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LEGAL IMPLICATIONS OF TRANSPORT OF DANGEROUS GOODS BY SEA

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CHAPTER 1

INTRODUCTION

1.1 Introduction

According to Hague-Visby Rules, a set of legal principles established under English law, the Hamburg Rules, which are a body of regulations under American law, and the IMDG International Regulations, a comprehensive framework governing the transportation of hazardous goods, it is observed that these legal frameworks play a significant role in shaping the international maritime industry. The present inquiry shall employ the most recent iteration of the Rotterdam Rules in order to evaluate the aforementioned definitions. The present chapter commences with an elucidation of the term "dangerous goods" as it is within the English language, the United States, and the framework of the International Maritime Dangerous Goods Regulations. The present study aims to undertake an assessment in order to evaluate the level of clarity associated with the term "dangerous." Subsequently, we shall proceed to undertake a concise examination of each of the classes delineated within the International Maritime Dangerous Goods (IMDG) code. Subsequently, a comprehensive analysis will be conducted to ascertain the adequacy of product classification based on the International Maritime Dangerous Goods (IMDG) code in establishing the eligibility of items as hazardous goods. As per the

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scholarly analysis conducted by Guner-Ozbeck, the categorization of risky products, as perceived by shipping companies, encompasses those commodities that pose unforeseen hazards to both the vessel itself and the accompanying cargo. As per the established norms and conventions of the commercial and industrial sectors, hazardous items are delineated as entities that necessitate the acquisition of specific knowledge in order to mitigate potential risks.[2]

Given its nature as a technical standard, it is conceivable that the IMDG code could potentially attract criticism due to the presence of this particular flaw. The present analysis leads to the determination that the aforementioned concept exhibits a notable deficiency in terms of its expansive and comprehensive adaptability, particularly when juxtaposed with a legal definition that has the potential to evolve and mature over a prolonged duration. The incorporation of the definition of hazardous goods, as delineated in the Rotterdam Rules, is duly acknowledged as a widely accepted international standard.

The foundational principle underlying the principle of dangerous goods in English law is rooted in the Hague-Visby Rules, which place an obligation on the shipper to abstain from exporting hazardous commodities.[3]It is to be noted that neither the High-Velocity Rule (HVR) nor the body of customary law provides a precise definition of the term in question. However, there exist two distinct approaches to tackle this issue. One perspective posits that deleterious entities are those that have been officially designated as such through the establishment of prior legal or customary rulings. In contrast, it is noteworthy to consider the Merchant Shipping Act of 1894, particularly section 446, as an illustrative instance of the aforementioned undertaking [...] The regulation that has recently come into focus is Rule 1(2) of the 1997 'Merchant Shipping (Dangerous Goods and Marine Pollutants)' Regulations.[4]

The present approach encounters a challenge in its failure to acknowledge the dynamic and evolving nature of the definition of harm. Consequently, it is imperative that the aforementioned list be subject to perpetual updates and rejuvenation. Moreover, it is imperative to acknowledge

[2]Guner-Ozbeck, M. (2007), 'The Carriage of Dangerous Goods by the Sea'. Springer, 60.
[3]Tiberg "Legal Survey" in Gronfers (ed) (1978), 'Damage from Goods', MLA, 9-11.
[4]Wilford, Coghlin, and Kimball (2003), *Time Charters*, 4th Ed., LLP, 179..

that this approach fails to consider the potential scenario wherein certain items may not possess inherent harmful properties, yet could pose a hazard during transportation due to extraneous circumstances.[5]An additional indispensable element inherent in the English approach pertains to the contractual prerogative to delineate the parameters of a hazard, thereby precluding its inclusion within the vessel's confines. The legal dispute between MicadaCompania Naviera S.A. and Texim, colloquially referred to as "The Agios Nicolas," has garnered significant attention within legal and maritime circles. This protracted legal battle has captivated the interest of scholars and practitioners alike, as it raises complex issues pertaining to contractual obligations, maritime law, and the interpretation of international conventions. MicadaCompania Naviera S.A., a prominent maritime company, and Texim, a well-established entity in the shipping industry, find themselves embroiled in a contentious legal conflict. The dispute revolves around the vessel commonly known as "The Agios Nicolas," which has become the focal point of this legal imbrog[6]The contractual agreement explicitly stipulated the prohibition of any form of livestock, as well as the exclusion of injurious, inflammable, or hazardous substances, including but not limited to acids, explosives, calcium carbide, ferro silicon, naphtha, motor spirit, tar, or any derivatives thereof, from being transported. The provision of iron ore by the concerned party was not in the form of actual iron ore, but rather in the form of iron ore concentrate, thereby contravening the stipulated requirement. The transportation of iron ore concentration necessitated the utilization of specialized fitting boards, a practice that contravened existing legal regulations. The ultimate outcome entailed both widespread devastation and a significant economic setback. Conversely, it was determined that the party assuming the role of the shipper bore the liability for the incurred losses due to the absence of an accurate manifest, the presence of a contractual provision limiting liability, and the failure to apprise the carrier of the veritable nature of the transported goods.[7]According to the ruling delivered by Donaldson J., it was determined that the cargo in question can be aptly described as "a wet wolf in a dry sheep's clothing." Consequently, it was concluded that there existed a lack of evidence indicating that the

[5]Wilson, J,'Carriage of Goods by Sea', 6th Edition,(2008) Longman, 32
[6]Ibid.
[7] Ibid.

carrier possessed complete knowledge regarding the nature of the cargo, thereby giving rise to a potentially perilous circumstance.

The lawsuit that was brought forward by the Ministry of Food against Lamport & Holt[8]According to the Ministry of Food Case, there is a possibility that commodities are hazardous despite the fact that they do not present a threat to the vessel. This decision was made due to the fact that an otherwise harmless product, such as grain, might become hazardous if it is exposed to certain conditions. Grain was transported in the ship's lower hold, while tallow was transported on the tween deck directly above the grain. The case in point. Tallow was lost from the corn because its packing was both loose and bulky. Damage to the corn was not the responsibility of the carriers since adequate precautions had been taken to avoid leakage. This was due to the fact that exporters had not provided carriers with enough warning regarding tallow. An additional claim posited by the vendors pertained to the shippers' purported liability for the harm incurred by the carrier due to the seepage and their alleged negligence in adequately apprising the carrier of the inherent characteristics of the tallow substance.[9]

The case pertaining to the Ministry of Food elucidated the phenomenon wherein substantial quantities of grain have the potential to undergo overheating, thereby necessitating the implementation of precautionary measures to ensure safety. In the context of shipping hazardous materials, it is imperative for shipper to fulfill their obligations of issuing a warning regarding the potential risks associated with the intrinsic properties of the material. This responsibility becomes particularly significant in scenarios where the shipper possesses knowledge pertaining to numerous factors that contribute to an elevated probability of risk occurrence. In instances where the peril is linked to the liberation of a chemical compound, and the individual responsible for its conveyance possesses a comprehensive understanding of said substance, it follows that the carrier is cognizant of the potential hazards involved.[10]As per the findings elucidated in the Ministry of Food Case, it is imperative for the individual entrusted with the transportation of medicinal substances to possess a comprehensive understanding of their chemical composition,

[8]Micada Compania Naviera S.A. v. Texim (The Agios Nicolas) [1968] 2 Lloyd's Rep. 57.
[9] Ibid
[10]Ministry of Food v. Lamport & Holt [1952] 2 Lloyd's Rep.

thereby enabling them to discern and duly acknowledge the inherent hazards associated with said substances. The significance of this matter cannot be understated, as it underscores the imperative for the recipient to possess a comprehensive knowledge of subject matter at hand.

The investigation into case of the Athanasia Comninos[11]has devised a new method for determining whether or not a product is hazardous to human health, which takes into account factors other than the inherent risks given by the material being evaluated. The approach that was used in Mitchell Coutts v. Steel was reaffirmed by the Athanasia Comninos.[12]which discovered that some products can be illegally hazardous to the individuals who buy them. Therefore, according to English law, items are considered detrimental if they have the potential to obstruct, delay, or seize a vessel.The Hague-Visby Rules make sure that shipper and carrier duties do not drop below the HVR with its Article 3(8) and Article 4(3) provisions. Any behavior that might cause a vessel or its cargo to be delayed, detained, or seized is considered to be in violation of these guidelines.

Regarding the Athanasia Comnino incident, it is pertinent to acknowledge that the vessel was engaged in the transportation of coal, a circumstance wherein the potential hazards can be mitigated through the implementation of judicious measures aimed at regulating the release of methane emissions. However, the carrier did not take these steps. The notice of the purpose of the cargo was not in dispute in this instance since the carrier was aware that the shipment included coal and the release of methane is a recognized concern in the industry. Instead, the issue was whether or not coal is considered to be an intrinsically harmful material, given that it was not included on the list of potentially hazardous substances in the rules.[13]As will be seen in the next section, which examines the method used by the United States, the Hamburg Rules devote greater attention to whether or not to mark potentially hazardous items on regulations. However, the most significant challenge with the English Hague-Visby implementation is not associated with labeling or regulatory lists. What is important is the nature of the content and the

[11]Ibid
[12]Jackson, D.C., "Dangerous cargo: a legal overview," in Maritime Movement of Dangerous Cargoes—Public Regulation and Private Liability, Papers of a one-day seminar, Southampton University, 11th September 1981, A3.
[13]Mitchell Coutts v. Steel [1916] 2 KB 610.

conditions of the journey. Mustill J. acknowledged that it is difficult to determine whether coal is safe or hazardous. Because it had agreed in the contract to transport objects with certain qualities, including risks, the carrier was responsible for the damage that occurred.

In the case of The Athanasia Comninos, Judge Mustill's decision may be found at:[14]is necessary in order to comprehend the methodology used in the course of defining what constitutes a risk.

Mustill J. held that

to come up with a general test that, even without detailed information about the cargoes' characteristics, will be able to detect those that violate the contract. I believe that it is essential to keep in mind that the issue at hand is the distribution of risk for the repercussions of a hazardous event throughout the journey, and not the categorization of commodities as "dangerous" or "safe," when searching for such a test. Obviously, one factor that adds to this predicament is the high quality of the goods. Nevertheless, there are further concerns. The shipowner's familiarity with the goods being transported and the care he takes in doing so are both very important.[15]

Therefore, the English use a three-part standard to determine what constitutes "dangerous goods":

The primary considerations in evaluating the safety of a shipment encompass three key aspects. Firstly, it is crucial to ascertain whether the item listed possesses inherent hazardous properties. This determination aids in assessing the potential risks associated with the shipment. Secondly, it is imperative to examine whether the shipper has provided comprehensive information regarding the item's characteristics, packaging methodology, and any other pertinent details that may impact the safety of the shipment. This disclosure enables a thorough evaluation of potential hazards and necessary precautions. Lastly, the treatment of the item by the carrier assumes significance, encompassing the implementation of appropriate safety measures and adherence to reasonable expectations commensurate with the nature of the transported item. By scrutinizing these three facets, a comprehensive assessment of the safety of the shipment can be achieved.

[14]Cooke (2007), *Voyage Charters*, 3rd edition, Informa, London, 162.
[15]Baughen, "Obligations of the shipper to the carrier," (2008) 14 JIML, 557.

The determination of whether an entity possesses hazardous characteristics is contingent upon the evaluation of three fundamental factors. In the circumstance that the aforementioned tripartite conditions, in conjunction with the Hague-Visby Rules, which were duly incorporated into the 'Carriage of Goods by Sea Act' of 1992 (COGSA 1992), are duly fulfilled, it is incumbent upon the shipper of a hazardous substance to assume liability for any resultant damage arising from the transportation of said perilous commodity. In the context of the present circumstances, the utilization of Athanasia Comninos emerges as a subject of scholarly inquiry. The examination of Comninos' contributions and insights assumes particular relevance in the contemporary milieu, as her work offers valuable insights and perspectives that can shed light on the prevailing conditions. By delving into Comninos' scholarship, researchers can glean a deeper understanding of the intricate dynamics at play and potentially uncover[16]There is a possibility that the case General Feeds Inc. v. Burnham Shipping Corporation (The Amphion) would shed light on this.[17]In this particular instance, the bill of lading listed general feed, which consisted of fishmeal as one of the components. This difference between general feed and fishmeal is very important due to the fact that bagged fishmeal has the potential to overheat and catch fire. General feed does not have this risk. This indicates that further safety measures, such as an anti-oxidant therapy, are required in order to mitigate the threat.[18] The shipper was informed that the cargo being transported consisted of fishmeal; nevertheless, the central dispute in this case centered on the fact that the fishmeal in question was advertised as having been antioxidant treatment. As a direct consequence of this, the carrier did not take any further steps to guarantee that the cargo was handled. As a consequence of this, a fire broke out as the cargo was being unloaded, and all of the goods was destroyed. During the course of the arbitration, it came to light that the fishmeal in question had not been subjected to any kind of processing. As a result, Evan J. decided that in order for the carriers to be held accountable, the fishmeal had to have been properly processed. Because the cargo in this instance was not handled in the appropriate manner, the shippers were

[16]Effort Shipping Co Ltd v. Linden Management S.A. (The Giannis NK) [1998] 1 All ER. 495 (HL).
[17]Robert, G. (2009), "Dangerous cargo and 'legally dangerous' cargo," in D. Rhidian Thomas (editor), The Evolving Law and Practice of Voyage Charterparties, Informa—Maritime and Professional, 120.
[18]The Athanasia Comninos [1990] 1 Lloyd's Rep. 277 at 277.

found to be in violation of contract.[19]The aforementioned claim was substantiated through the utilization of the Athanasia Comninos case as empirical validation. The aforementioned action was carried out in strict adherence to the established criteria as stipulated in Article 3(8) and Article 4(3) of the Hague–Visby Rules. The accountability for both the loss and the breach of contract was attributed to the shippers in light of this occurrence.

The term "dangerous" is used in a very wide sense in English law, and this has a direct bearing on the HVR criteria. As a result of Mitchell Coutts v. Steel and The Donald v. Steel, the Supreme Court of the United States[20]It was discovered that the word hazardous may also apply to things that are illegal or that are in contravention with the law. The principles of common law, which correspond to growing international standards like the HVR, have been responsible for the development of the most recent iteration of the concept of dangerousness. Despite this, there is a great deal of leeway in this view.When it was first introduced, COGSA 1992 included the HVR as one of the primary reasons for doing so. The HVR makes the implicit assumption that the shipper will not transport hazardous items, with the exception of situations in which the shipper had either explicit knowledge or constructive awareness that the consignment comprised harmful materials.[21]Using this method compels the shipper to disclose the items that are being transported; failing to do so puts them at danger of violating the contract and leaving them without any legal options in the event that the cargo is lost or damaged. This contractual strategy does not solve the issues that are faced with current hazardous commodities. These concerns have intensified as a result of an increase in the number of hazardous commodities that are transported by sea.

The English technique is one of the most adaptable approaches to threat assessment; nonetheless, it is predicated on the existence of contractual obligations. Because the question that has to be answered in these circumstances is whether the carrier is in danger of losing his means of subsistence and freedom, which "is precisely analogous to the shipment of a dangerous cargo

[19] Ibid;
[20]*The Athanasia Comninos* [1990] 1 Lloyd's Rep. 277 at 282; *Westchester Fire Insurance Co v. Buffalo Salvage Co* [1941] AMC 1601.
[21]General Feeds Inc. v. Burnham Shipping Corporation (The Amphion) [1991] 2 Lloyd's Rep.

that might cause the destruction of the ship."[22]. The concept of a hazardous good is more all-encompassing than the IMDG categories that are used to classify hazardous goods. This technique creates a framework that is more adaptable, so shielding the carrier from the shipper's potential misrepresentation of the goods that are being transported. If the shipper provides the carrier with exhaustive information on the items that are being transported, the carrier bears responsibility for "danger" that may prohibit the shipment from being accepted. The outcome is the same as it would be with the judicial system.

An examination of the contextual factors surrounding the occurrence of the accident reveals a notable emphasis on hazardous conditions rather than hazardous attributes, as explicated in the International Maritime Dangerous Goods (IMDG) guidelines. Henceforth, the term "dangerous" encompasses a broader scope, extending beyond the mere prospect of inflicting peril or devastation upon a vessel.[23]; crew[24]; other cargo or cleaning expenses and delay, and covers all features of the goods which might lead to the detention of the ship.

The necessity for a novel convention pertaining to the transportation of hazardous commodities arises from its inadequate scope in addressing third-party and intangible environmental damages.

Similar concerns arise whenever the United States engages in the handling of hazardous materials in accordance with the Hamburg Rules.[25]The Carriage of Goods by Sea Act of 1932 (COGSA 1932), under the jurisdiction of the Hague Rules, stands as the paramount legislative enactment within the United States. Even if these constraints were the impetus for the creation of the Hamburg laws, there are important grounds to revise COGSA 1932.[26]. Even though the Hamburg Rules have been kind of "implemented" in US common law via amendments and legislation, there is still a lot of controversy around them. This is due to the fact that US rulings

[22]Fishmeal is a Class 9 Hazard under the IMDG Code
[23]Ibid
[24]Robert, G. (2009), "Dangerous cargo and 'legally dangerous' cargo," in D. Rhidian Thomas (editor), The Evolving Law and Practice of Voyage Charterparties, Informa—Maritime and Professional, 120.
[25]Ibid
[26]*The Athanasia Comninos* [1990] 1 Lloyd's Rep 277 at 282; *Westchester Fire Insurance Co v. Buffalo Salvage Co* [1941] AMC 1601.

on COGSA 1932 resulted in the creation of a system with distinctive doctrines that are incompatible with the harmonised approach.[27]Sturley's results show,

Even the international systems that the vast majority of commercial nations and trade partners of the United States have embraced, COGSA predates them all. Draftsmen in the early 1920s were unable to foresee either the container revolution or the rise of internet commerce. It is common knowledge that worldwide consistency in this area would be beneficial; nevertheless, the legal system in the United States must be brought into line with the legal systems of the rest of the world as soon as possible. The passage of time has resulted in the development of distinct American legal ideas, which has led to COGSA, as interpreted by courts in the United States, being in conflict with present international regimes and even the international notion of transporting commodities by sea. This is due to the fact that COGSA was established in order to govern the transport of seaborne goods, but the courts in the United States have given it a different meaning.

In the instance of the legal dispute between VimarSequros y Reaseguros, S.A. and M/V Sky Reefer, it is worth examining the intricacies of the case.[28]The investigation uncovers that the formulation of the Carriage of Goods by Sea Act (COGSA) was significantly shaped by the Hague Rules, a set of regulations that emerged as a result of international harmonization efforts. Conversely, the present modeling approach required a meticulous adaptation of the implementation to align precisely with the legal framework inherent to the United States. In light of the aforementioned rationale, it was deemed appropriate by the Supreme Court of the United States to employ the legal framework of the United States in the matter at hand, specifically in the case of Robert C. Herd & Co. v. Krawill Mach. Corp.[29]It has been purported that the provision pertaining to the Carriage of Goods by Sea Act (COGSA) of 1932 has been physically expunged from the Hague Rules. The Hague Rules, along with subsequent modifications such as the Hamburg Rules, have engendered a multifaceted tapestry of laws and legal advancements

[27]*The Athanasia Comninos* [1990] 1 Lloyd's Rep 277 at 282
[28]Fishmeal is a Class 9 Hazard under the IMDG Code.
[29]Ibid.

within the United States' legal framework. This amalgamation of legal provisions and approaches has resulted in a complex and intricate landscape.

If you want to be sarcastic about it, you might argue that traveling by water is inherently dangerous business. Mining is unquestionably one of the many other hazardous vocations that can be found on land, underneath the earth, and on the same level of risk that aviation can be found in the air. The first method of transportation ever used was sailing across the sea. Due to the presence of this environment, activities such as the extraction of gas and oil as well as other nautical operations are hazardous when performed on offshore platforms. On board ships, the most common causes of harm and death are the ship's own contents, including cargo and other substances. However, there are variables from the outside, which originate from the dangerous climate that the container was exposed to while it was at sea.

Oil, chemicals, radioactive materials, and other potentially hazardous items are examples of hazardous substances that may be found on board ships. Nonetheless, there are items that are not classified as cargo, such as the oil and gasoline that are stored in a ship's bunkers or the lubricating oils that are taken as ship supplies.

These compounds are considered pollutants because they have the potential to damage or degrade the marine environment, cause harm to humans, and potentially cause property damage or loss. When it comes to vessels that transport potentially harmful chemicals, protecting the maritime environment and minimizing pollution are two aspects of the same overarching goal. The majority of individuals are concerned about loss and damage to shipments that occur at sea. The shipping of hazardous materials by ship is seeing a surge in modern times. This rise may be attributed to a variety of factors including accidents, explosions, spills, and pollutants. The growing awareness among the general public about the dangers posed by these factors has led to the establishment of international technology standards and transportation contract clauses that improve passenger safety. The compensation and responsibility for hazardous items have been controlled as a result of increased environmental consciousness and worries about the financial repercussions of maritime disasters. This is because of the two factors into account. These days, a significant amount of commerce takes place on the sea.

In addition, the safe transportation of hazardous materials is essential to the success of international commerce. It is believed that fifty percent of all shipments carried by water are hazardous. These items are hazardous to people's health as well as the environment and the natural world. Many naval accidents, both large and little, were brought on by hazardous items. Because of this, hazardous materials need to be carried in a secure manner. This research investigates the international treaties, national legislation, liabilities, and party responsibilities that regulate the harmless carriage of hazardous items by sea, as well as the movement of hazardous commodities by water. Specifically, the study focuses on the transportation of hazardous goods.

1.2. Review of literature

1. **Maxwell Michael Gidado**in his article **"Petroleum Development Contracts With Multinational Oil Corporations: Focus on the Nigerian Oil Industry**"reveals that[30]The industry of petroleum exploration and development is characterized by its significant capital requirements, necessitating substantial amounts of foreign currency and protracted negotiations that ultimately result in the execution of contractual commitments by all involved parties. The examination of issues pertaining to ownership, control, technology transfer, financial returns, and the process of 'indigenization' within the industry holds significant importance. These matters are thoroughly scrutinized within the context of countries' broader foreign investment policies, petroleum policies, and prevailing changes. The central emphasis of this research endeavor pertains to the intricate composition and configurations of petroleum development. The ambit of this study encompasses contractual arrangements that have spanned the temporal continuum commencing from the inception of oil exploration in Nigeria up until the contemporary era. Given the multidisciplinary nature of contemporary legal studies, a considerable portion of the research conducted for this investigation was derived from a comprehensive examination of publications pertaining to political economy, encompassing the domains of economics, politics, and legal scholarship. Based on the empirical evidence derived from the research investigation, it can be posited that Nigeria has effectively bolstered its negotiating stance through the accumulation of

[30]Robert, G. "Dangerous cargo and 'legally dangerous' cargo," in D. Rhidian Thomas (editor), The Evolving Law and Practice of Voyage Charterparties, Informa—Maritime and Professional, 120 (2009)

specialized knowledge and experience acquired over a considerable period, coupled with its active engagement within the Organization of the Petroleum Exporting Countries (OPEC). The present study sheds light on the formidable challenges faced by Nigeria, a nation categorized as less developed, in attaining complete mastery over its valuable petroleum resource, even in the presence of substantial financial resources. These challenges primarily stem from a dearth of technical and administrative proficiencies within the country's institutional framework. This phenomenon persists despite Nigeria's possession of the capital. Furthermore, this observation underscores the significance of legislation in delineating the structure within which corporate entities engage with one another, while also acknowledging the inherent constraints of such a regulatory function.

2**. Peter Gillies and Gabriël Moens**,[31]**," International Trade and Business: Law, Policy and Ethics"**[32]The subject matter at hand pertains to the core elements of global trade, encompassing various facets including international sales agreements, international commercial terminologies, the conveyance of goods via maritime, terrestrial, and aerial means, export financing, import limitations, international commercial arbitration, the exercise of jurisdiction beyond national borders in relation to corporate entities, and the formation of trading blocs. In every chapter, a comprehensive overview is presented alongside a meticulous analysis of the relevant statutes, regulations, and occasionally, ethical considerations of significance. Additionally, a series of instructive inquiries and a concise compilation of references are provided to further enhance the scholarly discourse. Furthermore, to facilitate the comprehension and analysis of international business law, paramount emphasis is placed on the reproduction of pivotal international texts, either in their entirety or in substantial excerpts. The proliferation of courses pertaining to international business and trade law has become a prevalent trend among a substantial number of academic institutions, encompassing both law schools and business schools alike. The present communication is a direct response to the persistent appeals made by the legal and business sectors, urging the establishment of educational programs aimed at endowing legal practitioners and business executives with the requisite expertise to dispense proficient counsel pertaining to

[31] Peter Gillies and Gabriël Moens, International Trade and Business: Law, Policy and Ethics, (Cavendish Pub., Sydney, Australia, 1st ed, 1998).
[32]*Mitchell Coutts v Steel* [1916] 2 KB 610; *The Donald* [1920] P 56.

international business practices and export trade legislation. The book "International Trade and Business: Law, Policy and Ethics" is specifically designed to cater to the intellectual needs of students and professionals who possess a keen interest in the realm of international business transactions. By delving into the intricate nuances of international trade law, policies, and ethics, this scholarly work aims to provide a comprehensive understanding of the subject matter.

3. The individual in **M. A. Fox, Malcolm**,[33] has written a book titled **"Glossary for the Worldwide Transportation of Dangerous Goods and Hazardous Materials**," which encompasses the contributions of esteemed environmental scientists affiliated with a distinguished environmental engineering organization. The present literary work elucidates the regulations governing the transportation of hazardous materials across international borders, employing a precise and jargon-free approach. The platform provides shippers with a practical tool for the identification of their merchandise and the correlation of said goods with relevant regulatory citations. Furthermore, it can be postulated that the implementation of this practice serves the purpose of ensuring that potentially dangerous articles are duly recognized and classified, thereby resulting in the transportation of goods in a manner that aligns with established protocols and regulations.

4.**Arben Mullai**,[34] has done research on the **maritime transport system of packaged dangerous goods** (PDG) [35]Extensive research has been conducted on the intricate dynamics of the maritime transport system pertaining to packaged dangerous goods (PDG), as well as the underlying principles governing the risks associated with marine accidents/incidents involving such hazardous materials. The individual in question has authored a comprehensive report encompassing his discoveries and observations. Additionally, this report amalgamates his independent research endeavors, thereby augmenting the scholarly discourse surrounding this subject matter.

[33] Supra note 10
[34] Supra note 17.
[35]Brass v Maitland. [1856] 6 E & B 470.

The primary objective of the author's research endeavor is to develop a risk analysis framework that can be readily implemented in the PDG marine transport system. Additionally, the author aims to provide empirical evidence or validation of the efficacy of this framework through practical demonstrations. The predominant portion of the book is constituted by the "Frame of Reference" section. This particular section presents salient conceptual frameworks, precise definitions, and theoretical constructs within the fundamental interconnected realms of research. Several research areas have been identified for investigation in this scholarly discourse. These areas encompass the examination of:

a) the intricate maritime transport system of PDG;

b) the potential hazards associated with accidents or incidents involving dangerous goods;

c) the comprehensive framework of risk management employed within the system.

The development of a comprehensive risk analysis framework necessitates the thorough examination and interconnection of numerous relevant concepts. This process is essential in establishing a solid theoretical basis, which is further reinforced by the framework under consideration. The present study undertakes an investigation into the initial two research subjects, specifically: a) the maritime transport system of PDG and b) the associated perils it entails. The present text pertains to the DaGoB project, which is an integral part of the Safe and Reliable Transport Chains of Dangerous Goods in the Baltic Sea Region. Additionally, it encompasses the author's individual scholarly investigation into the subject matter. This book delves into the intricate realm of the maritime transport system pertaining to packaged hazardous goods (PGD). It aims to comprehensively explore the multifaceted dimensions of hazards associated with marine accidents and incidents involving dangerous goods.

5. The aforementioned document, known as the "**European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways**," is retrievable within the pages of the book.[36]The literary work under consideration is composed of a comprehensive

[36]Mitchell Coutts v Steel [1916] 2 KB 610 at 614.

collection of two volumes. The initial volume encompasses an assortment of revisions and additions meticulously incorporated by the esteemed author. The convening of a Diplomatic Conference in Geneva, Switzerland, spanning from the 22nd to the 26th of May in the year 2000, was orchestrated under the esteemed patronage of two prominent international organizations, namely the United Nations Economic Commission for Europe (UNECE) and the Central Commission for the Navigation on the Rhine (CCNR). The conference held on May 25, 2000 witnessed the adoption of the European Agreement concerning the International Carriage of Dangerous Goods, by Inland Waterways, commonly referred to as ADN. The collaborative efforts of the United Nations Economic Commission for Europe (hereinafter referred to as UNECE) and the Central Commission for the Navigation on the Rhine (henceforth referred to as CCNR) culminated in the joint development of the ADN.''

The enclosed regulations encompass stipulations pertaining to perilous substances and articles, the construction and functioning of aforementioned vessels, the conveyance of hazardous substances and articles aboard inland navigation vessels or tank vessels, whether in packaged or bulk form, and the fabrication of said watercraft. Furthermore, the aforementioned aspects encompass the comprehensive examination and elucidation of regulations and techniques pertaining to inspections, the bestowal of certificates of approval, the acknowledgement of classification societies, the vigilant oversight, and the pedagogy and evaluation of proficient individuals in this domain. According to the provisions outlined in Article 11 of the agreement, it is stipulated that the Regulations appended to the agreement, in their initial iteration, shall come into force precisely one year subsequent to the agreement's implementation.

6.**Meltem Deniz Güner Zbek**,[37] in his **" Carriage of Goods by Sea**" [38]The author has conducted extensive research on perilous commodities, as documented in his scholarly publication. Within the pages of his book, he delves into the historical origins of transporting hazardous products via maritime vessels, tracing its roots to antiquity. During this bygone era, ship operators were often unaware of the perilous nature of the goods they transported, or if they possessed knowledge of the hazardous nature, they diligently implemented the necessary precautions to ensure safe

[37] Supra note 2.
[38]Bamfield v Goole and Sheffield Transport Company [1910] 2 KB 94.

conveyance. The potential sources of harm within the context under consideration encompassed rum, brandy, and gunpowder, with the underlying cause of concern being their amalgamation rather than the inherent properties of the individual constituents. The proximity to a detonating gunpowder consignment may have elicited a modicum of unease within an individual, yet the actual peril associated with such circumstances was not as substantial as initially perceived. The prevailing circumstances have undergone a transformation due to the incessant surge in the quantity of goods being conveyed via maritime routes, wherein the vessel emerges as the most optimal mode of transportation at present. According to prevailing scholarly discourse, a substantial proportion exceeding fifty percent of the total volume of packaged commodities and bulk cargoes transported via maritime routes in contemporary times can be categorized as possessing inherent risks, displaying hazardous characteristics, or posing potential harm to the delicate ecological balance. The aforementioned factor exerts a substantial influence on the realm of international trade and commerce. Certain substances, materials, and articles possess inherent dangers and hazards, warranting meticulous consideration from a safety standpoint. Moreover, these entities exhibit deleterious effects on the delicate marine ecosystem. Conversely, there exist substances, materials, and articles that solely pose hazards when transported in large quantities. The category of hazardous cargoes encompasses a wide range of products that are commonly transported in bulk form. These cargoes primarily consist of solid or liquid chemicals, various materials, gases, as well as products associated with the oil-refinery industry, and waste materials. Shipborne barges, commonly referred to as barge-carrying ships, play a significant role in the transportation of various commodities. These commodities primarily include freight containers, b packing, portable tanks, tankcontainers, road tankers, swap-bodies, vehicles, trailers, Intermediate Bulk Containers (IBCs), unit loads, and other cargo transport units. Collectively, these packed forms of commodities contribute to approximately 10% to 15% of the total cargo transported.

7.**Roger Wrapson**.[39]the author of the literary work titled **"Dangerous Goods**," it is imperative for the operator to possess the capacity to promptly and efficiently ascertain the regulatory exemptions that are applicable to the designated UN numbers denoting perilous substances.

[39]Brass v Maitland (1856) 26 LJQB 49.

Furthermore, individuals possess the capacity to acquire verification regarding their legal entitlement to transport hazardous materials within the confines of a transportation operation, even in the absence of specialized expertise or training. This is made possible through the inclusion of UN numbers and exemptions in a readily accessible format, which offers guidance on effectively utilizing the provided data within the regulatory framework. This enables individuals to acquire verification regarding their capacity to lawfully transport hazardous materials within the confines of a transportation endeavor.

8.In the aforementioned chapters, namely "**Storage and Handling of Dangerous Goods Code of Practice,"**[40]The central areas of concern revolve around the strategic formulation and implementation of risk management principles as they pertain to the storage and handling of said subject matter. Risk management is a systematic approach employed to effectively organize and coordinate efforts aimed at ensuring the secure handling and storage of various entities. It serves as a means of arranging activities that mitigate potential risks and hazards associated with these processes. The technique presented herein serves as a valuable tool for the identification of specific risks associated with a given location. It is imperative for operators to engage in comprehensive discussions pertaining to these processes with their respective staff members. Within a subsequent section, comprehensive guidance is provided pertaining to the transit and management of areas designated for the storage, reception, or dispatch of hazardous materials surpassing the prescribed placard quantity as outlined in Schedule 1 of the Storage and Handling Regulations. It is important to note that this encompasses all receptacles intended for the containment of bulk dangerous goods. Notwithstanding, it is imperative to note that the aforementioned guidance does not extend its applicability to perilous commodities situated within port facilities. Such goods are instead governed by the stipulations set forth in the Dangerous Goods Safety (Goods in Ports) Regulations of 2007, as well as the Australian Standard (AS) 3846:2005. It is crucial to emphasize that these regulations exclusively pertain to the manipulation and conveyance of hazardous materials.

[40]Deutsche Ost-Afrika v Legent [1998] 2 Lloyds Rep 71; IMDG Code Class 1.1; Losinjska Plovidba v Transco Overseas Ltd (The Orjula) [1995] 2 Lloyds Rep 395.

9. **Surya P. Subedi**,[41]in his "**Textbook International Trade and Business Law"** The user has provided details regarding the collaborative efforts between Vietnamese and foreign specialists, which serves as a testament to Vietnam's comprehensive integration into the global cultural framework. The profound commercial and economic global integration of Vietnam, a momentous achievement realized through its accession to the World Trade Organization (WTO) in 2007, has significantly facilitated the comprehensive engagement of Vietnamese professionals and academics within the global scientific and cultural community. The accession of Vietnam to the World Trade Organization (WTO) was successfully accomplished by the nation's membership. The textbook encompasses a comprehensive compilation of various legal frameworks governing international trade. It incorporates a wide range of sources, including global instruments such as the World Trade Organization (WTO) and the Vienna Convention on the International Sale of Goods. Additionally, it incorporates regional agreements such as the European Union (EU), the North American Free Trade Agreement (NAFTA), and the Association of South East Asian Nations (ASEAN), which are pertinent to their respective geographical areas. Furthermore, the textbook takes into account bilateral agreements between Vietnam and its trading partners. By incorporating these diverse sources, the textbook provides a comprehensive overview of the multifaceted perspectives on the regulation of international trade.

1.3. Objectives of the study

The following is what we want to accomplish with this study:

- To analyse the international regulations that govern the transport of hazardous materials by sea.
- To investigate the legal framework that governs the transportation of hazardous materials by sea in accordance with Indian law.
- To investigate the legal concerns that are raised by the transportation of hazardous materials by sea.

[41]Guner-Ozbeck, M 'The Carriage of Dangerous Goods by the Sea',(2007) Springer, 62

- To emphasis on promoting safe and responsible maritime transportation of dangerous goods.

1.4. Research methodology

The technique of doctrinal research, also known as non-empirical research methodology, was used while writing the dissertation. The examination of pertinent international treaties, national legislation, case law, and academic works in inquiry are the components that make up the doctrinal process. The study does not include any of the methodological concerns that are often associated with other areas of the social sciences, such as statistical or quantitative studies.

1.5. Research questions

- What international regulatory regulations have been enacted by the international community in regard to the transportation of dangerous goods by sea?
- What are the responsibilities of the shippers and carriers with regard to the contractual obligations involved in the transportation of hazardous materials through maritime transport?
- What exactly are all of the concerns that pertain to the responsibilities of the parties involved in the carrying of hazardous materials?
- What kind of legislative framework does India now have in place for the shipment of hazardous materials by sea?

1.6. Hypotheses

For the safe and lawful shipment of hazardous commodities by sea ,the international community has devised a comprehensive set of regulatory regulations, largely governed by the IMDG Code, SOLAS, and MARPOL.With a focus on preventing accidents, mitigating intentional threats, minimising environmental impact, and ensuring legal adherence, the concerns related to the responsibilities of parties involved in the carriage of hazardous materials span safety, security, environmental protection, and regulatory compliance.Due to the fact that India has not ratified a number of significant international conventions, the

country is in a particularly precarious position when it comes to dealing with issues over the transportation of hazardous materials by sea.

1.7. Rationale of the study

This research is focused entirely on the international treaties that govern the shipment of hazardous materials by sea. In addition to this, it places an emphasis on the obligations of the parties involved in the carrying of hazardous materials by sea, as well as the problems associated with the liabilities. This research also examines the Indian legal framework governing the transportation of hazardous materials by sea.

1.8. Limitation of the study

The study's focus is mostly on legal and regulatory issues, perhaps excluding more significant social and economic elements that could have an impact on the shipping of dangerous commodities by sea. The research mainly relies on already-published legal documents, and the analysis's breadth could be constrained by a lack of recent or complete data.

1.9. Chapter scheme

CHAPTER-1: INTRODUCTION

This chapter discusses the introduction to the study, which contains the scope of the investigation, research goals, a description of the issue, research questions, objectives, and a hypothesis, as well as the research methods and the constraints of the study.

CHAPTER 2: GLOBAL FRAMEWORK FOR CARRIAGE OF DANGEROUS GOODS BY SEA

In the second volume of the research project, an overview of the global regulations that control the transportation of hazardous materials through maritime routes is presented. The legal framework incorporates important norms and rules into its structure. The definitions of words like “dangerous” and “hazardous,” which are often considered interchangeable, are investigated.

The SOLAS and MARPOL Conventions, as well as their repercussions, are the primary topics of discussion in this chapter.

CHAPTER 3: CIVIL LIABILITIES IN SEA TRANSPORT OF DANGEROUS GOODS

This chapter presents a comprehensive analysis of the key elements encompassed by the Hague-Visby, Hamburg, and Rotterdam Rules, with the aim of elucidating the crucial interconnection between shippers and carriers. The investigation of their historical background is undertaken, culminating in a comprehensive examination and evaluation.This chapter also delves into the examination of the multifaceted matters pertaining to responsibility and compensation that emerge within the framework of oil spills instigated by maritime vessels. Furthermore, this scholarly investigation delves into the examination of established societal conventions pertaining to the handling and management of substances deemed hazardous and noxious. Additionally, it delves into the intricate domain of the transportation of nuclear materials, scrutinizing the norms and regulations governing this intricate process.

CHAPTER 4: LIABILITIES OF INVOLVED PARTIES

This chapter conducts an in-depth investigation on the scope of the liability faced by shippers in a variety of events and settings. Within the context of the transportation of hazardous commodities, it digs into the many nuances of their duties and obligations in terms of accountability.

CHAPTER 5: REGULATORY FRAMEWORK OF CARRIAGE OF DANGEROUS GOODS IN INDIA

The central focus of this chapter pertains to the legal prerequisites that necessitate fulfillment for the purpose of effectuating the transfer of hazardous materials via maritime transport. This study examines several legislative acts pertaining to the transportation of goods by sea in India, namely the Indian Carriage of Goods By Sea Act of 1925, the Merchant Shipping Act of 1958, and the Merchant Shipping (Carriage of Cargo) Rules of 1991. These acts have been subject to thorough investigation by the present research body. Furthermore, this scholarly discourse delves into an

analysis of the international accords ratified by the esteemed Government of India, with the primary objective of ensuring the secure conveyance of perilous commodities via maritime routes. The corpus of international agreements pertinent to the transportation of hazardous products encompasses several key instruments, namely the International Maritime Dangerous Goods (IMDG) Code, the International Convention for the Safety of Life at Sea (SOLAS), the International Convention for the Prevention of Pollution from Ships (MARPOL), and the United Nations Recommendations for the Transport of Dangerous Goods.

CHAPTER 6: CHALLENGES REGARDING THE LIABILITY OF PARTIES

The difficulties that arise from the duties held by both shippers and carriers are the primary focus of this chapter. In it, problems like the shipper's infinite responsibility and the insufficiency of legislation regulating hazardous items are discussed in depth.

CHAPTER 7: CONCLUSION

Contains a summary of the most important topics, as well as an inference and references.

CHAPTER 2

GLOBAL FRAMEWORK FOR CARRIAGE OF DANGEROUS GOODS BY SEA

2.1 Introduction

Dangerous good in this context conjures up images of peril at sea, raising questions about its definition and legal standing under maritime law. The late nineteenth century British statute creates the legal meaning of "dangerous good."[42]Prior to that time, there were very few instances of dangerous goods being transported by water.[43].Therefore, there was no need for international legislation for the transfer of hazardous goods.[44]. Explosions, oil spills, fires, and other risks have contributed to an increase in the amount of dangerous items that are transported over water. The public is made aware of potentially hazardous objects and their consequences, and they are encouraged to take action as a result of this. Reasonable regulations, tougher regulatory standards, and increased penalties for violating them were enacted as a result of public and business concerns.[45]

The majority of the laws that are in effect today are regulatory in nature. The particulars of these pieces of law are quite in-depth. To be able to interpret regulatory regulation, one must first struggle to acquire the right terminology in order to differentiate between legal, scientific, and technical points of view. It has been stated that the ship is hazardous. It's more when she comes in on the water owing to internal variables and external impacts like the surroundings. This danger is widespread due to the fact that the ship has spent the majority of its life being subjected to the internal board states and climatic stresses. In some contexts, the terms "loss,""damage," and "injury" may be used to talk about "harm,""danger," and the effects of such things.

[42]Tetley (1979), "The Hamburg Rules—a commentary" [1979] *L.M.C.L.Q.*, 1.
[43]Sturley, M (2009), "Modernizing and Reforming US Maritime Law: The Impact of the Rotterdam Rules in the United States" *Texas International Law Journal*, 44(426), 429-30.
[44] Ibid
[45]Ibid.

However, the distinction between the two of them is not clear, and attempts to interpret them in a meaningful way were fruitless.

Fortunately, the challenges with the language do not lead to any misunderstandings in a practical sense. The manner in which a term is used in a maritime event may have various implications from a legal standpoint. Both of these terms may be used interchangeably depending on the situation. The umbrella term "hazardous" may be broken down into several specific categories.Words like "hazardous,""unsafe," and "harmful" allude to several aspects of pollution and safety. The risks associated with the transfer of chemicals by sea transport include, among other things, harm, loss, injury, and damage. The term "hazardous and noxious substance" was first used in the HNS Convention in 1996.[46]a description of the ship's cargo that falls into any of the two categories. This obligation under private law encompasses both pollution and safety.

This connection must also correspond with the meanings and definitions of the legal instruments that govern international law and local law.

2.2 Conventions and Codes

2.2.1 The IMDG Codes and the other Relevant CODES

The International Maritime Dangerous Goods Code (IMDG Code) is an obligatory manuscript encompassing an extensive compendium of directives, meticulously structured into two distinct volumes. The present regulation aims to comprehensively tackle a range of challenges pertaining to the transportation and management of hazardous materials via maritime routes. These challenges encompass various aspects such as packaging methodologies, stowage techniques, container traffic management, segregation of incompatible substances, and other pertinent considerations. By addressing these concerns, the regulation endeavors to enhance the safety and efficiency of handling seaborne hazardous products.[47]The aforementioned code was deemed obligatory subsequent to the acknowledgment by the SOLAS state party of the inclusion of the

[46]Robert C. Herd & Co. v. Krawill Mach. Corp. (1959), 359 U.S. 297, 301.
[47]Maxwell Michael Gidado, Petroleum Development Contracts With Multinational Oil Corporations: Focus on the Nigerian Oil Industry, (University of Warwick, England, 1992).

IMDG Code provisions within its national legislation in the month of January in the year 2004. Furthermore, it is imperative to possess the Bulk Chemical Code (BCH), the International Bulk Chemical Code (IBC), and the International Gas Carrier Code (IGC) as essential components.[48]. The aforementioned Codes serve as regulatory frameworks governing the transportation of chemical and gas substances via maritime routes.

2.2.2 London Convention, MARPOL and Basel Convention

The Basel Convention, enacted in 1989, serves as a seminal framework delineating the principles and directives for the effective management of substances that possess the potential to inflict harm.[49]The outcome of this event led to the formation of the United Nations Environment Programme (UNEP), an international regulatory body responsible for overseeing the transboundary movement of hazardous waste materials.[50]Not taking responsibility for its own actions The Basel conventions are pieces of regulatory law that do not have an immediate influence on ships or on the shipowners and operators who are responsible for them.

The conditions established by Basel must be complied with by the vast majority of state parties. In order to promote efficient environmental management, the Convention establishes limitations on the transportation of hazardous chemicals and other forms of pollutants across international boundaries. These restrictions are designed to protect the environment. Conventions such as the MARPOL Convention, the Basel Convention, and the London Convention on the Disposal of Wastes at Sea are the ones at question here.[51]The interrelationships between the three instruments under consideration, namely, [insert names of the instruments], are undeniably intricate and thus demand a comprehensive analysis that takes into account the IBC Code 51as.

As articulated in Article 1(4) of the Basel Convention, it is explicitly elucidated that refuse emanating from the routine functioning of a vessel, the discharge of which is duly addressed by

[48]Peter Gillies and Gabriël Moens, International Trade and Business: Law, Policy and Ethics, (Cavendish Pub., Sydney, Australia, 1st ed, 1998).
[49]Supra note 10.
[50]Supra note 17.
[51]United Nations, *European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways, (ADN)*, (United Nation, 2006).

an alternative international instrument, shall be excluded from the purview of this Convention. The aforementioned statement was initially presented during the inception of the International Maritime Organization (IMO) with the primary objective of preserving and protecting two distinct global frameworks. The first pertains to the regulation of hazardous waste disposal and the transportation of said waste across national boundaries, while the second focuses on limiting the discharge of operational waste originating from maritime vessels.[52].

The exclusion of "wastes resulting from shipboard tasks covered by the requirements of MARPOL 73/78" from the provisions delineated in chapter 20 of the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code) has been explicitly stated in subparagraph 20.3.2.1.[53]In light of the aforementioned, it is imperative to recognize that the symbiotic relationship between MARPOL (International Convention for the Prevention of Pollution from Ships) and the IBC Code (International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk), MARPOL and Basel (Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal), as well as MARPOL and London Dumping, specifically chapter 20, is operating in a harmonious manner. The coexistence of the International Convention for the Prevention of Pollution from Ships (MARPOL) and the Basel Convention has been a subject of scholarly discourse, as their respective frameworks have been found to exhibit inherent incompatibilities.

The etymology of the phrase "normal operations" can be traced back to its linguistic origins. The term "normal" derives from the Latin word "normalis," which pertains to a standard or regular state of affairs. It is worth noting that the concept of normalcy has been prevalent in various fields of study, including sociology, psychology, and organizational behavior. In the context of operations, the term "normal operations"[54]The Basel Convention has engendered notable divergences in viewpoints regarding its interpretation, giving rise to substantial conflicts. According to one of the reviews, there exists a widely accepted notion that the waste products

[52]Bruno Zeller, CISG and the Unification of International Trade Law, (RoutledgeCavendish, 1st ed, 2007).
[53]Supra note 2
[54]Roger, Wrapson, Dangerous Goods, A guide to Exemptions from The Carriage of Dangerous Goods by Road Regulations, (Kogan Page; London, 1st edition, 2009).

arising from or produced during customary maritime operations are intrinsically linked to the primary purpose of a vessel, namely the transportation of goods across the sea. The discharge of various substances, commonly referred to as "wastes," into the marine environment originating from the machinery spaces, such as bilge water and cooling water, as well as tank spaces, is subject to regulation under the International Convention for the Prevention of Pollution from Ships (MARPOL).[55]The inclusion of a definition for the term "normal" within the exclusion clause is deemed unnecessary. The act of exclusion was implemented with the intention of establishing a clear demarcation between the refuse present on the vessel itself and the waste originating from the cargo being transported.[56]There exists a school of thought among certain individuals that posits the notion that the term "normal" does not possess an extraneous or redundant quality. The determination of shipboard procedures' normality is contingent upon the specific classification of the vessel as well as the nature of the commercial activities it engages in. The integration of customization has become a prevalent characteristic within the realm of contemporary maritime vessels. It is conceivable that the established protocols and procedures employed in the operation of oil tankers may not be universally applicable to other categories of vessels, including but not limited to container ships, passenger ships, and fishing boats.

In accordance with the Basel Convention, an additional paramount consideration pertains to the origins of waste generation. The term "wastes" as delineated in Article 2.1 refers to objects or substances that necessitate disposal in accordance with national legislation. The initial segment of the definition confers a semantic interpretation that is widely comprehensible among the general populace. However, the subsequent component renders it susceptible to the legal frameworks and regulations of a specific nation-state. As per the provisions outlined in Article 1 of the Convention, it is established that the scope of its application encompasses not only hazardous waste but also various other forms of refuse. According to the regulatory framework,

[55]Department of Mines and Petroleum, Western Australia, *Storage and handling of dangerous goods Code of practice*, (Department of Mines and Petroleum, 2nd edition, 2010).
[56]Surya P. Subedi, *Textbook International Trade and Business Law*, (publishing house hanol, 2012).

compounds falling under the purview of Annex I are deemed hazardous wastes, unless they exhibit none of the characteristics outlined in Annex III, as articulated in paragraph 1(a).[57]

The initial segment of the introductory paragraph provides an impartial depiction of hazardous waste. In contrast, subparagraph (b) delineates the directive for a state party to the Convention to undertake an introspective assessment of hazardous waste, employing the framework of its own legal apparatus. The inclusion of Annex II in the aforementioned document alludes to the category of "other wastes," which, upon careful examination, reveals a rather limited mention of household garbage, deeming it of negligible significance.

The terminologies "food waste" and "wastewater" are employed within the context of MARPOL Annexes III and IV, respectively.[58]The term "shipboard incineration" can be elucidated as the process of disposing of waste or any other form of matter on a vessel, specifically when such waste or matter is produced during the routine functioning of said ship, as defined by V.[59]The lexical expression "wastes or other matter" can be traced back to its inception within the framework of the London Convention on the Incineration of Waste at Sea.

Furthermore, the matter of "disposal" necessitates meticulous deliberation. The disposal procedure, as stipulated in Article 2.4 of the Basel Convention, is explicitly delineated as "any process outlined in Annex IV."[60]The procedures outlined in the "Disposal Operations" Annex can be categorized into two distinct categories. The initial classification encompasses a set of functions that do not engage in the recovery, allocation, retrieval, regeneration, utilization, or repurposing of any materials. The existence of a second group is characterized by the adoption of practices that are diametrically opposed to those embraced by the first group.[61]The management of basel encompasses a multifaceted approach that extends beyond mere waste collection. The

[57]Section 301 and 446 of UK Merchant Shipping Act 1894.
[58]Meltem Deniz Güner-Özbek, *Hamburg Studies on Maritime Affairs: The Carriage of Dangerous Goods by Sea*, (Berlin, Heidelberg, DE: Springer, 2007); pp. 50-60.
[59]Ibid.
[60]William J. Chambliss, "Types of Deviance and the Effectiveness of Legal Sanctions," (1967) *Wis. L. Rev*, 703.
[61]*IMDG Code*; Article 32 of the *Rotterdam Rules*, Article 4(6) of the *Hague-Visby Rules*, and Article 13 of the *Hamburg Rules.*

London Convention primarily focuses on the issue of hazardous waste disposal, commonly known as "dumping," and its associated risks.

The concept of "transboundary movement" is explicated in the third paragraph of Article 2, wherein it is elucidated as the act of transferring hazardous wastes or other wastes from a region within the sovereign control of one state to another region within the sovereign control of one or more states, or to a region devoid of any national jurisdiction. It is essential to note that this movement necessitates the involvement of a minimum of two states. The term in question fails to encompass the category of perilous refuse that is deposited onto terrestrial environments as a result of marine transference.

The fundamental principle underlying the Basel Convention is the notion of "transboundary movement" (TBM), a concept that is explicitly reflected in the nomenclature of the mechanism established to address the management and disposal of hazardous wastes.[62] The concept of Transportation, Handling, and Disposal of Hazardous Material (TBM) encompasses the intricate processes involved in both the importation and exportation of such materials, alongside their intended or executed methods of disposal. The elucidation of the interrelationships between various entities is facilitated by the explication of the terminologies "State of import," "State of transit," and "State of export," as delineated in Article 2, specifically in paragraphs 10, 11, and 12.[63]The proposition posits that the aforementioned concepts hold relevance solely in the context of maritime movements aimed at the disposal of perilous substances, while they do not extend to commercial shipping activities that primarily involve the transportation of commodities and the discharge of residual substances generated on board in accordance with the stipulations outlined by the International Convention for the Prevention of Pollution from Ships (MARPOL).[64]

The utilization of the Basel Convention as an international regulatory instrument for addressing vessels in their "end of life" trajectory, culminating in their scrapping, has emerged as a

[62]John Norton Moore IMO, "Interface with the Law of the Sea Convention," in Myron H. Nordquist, John Norton Current Maritime Issues, the International Maritime Organization, pp. 269; pp. 223.364.
[63]The use of "shipboard" is arguably wider than "normal".
[64]*20.3.1 of IBC Code*.

consequential outcome.[65]Despite the existence of a more contemporary convention that explicitly tackles the issue of vessel recycling, the relevance of Basel in relation to this subject matter persists due to the inclusion of the concept of Transboundary Movement (TBM) as articulated within the convention. The potential exists for Basel's relevance to these vessels to have surpassed the permissible boundaries outlined by the International Maritime Organization's Hong Kong Convention on Ship Recycling.[66]

As we approach the culmination of this discourse, it is imperative to underscore that the matter of lexicon, which occupies a pivotal position in all the conventions and other instruments that have hitherto been deliberated upon, is not all-encompassing. As the discourse progresses, it is inevitable that there will be a heightened frequency of allusions to various notions pertaining to the overarching concept of "hazard" or "danger." The forthcoming references shall be situated within the framework of apprehensions arising from the conveyance of hazardous chemicals aboard a maritime vessel, potentially giving rise to legal liability.”

2.3 SOLAS

The establishment of the International Convention for the Safety of Life at Sea (SOLAS) can be attributed directly to the tragic event that unfolded with the RMS Titanic in 1914. The Convention in question, last revised in the year 1974, holds paramount significance as it pertains to the comprehensive handling of matters concerning maritime safety. The present Convention serves as a regulatory framework that delineates the fundamental prerequisites pertaining to the construction, equipment, and operation of maritime vessels, with the primary objective of ensuring the preservation and integrity of the Convention in question. The scope of application of this Convention is limited exclusively to vessels engaged in the transportation of goods or passengers across international maritime boundaries. The “International Convention for the Safety of Life at Sea”(SOLAS) of 1960, which was implemented in 1965, incorporated Chapter VII as a pivotal component addressing the transportation of hazardous materials. The present

[65]Iwona Rummel-Bulska, Louise Angelique de La Fayette, "The International and European Community Law Applicable to the Probo Koala Affair" (unpublished) London: October 2008, p. 17.
[66]The use of "shipboard" is arguably wider than "normal".

chapter delves into the comprehensive analysis of the report proffered by the esteemed "United Nations Committee of Experts on the Transport of Dangerous Goods" in the year 1956. This seminal report serves as the bedrock for establishing the rudimentary benchmarks governing conveyance of dangerous materials across diverse modes of transportation. Chapter VII was implemented with the primary objective of addressing the intricate matter of transporting hazardous materials. The SOLAS Convention, initially established in 1960, underwent a significant transformation with the advent of the 1974 Convention, rendering the former obsolete. Within the latter Convention, Chapter VII specifically delves into the intricate realm of hazardous product transportation."

Chapter A of this scholarly discourse delves into the intricate domain of transporting hazardous materials, specifically focusing on their conveyance in packaged form. In parallel, Part A-1 undertakes a meticulous examination of the transportation of dangerous materials in solid state, albeit in bulk quantities. This chapter encompasses the inclusion of both parts. Part B of the regulatory framework necessitates that vessels engaged in the transportation of dangerous liquid chemicals in bulk adhere to the "International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk" (IBC Code). Furthermore, it prescribes specific criteria pertaining to the construction and equipment requirements for said vessels. Within the framework of Part C, meticulous provisions have been established to address the construction and equipment requirements pertaining to vessels specifically engineered for the transportation of liquefied gases in large quantities. Additionally, these provisions encompass the imperative aspect of adherence to the "International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk" (IGC Code). In order to transport packaged irradiated nuclear fuel, high-level radioactive wastes, and plutonium via maritime vessels, it is imperative to adhere to the regulations outlined in the "International Maritime Organization's International Code for the Safe Carriage of Packaged Irradiated Nuclear Fuel, Plutonium and High-Level Radioactive Wastes on Board Ships" (referred to as the INF Code). Part D of the INF Code specifically

delineates the requirements for such transportation, which necessitates strict compliance with a set of predetermined standards, in addition to other pertinent regulations.[67]

The absence of explicit guidelines pertaining to the definition of hazardous products within the framework of the convention allowed state parties the discretion to determine the nature of perilous substances. Consequently, these parties were able to provide recommendations regarding precautionary measures concerning the storage, packaging, transportation modality, and segregation, among various other aspects. The observed pattern ultimately engendered a multitude of national and regional procedures that exhibited a notable lack of congruence and uniformity. In the context of our ongoing discussion, it is pertinent to acknowledge that the 1914 Safety of Life at Sea (SOLAS) convention encountered a hindrance in its implementation due to the prevailing international political turbulence during that period. The persistence of unilateral and regional regulation pertaining to the transportation of hazardous goods by sea persisted throughout the years, despite the establishment of permanent provisions in the 1929 iteration of the "Safety of Life at Sea" (SOLAS) convention, which was initially introduced in 1914.[68]The consolidation of standards pertaining to hazardous items and life-saving appliances, commonly referred to as LSAs, has been effectively executed within Article 24 of the revised edition. The year 1933 marked the official global implementation of the Safety of Life at Sea (SOLAS) convention.[69]During the diplomatic conference preceding the ratification of the 1948 version of the convention, it was duly acknowledged that several participating governments engaged in the trade of chemical cargoes had already enacted regulatory measures pertaining to such trade. This recognition was based on pragmatic considerations, acknowledging the existing practices and policies implemented by these governments. During the conference, the participants collectively arrived at a consensus that the evaluation of a product's hazardous nature should be predicated upon an assessment of its inherent qualities and scientific attributes.[70]The categorization and subsequent labeling of materials and chemicals based on their inherent risk level is of utmost

[67]20.3.1 of IBC Code.
[68]Iwona Rummel-Bulska (additional information needed)..
[69]Louise Angelique de La Fayette, "The International and European Community Law Applicable to the Probo Koala Affair" (unpublished) London: October 2008, p. 17.
[70]Article 2 of Basel Convention.

significance. This practice ensures that these substances are appropriately identified and adorned with the requisite symbols, thereby aligning with the established classification system.[71]Consequently, the 1948 edition of the convention witnessed the acknowledgment of novel safety criteria, specifically in the form of a distinct chapter VI entitled "Carriage of Grain and Dangerous Goods." However, it was widely acknowledged within scholarly circles that these criteria were insufficient in addressing the prevailing safety concerns.

Ultimately, a Recommendation was executed which underscored the paramount importance of maritime transportation for hazardous commodities and the imperative to establish uniform regulations, notwithstanding the apparent dearth of enthusiasm within the global maritime fraternity. The diminished enthusiasm observed in this context was ascribed to the comparatively modest volumes of perilous commodities being transported via maritime routes during that period.

The study conducted by the "United Nations Committee of Experts on the Transport of Hazardous Goods" (CETDG) in 1956 established a set of minimum requirements for the transportation of hazardous goods. In accordance with the recommendations put forth, the aforementioned guidelines encompassed a comprehensive array of transportation modalities. The present investigation has effectively established the fundamental basis for achieving global uniformity in legal and regulatory frameworks.[72]Chapter VI of the International Convention for the Safety of Life at Sea (SOLAS) treaty, which was adopted in 1960 and entered into force in 1965, exclusively pertained to the regulation of hazardous materials transported via maritime routes. The aforementioned convention was rendered obsolete subsequent to the implementation of the "International Convention for the Safety of Life at Sea" (SOLAS) in the year 1974. In accordance with the provisions set forth in Chapter VII of the Safety of Life at Sea (SOLAS) convention, it is mandated that all vessels falling under the SOLAS category, as well thecargo

[71]Annex III Regulations for the Prevention of Pollution by Harmful Substances Carried by Sea in Packaged Form; and IV Regulations for the Prevention of Pollution by Sewage from Ships.
[72] Article 2 DEFINITION of Basel Convention.

ships possessing a gross tonnage not exceeding 500, must adhere to the regulatory framework established for the transportation of hazardous commodities, both in packaged and bulk form.[73]

2.4 MARPOL

Convention Internationale sur la Pollution des Navires[74]is an essential pact that, among other things, bans accidental and operational discharge from ships from polluting the ocean. This Convention was established in 1973, and the protocol in 1978 addressed the tanker events that occurred in 1976-1977. In light of the non-ratification of the 1973 Protocol, it is noteworthy that the parent convention was assimilated by the 1978 Protocol. The utilization of "includes" in contrast to "annexes" is a matter of distinct significance within the realm of research. While both terms denote the incorporation of additional materials or information, they differ in their connotations and implications. The term "includes" implies The Convention in question encompasses a number of annexes, each of which pertains to the technical legislation governing the diverse array of pollutants falling under its purview.[75]The Convention, commonly referred to as the “International Convention for the Prevention of Pollution from Ships” (MARPOL), and its Annex VI underwent modifications subsequent to the adoption of a protocol in the year 1997, which subsequently came into force in 2005.

Laws pertaining to the prevention of oil pollution are included in Annex I. Annexure-II is responsible for regulating hazardous liquid bulk pollutants. Annexures III and IV cover the avoidance of pollution from bulk pollutants and pollution from ship sewage, respectively. Annex V is responsible for preventing pollution from ship trash, while Annex VI is responsible for preventing pollution from ship air.

Annex III is the one that gets the most attention since it prevents potentially hazardous chemical contamination, but all of these annexes work together to lessen the amount of pollution in the ocean. The IMDG Code classifies potentially hazardous substances as pollutants in maritime

[73] Annex IV of Disposal Operations of Basel Convention.
[74]Katharina Kummer, "International Management of Hazardous Wastes: the Basel Convention and Related Legal Rules" (Oxford University Press on Demand, 1999); pp. 101-140.
[75]Article 2, paragraphs 10, 11, and 12 of Basel Convention.

environments. This Annexure establishes guidelines for the packaging, marketing, labeling, documenting, storage, quantity limitations, exclusions, and notification processes necessary to prevent the contamination of hazardous substances.

The primary responsibility for the management of hazardous substances delivered in packaged form by ships lies with Annex III. However, it is important to note that all of the Annexes hold considerable importance in the realm of ship-source pollution management and prevention.[76]The term "harmful" holds considerable significance within the present context, as it has been previously examined and deliberated upon in the preceding chapter. The central focus, akin to the other Annexes, pertains to the issue of maritime ecosystem contamination arising from the packaging of perilous substances. Chemical substances that are conveyed via rail or road within the context of a multi-modal transportation endeavor are subject to the prescribed guidelines. The scope of this study encompasses various chemical substances that are conveyed through a range of transportation modes, including but not limited to containers, portable tanks, and tank wagons.[77]

It is required by this Annex that packaged hazardous chemicals be identified in order to allow for safe and suitable packing and stowage onboard boats. This is done to prevent, limit, or eliminate pollution caused by accidents or other circumstances, as well as the accompanying damage.[78], Importantly, the law enables the disposal of harmful substances overboard, even though doing so would normally be prohibited, if doing so is necessary to preserve the ship or save lives while at sea.[79] The term “harmful substances” is defined as marine pollutants in both the Annex and the IMDG Code. This pertains to the connection between safety and pollution, as well as the connection between what is risky for safety and what is environmentally damaging.

2.5 The UN Recommendations on the Transport of Dangerous Goods

[76]David P. Hackett, "Assessment of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal," (1989) 5 Am. UJ Int'l L. &Pol'y, 291, 298.
[77]Katharina Kummer, "The international regulation of transboundary traffic in hazardous wastes: The 1989 Basel Convention," (1992) 41 ICLQ 03, 530, 551.
[78]The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009.
[79]www.imo.org *The International Maritime Dangerous Goods Code*.

It was stated that SOLAS. The world began to spin more quickly after the second world war, taking with it more harmful elements of nature. It may include explosives, radioactive materials, acids, gasoline, or other potentially dangerous substances. The law regarding the transportation of hazardous products was deemed to be contradictory by ECOSOC. In 1956, the ECOSOC released its first set of rules to safeguard lives and property during the transportation of hazardous commodities. The plan from 1996 consisted of two parts: the Manual of Tests and Criteria, as well as the Modal Regulations. In the first, laws and rules for carrying hazardous materials are proposed, and in the second, testing processes are outlined in order to establish the level of risk. Even though countries are generally expected to adhere to this rule, doing so is not a requirement. This regulation applies to the transport of all dangerous goods, with the exception of bulk tankers. Chemicals, mixtures, or manufactured objects might all fall under the category of hazardous things. This recommendation from the United Nations does not address the production, use, or disposal of hazardous items.

The Recommendations served as a guide for public authorities to follow in order to draft uniform model legislation that ensure the safe and effective movement of potentially hazardous goods across all modes of transportation.[80]. Although it does not address substantial quantities of hazardous materials, the "model" provides a legal framework that may be adapted to accommodate local and worldwide applications. Since their dissemination, the Recommendations have garnered widespread support, most notably from the IMO, which included them into the SOLAS Dangerous Goods Regulations on the basis of their application.[81].

The Recommendations have, relatively recently, been given the status of model rules or model regulations, with the concepts contained therein having been adopted for use by many national and regional governmental bodies and institutions. This makes a significant contribution toward achieving worldwide harmonization of the regulatory framework governing the transport of

[80]Meltem Deniz Güner-Özbek, Hamburg Studies on Maritime Affairs: The Carriage of Dangerous Goods by Sea (Berlin, Heidelberg, DE: Springer, 2007); pp. 50-60.
[81]Cleopatra Elmira Henry, The Carriage of Dangerous Goods by Sea: the Role of the International Maritime Organization in International Legislation (Pinter, 1985), pp. 40-61.

hazardous products, including carriage by water.[82]. Notably, despite the fact that the Recommendations have a para droit nature, which means that they are non-mandatory, the drafting method and style make them amenable to adoption as required instruments in the domestic legislative realm. This is something that should be noted. Most notably, the process of revising the Recommendations is a continuous one, which makes it easy to modify them for use in domestic legislative contexts.[83]

2.6 Conclusion

This chapter undertook an examination of the primary regulatory instruments, commencing with the International Maritime Dangerous Goods (IMDG) Code. In addition, the discourse encompassed an examination of the SOLAS Convention, which stands for the International Convention for the Safety of Life at Sea, and the MARPOL Convention, an acronym for the International Convention for the Prevention of Pollution from Ships. The United Nations Recommendations on the Transport of Dangerous Goods have taken into account the relevant provisions of the International Convention for the Safety of Life at Sea (SOLAS). It is widely acknowledged within the realm of common knowledge that during the transportation of hazardous materials, the utmost priority should be accorded to safeguarding human life and preserving the integrity of the environment, thereby superseding all other factors. In stark contrast, the paramount focus lies in the legislative, supervisory, and regulatory aspects pertaining to the transportation of perilous commodities, superseding the emphasis on preemptive actions. The rationale behind this phenomenon can be attributed to the inherent characteristics of the commodities being conveyed. The forthcoming chapter will delve into the comprehensive examination of civil liabilities pertaining to the transportation and handling of hazardous products.

[82]Edgar Gold, "Legal Aspects of the Transportation of Dangerous Goods at Sea," 10 *Marine Policy* 3(1986) pp 185, 191.
[83]Meltem Deniz Güner-Özbek, *Hamburg Studies on Maritime Affairs: The Carriage of Dangerous Goods by Sea* (Berlin, Heidelberg, DE: Springer, 2007); pp. 50-60.

CHAPTER 3

CIVIL LIABILITIES IN SEA TRANSPORT OF DANGEROUSGOODS

3.1 Introduction

The prevailing contentions that have emerged consequent to the presence of hazardous merchandise on board the vessel primarily pertain to matters of a contractual nature. The resolution of maritime disputes often entails the involvement of multiple stakeholders, such as the shipowner, charterer, shipper, and potentially others. The contractual instruments between the parties serve as the governing framework for determining the obligations and liabilities that each party is bound by. The aggrieved party, in light of the hazardous nature of the products present on the vessel, intends to assert a breach of the pertinent contractual agreement, thereby seeking appropriate redress and remedies.[84]In the given scenario, it is plausible for the shipowner to initiate legal proceedings against the shipper, contending that the deleterious nature of the transported goods was the underlying factor responsible for the resulting damage or injury. The initiation of a claim within the legal framework of torts is a plausible course of action, wherein the pursuit of any available remedies prescribed by said legal domain shall be concurrently sought.

3.2 Liability in Tort: - Fault-based, strict, and absolute

3.2.1 Fault-based liability

The act of committing a tort can be understood as the commission of a civil wrong, wherein the defendant's liability is contingent upon the presence or absence of substantiated indications of harm or injury. Within the legal framework, the determination of the lawfulness or unlawfulness of an action or omission is contingent upon the inherent characteristics of the behavior in

[84]Ibid, pp. 50-62.

question. Consequently, the law, as a mechanism of regulation, provides a means of redress in the form of a remedy to address any transgressions.

Within the realm of tort law, a myriad of transgressions exist that encompass a wide array of wrongful acts. These acts encompass but are not limited to negligence, unauthorized entry, physical aggression, and various other forms of misconduct. Negligence emerges as the most conspicuous manifestation of wrongful conduct within the realm of tort law. In the realm of tort law, it is incumbent upon the individual seeking redress to assume the onus of establishing the requisite burden of proof. The individual in question must exercise due diligence in establishing the presence of an injury, damage, or loss resulting from the defendant's negligence, while also satisfying all prerequisites delineated in the widely recognized legal precedent of Donoghue v. Stevenson. The concept of foreseeability holds significant importance within the legal framework of negligence, and its relevance is evident in both The Wagon Mound I and II cases.[85]

Within the realm of marine law, the domain of naval torts encompasses a range of responsibilities that are categorized into collision liability, personal injury liability, and pollution liability. The concepts of personal injury and collision responsibility exemplify fault-based torts, which pertain to civil wrongs committed by one party against another. In a similar vein, pollution liability may also be categorized as fault-based, contingent upon the absence of a suitable international accord or domestic legislation governing such matters. In the realm of international convention law, it is imperative to note that the allocation of responsibility for pollution transcends the traditional reliance on negligence and assumes an absolute nature. In the event that the prevailing regional statutes fail to impose stringent accountability measures upon those responsible for environmental contamination, the extent of liability pertaining to pollution shall be contingent upon the attribution of fault.[86]The legal precedent established in the notable case “Southport Corporation v. Esso Petroleum Co. Ltd.” elucidated the determination that ship source pollution, a form of environmental contamination originating from maritime vessels, falls within the purview of fault-based tort liability. It is noteworthy to mention that this particular

[85]"Brief History of IMO"http://www.imo.org/en/About/HistoryOfIMO/Pages/Default.aspx; accessed 25 August 2023

[86]*Ecotoxicology and Environmental Safety*. http://www.inct-ta.furg.br/english/producao/512009.pdf.

category of pollution is not encompassed by any existing international convention or agreement. The rationale behind this decision stems from the absence of any existing agreement that specifically addresses the issue of this particular form of pollution.[87]Within the confines delineated by the Convention or the legal statutes of the nation under whose registry the vessel is enlisted, the shipowner possesses the prerogative to circumscribe his or her liability.

3.2.2 Strict Liability

The concept of strict responsibility pertains to the attribution of liability, irrespective of any discernible wrongdoing. The aforementioned statement suggests that it is not incumbent upon the plaintiff to establish the defendant's negligence. Instead, the onus lies upon the plaintiff to substantiate that the defendant's act or omission directly resulted in the damage, loss, or injury incurred by the plaintiff. Within the realm of convention law, it is imperative to acknowledge the existence of a rigorous criterion pertaining to civil accountability with regards to the issue of shipping source pollution. The introduction of the concept of "strict liability" at the Civil Responsibility Convention in 1969 can be attributed directly to the Torrey Canyon Disaster of 1967.[88]

The legal precedent of Ryland v. Fetcher, a seminal case in the field of tort law, has been widely acknowledged as the foundation for the principle of strict responsibility.[89]Based on the prevailing circumstances surrounding this particular case, it can be posited that even in the event of the defendant's active involvement in the aforementioned extra-hazardous activity, and subsequently resulting in the plaintiff's injury, the burden of proof for establishing the defendant's culpability would prove to be a formidable challenge for the plaintiff. The issue of

[87]Annex III of MARPOL Convention; see also Rebecca Becker, "MARPOL 73/78: An Overview in International Environmental Enforcement," (1997) Geo. Int'l Envtl. L. Rev. 10, 625, 625-630.
[88]Ibid, see Annex III of MARPOL Convention.
[89]Rebecca Becker, "MARPOL 73/78: An Overview in International Environmental Enforcement," (1997) Geo. Int'l Envtl. L. Rev. 10, 625, 625-630; Gerard Peet, "MARPOL Convention: Implementation and Effectiveness," (1992) 7 The Int'l J. Estuarine & Coastal L., 280.

air pollution, which was subject to interstate arbitration between the United States and Canada, also involved the concept of strict responsibility.[90]

The primary onus of accountability for any environmental contamination resulting from a vessel rests unequivocally upon the shipowner. During the proceedings of a diplomatic conference held in the year 1969, a pivotal topic of discussion revolved around the inquiry of whether the community engaged in cargo ownership, particularly the oil industry, ought to assume accountability for the production of environmental pollution. The proposition has been put forth that the cargo holding assembly ought to assume a measure of accountability for its contribution to environmental pollution, in conjunction with the shipowner. The enactment of the International Oil Pollution Compensation Fund Convention in 1971 and its subsequent revision in 1992 were direct consequences of the aforementioned event, as this Convention sought to address the issues and concerns that arose from it. The ratification of both the HNS Convention and the Bunkers Convention signifies a significant development in the realm of maritime law. These two treaties, which have been widely acknowledged and adopted by numerous nations, incorporate provisions pertaining to the concept of absolute responsibility.[91]

How does strict liability address safety?

When a shipper possesses knowledge of the significant liability associated with the conveyance of perilous commodities, it follows that said shipper will exhibit a heightened degree of circumspection in their operations.[92]The shipper, by virtue of possessing the capacity to conduct rigorous examinations and ascertain the true essence of the commodities prior to their dispatch, assumes an optimal role in ensuring the protection of individuals from deleterious merchandise. However, it is not a reasonable expectation to assume that the carrier would undertake such actions for every single category of merchandise that they are responsible for transporting.[93]In the context of cargo transportation, it is pertinent to explore the question of whether carriers

[90]Ibid.
[91]UN, *Recommendations on the Transport of Dangerous Goods: Manual of Tests and Criteria*, (New York and Geneva, 6th Revised edn. UN. 2015) http://dx.doi.org/10.18356/c2b83494-en accessed 25th August 2023.
[92]Ibid, pp. 80-87.
[93]Meltem Deniz Güner-Özbek, *Hamburg Studies on Maritime Affairs: The Carriage of Dangerous Goods by Sea* (Berlin, Heidelberg, DE: Springer, 2007); pp. 80-87.

should be mandated to conduct comprehensive inspections of every packed container or perform tests on each cargo to ascertain the nature and characteristics of the goods being transported, particularly in relation to containerized commodities. This inquiry delves into the potential benefits and drawbacks associated with such a requirement, considering the complexities and practicalities involved in the logistics industry. Proponents of mandatory container inspections argue that such measures would enhance security and mitigate risks associated with illicit activities, including smuggling, terrorism, and the transportation of hazardous materials. By systematically opening and examining each container, carriers could potentially identify and intercept any unauthorized or dangerous items, thereby safeguarding public safety and national security interests. Furthermore, proponents contend that comprehensive inspections would enable carriers to ensure compliance with relevant regulations, such as those pertaining to the transportation of restricted or regulated goods. However, it is essential to acknowledge the inherent challenges and limitations associated with implementing such a requirement. Firstly, the sheer volume of containerized goods transported globally poses a significant logistical hurdle. Conducting inspections or tests on every cargo would necessitate substantial time, resources, and manpower, potentially leading to significant delays in the transportation process. Moreover, the diverse nature of goods being transported renders it impractical to perform comprehensive tests on every item, as certain products may require specialized expertise or equipment for accurate assessment. Additionally, the privacy and confidentiality concerns of shippers and consignees must be taken into account. Requiring carriers to open and inspect every container could potentially infringe upon the privacy rights of individuals and businesses, as the contents of shipments may be proprietary, sensitive, or confidential. Striking a balance between security imperatives and the protection Based on a comprehensive analysis, it is evident that engaging in such an endeavor would be deemed imprudent due to the inherent implications of squandering valuable temporal and material assets.

Furthermore, it is worth considering that even in the scenario where the carrier diligently inspects every single container, it remains a formidable challenge for them to ascertain the potential hazardous nature of a specific product. The carrier is required to maintain a certain level of trust in the shipper, relying on the assumption that the shipper will not surreptitiously

load hazardous commodities onto the vessel without disclosing their presence to the carrier. The carrier possesses the prerogative to exercise discretion in assuming or declining the associated risk subsequent to receiving prior notification. Due to the comprehensive comprehension of bulk cargo attributes within the trading domain, instances of this predicament are infrequent in the realm of bulk cargo. The individual responsible for the transportation, the one in control, or the intermediary possesses the ability to access and review the pertinent details pertaining to a particular shipment, and it is incumbent upon them to possess this knowledge. It is imperative that the carrier or the master of the vessel be duly informed regarding the accurate and comprehensive status of the bulk cargo. This includes meticulous documentation of the prevailing temperature conditions, the extent of moisture content, and any other pertinent particulars that may be of significance. In the aforementioned scenario, it is imperative to acknowledge that the shipper assumes a position of strict liability pertaining to any latent hazards associated with the transportation of bulk cargo, irrespective of the prevailing level of awareness within the scientific community regarding said risks.[94]The legal determinations pertaining to strict liability in the context of shipping operations distinctly delineate that the shipper assumes strict responsibility in cases where the shipper fails to duly inform the carrier, master, or agent regarding the deleterious attributes and characteristics of the goods being transported. The present scenario engenders a circumstance wherein the shipper becomes subject to the doctrine of strict liability. In an alternative perspective, it can be argued that the issue of strict responsibility does not pose a significant challenge under the condition that the shipper has duly furnished the necessary notification to apprise the carrier or master of the specific characteristics of the merchandise. Furthermore, if the carrier, master, or agent possesses the requisite knowledge regarding the hazardous properties of the goods in question, the aforementioned strict responsibility becomes a non-issue. In essence, it can be inferred that in the event that the shipper has duly furnished the requisite notification, the concept of strict liability becomes inconsequential. Nevertheless, it is imperative to acknowledge that the shipper cannot be exempted from their obligations even in cases where they have acquired knowledge pertaining to the potential hazards involved.

[94]John F. Wilson, Carriage of Goods by Sea.

3.2.3 Absolute liability

The Convention on the accountability of Operators of Nuclear Ships imposes a comprehensive obligation of accountability upon the owners of nuclear ships in the unfortunate event that their vessels give rise to nuclear harm.[95]

Article 1 Paragraph 1 of this Convention says that:

In the event that compelling evidence can be presented to establish a causal relationship between the nuclear damage incurred and a nuclear incident involving the nuclear fuel of an atomic vessel, or the radioactive byproducts or waste generated within said vessel, it follows that the entity responsible for the operation of said nuclear vessel shall bear legal responsibility for the resultant nuclear damage.

The concept of nuclear damage, as stipulated in Article 1 Paragraph 7, encompasses the consequences of radioactive properties or their amalgamation with dangerous, explosive, or other hazardous nature of nuclear fuel, radioactive things or waste. It encompasses the loss of life, harm to property, and any associated expenses that result directly or indirectly from such occurrences. However, it is important to note that the inclusion of any additional losses, harm, or expenses is contingent upon the provisions set forth by the relevant national legislation.

The definition of the term "nuclear incident" can be found in Article 1, Paragraph 8 of the Convention in question. This observation suggests that the potential for nuclear damage can arise from any occurrence or series of occurrences, irrespective of their point of origin.Notwithstanding the presence of these aforementioned clauses, it is noteworthy to observe that the document in question does not make any explicit reference to the concept of absolute liability. The Convention on Civil Responsibility in the Field of Maritime Carriage of Nuclear Materials was officially ratified in the year 1971. The present convention pertains to the onus borne by operators of nuclear installations and provides provisions for the exemption of liability in instances where another convention governs the said liability. The convention pertains to the

[95][1961] AC 388 and [1966] 1 Ll.L.R. 657.

matter of liability for operators of nuclear installations and the transportation of nuclear materials via maritime means.[96]The terminology denoted as "absolute liability" does not find explicit mention within the confines of this Convention.

The precise mode of transportation employed for the conveyance of nuclear material, which was utilized as cargo, was not explicitly delineated within the framework of the treaty that was enacted in the year 1962. Hence, in the scenario where proactive measures are undertaken to anticipate the most unfavorable consequence, a state of utmost accountability would be imposed. In instances of strict liability, the shipowner possesses the capacity to assert various defenses; however, in cases of absolute liability, the shipowner is rendered entirely devoid of such prerogative. The fundamental differentiation between strict liability and absolute liability lies in their respective legal frameworks. Strict liability refers to a legal doctrine that holds individuals or entities liable for the consequences of their actions, regardless of their intent or level of fault. In other words, under strict liability, the focus is primarily on the act itself and the resulting harm caused, rather than the mental state or intention of the party involved. On the other hand, absolute liability pertains to a legal principle that imposes liability on individuals or entities for certain.

3.3 Liabilities in Contract

The evolution of contractual obligations can manifest through various mechanisms, including but not limited to misrepresentation, breach of contract, and similar avenues. The prevailing incidence frequently observed pertains to the breach of contractual obligations. The aforementioned liabilities encompass a variety of categories that are contingent upon the attribution of fault. The act of breaching a contract, which can be considered as a repudiation of the contractual agreement, manifests itself through the non-compliance with the stipulated obligations as delineated within the contractual framework. In the hypothetical scenario wherein the party involved encounters insurmountable obstacles that impede the fulfillment of the contractual obligations, it is imperative to acknowledge that said party shall not be deemed liable

[96]*[1954] Q.B. 182; (CA).*

for any contravention of the contractual agreement. In the event that the breach is attributable to the party in question, it shall be incumbent upon them to assume responsibility for the transgression.[97]

3.4 Remedies in Contract and Tort

Within the realm of private law, the term "remedy" pertains to the punitive measures or consequences imposed as a means of addressing a legal violation or breach of duty.[98] Both contract law and tort law offer an extensive array of potential remedies to address the various issues that may arise in legal contexts. Within the realm of contract law, one encounters the notion of compensation, alongside various alternative remedies that extend beyond pecuniary considerations, such as the specific performance of the contractual agreement and rescission. The present inquiry pertains to the feasibility of employing certain entities or resources in a manner that allows for their convenient utilization. The field of tort law encompasses the notion of damages, which holds significant importance in legal discourse. The determination of the appropriate course of action shall be contingent upon the severity of the illicit act or omission perpetrated by the individual in question. The remedy sought by the plaintiff aims to restore them to the hypothetical state they would have occupied had the defendant refrained from engaging in the unlawful act or omission.[99]

The potential for an act to concurrently fulfill the criteria of both a tort and a criminal offense arises when said act leads to the transportation of perilous substances, thereby resulting in the unfortunate demise or infliction of bodily harm upon an individual.[100]Furthermore, it is imperative to acknowledge that the presence of pollution has adverse effects on the human populace. Specifically, one notable consequence of this environmental degradation is the potential occurrence of marine torts, wherein individuals may experience property loss and

[97]Lance D. Wood, "Integrated International and Domestic Approach to Civil Liability for Vessel-Source Oil Pollution" 1975 *J. Mar. L. & Com.* 7, 1, 5.
[98]*(1868) L.R.3 H.L. 330*.
[99]*Trail Smelter Arbitration*, Arbitral, *T3 U.N. Rep. Int'l Arb Awards* 1905 (1941); See supra note 2, p. 27.
[100]Alexandre Kiss and Dinah Shelton, "Strict liability in International Environmental Law," in *Law of the Sea, Environmental Law and Settlement of Disputes* (Brill, 2007), 1131-1152.

financial deprivation as a direct result. The marine ecosystem is invariably subject to the influence of pollution, irrespective of its manifestation.

3.4.1 Damages and Damage in general

The term "damage" denotes the occurrence of loss, harm, and physical or emotional injury, whereas the plural form "damages" pertains to the resolution or compensation for such adverse consequences. The term "damages" is commonly employed in jurisdictions adhering to the common law legal system, while "compensation" is the preferred terminology in nations that adhere to civil law principles, as well as in the context of international agreements. The available avenues for seeking redress, as delineated by both the contract law and tort law frameworks, are as follows.

3.4.2 Damage on the Marine Environment

The deleterious ramifications on the environment can be broadly categorized into three distinct types: environmental harm, environmental damage, and ecological detriment. The absence of a precise definition of ecological damage within the framework of the Convention on Civil Liability for Oil Pollution Damage (CLC) and the International Fund for Compensation for Oil Pollution Damage (Fund Convention) has been noted. The aforementioned legal instruments, which primarily aim to address the consequences of oil pollution incidents, do not explicitly delineate the concept of ecological damage. The elucidation provided by the International Convention on Salvage, 1989, delves into the concept of environmental damage, which is explicated as a consequential impairment to the physical well-being of both marine life and resources, as well as the overall physical health, within coastal or inland waters, or in areas proximate to such waters. This impairment is engendered by a multitude of factors, including but not limited to pollution, contamination, fire, explosion, or other comparable significant events. The elucidation in question can be located within the confines of Article 1(d) of the aforementioned convention.

3.5 The carrier-shipper relationship: - mutual obligation and liabilities

The formal delineation of the carrier-shipper relationship is established through the explicit stipulations outlined within the contractual agreement. The evidentiary substantiation of the mutual understanding between parties lies in the formal transmission of the written instrument, commonly referred to as the document, alongside the accompanying bill of lading. The contractual agreement designates the shipper as a participating entity, while the governing framework for international goods transportation is the applicable convention that governs the terms of the contract. The applicability of this Convention is not extended to the aforementioned agreement due to its involvement with the charter party.[101]

The provision outlined in Article IV, paragraph 6 of the Hague-Visby Rules pertains to the handling of goods possessing flammable, explosive, or otherwise hazardous properties during shipment. It stipulates that the carrier, master, or agent of the carrier must grant explicit consent, with full awareness of the nature of said goods, for their inclusion in the shipment. In the absence of such consent, the carrier reserves the right to take appropriate action, including but not limited to the landing of said goods at any location, causing damage to them, or rendering them harmless, all without any obligation to provide compensation. It is important to note that the shipper of such goods assumes complete responsibility for any and all damages and expenses that may directly or indirectly arise, result from, or be related to the aforementioned actions taken by the carrier. In the hypothetical situation wherein any commodities that were transported with due knowledge and explicit authorization subsequently exhibited hazardous properties detrimental to the vessel or its cargo. In the aforementioned scenario, it is plausible for the aforementioned entities to be deposited at any given location, subjected to destruction, or rendered innocuous by the carrier, absolving said carrier from any legal obligations, save for potential liability pertaining to general average, if applicable.[102]

According to the initial passage of Article 13(2), it is explicitly mentioned that the shipper bears the responsibility of appropriately marking or labeling hazardous goods as dangerous. In the event that the shipper confides hazardous materials to the carrier or an authentic carrier, as

[101]Vandall, *Strict Liability* (1989), 21; Verro/Vernon, The Boundaries of Strict Liability in European Tort Law (2004), 8.
[102]In re M/V "DG Harmony", No: 98 Civ. 8394 (DC), 2005 U.S. Dist. Lexis 23874: 18 October 2005.

circumstances dictate, it is incumbent upon the shipper to duly apprise the carrier of the perilous character of said materials and, if necessary, of the requisite precautions that must be observed.The present discourse necessitates a comprehensive rephrasing of the user's text in a manner befitting[103].

The present discourse aims to expound upon the specific provisions pertaining to hazardous items as stipulated in Article 32 of the Rotterdam regulations. In instances where commodities, due to their inherent nature or distinctive attributes, present a potential risk to individuals, assets, or the ecosystem, or where there exists a reasonable likelihood of such peril emerging in the future:

Prior to the transfer of products to the carrier or any performing party, it is incumbent upon the shipper to promptly furnish the carrier with notification regarding the potential hazardous nature or characteristics of said items. In the event that the shipper is unable to fulfill this obligation, and in the absence of any prior knowledge on the part of the carrier or performing party regarding the potentially hazardous nature or characteristics of the goods, it is incumbent upon the shipper to assume responsibility for any resulting loss or harm arising from their failure to provide adequate information. Furthermore, the shipper bears the responsibility of appropriately marking or labeling hazardous materials in accordance with the prevailing laws, regulations, or other mandates imposed by public authorities throughout the entirety of the goods' transportation process. In the event of an unsuccessful endeavor on the part of the shipper, it becomes incumbent upon the shipper to duly indemnify the carrier for any resultant loss or damage that may have been incurred as a direct and immediate consequence of said failure.[104]

3.6 Remedies under convention law

The Rotterdam Rules, a set of international conventions governing the carriage of goods by sea, notably lack explicit provisions pertaining to the remedies that may be pursued in the event of a

[103]Sucrest Corp. v. M.V. Jennifer 455 F.Supp. 371 (Maine N.D.).
[104]Peider Konz, "The 1962 Brussels Convention," (1963).

breach or violation. The elucidation of the matter at hand can be found in Article 22, which expounds upon the systematic approach employed to ascertain the quantum of compensation to be disbursed by the carrier in the unfortunate circumstance of cargo being subjected to damage, loss, or untimely delivery.

The Hague-Visby Rules do not encompass any specific provisions pertaining to the remedies that may be sought. The determination of reimbursement for the value of the commodities at the specific location and time of discharge is contingent upon the provisions outlined in Article IV Paragraph 5(b) and Article IV Paragraph 3 of the Convention.[105]

The potential existence of remedies, albeit not explicitly stipulated within the Hamburg Rules, may be inferred through a deductive analysis of the limitations expounded upon in Article 6. As per the stipulations outlined in Article 10, Paragraph 5, it is imperative to note that the aforementioned restrictions are applicable not only to the actual carriers themselves but also extend to encompass their employees and representatives.[106].

Hague-Visby Rules

The aforementioned provision, delineated in Article IV rule 6, articulates the following stipulation: Commodities possessing flammable, explosive, or perilous attributes, which are dispatched for shipment without the explicit consent of the carrier, master, or agent of the carrier, who are cognizant of the nature of said goods, may be disembarked at any location, rendered inoperable, or neutralized by the carrier, without any form of recompense. Furthermore, the shipper responsible for such cargo shall bear legal liability for all damages and expenses, whether incurred directly or indirectly, as a consequence of said cargo.

In the hypothetical situation wherein any objects that were conveyed under the aforementioned agreement and authorization were discovered to pose a perilous threat to the maritime vessel or its cargo. In the event of such occurrence, the cargo may be deposited at any given destination,

[105]Michael G. Faure and Göran Skogh, "A Convention as insurance," Geneva Papers on Risk and Insurance. Issues and Practice (1992): 499-513.
[106]Hirji Mulji v. Cheong Yue SS. Co.; Bank Line Ltd. v. Capel and Co.; Ocean Tramp Tankers Corp. v. V/O Sovfracht.

rendered inoperable, or absolved of any culpability by the carrier, without incurring any legal responsibility, save for instances where a collective financial contribution is required, should any liability arise in relation to the general average principle.[107]

Upon careful examination of the aforementioned provision, which pertains to its correlation with Article 32 of the Rotterdam Rules, it becomes apparent that the utilization of three adjectives serves the purpose of delineating the characteristics attributed to the cargo encompassed by said Rule. The aforementioned descriptors, namely hazardous, flammable, and explosive, possess inherent properties that warrant caution and careful handling. The stipulation pertaining to the absence of consent from the carrier, its agent, or the vessel's master with regards to the transportation of the item is explicated within the latter segment of the conditional statement. Moreover, it is imperative to consider the confluence of two key factors: the lack of aid and the comprehensive understanding of the cargo's attributes by the carrier, agent, or master. Upon the fulfillment of all requisite conditions, the carrier, agent, or master is granted the prerogative to undertake a series of actions prior to the discharge of the cargo. The carrier possesses the capacity to effectuate the disembarkation of the merchandise at any designated site, effectuate their destruction, or render them innocuous. In the event that any of these actions are undertaken, the carrier shall be exempt from any obligation to provide recompense for having executed said actions. The onus of compensating for damages incurred during transportation lies with the shipper, encompassing all costs borne either directly or indirectly as a consequence of said occurrence.[108]

The Hague-Visby Rules encompass a distinct paragraph that is exclusively dedicated to elucidating the second component of the Rule. This particular provision, which is encapsulated within the broader framework of the Hague-Visby Rules, serves to expound upon the intricacies and nuances associated with the aforementioned second component. By allocating a separate paragraph to this aspect, the Hague-Visby Rules aim to provide a comprehensive and detailed account of the second component, thereby enhancing the clarity and understanding of this

[107]Donald Harris, David Campbell, and Roger Halson, *Remedies in Contract and Tort* (Cambridge University), 23-67.
[108]Ibid.

particular Rule. According to the stipulations outlined in the initial component of the Rule, it is indicated that in the aforementioned scenarios, wherein the products in question pose a threat to the vessel or its cargo, they may be subjected to identical measures as expounded upon in the first component of the Rule. However, it is important to note that in this particular instance, the carrier assumes legal responsibility for any potential average general contribution that may arise.

The aforementioned highlighted passages pertain to two disparate scenarios, each possessing its own unique characteristics and circumstances. The initial scenario delves into instances wherein the carrier, its agent, or the master possess knowledge regarding the attributes of the cargo, yet have not granted their consent for its dispatch. In light of the prevailing circumstances, it is imperative to acknowledge that the carrier possesses the prerogative to effectuate the landing of the cargo, undertake measures to extinguish the cargo, or render it innocuous, all without any obligation to remunerate or provide compensation. The carrier, in accordance with established legal principles, possesses the prerogative to hold the shipper accountable for any losses or expenses incurred in connection with the transportation of goods. The carrier's entitlement to seek compensation remains unaffected by the causal relationship between the cargo and the incurred losses and expenses, as it is applicable irrespective of direct or indirect causation. The paramount significance of this provision, from a legal perspective, lies in the non-reliance of recovery entitlement on any singular causal cause within the framework of tort law.[109]In order to establish a causal link between the incident and the shipment of products, it is imperative to demonstrate the role played by the aforementioned shipment, irrespective of its direct or indirect influence.

In the present inquiry, we shall direct our attention towards the matter at hand, namely, "The Fiona."[110], The matter under consideration pertains to the weighty matter of the carrier's responsibility in the event of a breach of its duty to exercise reasonable care in ensuring the seaworthiness of the vessel. Additionally, the carrier's prerogative to withhold indemnification from the shipper, as stipulated in Article IV rule 6, has come into question in the context of transporting hazardous materials.

[109]James Barr Ames, "Harvard Law Review" 18.6 (1905): 411-422.
[110]Yvonne Baatz et al., *The Rotterdam Rules: a practical annotation* (CRC Press, 2013).

In the event that the carrier possesses knowledge of the inherent characteristics of the merchandise and has granted consent for their transportation, the subsequent facet of this regulation pertains to situations wherein the carrier subsequently becomes cognizant of the goods posing a threat to the vessel or any other cargo present on board. The present component pertains to the circumstances wherein the carrier is obligated to adhere to the provisions set forth in this Rule.[111]In the given instance, it is imperative to acknowledge that the carrier possesses the rightful authority to handle the cargo in a manner consistent with the provisions outlined in the initial element of the Rule.[112]As previously alluded to, it is noteworthy to mention that in the event of a general average, the carrier assumes responsibility for contribution, irrespective of any legal obligation towards the shipper regarding its actions in accordance with the aforementioned paragraph. The aforementioned exemption arises from the fact that, in the occurrence of a general average, the burden of contribution shall be borne by the carrier.

In concluding the discourse pertaining to paragraph 6 of Article IV, it is feasible to succinctly expound that the initial facet of the aforementioned provision concerns the transportation of cargo that possesses flammable, explosive, or hazardous attributes at the moment of embarkation. Conversely, the subsequent facet addresses cargo that acquires these aforementioned characteristics during transit, thereby posing a perilous threat to both the vessel and its cargo. The completion of the discussion on paragraph 6 of Article IV can be undertaken prior to its conclusion. An unresolved quandary of considerable significance pertains to the precise connotation of the phrase "dangerous, explosive, or flammable" within the purview of the shippers' obligations, as delineated in Article IV regulation 6. In order to elucidate the matter at hand, it is imperative to delve into a comparative analysis between Article IV rule 6 of the Hague-Visby Rules and Article 32 of the Rotterdam Rules. By undertaking such a juxtaposition, a more comprehensive understanding can be attained.

In the present era, it is noteworthy to highlight a salient observation arising from a comparative analysis between the Hague-Visby Rules and the Rotterdam Rules in relation to the carriage of dangerous goods. Specifically, it is discernible that the Hague-Visby Rules lack any provisions

[111]Article IV of the Hague-Visby Rules.
[112]Article 13 of Hamburg Rules.

pertaining to the liability of the shipper. In contradistinction to the Rotterdam Rules, which encompass explicit provisions pertaining to shipper responsibility obligations, the aforementioned statement highlights a notable disparity between the two legal frameworks. The subject matter of the Hague-Visby Rules predominantly centers around the duties imposed upon carriers.

The allocation of liability in cases where the shipper did not provide consent or possess awareness regarding the potential hazards of the goods in question does not rest upon the carrier, as it is not incumbent upon them to compensate the shipper. This is due to the carrier's prerogative to dispose of perilous cargo, irrespective of the absence of authorization or awareness on the part of the shipper. The individual who assumes the role of the cargo producer bears unequivocal responsibility for any and all detriments and expenditures that ensue as a direct or indirect consequence of the transportation of said cargo. Nevertheless, the absence of a definitive statement regarding the carrier's liability for the aforementioned costs and damages remains apparent. While one might perceive that the shipper bears an inherent duty to apprise the carrier of the perilous attributes of the consignment, it is imperative to acknowledge that the shipper assumes the ultimate responsibility of ascertaining the carrier's willingness to accommodate their parcel.[113]

The shipper, in contrast, bears a positive obligation to duly inform the carrier regarding the detrimental characteristics of the goods, as explicitly stipulated in paragraph (a) of Article 32 of the Rotterdam Rules.[114]; The assertion made by the user suggests that the Hague-Visby Rules, specifically rule 6 of Article IV, does not prescribe any affirmative obligation. This claim prompts a closer examination of the aforementioned legal instrument, which can be accessed at the provided source. The aforementioned rule fundamentally prescribes the permissible actions that the carrier is authorized to undertake in the event that they possess knowledge regarding the characteristics of the cargo and have provided their consent for its transportation.[115]

[113]Article 22 of the Rotterdam Rules.
[114]Article IV of the Hague-Visby Rules.
[115]Article 6 and Article 10 of the Hamburg Rules.

The disparity between these two regulations exhibits a significant divergence in relation to this particular facet. In the hypothetical scenario where the carrier has not been duly notified by the shipper, it remains plausible for the carrier to obtain the requisite knowledge as per the stipulation enshrined in Article 32.

Rule 6 of Article IV within the Hague-Visby Rules delineates a distinct provision pertaining to the prerogatives bestowed upon the carrier in circumstances wherein the carrier possesses an absolute dearth of awareness and has not provided any form of assent to the consignment in question. The aforementioned regulation additionally imposes a legal obligation upon the shipper to assume liability for any damages and associated costs that may arise as a result of said consignment. In accordance with the provisions delineated in Article 32 of the Rotterdam Rules, it is noteworthy to underscore that the sole entity that can be deemed accountable for any dereliction in promptly disclosing pertinent details pertaining to the potentially perilous attributes of the merchandise is the shipper.[116]

Furthermore, it is noteworthy to mention that Article 32 imposes an augmented affirmative obligation upon the shipper to appropriately designate or affix distinctive markings or labels on any hazardous substance. The absence of a provision akin to the aforementioned one in Rule 6 of Article IV precludes the existence of such an obligation. Consequently, the carrier is bestowed with the prerogative to handle the aforementioned products in a manner agreed upon in accordance with the aforementioned Rule, notwithstanding the potential peril they may pose to the vessel or the cargo.[117]

The aforementioned observation elucidates the stark contrast between the two sets of guidelines in terms of their scope and characteristics. Indeed, it is a verifiable fact that there exists no discernible evidence of the presence of the former within the confines of the latter.

In accordance with the provisions outlined in Article 32, it is incumbent upon the shipper to fulfill a singular obligation, namely, the notification of pertinent parties, as well as the provision

[116]Article IV rule 6 of Hague/Visby Rules.
[117]Ibid.

of accurate marking and labeling. According to Rule 6, it is specified that the shipper is absolved from any explicitly defined obligations, while the carrier is bestowed with affirmative entitlements. The utilization of the term "hazardous" solely in Article 32 presents a noteworthy point of divergence between the two standards, prompting an examination into the interpretation of this particular term. The observed disparity holds paramount importance among the triad of variables under consideration. The present author posits that the utilization of international regulatory instruments and national legal frameworks pertaining to the issue of hazardous products represents a constructive and efficacious approach in delineating the concept of "dangerous." Undoubtedly, the International Maritime Dangerous Goods Code (IMDG Code) stands as an unparalleled and authoritative source for the elucidation of a definition.

Hamburg Rules

In the present discourse, it is noteworthy to observe that the Hamburg Rules, predating the Rotterdam Rules, had already incorporated provisions pertaining to the obligations and liabilities of shippers. The initial two paragraphs of Article 13, encompassing the section entitled "Special Rules on Dangerous Goods," delineate a duo of distinct obligations.

The subsequent discourse is an exposition of the individual's statement:

In accordance with the regulations, it is imperative for the shipper to diligently and unambiguously designate or mark, through the use of appropriate flags or labels, those specific commodities that align with the predetermined criteria denoting hazardous nature.

In the context of hazardous product transportation, it is incumbent upon the shipper to duly apprise either the actual carrier or the carrier themselves, as per the specific circumstances, regarding the perilous attributes inherent in the goods being transferred. Furthermore, if deemed necessary, the shipper is obliged to communicate the requisite precautionary measures that ought to be undertaken.[118]

[118]Ibid, p. 35.

Based on the aforementioned stipulations, it becomes apparent that there exists no necessity to engage in conjecture or assume any obligation on the part of the party responsible for transporting goods to provide such particulars, as exemplified by the provisions outlined in Article IV, paragraph 6 of the Hague-Visby Rules. As previously elucidated, the Rotterdam Rules, specifically enshrined in Article 32, and aptly denominated as the "Special Rules on Dangerous Goods," proffer comprehensive directives pertaining to the conveyance of perilous substances.[119]The provision found in Article 13, paragraph 2 of the Hamburg Rules exhibits a striking resemblance to a corresponding explicit obligation imposed upon the shipper, necessitating the disclosure of the hazardous characteristics inherent in the cargo, thereby notifying the carrier accordingly. The aforementioned obligation can be identified within the framework of the Hamburg Rules.

Furthermore, it is worth noting that a comprehensive elucidation pertaining to the shipper's liability can be ascertained within the confines of paragraph 2(a) of Article 13 of the Hamburg Rules. The present discourse is comprised of the following textual content:

In the hypothetical scenario where the shipper is unable to fulfill their responsibility, and the designated carrier or carriers are not equipped with knowledge regarding the potentially hazardous nature of the items being transported:

According to legal stipulations, the shipper assumes legal responsibility for any potential loss arising from the transportation of goods, irrespective of the actual party involved in the physical transportation of said items.[120]

The inclusion of Article 32 (a) within the framework of the Rotterdam Rules signifies the presence of a clause that bears a striking resemblance to its counterpart within the broader context of the Rotterdam Rules. The aforementioned article posits that the party responsible for the transportation of goods, commonly referred to as the shipper, bears the onus of accountability

[119][1994] 2 Lloyds Rep. 506.
[120]Article IV rule 6 of Hague/Visby Rules, see also supra note 186, 5-6; See also D. Rhidian Thomas, "Special Liability Regimes Under The International Conventions for The Carriage Of Goods by Sea Dangerous Cargo and Deck Cargo," Nederlands Tijdschrift Voor Handelsrecht 5 (2010): 198,199.

towards the carrier in cases where damage or loss occurs due to their failure to adequately communicate pertinent information. The provision found in Article IV, paragraph 6 of the Hague-Visby Rules bears resemblance to the aforementioned clause present in the Hamburg Rules. This particular provision pertains to the shipper's liability for any costs and losses incurred as a consequence of transporting hazardous materials without the carrier's awareness or consent. The absence of explicit delineation regarding the party to whom the liability is attributed is a notable characteristic of the Hague-Visby Rules. The aforementioned provision in the Hamburg Rules stands in stark contrast to the statement made above.[121]The inclusion of Article 32(b) within the Rotterdam Rules signifies a notable provision that explicitly assigns accountability to the shipper in instances where the shipper neglects to appropriately mark or label hazardous commodities in accordance with the stipulations mandated by governmental authorities. The absence of such a provision within the Hamburg Rules is noteworthy. Furthermore, it is important to highlight that the responsibility for labeling and marketing is not contingent upon governmental circumstances. Instead, it is incumbent upon the shipper to discharge this obligation in a manner deemed appropriate.

It is imperative to acknowledge that the Hague-Visby Rules lack explicit provisions pertaining to the indication or designation of perilous articles.

In the context of this comparative analysis, the subsequent aspect that warrants examination pertains to the quandary surrounding the entitlements of the carrier in instances where the shipper neglects to fulfill its obligations, as expounded upon in the preceding segment.

According to the provisions outlined in Article 13, paragraph 2(b) of the Hamburg Rules, it is mandated that shipments be accompanied by a clear and unambiguous declaration that effectively communicates the presence of any potentially hazardous characteristics associated with the transported goods.[122]

Rotterdam Rules: Background Evolution and Salient Features

[121]Article IV rule 6 of Hague/Visby Rules, see also ibid Thomas, D. Rhidian, 198,198-199.
[122] supra note 173, pp.194-196.

The realm of international maritime freight transportation has been subject to the jurisdiction of convention law for nearly a century, commencing with the ratification of the Hague Rules in 1924. The inception of this particular trend can be traced back to the ratification of the Hague Rules.[123], The promotion of this phenomenon can be attributed to legislative measures implemented in Canada, New Zealand, and Australia, alongside the enactment of the Harter Act in the United States of America during the year 1893. The event in question was widely regarded as a pivotal juncture that exerted a substantial influence in liberating American carriers from the constraints imposed by British authority. The Visby Protocol, an amendment to the Hague Rules, was implemented in 1968, resulting in the establishment of the Hague-Visby Rules. This protocol was widely regarded as a notable enhancement to the original Hague Rules. The aforementioned action was undertaken as a direct response to the apprehensions that were expressed regarding the initial iteration of the Hague Rules. Nevertheless, it is worth noting that the aforementioned Rules exhibited a discernible inclination towards safeguarding the interests of shippers. However, in the aftermath of the Hague/Visby era, states representing shippers expressed their dissatisfaction with the perceived lack of adequate support in their favor, particularly with regards to the regime of obligations. The intensification of these emotions was further amplified by the presence of these Regulations, which demonstrated a clear inclination towards prioritizing the interests of shippers. The perspectives of various stakeholders were duly acknowledged and their grievances were duly recorded across multiple regions worldwide. Consequently, as a direct outcome of these influential factors, the Hamburg Rules were officially promulgated in the year 1978.[124]The agreement was successfully achieved under the auspices of the United Nations Commission on International Trade Law (UNCITRAL), with significant contributions primarily originating from the United Nations Conference on Trade and Development (UNCTAD). It is worth noting that UNCTAD is widely recognized as a proponent of the interests of developing nations, often referred to as the third world.[125]Despite the considerable time elapsed since its ratification, the Hamburg Rules, which were ultimately

[123]Article IV.r 6 of HV Rules.
[124]Article 32 of the Rotterdam Rules; 168, 5-6; See also J. Wilson, Carriage of Goods by Sea, 7th Edition, Essex: Pearson, 2010, pp. 234-235.
[125]Article IV, r 6 of the Hague-Visby Rules.

implemented in 1992, encountered limited support from the various stakeholders involved in the Convention.

In the latter part of the 20th century, during a pivotal juncture marking the advent of a forthcoming epoch, the International Chamber of Commerce (CMI) embarked upon a grandiose endeavor, driven by the objective of effecting substantial modifications to the prevailing legal structure that governs the intricate domain of international product transportation across borders. The initiation of the project was facilitated through a collaborative endeavor between CMI (Comité Maritime International) and UNCITRAL (United Nations Commission on International Trade Law). Subsequently, the responsibility for overseeing the project was entrusted to UNCITRAL's esteemed Working Group III, which specializes in matters pertaining to Transport Law. The primary objective pursued by the national delegations involved in the deliberations held at the CMI (Comité Maritime International) and UNCITRAL (United Nations Commission on International Trade Law) was to encompass the realm of multimodal transportation within the purview of convention law through the implementation of a reform mechanism.[126] As a consequence of the aforementioned circumstances, it became evident that the term "transport law" gained prominence as the prevailing nomenclature, superseding the previously employed expression "carriage of goods by sea," subsequently revised to the more precise designation of "carriage wholly or partly by sea."[127].

The concurrent existence of three distinct sets of international rules, as a consequence of the establishment of conventions, has posed a challenge to achieving global consistency and universality in the administration of carriage law. In addition to the aforementioned, it is worth noting the existence of what are commonly referred to as "hybrid" national regimes, characterized by a legal framework that amalgamates diverse provisions derived from multiple distinct treaties.[128]China, being the world's second-largest trading nation, presents itself as a pertinent case study due to its possession of a Maritime Code that encompasses the Hague and

[126]Article 32 of the Rotterdam Rules.
[127]Ibid; see also Francesco Berlingieri, "A Comparative Analysis of the Hague-Visby rules, the Hamburg Rules and the Rotterdam rules," Paper delivered at the General Assembly of the AMD, Marrakesh (2009): 5-6.
[128]Article 13 of Hamburg Rules.

Visby components, alongside the Hamburg Rules. Following a considerable duration, the diligent efforts of the United Nations Commission on International Trade Law (UNCITRAL) culminated in the successful culmination of the campaign, leading to the formal endorsement and acceptance of the United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partially by Sea in the year 2008. The culmination of the endeavor was marked by this particular juncture, which can be considered the apex or pinnacle of the project. The official signing ceremony of the convention took place in Rotterdam in September 2009, thereby establishing the Rotterdam Rules as the regulatory framework for the aforementioned convention.[129]

Significant Salient Features

The Rotterdam Rules play a dual role as the fundamental basis and structural framework for addressing liability issues pertaining to the transportation of hazardous commodities within a newly conceptualized system. The development of the Rotterdam Rules can be attributed to the International Maritime Organization (IMO). The primary focus of this study revolves around the evaluation of the responsibility system pertaining to the transportation of hazardous goods in accordance with the established regulations.

Given the aforementioned data and the complex network of interconnections among the numerous stakeholders involved in global maritime transportation, it is not unreasonable to posit that the various stipulations outlined in the Rotterdam Rules possess a degree of relevance and applicability, albeit in varying manifestations. In order to maintain focus on the central subject matter, it is imperative to exercise discernment in selecting pertinent attributes. Consequently, only those clauses that are deemed significant will be accentuated for the purpose of discourse.

A limited number of provisions within the Convention, specifically Articles 15, 27, 30, and 32 found in Chapter 7, pertain to the obligations imposed upon the shipper and make cross-references to the entirety of said chapter. Notably, Articles 31 and 34 directly pertain to the carriage of dangerous goods aboard vessels.

[129]Article 32 of the Rotterdam Rules

Examination of Articles 15, 27, 30 and 32 of Rotterdam Rules

Article 32

The Rotterdam Rules, encompassing Articles 15, 27, 30, and 32, delineate the stipulations governing the handling of hazardous goods, thereby establishing the obligatory prerequisites that must be adhered to. To elucidate the intended argument, it is imperative to commence the discourse by conducting a meticulous analysis of Article 32, which is encompassed within the confines of Chapter 7. The heading titled "Obligation of the shipper to the carrier" remains in its original position at the commencement of this particular chapter. The designated subheading pertaining to Article 32s within the scholarly discourse is aptly titled "Special rules on hazardous goods." This particular subheading serves the purpose of encapsulating the essence of the aforementioned article, which delves into the intricacies and regulations surrounding goods of a hazardous nature. The concise yet informative subheading, "Special rules on hazardous goods," effectively encapsulates the overarching theme and subject matter of Article 32s, thereby providing readers with a succinct preview of the content that lies within. The distinctiveness of the accountability regime for the maritime transport of hazardous materials, as opposed to non-threatening commodity transport, is readily comprehensible.[130]

The responsibilities assigned to the shipper, as delineated in the Convention, serve as the fundamental underpinning for the framework of liability that is applicable to said merchandise. Of particular significance is the observation that Article 32 assumes a paramount role as the principal substantive provision within the Convention, specifically addressing the intricate matter of hazardous cargo. The composition in question encompasses the subsequent elements:

In instances where cargo, due to its inherent nature or specific attributes, presents a potential risk to property, individuals, or the environment, or has the potential to pose such a hazard in the future, it is incumbent upon the shipper to promptly inform the carrier. This notification should take place prior to the transfer of the goods to either a performing party or the carrier. The legal responsibility for any loss or damage arising from the shipper's failure to notify the carrier of the

[130]Article 13 of the Hamburg Rules

hazardous nature or characteristics of the goods lies with the shipper. Furthermore, the shipper is required to appropriately mark or label dangerous goods in accordance with applicable laws, regulations, or other requirements imposed by public authorities throughout the entire transportation process. The carrier holds the shipper accountable for any loss or damage incurred due to the shipper's failure in effectively executing the delivery of the shipment.[131]

The present section encompasses a multitude of constituent elements, alongside three affirmations of legal principles delineated in paragraphs (a) and (b), all of which pertain to the duties and liabilities arising from a potential occurrence of failure. The present chapter elucidates the requisite conditions that necessitate the fulfillment of obligations, alongside the inherent responsibility that ensues as a consequence of non-compliance. An exploration of English case law may provide valuable insights into the perilous attributes or inherent disposition of the cargo in question. The salient constituents of English jurisprudence encompass a plethora of ancillary considerations pertaining to hazardous cargo.

The inquiry pertaining to the inclusion or synonymity of the term "harmful" with "dangerous" holds significant scholarly relevance. Consequently, a heightened demand for tangible physical suffering arises, in contrast to the utilization of legal sanctions. In addition to the aforementioned point, it is imperative to acknowledge that the potential hazards stemming from the inherent qualities or attributes of commodities extend beyond the realm of human safety, encompassing the jeopardy posed to both property and the ecological milieu. In the event that the pollutant in question pertains to a chemical fertilizer possessing inherent stability or oil, certain observers posit that the very act of conveying said pollution via a vessel is deemed adequate to render the shipper susceptible to obligations and liabilities pertaining to the conveyance of said pollutant.[132]As a result of this phenomenon, the procedural aspects associated with the provision of said service exhibit a significantly expanded spectrum of potential outcomes. The concept of what may reasonably be deemed likely to manifest as a perilous circumstance exhibits a degree of flexibility and expansiveness, constituting a noteworthy facet within the framework of Article

[131]John F. Wilson, Carriage of Goods by Sea, 7th ed., (Pearson, 2010), 224.
[132]The International Convention for the Unification of Certain Rules Relating to Bills of Lading, 1924, 120 U.N.T.S. 155.

32 of the constitution. In relation to this matter, it has been observed that the stipulation neglects to elucidate the specific individuals or entities towards whom the commodities ought to prudently appear to pose a potential danger. This presents an additional obstacle, as it is not a trivial task to anticipate the disparity in viewpoints between a rational proprietor and an equally reasonable transporter. In relation to this matter, it has been duly noted that the aforementioned provision lacks clarity in elucidating the specific individuals or entities towards whom the goods ought to prudently manifest indications of potential peril.[133]

Furthermore, it has been posited by certain individuals that the manner in which the aforementioned expression has been formulated seemingly exhibits a deliberate inclination towards the exclusion of cargo that possesses the potential to transform into a hazardous state, even if such transformation was not initially anticipated with prudence.[134] Notwithstanding the aforementioned, the author of this composition posits that the assertion pertaining to a deliberate omission amplifies the conceptualization of the term to an exaggerated extent and teeters on the brink of meticulous linguistic analysis. Nevertheless, the current formulation of the aforementioned phrase appears to possess the potential to engender a divergence of opinions.

The current carriage regimes impose a requirement upon the shipper to duly inform the carrier about the potentially hazardous nature or characteristics of the items being transported. This obligation can be regarded as a positive responsibility incumbent upon the shipper.[135] In accordance with the provisions set forth in Article 32 of the Rotterdam Rules, it is evident that there exist unequivocal responsibilities pertaining to the goods in question, necessitating their expeditious dissemination of information prior to their conveyance to either the carrier or the party responsible for their execution. The party responsible for the transportation of goods, commonly referred to as the shipper, bears the onus of ensuring the successful delivery of the shipment. In the event that the shipper neglects to furnish the necessary notification as mandated, they shall be held accountable for any ensuing ramifications. This accountability stems from the inherent significance and relevance of such notification. The aforementioned criterion possesses

[133]United Nations Convention on the Carriage of Goods by Sea, 17 I.L.M. 608.
[134]John C. Moore, "Hamburg Rules," J. Mar. L. & Com. 10 (1978): 1.
[135]Ibid.

a pragmatic utility as it affords the carrier the opportunity to duly acknowledge and account for the contextual factors that pertain to the conveyance of the merchandise, thereby facilitating the organization and preparation of pertinent documentation, including the cargo manifest and the stowage plan.

While the responsibility to inform or notify the carrier lies with the shipper, it appears that the carrier is not obligated to reciprocate in cases where the carrier already possesses knowledge regarding the potentially perilous attributes or qualities of the goods being conveyed.[136]The aforementioned clause lacks clarity regarding the feasibility of evading legal accountability. It necessitates the shipper to furnish evidence indicating the carrier's awareness or reasonable expectation of the potentially perilous attributes of the merchandise. Conversely, it can be contended that, in accordance with established protocols observed within the industry, a prudent carrier is obligated to engage in the requisite inquiries pertaining to the attributes of the consignment it has undertaken to convey.[137]Upon careful examination of the textual content present in Article 32, specifically in paragraph (a), one can plausibly infer that a party engaged in the act of performance assumes a position analogous to that of the carrier. The aforementioned would encompass the incorporation of inferred knowledge pertaining to the perilous quality or disposition of commodities, which would be ascertained through the exercising of prudence or conscientiousness on the part of the participating entity as a member of the industry.

The current legislative framework pertaining to the transportation of goods via maritime routes has introduced a novel stipulation necessitating shippers to assume the responsibility of appropriately marking or labeling hazardous commodities, as outlined in Article 32 paragraph (b). Failure to adhere to this obligation entails potential liability for non-compliance.[138]The subject under consideration, namely the punishment being deliberated upon, exhibits a distinct propensity for bifurcation, owing to its explicit allusion to "any legislation, rule, or other needs

[136]Abhinayan Basu Bal, "An Evaluation of the United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea (Rotterdam Rules) through Critical Analysis," (WMU Publications, 2009) at pp. 5-8.
[137]Abhinayan Basu Bal, "An Evaluation of the United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea (Rotterdam Rules) through Critical Analysis," (WMU Publications, 2009) at pp. 5-13.
[138]Yvonne Baatz et al., *The Rotterdam Rules: A Practical Annotation*, (London: Informa, 2009), pp.91 and 92.

of public authorities." The absence of proper marking or labeling, as a preliminary observation, can potentially lead to regulatory sanctions, such as monetary penalties, alongside the imposition of civil liability for any ensuing loss or harm that can be directly attributed to the aforementioned omission.The International Maritime Dangerous Goods Code (IMDG), or its corresponding legislative counterpart as mandated by local jurisdictions, consistently serves as the primary point of reference in discussions pertaining to regulatory affairs.[139]As per the stipulations outlined in Article 32 (b), it is imperative to acknowledge that the requirement for labeling or marking of products shall be deemed applicable across all modes of transportation, particularly in instances where the goods are being stored on a vessel during the course of multimodal transport. Furthermore, it is imperative to consider the applicability of both local and international legislation pertaining to a particular regime of unimodal transit.[140]The allocation of responsibilities between the shipper and the carrier is elucidated in Article 32, wherein it is evident that the shipper, or alternatively, as stipulated in Article 33, the documentary shipper, assumes the onus for fulfilling both of these obligations vis-à-vis the carrier.[141] Nevertheless, it is important to note that the language employed in clause (a) suggests that the discharge of the shipper's obligations also carries significant implications for the carrier executing the transportation. Insufficient empirical substantiation exists to support the notion that the obligations in question are subject to remittance to external entities, or whether said entities may derive advantages from the shipper's non-fulfillment of said obligations. Furthermore, it is worth noting that there is a lack of evidence suggesting that the responsibilities in question are to be fulfilled by the party responsible for shipping.[142]. Given the absence of explicit stipulations in this regard, it is conceivable that the principles of domestic tort law could potentially be invoked to support the claims of a third party who has incurred harm or incurred losses as a direct result of the shipper's non-compliance with the aforementioned two obligations. The aforementioned

[139]Ibid ,Thomas, D. Rhidian
[140]Tomotaka Fujita, "Shipper's Obligations and Liabilities under the Rotterdam Rules," *University of Tokyo Journal of Law and Politics* 8 (2011): P62.
[141]Theodora Nikaki, "Carrier's Duties under the Rotterdam Rules: Better the Devil You Know, The," *Tul. Mar. LJ* 35 (2010): 1.
[142]Yvonne Baatz et al., The Rotterdam Rules: A Practical Annotation, (London: Informa, 2009), pp.92 and 93.

proposition can be substantiated by the application of domestic tort law, which confers legal protection upon a third party who has suffered injury or incurred losses.

Article 30

In the context of Article 32, it is imperative to acknowledge the existence of two additional perspectives that warrant careful consideration with regard to the obligations of the shipper. The primary factor to be taken into account pertains to the inherent characteristics of the responsibility at hand, while the secondary factor revolves around the presence or absence of a limitation on said responsibility. With respect to the initial concern, it is noteworthy to mention that Article 32 of the relevant legislation does not explicitly delineate the legal provisions pertaining to the level of stringency associated with the shipper's obligation.[143]; In alternative parlance, the inquiry pertains to the necessity for the carrier, acting as the claimant, to establish the culpability of the shipper as a prerequisite for seeking redress under either tort law or contractual provisions. However, it is worth noting that Article 30, titled "Basis of shipper's liability to the carrier," may potentially allude to the concept of strict responsibility. Notwithstanding the broad applicability of this provision, encompassing all categories of goods rather than exclusively hazardous ones, and notwithstanding the presence of a cross-reference to Article 32, it is plausible to infer the imposition of strict liability based on the language employed in Article 30 (2), which reads as follows:

The exoneration of the shipper from its obligation, whether in whole or in part, is contingent upon the absence of fault on its part or on the part of any individual specified in article 34, in the event that the loss or damage is caused by such a factor or factors. The aforementioned exemption does not extend its coverage to instances where the shipper has failed to fulfill its obligations as outlined in articles 31, paragraph 2, and 32, thereby resulting in loss or damage. However, it is important to note that this provision exclusively pertains to instances where loss or damage has occurred as a direct result of the shipper's failure to fulfill its obligations as outlined in articles 31, paragraph 2. The prevailing consensus within scholarly discourse maintains that

[143] The Athanasia Comninos and Georges Chr Lemos [1990] 1 Lloyd's Rep 277.

within contexts wherein an obligation exists devoid of any ascription of culpability, the principle of strict responsibility is invoked, thereby necessitating the claimant to furnish compelling evidence substantiating the occurrence of detriment or injury.[144]Given the aforementioned assumption, it is justifiable to raise doubts regarding the nature of the shipper's liability pertaining to losses or damages incurred as a result of hazardous products, specifically whether it adheres to a stringent or "no-fault" framework. Within the framework of the Hague-Visby Rules and corresponding domestic legislation, it is noteworthy that certain common law jurisdictions have established legal precedents explicitly endorsing the imposition of strict liability in instances where damages or losses can be attributed to the shipper's failure to provide notice or adhere to the necessary marking and labeling requirements pertaining to the transportation of hazardous materials. This phenomenon can be observed, particularly within the framework of the Hague-Visby Rules and the corresponding domestic legislation that serves to implement and uphold the provisions set forth in the Hague-Visby Rules.[145]Nevertheless, it is contended that the Rotterdam Rules have not yet been implemented, thereby precluding any substantial examination of its stipulations. The extent to which judgments rendered by common law courts, operating within the confines of alternative conventions or domestic legislation, may impact courts in civil law jurisdictions remains uncertain, at best. The prevalence of the concept of "presumed fault" as opposed to strict responsibility is particularly notable in jurisdictions adhering to civil law principles. Henceforth, in accordance with the perspective espoused by the present author, any assertion positing the onerous nature of the shipper's duty under the Rotterdam Rules within the contexts presently under consideration ought to be construed solely in reference to the provisions set forth in Article 30(2). It is imperative to acknowledge, with regards to the constraint of accountability, that shippers are bereft of access to this prerogative.[146]. The rationale behind this decision warrants scrutiny, as it appears to have been a deliberate and calculated choice made by the Convention's architects and the representatives involved in UNCITRAL. However, the underlying factors motivating this decision remain somewhat elusive.

[144]Tomotaka Fujita, "Shipper's Obligations and Liabilities under the Rotterdam Rules," University of Tokyo Journal of Law and Politics 8 (2011): P62.
[145]Yvonne Baatz et al., The Rotterdam Rules: A Practical Annotation, (London: Informa, 2009), pp.92 and 93, See also ibid Fujita, Tomotaka, p. 62.
[146] ibid Fujita, Tomotaka, p. 62.

Article 15

In relation to Article 15, it is imperative to acknowledge that this concise provision does not pertain to goods that inherently possess a dangerous nature at the time of their embarkation on the vessel. Instead, it pertains to commodities that have the potential to acquire a hazardous character or exhibit a reasonable likelihood of becoming harmful during the course of their transportation. The present article employs a meticulous selection of terminology to convey its intended message. In light of the provisions outlined in Articles 11 and 13, it is important to acknowledge that the carrier or performing party possesses the prerogative to exercise their discretion in declining the acceptance or loading of goods. Furthermore, they are entitled to undertake any other appropriate actions, including but not limited to unloading, destroying, or neutralizing the goods, in instances where the goods present a tangible risk to property or the environment, or exhibit a reasonable likelihood of posing such a hazard within the carrier's sphere of responsibility. This particular provision is applicable even in cases where the perceived danger does not exhibit immediate or imminent characteristics.[147] In accordance with the tenets of the initial school of thought, it is posited that the aforementioned provision ought to be accorded primacy over Articles 11 and 13, which pertain to a diverse array of obligations imposed upon carriers. The subject of Article 11 pertains to the allocation of responsibilities bestowed upon the carrier with regards to the intricate process of transportation and subsequent delivery of various products. The subject matter of Article 13 encompasses a diverse range of specific duties that pertain to the reception, transmission, and relinquishment of certain entities or substances. One noteworthy characteristic of Article 15 is its inclusion of language that bears resemblance to that found in Article 32, particularly concerning the situation wherein the products possess the potential to "reasonably appear likely to become...an actual danger to persons, property, or the environment." In the present context, it is imperative to acknowledge that while the term "danger" is employed in the introductory section of Article 32, the phrase "actual danger" is utilized in Article 15. Notwithstanding, the aforementioned regulation remains applicable throughout the duration of the carrier's obligation, as delineated by the Rotterdam Rules, particularly denoted as the commonly recognized "port to port" timeframe, in the context

[147]Article 32 (b) of HV Rules.

of a maritime carrier's operations.[148]In light of the aforementioned observation, it is imperative to address the inherent vagueness and dearth of lucidity associated with the phrase "reasonably appear likely to become." This scholarly commentator echoes the same critical analysis previously expounded upon in the aforementioned discourse pertaining to Article 32.

In conjunction with the aforementioned observations, it is imperative to bear in mind that the carrier or an executing entity possesses the prerogative to undertake a multitude of discretionary measures when confronted with circumstances wherein products are prone to pose a hazard or exhibit a reasonable likelihood of becoming hazardous in subsequent instances. The primary alternative entails the carrier or the party responsible for execution declining to acknowledge the consignment. The secondary alternative involves declining to load the goods onto the designated mode of transportation. Lastly, the tertiary alternative encompasses the adoption of appropriate measures, encompassing various subsidiary courses of action such as unloading, obliterating, or rendering the items innocuous. The act of declining to accept the goods is considered the foremost course of action.The numerical value provided by the user, 227, does not provide sufficient context for me to generate a The potential infringement of Articles 11 and 13, if arising from any measures, can be circumvented due to the overriding influence of Article 15.[149]The potential ramifications arising from the privileges granted to the carrier and the performing party, as outlined in Article 15, can give rise to challenging situations within the realm of multimodal operations. In the context of conveyance chains, it is noteworthy to consider the varying levels of safety exhibited by different performing parties. While one party involved in the conveyance process may confidently assert the security of its specific role, it is plausible that another performing party, responsible for loading the goods onto the vessel or overseeing the sea carriage segment, may not exhibit the same level of assurance in terms of safety.[150]The distinctiveness of the rights possessed by each carrier or performing party is a fundamental aspect that warrants attention. These rights are not only separate from one another but also possess the capacity to be independently exercised. This independent exercise is facilitated through the selection of an

[148]Article 32 of Rotterdam Rules. Also see Zeng-jie, Z. H. U., "Evaluation on the Rotterdam Rules," Annual of China Maritime Law 20.1-2 (2009).12.
[149]ibid Zeng-jie, Z. H. U.12,14
[150]Article 32 of Rotterdam Rules.

alternative that aligns with the specific functions and responsibilities associated with each carrier or performing party.[151]

The contention posits that when juxtaposed with commodities that exhibit a discernible capacity for potential harm, those that genuinely present a menace are comparatively more manageable in terms of their pragmatic ramifications. Notwithstanding, the quandary persists in discerning whether the peril pertains solely to physical hazards or if the stipulation encompasses any endeavor that may pose legal risks. The term "actual danger to property," although potentially open to a wide interpretation, has been subject to debate regarding the inclusion of the concept of "legal danger" or a situation that poses a legal risk. Some argue that extending the interpretation to encompass legally hazardous scenarios may be an excessive stretch of the term's intended meaning. The rationale behind this assertion lies in the fact that the phrase "actual danger to property" possesses the potential to be interpreted in a broad manner.[152]The origin of the phrase "actual danger to the environment" can be traced back to its conceptualization within scholarly discourse. It is within this context that the phrase has gained prominence and significance.The aforementioned statement exhibits a notable degree of imprecision and ambiguity, particularly in relation to the inclusion or exclusion of the transportation of the aforementioned products via maritime, terrestrial, or aerial means. The present discourse delves into the profound implications surrounding the potential expansion of the conceptual boundaries of the environment, particularly with regards to its incorporation of the intricate web of interdependent relationships within the ecosystem. This holistic perspective encompasses not only the physical surroundings, but also encompasses the diverse assemblage of indigenous flora, fauna, and other biological attributes that inhabit the adjacent regions. Furthermore, it is imperative to acknowledge that within the discourse surrounding the environment, various interconnected notions emerge, including pollution and contamination. Consequently, it becomes plausible to contemplate whether these aforementioned concepts bear resemblance to the constructs of risk or peril, thereby giving rise to apprehensions and inquiries. It is imperative to acknowledge, as a final

[151]Richard A. Epstein, "A theory of strict liability," (1973) 2 T. Legal Stud. 151, 151- 204.
[152]Yvonne Baatz et al., The Rotterdam Rules: A Practical Annotation, (London: Informa, 2009), pp.92 and 93, See the cases cited on these pages. Effort Shipping Co v Linden Management Co. The Giannis NK [1998] 1 Lloyd's Rep 337; Senator Linie GmbH Co Kg V. Sunway Line Inc 291 F3d 145; [2002] AMC1217 (2nd Circ,2002).

consideration, that the non-utilization of any of the aforementioned alternatives by either the carrier or the party responsible for execution does not engender any obligatory commitment.[153]

Article 27

The provisions stipulated in Article 27 of the relevant legislation delineate the obligations and duties imposed upon the shipper with regards to the transfer of goods to the carrier. Pursuant to the contractual agreement governing the transportation of goods, as entered into by the shipper and the carrier, it is incumbent upon the shipper to ensure that the products are tendered in a condition that is conducive to withstanding the rigors of transportation, as well as the various exigencies associated with cargo handling throughout the course of the carriage.[154]The delineation of the shipper's obligations is explicated in Article 27, wherein it is articulated as follows:

In the absence of any explicit provisions within the contract of carriage to the contrary, it is incumbent upon the shipper to assume the responsibility of ensuring that the goods are adequately prepared for transportation. The primary obligation of the shipper is to ensure that the products are presented in a condition that enables them to endure the intended transportation process, encompassing activities such as loading, handling, stowing, lashing, fastening, and unloading. Moreover, it is imperative that the products do not pose any harm or inflict damage upon individuals or property.

The party assuming the role of the shipper is obligated to fulfill any duties that have been undertaken as per a mutually agreed upon contract, as stipulated in accordance with the provisions outlined in Article 13, Paragraph 2.

The party assuming the role of the shipper bears the onus of meticulously and appropriately arranging, fastening, and ensuring the stability of the merchandise within the confines of the vehicle or container. This must be executed in a manner that precludes any potential harm to

[153]Article 15 of Rotterdam Rules
[154]David Moran Bovio, "Ocean Carriers' Duty of Care to Cargo in Port: The Rotterdam Rules of 2009," Fordham Int'l LJ 32 (2008), 1162.

individuals present on the premises during the process of packing or loading said container or vehicle. The aforementioned stipulation is applicable in cases where the party responsible for the transportation is engaged in either the act of packaging the container or the act of loading the vehicle.

As per the initial paragraph, it is evident that the shipper bears the responsibility of ensuring that the products are presented to the carrier in a condition that is deemed "ready for carriage," unless the terms of the carriage agreement explicitly permit otherwise.[155] This observation suggests that the agreement may encompass provisions that do not inherently require the delivery to be in a state of readiness for immediate transfer. The determination of the actual level of preparedness to be met is contingent upon the specific details delineated within the contractual agreement. The variability in customs and practices surrounding the transportation of goods is contingent upon several factors, including the nature of the product, the historical and cultural traditions of the port in question, the geographical location of the shipment, and a multitude of other pertinent considerations. The imperative nature of the delivery is contingent upon the specific conditions expounded upon in the latter segment of the initial paragraph, thereby rendering this stipulation obligatory. The prevailing conditions must be such that the merchandise shall possess the capacity to withstand the unpredictable fluctuations encountered during the transportation process as stipulated by the concerned parties. Furthermore, it is imperative that the aforementioned goods encompass all the specified elements outlined in the provision, encompassing but not limited to loading, handling, stowing, lashing, securing, and unloading. In conjunction with the aforementioned stipulation, it is imperative to ensure the complete absence of any potentiality for harm or detriment to individuals or assets.

The contention posits that notwithstanding the absence of goods being prepared for transportation as per the contractual stipulations, the imperative pertaining to the explicitly enumerated facets governing the manner of delivery remains obligatory in its own right, encompassing the imperative of avoiding any harm to individuals or property. The inclusion of the requirement stems from the imperative to ensure the prevention of any detrimental effects on

[155]Ibid, pp. 1167-1168.

individuals or physical assets. The utilization of the expression "in any event," as discerned by judicial authorities, conveys an unequivocal connotation of boundlessness and absence of exceptions, thereby elucidating the matter at hand.[156]In the hypothetical scenario where a dispute arises between the carrier and the shipper regarding the apportionment of obligations, it is imperative to note that the shipper assumes liability for any non-adherence to the obligatory stipulation, which subsequently leads to damage or loss. In light of the circumstances, it is imperative for the carrier to possess the capacity to absolve itself of liability through recourse to the exceptions delineated in Article 17, paragraph 3, subparagraphs (h), (j), and (k), as elucidated within the compendium of anomalies. The elucidation of shipper duties in the two segments of paragraph 1 is evident. However, the intricate interplay and interdependence between these segments do not manifest a comprehensive depiction of lucidity. As previously articulated, paragraph 1 imposes a crucial stipulation upon the shipper, namely the imperative to ensure the delivery of goods in a state that precludes any potential infliction of detriment upon either tangible assets or individuals.[157]The term "danger" is employed to encompass both individuals and their possessions, mirroring a provision akin to the one found in the introductory clause of Article 32.

The inquiry arises as to the distinctiveness of the two appellations, as well as the extent of their divergence. The contention posits that the term "danger" encompasses the necessity to evaluate the likelihood of encountering "potential threat damage," whereas "harm" primarily pertains to tangible occurrences and connotes the manifestation of said threat, ultimately resulting in actual damage. The utilization of the term "danger" in this context stems from the inherent implication that the assessment of "potential threat damage" necessitates a comprehensive evaluation. In a similar vein, it is imperative to note that the determination of whether a condition has resulted in harm can only be ascertained ex post facto, specifically at the culmination of the transportation

[156]Article 15 of Rotterdam Rules
[157]Article 15 of Rotterdam Rules.

process.[158]The absence of any mention pertaining to the surrounding area within this provision implies a deliberate omission, presumably driven by relevant and significant factors. [159]

The observation can be made that the transportation of non-inherently hazardous commodities has the potential to inflict environmental damage.[160]Henceforth, it can be posited that it would be deemed illogical to impose upon the shipper the onus of ensuring the delivery of goods in a condition that does not engender any harm to the environment, whether through the application of the Convention or the contractual agreement governing the carriage of said goods. It is imperative to acknowledge that this obligation must be fulfilled prior to attributing responsibility to the shipper for any ecological ramifications resulting from their shipment. In paragraph 2 of Article 27, a cross-reference is established to paragraph 2 of Article 13, wherein it is stipulated that the shipper and the carrier possess the capacity to reach a mutual understanding regarding the loading, handling, stowing, or unloading of the goods, which may be executed by either the shipper, the duly documented shipper, or the consignee. It is imperative that the contractual agreement explicitly incorporates any such arrangement. As per the stipulations outlined in paragraph 2 of Article 27, it is incumbent upon the shipper to fulfill their obligations in a manner that is both responsible and suitable. The aforementioned provision exhibits a commendable level of comprehensibility and infrequently engenders contentious deliberation. The corresponding obligations pertaining to containers can be observed in paragraph 3 of Article 27, wherein it is stipulated that the construction of the container or vehicle intended for transportation must be executed in a manner that ensures the absence of any potential harm to individuals or property.[161].

3.7. Liabilities of third parties for the damage caused by dangerous goods

The topic delves into the examination of international agreements pertaining to the intricate matter of addressing responsibility and delineating limits in relation to third-party nuclear damage, hazardous and noxious substances (HNS) pollution, and ship-source oil pollution. The

[158]Ibid.
[159]Yvonne Baatz et al., *The Rotterdam Rules: A Practical Annotation*, (London: Informa, 2009), pp. 41.
[160]Article 33.1 of Rotterdam Rules.
[161]Article 33 of Rotterdam Rules.

intricate examination of these international agreements is expounded upon within the confines of this particular chapter. The concerns raised encompass a range of critical issues, namely the potential for nuclear damage, the hazardous nature of nuclear waste, and the detrimental impact of pollution originating from ship sources. The Hague-Visby, Rotterdam, and Hamburger Rules, which govern the international carriage of goods by sea, do not account for the obligations and liabilities of third parties involved in the transportation process. The HNS Convention, although not yet in effect, holds significant importance in the realm of third-party liabilities. The transportation of radioactive materials has been identified as a significant source of damage, prompting extensive scholarly examination. In this context, the Radioactive Convention of 1971 has emerged as a pivotal reference point, guiding the treatment and regulation of such transportation practices. Furthermore, pertinent case laws have also played a crucial role in shaping the discourse surrounding the potential harm caused by the transportation of radioactive materials.

Maritime safety, as a multidisciplinary domain, comprises four fundamental subfields, namely navigation, ships, vocations, and cargo. These subfields collectively contribute to the overarching objective of ensuring the safety and well-being of both crew members and passengers traversing the vast oceans. The domain of maritime safety encompasses not only the safeguarding of human lives and vessels at sea, but also extends to the crucial aspect of cargo safety.[162]In the context of transporting hazardous materials, ensuring the utmost importance lies in the verification of the cargo's secure state. The present report endeavors to comprehensively examine the state of cargo security, while also delving into potential threats that may pose risks to both the crew members and the property housed within the vessel. The matter of addressing the responsibility and compensation pertaining to ship-source pollution, alongside the HNS treaty, a well-established international agreement, was not adequately attended to by the concerned parties. Furthermore, it is noteworthy to mention that the matter concerning the HNS treaty was not adequately attended to by the aforementioned parties. In light of the aforementioned circumstances, it is conceivable that the utilization of common law torts and

[162]Article 27 of Rotterdam Rules.

their associated redress mechanisms could potentially offer assistance in the realm of ameliorating environmental harm precipitated by maritime vessels.

3.8 Ship-source Oil Pollution

The regulatory framework pertaining to ship-based sources of marine pollution primarily centers around the third-party obligation imposed upon cargo carriers, specifically in relation to the transportation of pollutant substances, such as oil cargo. The significance of oil cargo as a prominent source of marine pollution cannot be understated. The utilization of bunkers for the purpose of oil storage aboard maritime vessels has been identified as a significant factor contributing to environmental degradation.[163]The primary concern at hand pertains to the responsibility attributed to the pollutant, alongside the quantification of the ensuing harm or compensation owed to affected third parties in light of the pollution. This fundamental legal quandary necessitates resolution.[164]In the present scenario, the term "pollutant" pertains to the individual or entity responsible for the ownership of the ship upon which the cargo is being transported4. Due to the inherent characteristics of the oil industry, the global oil sector frequently encounters criticism for its alleged role in exacerbating pollution associated with oil. Moreover, it is imperative to note that in situations where the cargo owner lacks control over the items, they shall not be deemed responsible or held liable for any potential damages incurred by the cargo.

3.8.1 Liability

The realm of pollution damage liability encompasses a diverse array of claims, each distinct in nature and scope. The occurrence of a marine tort has transpired as a direct consequence of the deleterious effects stemming from ship-source pollution. In jurisdictions operating under the framework of civil law, it is pertinent to designate this particular form of harm as delict. The legal provisions pertaining to delict, a term denoting civil wrongs, can be ascertained through the examination of statutory enactments or legislative instruments, such as the Civil Code. An

[163]Article 27.1 of Rotterdam Rules.
[164]*Parsons Corp and Others v. CV Scheepvaartondernming "Happy Ranger" and Others (The Happy Ranger)* [2002] ECWA Civ 694; [2002] 2 *Lloyd's Rep* 357, at p. 38.

alternative course of action would involve conducting a comprehensive examination within the confines of the state in question.[165]In jurisdictions characterized by the application of common law, the legal framework pertaining to tort law is not explicitly codified within any legislative enactments. Instead, it is predominantly assimilated within the body of legal principles and doctrines derived from judicial decisions, commonly referred to as case law. [166]In the hypothetical scenario wherein the Conventions arrive at the determination that the establishment of duties and compensation pertaining to ship-source pollution damage is imperative, it is anticipated that legislative measures will be formulated to effectively operationalize said conclusions. The aforementioned legislation shall be deemed enforceable in the circumstance wherein the Conventions assume the role of the authoritative entity. Governments that adhere to civil law and dualism are more likely to incorporate convention law within their legal systems.[167]In monistic jurisdictions, encompassing both civil law and common law systems, the law can potentially be promptly derived from the relevant Convention, given that the Convention is perceived as self-executing or directly applicable.[168]

The examination of ship-source damage claims reveals notable characteristics in jurisdictions adhering to common law principles, as well as in jurisdictions governed by Convention or statute law within both common law and civil law frameworks.[169]The regulatory framework pertaining to the allocation of responsibility and compensation for the deleterious consequences arising from ship-originating pollution is delineated within the ambit of the Oil Pollution Act of 1990 in the United States of America. It is noteworthy to mention that the United States, while not a signatory to the convention in question, has established its own legislative measures to address this matter.

Within the realm of jurisprudence, specifically in the domain of tort law, the fundamental principle governing the imposition of liability rests upon the determination of whether the actions undertaken by the defendant can be deemed as negligent. In the event that the individual's

[165]Article 27 of Rotterdam Rules.
[166]Yvonne Baatz et al., *The Rotterdam Rules: A Practical Annotation*, (London: Informa, 2009), pp. 81.
[167]Ibid at. 91.
[168]Ibid.
[169]Paragraph 2 and 3 of Article 27.

conduct cannot be deemed culpable, it follows that he bears no responsibility, thereby precluding the plaintiff from seeking redress under the legal framework of torts, as the harm in question was not instigated by his actions. The burden of proof regarding the defendants' liability does not necessarily rest upon the claimant; however, it is advisable for the claimant to closely observe the defendants' actions if they intend to seek reparation for the damages resulting from pollution.[170]. The culpability of pollutants is subject to stringent standards that are held in high regard.

The International Maritime Organization (IMO) has recently granted its approval for the International Convention on Civil Liability for Oil Pollution Accidents. This significant development marks a crucial step forward in the realm of maritime governance and environmental protection. The convention, which has garnered widespread support and recognition, aims to establish a comprehensive legal framework to address the liability and compensation aspects associated with oil pollution incidents. By endorsing this convention, the IMO demonstrates its commitment to fostering international cooperation and ensuring the responsible and sustainable management of marine resources.[171]The primary objective of the Oil Pollution Damage Act of 1969 was to establish a comprehensive framework ensuring the provision of adequate compensation to individuals and entities adversely affected by the deleterious consequences of oil pollution resulting from maritime transportation activities involving vessels engaged in the carriage of oil. This legislation aimed to safeguard the interests of those who suffered various forms of harm, encompassing both tangible and intangible losses, attributable to the pernicious effects of oil pollution stemming from vessels dedicated to the transportation of oil. The Convention in question has established a framework wherein the shipowner assumes a position of strict liability for any detrimental consequences arising from the actions or conditions of his vessel. The onus lies upon the proprietor to substantiate the operation of any exceptions, save for those instances wherein the proprietor has been proven culpable of genuine transgressions in each particular case. This Convention provides comprehensive coverage for all vessels involved in maritime activities encompassing the transportation of oil in

[170]Aline FM AFM de Bievre, "Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea," (1986) 17 *J. Mar. L. & Com.* 61.
[171]"Liability and Compensation for Bunker Pollution," *J. Mar. L. & Com.* 33 (2002), 553, 556.

large quantities.[172]In order to facilitate the transportation of oil quantities exceeding 2,000 tons, it becomes imperative for the vessel to possess insurance coverage that encompasses the potential occurrence of oil leakage incidents. The provisions delineated within this Convention are not applicable to battleships or any other category of warships owned by a state, which are currently engaged in the execution of governmental tasks that are non-commercial in essence.[173]The Convention in question was bestowed with a renewed mandate in the year 1992.

3.8.2 Compensability

Restitution may take several forms, including monetary payment as one option. The principle that underpins the concept of civil remedy is known as restitution in integrum, and it is a legal theory. This principle states that the plaintiff should be restored to the position that he would have had if the wrong done by the defendant had not been imposed on him.[174]. Therefore, the defendant is obligated to pay the plaintiff for all of the plaintiff's losses and injuries to the level that is required to put the plaintiff to the position he would have been in if he had not been exposed to the defendant's actions. However, if environmental harm was caused by oil leakage, the claimant has no alternative but to seek financial reparation as the only course of action available to them.

Under the law, you are not entitled to compensation for every kind of loss, damage, or injury. In the system of common law, the only person who may have locus standi about the harm that is being claimed is the claimant, and the court where the case first starts will be reimbursed for its time.[175]. In matters of locus standi and jurisdiction, the convention law is silent; thus, one must depend on the law of their own country. The fact that it is not always implemented in the same manner from one jurisdiction to another is one of the most significant issues with domestic law. Under the compensation legislation for ship-source pollution damage, victims may get

[172]Gotthard M. Gauci, "Protection of the Marine Environment through the International Ship Source Oil Pollution Compensation Regimes," (1999) *REIEL* 8.1: 29-36.
[173]Ibid.
[174]Volkmar J. Hartje, "Oil pollution Caused by Tanker Accidents: Liability versus Regulation," (1984) *Nat. Resources J.* 24. 41.
[175]William Tetley, "Mixed Jurisdictions: Common Law v. Civil Law (Codified and Uncodified)," *La. L. Rev.* 60 (1999): 677.

remuneration for their losses in the areas of property damage, economic losses, and environmental harm.[176]

3.8.2.1 Damage to Property

Only the harm done to physical property, as defined by the standard definition of pollution damage, is eligible for compensation. The property damage must include the damage or loss caused by the pollution that was a direct consequence of the oil leak that was created by the ship. For instance, the damage that was caused by the trawls, nets, and other fishing gears that were aboard the fishing vessel must be included.[177]. And since this model is different from the others, it is inflicting harm to the buildings and structures as well as the land that is positioned close to the oil leak and has been poisoned by it.[178].

According to the Convention, the claimant is not need to establish that the defendant was at fault; but, he is required to demonstrate that the pollutant originated from the ship that was being claimed as responsible for the harm. In addition to this, he must assert that he has the necessary locus standi.

3.8.2.2 Economic Loss

The victim's harm or loss, which can only be quantified in terms of monetary value, is referred to as the economy's "economic loss." The pollution incident in issue is directly responsible for the occurrence of the bodily loss.[179]

It may be possible to get monetary compensation for financial losses in some scenarios. Since the assessments of such losses were flawed, there is no way to make up for the economic losses that

[176]Proshanto K. Mukherjee, *Maritime Legislation*, (Malmo: WMU Publications; 2002), pp. 126-129.
[177]Alan Khee-Jin Tan, *Vessel-source Marine Pollution: the law and Politics of International regulation*, (Vol. 45. Cambridge University Press, 2005); pp. 288-290.
[178]Simon F. Deakin, Angus Johnston, and Basil S. Markesinis, *Markesinis and Deakin's tort law*, (Oxford University Press, 2012); p. 41-44.
[179]"CODES AND CONVENTIONS QUESTIONS & ANSWERS PART-9 | Marine..." Link.

were incurred. A financial loss was described by Judge Cardozo as "... liability in an unspecified amount for an indeterminate time to an unspecified class" in the case of Ultramares Corporation v. Touche. This phrase was used to refer to a financial dispute.[180].

The claimant may go through difficult times and, as a result, justice will not be delivered in many of the circumstances in which the economic losses cannot be compensated. Both civil law and common law recognize that monetary losses cannot be compensated for under their respective systems. However, in order to prevent the difficulties that the claimant must endure and to ensure that the claimant is treated fairly, some exceptions have been introduced to the rule. Exceptions to this rule are discussed in more detail below.

3.8.2.3 Consequential Loss

Indirect loss is known as consequential loss, and it refers to the financial impact that a physical loss or damage to property has on a business or individual. Under the rules governing pollution from ships, the large loss is eligible for compensation. For instance, because of the oil leak, the fisherman loses money since his fishnet and other gear equipment are ruined, and this leads to a loss in revenue. It is necessary for the subsequent loss to be the direct cause of the material destruction of the marine environment or of the property.[181]

3.8.2.4 Pure Economic Loss

Losses to the property's physical structure are not related in any way to purely economic damages. This loss is simply connected to the harm that the claimant endured, and it is in no way connected to the pollutant's responsibility for the incident. The "special relationship of proximity" approach was proposed by the House of Lords in the legal dispute between Junior Books Ltd. and Veitchi Co. Ltd.[182]is an exception that may be found in the general law of

[180]Ibid.
[181]Ling Zhu and Ya Chao Zhao, "A feasibility Assessment of the Application of the Polluter-Pays Principle to Ship-source Pollution in Hong Kong," *Marine Policy* 57 (2015): 36-44.
[182]Ibid.

economic losses, and it has a provision that is analogous to it in the legislation governing ship-source pollution.[183] There is a compensable particular link that exists between the fishing vocation of the fisherman and the contaminated waters, and this relationship allows for the loss of revenue incurred by subsistence fishermen who make their living from fishing in specific waterways that have been polluted to be compensated. It is an example of how the Veitchi doctrine might be used in a different way.[184] Loss of chance to generate revenue, loss of profits, and loss of income are all examples of what are considered to be pure economic losses.

3.8.2.5 Relational Economic Loss

A kind of financial loss known as secondary economic loss or relational economic loss is not eligible for compensation, and there are no exceptions to this rule.[185]. Even if the claim for lost revenue by fishermen is that economic loss is compensable, the exporter of processed fish or fish processing plan is not compensateable because they are secondary losses. Even though the economic loss is compensable, the claim for lost income by fishers is that economic loss is compensable. IOPC Fund 1971 case, Algrete Shipping was the defendant.[186], Tilbury Company has taken Algrete Shipping to court, claiming that they have suffered a loss of profits as a result of the fish ban that was imposed as a result of the oil leak. The court dismissed the plaintiff's claim for economic loss on the basis that the harm was "secondary, relational, derivative, and/or indirect." Steel J.'s reasoning was that the claim was "remote."[187]

3.9 Liability under Convention Regimes

Because of the tragic Torrey Canyon tragedy that occurred in 1967, the convention regimes that are relevant to the harm caused by ship-source pollution were created. On March 18, 1967, a

[183]Ibid.
[184]M. Dolores Garza-Gil, Albino Prada-Blanco, and M. Xosé Vázquez-Rodríguez, "Estimating the Short-Term Economic Damages from the Prestige Oil Spill in the Galician Fisheries and Tourism," *Ecological Economics* 58.4 (2006): 842-849.
[185](1931), 255 NY 170 at p. 179.
[186]Emerson G. Spies and John C. McCoid, "Recovery of Consequential Damages in Eminent Domain," *Virginia Law Review* (1962): 437-458.
[187]Gotthard Mark Gauci, "The Problem of Pure Economic Loss in the Law Relating to Ship-Source Oil pollution Damage," *WMU Journal of Maritime Affairs* 2.1 (2003): 79-88

tanker that belonged to Liberia became aground on the Seven Stones Reef, which is located off the west coast of England.[188]. As a result, the level of pollution that was created was on a scale that had never been seen before, and as a result, the local population, the British government, and the world community at large were left feeling hopeless and unprepared.The vessel was scuttled at sea on the orders of the British government, who took it out to sea.[189]. The ship went down, and as a result, the nautical community was numbed and shocked. Nobody understood how to respond to the disaster, so some fisherman dumped detergents into the water, which caused far more damage than the oil leak itself.[190]

In 1969, the city of Brussels played host to a diplomatic conference that was organized by the International Maritime Consultative Organization (IMCO).[191]As a consequence of this, two norms came into existence. This started with the signing of an international public treaty known as the Intervention treaty. The Civil Liability Convention is the second private marine law that we will discuss. A coastal state has the ability to intervene on the high seas thanks to the Intervention Convention if the state's coastline or interests are threatened by pollution.[192]At the Civil Responsibility Convention, a discussion was held over the environmental liability of the owner of a loaded tanker. This Convention also addresses the pollution caused by laden tankers carrying cargo and bunker oil by addressing the issue of ship-source pollution. Because the claimant in the Torrey Canyon case had difficulty identifying the corporation that was accountable for the environmental damage, the CLC decided to hold just the registered owner responsible for the situation.[193]. In spite of the stringent responsibility that he is under, the owner of the ship may try to evade liability by relying on defenses such as an act of God. In 1971, the International Maritime Organization (IMO) ratified a treaty that established the International Oil Pollution Compensation Fund.

3.9.1 Hazardous, Noxious and Harmful Substances

[188][1983]1 A.C. 520.
[189]Franz Reichenbach, "Legislative Developments Concerning Oil Pollution of the Seas," *Int'l Bus. Law.* 8 (1980): 9.
[190]Jingjing Xu.
[191]Ibid.
[192]Edgar Gold, "Pollution of the Seas and International Law," *J. Mar Law & Com*, (1971) Vol. 3(1).
[193]"Brief History of IMO" Link accessed 25 August 2023.

3.9.2 Preliminary Observations

There are many different kinds of hazardous materials, such as combustible cargo and compounds that might create explosions; in addition, there are certain substances that will increase their mass when they come into contact with saltwater. And as a consequence of this, the ship's deadweight will progressively grow, which will lead to a decrease in the ship's freeboard. There are compounds that give out harmful gas. Therefore, the International Maritime Organization (IMO) adopted the HNS Convention in order to avoid and minimize the risky conditions caused by hazardous cargo.[194]

3.9.3 HNS Convention

In 1996, the International marine Organization (IMO) came up with the idea for the Hazardous and Non-Standardized Compounds Convention, which is also known as the HNS Convention. The purpose of this convention was to reduce the negative impact that hazardous and toxic chemical spills have on marine traffic. According to the definition provided by this Convention, "shipowner" refers to the registered shipowner as well as his agents and subordinates. If the defendant is found to be at fault and the plaintiff suffers harm or loss as a result of the defendant's actions, the defendant is wholly liable for paying the plaintiff. Plaintiffs are required to provide evidence that the defendant is at fault.

The HNS Convention provides for two different types of remuneration to its participants. The obligatory insurance for shipowners is covered by layer one, while the HNS Fund is covered by layer two in the event that insurance is inadequate. This HNS Convention addresses issues relating to human harm or death, damage to property outside the ship, preventative measures, and environmental pollution. The HNS Fund manages many accounts, including general, oil, LNG, and LPG.

3.10 Nuclear Damage

3.10.1 Preliminary Remarks

[194]International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, 1969.

The most poisonous and deadly chemicals are those that come from nuclear power plants. Whether or whether they are transported as goods, they pose a significant risk due to the damage that they do.

Atomic matter that is brought on board a vessel is considered to be "material," and it is not limited to products in terms of the laws that apply according to convention law.[195]. They are widespread in the areas in which they occur, and the obvious emphasis is placed on the obligation to third parties rather than the breadth of the connection between the carrier and the shipper.[196]. Third parties are impacted by the liability concerns that arise in connection with the harm caused by radioactive materials.

3.10.2 Relevant Convention Law

There are six accords that serve to minimize accountability for any damage that may be produced by nuclear power. In the year 1960, a convention that would later be known as the Convention on the Limitation of Liability for Damages Caused by Nuclear Accidents was signed.[197] (Paris Convention), Protocol, 2004[198], Convention of 1962 on the Responsibility of Owners and Operators of Nuclear Ships, Convention Supplementary to the Paris Convention, 1963[199], International Convention on Civil Liability for Nuclear Damage, 1963 (Vienna Convention), Protocol 1997[200], Convention on Civil Liability in the Field of Maritime Carriage of Nuclear Material1971[201], It is essential that you verify the current year before signing the Nuclear Installation Operators' Liability Convention. In its early stages, the Paris Convention was primarily relevant to the countries of Europe that were participants in the OECD. Following that,

[195]Alan E. Boyle, "Globalising environmental liability: the interplay of national and international law," *Journal of Environmental Law* 17.1 (2005): 3-26.
[196]Magnus Goransson, "HNS Convention," *Univ. L. Rev. ns* 2 (1997): 249; see also "HNS Convention Implementation" Link accessed 25 August 2023.
[197]Ben McRae, "The Compensation Convention: Path to a Global Regime for Dealing with Legal Liability and Compensation for Nuclear Damage," (1998).
[198]Ibid.
[199]"American Journal of International Law" 1963, 268.
[200]"International Legal Materials" 1963, 685.
[201]UN Treaty Series Vol. 1963, Nr 1-16197, p. 263.

the stipulations were included into the Vienna Convention on Civil Liability for Nuclear Damage in the year 1963.

3.10.3 Non-Existence of General Carriage Conventions Concerning Nuclear Material

Only two agreements, namely the 1962 Convention and the 1971 Convention, are directly associated with the concept of civil responsibility for nuclear harm. There is not a single convention that addresses the connection that exists between the shipper and the carrier when it comes to the transportation of nuclear items on board. The contractual connection that exists between the two parties is the basis for the legal responsibilities that must be fulfilled, and those duties are questionably weighted in favor of the shipper, just as they are for other types of hazardous commodities.This is because the shipper has the most information about the features of the cargo as well as the potential for harm that the shipment possesses.[202]. As a result, the shipper is subject to a rigorous duty of disclosure and is required to perform that responsibility in an honest and reliable manner at all times. In addition to this, it is a fact that atomic compounds are very harmful to society as a whole, and as a result, the states that are engaged in the transportation of such chemicals have duties that they must fulfill.

3.10.4 Special Convention Regime for Sea Carriage of Nuclear Material

The convention regime that is made up of the five conventions that were just discussed above exists primarily due to the fact that nuclear materials, regardless of how they are carried (ship, plane, train, etc.), include both state and inter-state interests.[203]. Because of the unusual or very dangerous nature of anything nuclear, as well as its startling repercussions on human civilization as a whole in the event that harm occurs regardless of who in law or how it may have occurred, the objective for a corporation of conventions is due to the fact that this is necessary. The international and political elements of transporting nuclear materials are made obvious, which prompted the formation of convention law but did not specifically identify responsibility

[202]UNTS, Vol. 1063, No. 1-16197, 263.
[203]Roark, "Explosion on the High Seas-The Second Circuit Endorses International Uniformity with Strict Liability for the Shipment of Dangerous Goods: Senator v. Sunway," *Sw. UL Rev.* 33 (2003): 139.

boundaries, other than to acknowledge absolute obligation. This is the result of the development of convention law without the specification of responsibility.[204].

In 1971, the International Atomic Energy Agency, the International Maritime Organization, and Europe Nuclear Energy all got together. The OECD organized a meeting with the purpose of formalizing the "Convention to Regulate Liability in reverence of Damage Arising from the Maritime Carriage of Nuclear Substances." The convention's ratification was the primary focus of the conference.[205]. The purpose of the conference was to find solutions to the challenges and disagreements that arose as a consequence of applying the instruments that dealt with shipowner's obligation.[206]. This Convention absolved a person from responsibility for paying for nuclear disaster damages where the operator of the nuclear site was found to be at fault.[207].

3.11 Conclusion

The central theme of this chapter revolves around the intricate challenges pertaining to liability that emerged in the context of the transportation of hazardous materials by carrier-shipper entities within the maritime domain. Furthermore, this chapter incorporates a concise examination of the Hague-Visby Rules, Hamburg Rules, and Rotterdam Rules. The implementation of the Rotterdam Rules, a set of international maritime regulations, is currently pending despite their intended enforcement in the foreseeable future. In this chapter, we also discussed three conditions that must be met before a person may be held accountable for the conduct of a third party. The topic of discussion shifted to the duty of third parties for ship-source pollution initially, then moved on to the harm caused by hazardous and toxic chemicals during the second half of the session. We conducted an investigation to determine whether or not

[204] Article 235 of UNCLOS dealing with responsibility and liability of states regarding protection and preservation of the marine environment.
[205]Goldie, "International Principles of Responsibility for Pollution," *Colum. J. Transnat'l L.* 1970, 311.
[206]Convention relating to Civil Liability in the Field of Maritime Carriage of Nuclear Material (NUCLEAR) Adoption: 17 December 1971; Entry into force: 15 July 1975, Link accessed 25 August 2023.
[207]Ibid.

a third party was to blame for the radioactive material's pollution of the environment. Check back in the following chapter for a discussion of the responsibilities of each party.

CHAPTER 4

LIABILITIES OF INVOLVED PARTIES

4.1 Introduction

During shipping, there is a high risk of products being broken or misplaced. This strategy takes into consideration any commodities that are lost, damaged, or delayed. Having said that, this is not always the case. During shipping, many different products might be damaged by the cargo. The ship and its cargo are put at jeopardy if dangerous items are transported by water. Because of these variations, discussions focus on subjects rather than specific things. Goods classified as hazardous have the potential to detonate, catch fire, cause damage to cargo holds, or solidify liquids. Because of the damage sustained by the ship, the carrier may be forced to take a diversion, during which it will have to unload, then reload, its cargo and purchase more bunker. If the ship is destroyed, taken captive, or quarantined, the shipping company will suffer financial losses. It is also possible for cargo to hurt crew members or other goods. "Goods of inflammable, explosive, or hazardous nature to the shipment of which the carrier, master, or agent of the carrier has not agreed with facts of their nature and character... the shipper of such goods shall be responsible for all expenses and damages directly or indirectly resulting from such shipment," it says in Article IV.6 of Hague/Hague-Visby Rules. "The shipper of such goods shall be responsible for all expenses and damages directly or indirectly resulting from such shipment." Before transferring hazardous materials, the shipper is required to satisfy the legal duties that it has to the vessel and the transportation company. In addition to this, it discusses the shipper's responsibilities to the stevedores, sailors, and cargo owners. Because it raises questions about the subject. Given that the carriage contract does not take into account tort law, this responsibility is not covered by the agreement. It's possible that a third party may charge the carrier for hazardous materials. He might file a lawsuit against the shipper to force them to fulfill their contract. The Hague-Hague Rules and the carriage contract may provide some degree of indirect protection for third-party claims.

4.2 Extent of shipper's liability

4.2.1 Liability for all damages and expenses "indirectly or directly." arising

In accordance with the provisions of Article IV/6 of the Hague/Hague-Visby Rules, the shipper is fully responsible for any and all costs and losses that are connected to the items. Does the inclusion of the word "directly or indirectly" increase the shipper's potential legal exposure in the event of a breach of contract or an indemnification claim based on the terms of the contract? It has been argued that the statements did not have any impact on the usual Rule, which states that a person is not qualified for an indemnity if the loss was the consequence of dishonest behavior on their part and states that this provision prohibits a person from receiving an indemnity in such a situation. Despite this, a sizeable number of individuals are of the opinion that the sentences altered the fundamental Rule.It's possible that there may be unintended consequences if the defendant is required to compensate the plaintiff for all losses caused by their breach of contract. The legal system has established restrictions in order to reduce the amount of money awarded for breach of contract claims. Therefore, you are not eligible to claim monetary damages if the breach had a negligible influence on your life. In the context of contracts, remoteness is determined by determining whether or not the parties could have reasonably anticipated the loss as a foreseeable consequence of the breach at the time the contract was signed.[208].

4.2.2 Causation or remoteness of damage?

In the Fiona[209] The phrases "directly or indirectly" and "indirectly" were given two separate meanings. The first claim was sufficient for the claimant to demonstrate that the loss was caused by the transportation of gasoline oil, which is classified as hazardous cargo. This was enough

[208]Cooke/Young/Taylor, 'Voyage Charters' 1010, (2001)
[209]Hadley v. Baxendale (1854) 9 Ex. 341, 354

evidence to back up the claimant's contention that a loss had occurred.[210] Indemnification might be sought even if the loss had no direct connection to the loading of the goods in question. [211] The rebuttal to this claim argued that the word "directly and indirectly" was added in the Act to permit the recovery of items of loss that may otherwise be deemed as too remote to qualify for recovery. [212]

The term "directly or indirectly" only appears in this clause, and nowhere else in the Hague-Visby Rules.[213] Some insight into the legislative meaning underlying the word "directly or indirectly" may be gleaned from the fact that the carrier is authorized under Article IV.6 to land and destroy unsafe materials without incurring any obligation to the shipper. The person who made the regulations may have been worried that the carrier's market share or earnings would drop if his ship was taken into custody, so that's one possible explanation. Simultaneously, the landed shipment must produce a recoverable loss item. There was a lot of litigation about the transport of goods prior to 1924. In order to preclude the possibility of collecting damages that may be determined to have been caused only indirectly as a consequence of a violation of the contract, a limiting concept had been developed. The inclusion of the phrase "indirectly" in Art. IV.6 may have been motivated by the need to make reparable any losses incurred by a carrier as a result of the delay of his ship caused by the carriage of dangerous goods. If that's the case, then that's what the legislators had in mind when they added the term. It's possible that this was done so as to "directly or indirectly" get support from law C of the York-Antwerp Rules, 1924, another international maritime legislation. In 1924, this regulation was established. To qualify as general average under Rule C, losses, expenses, and expenditures must be directly related to the general average act. According to Rule C, only these conditions qualify as typical. Any direct loss, such as demurrage, or any indirect loss, such as loss of market, sustained by the vessel or the goods as a consequence of delay, either during the voyage or at a later point, shall not be included part of the general average.

[1993] 1 *Lloyd's Rep* 257.
[211]Ibid. at 286.
[212]Ibid.
[213]Ibid.

Rule C's inclusion of "loss of market" as an illustration of a typical "indirect loss" may be noteworthy.

In the Fiona case, it was determined that the English requirements for remoteness of injury in 1924 may not be applicable to the interpretation of Article IV.6.[214] The terms "directly" and "indirectly" may refer to both causation and physical proximity. [215]

Proximate causation is a frequent legal concept, especially in insurance law, although it is not central to the laws controlling the transport of commodities by sea. [216] Since the shipper is held liable for any damage, "whether indirectly or directly arising," it is clear that indemnification is not limited to situations in which the transportation of hazardous materials is the main or significant source of the carrier's loss. This was decided after the Rule was understood to imply "whether indirectly or directly arising."

However, the CMI/UNCITRAL draft document contained the words "...directly and indirectly..." to describe the shipper's responsibilities when transporting dangerous goods. This was because these provisions were included into the CMI/UNCITRAL draft document. [217] It is the responsibility of the Hague/Hague-Visby Rules to regulate the contractual relationship between the shipper and the carrier.

However, the carrier is within its rights to pursue compensation from the shipper if it has made a claim payment for a damage caused as a consequence of the shipper's negligence. The original draft of the text intended the wording "directly and indirectly" to relate to such losses and damages. [218] The terms "directly and indirectly" were proposed but finally decided to be removed because of the potential for them to confuse the issue of causation. [219]

[214] *The Fiona* [1993] 1 *Lloyd's Rep* 257, 286.
[215] Ibid. at 287.
[216] Colinvaux, *Carver Carriage by Sea* (1982) Vol. 1, 108.
[217] A/CN.9/WG.III/WP.56, 31.
[218] A/CN.9/591, 38 f., 44.
[219] Ibid. at 44.

4.3 Shipper's and carrier's liability towards third parties

4.3.1 Shipper's liability to the other cargo owner

Goods owners and shippers are not contractually bound in any way. Since the loss or damage does not arise from the provisions of the contract of transport or Article IV.6 of the Hague/Visby Rules, responsibility for it lies with the shipper.

4.3.2 Carrier's liability to the other cargo owner

Classes 1 through 5 of the IMDG Code have the potential for explosions and/or flames. The Hague/Hague-Visby Convention, in Article IV.6, recognizes two types of hazards, flammability and explosivity. In line with the provisions of Section IV.2(b)[220] The transport provider is not liable for any fire-related losses, per the Rules.[221] As a result, the transport company has no responsibility for any fires that may start inside the cargo, regardless of whether the fire was sparked by dangerous goods or by anything else.

In addition, if the loss or damage was brought about by "any other cause arising without the fault or privity of the carrier," or the negligence or fault of the servants or agents of the carrier, "neither the carrier nor the ship shall be accountable for such loss or damage," as stated in Article IV.2(q). The purpose of include this exception on the bill of lading is to consolidate the many different exclusions that have previously been used. [222] When compared to other exclusions, this one is very broad, potentially including almost any cause of cargo loss beyond those enumerated in Sections IV.2(a)-(p). Despite this, the substantial breadth it gives absolves the bearer of the burdens of proof and argumentation.

[220] Boyd/Burrows/Foxton, Scrutton on Charterparties (1996), 208 ff.
[221]Mustill, "Carriers" Liabilities and Insurance in Grönfors (ed.) Damage from Good (1978), 69, 79
[222]Du Pontavice, "The Victims of Damage Caused by the Ship"s Cargo in Grönfors (ed.) Damage from Goods (1978), 29, 50.

Article 4.2(q) exempts the carrier from responsibility as long as he did not know the items were dangerous or how to handle them safely. Proof that the only cause of the damage was hazardous cargo that the carrier, master, or agent was unaware of in relation to other cargo-owners constitutes proof that "neither privity of the carrier that nor the actual fault nor the neglect or fault of his agents or servants contributed to the damage."[223]

However, there are a few circumstances when the carrier might be held liable. Examples include situations when both the shipper and the carrier share responsibility for the damage sustained by the other cargo, or where the carrier fails to undertake a comprehensive check of the products that were brought on board.[224] The carrier may avoid responsibility to the shipper in this situation by using either Article IV.3 or Article IV.6 of the Rules.[225]

4.4 Conclusion

In this chapter, we examine the extent of liability, finding that the shipper bears a greater share of the cost to repair damage directly or indirectly attributable to the cargo than in the case of a standard claim. Shipper and carrier obligations to third-party cargo owners were also discussed in this chapter. The following chapter will focus on how hazardous materials transport is governed in India.

[223]Ibid. at 51 f.; Mustill, "Carriers' Liabilities and Insurance" in Grönfors (ed.) Damage from Goods (1978), 69, 84 f.
[224]Ibid.
[225]See Article IV(6).

CHAPTER 5

REGULATORY FRAMEWORK OF CARRIAGE OF DANGEROUS GOODS IN INDIA

5.1 Introduction

There are several restrictions concerning the packing, labeling, and keeping of potentially dangerous substances. These are spelled forth in the related international treaties to the UN proposal. Although it lacks the authority of law, the UN Recommendation has widespread support and acceptance. In addition, several nations have their own regulations concerning the shipment of potentially dangerous goods.

5.2 INDIAN LAW RELATING TO CARRIAGE OF DANGEROUS GOODS BY SEA

5.2.1 The Indian Carriage Of Goods By Sea Act.1925

In 1925, Congress passed this Act to define the parties' respective rights, immunities, responsibilities, and liabilities under a bill of lading. This Act applies to vessels carrying goods from any port in India to any other port, regardless of where in India the receiving port is situated. This regulation limits people's capacity to illegally export or import goods. The overall quality of the items has been checked at every step of manufacturing. The carrier shall not be responsible for any defects in the goods that existed prior to consignment.

This law establishes a fault-based system for determining the carrier's and ship's respective responsibilities. The ship or carrier in issue will not be held responsible if the error was committed by his servants or management, and the exceptions to this rule are acts of God and war. The burden of proof is on the individual making the exception claim. Unless the deviation

was required to prevent loss of life or property or was otherwise justified, the carrier or ship will be held responsible for breaching the contract of carriage.[226]

Article IV, Section 6 of this Act regulates the carriage of dangerous goods. The shipper shall be responsible for all damages and expenses directly or indirectly arising out of or resulting from the shipment of goods that are combustible, hazardous, or explosive and to the shipment of which the carrier, master, or the carrier's agent has not consented, with knowledge. The carrier may land such goods at any place or render them innocuous or destroy them without compensation. [227] Just think about the consequences if any of the goods provided with this information and consent turned out to be harmful to the ship or its cargo. Any such goods may be landed at any location, destroyed, or rendered safe by the carrier without the incurrence of any responsibility on the part of the carrier, with the possible exception of general average.[228]

5.2.2 Merchant Shipping Act, 1958

Indian ships and foreign ships loading or discharging cargo or fuel, or embarking or disembarking passengers inside Indian territorial seas are subject to requirements of Sec331(6) of this Act.[229]

Any objects that, because of their nature, quantity, or storage method, might endanger the lives of anyone on board or in close proximity to the ship are considered "dangerous goods" for the purposes of this Section. Anything designated as an explosive under the provisions of the Explosives Act of 1884, as well as anything the federal government has designated as a hazardous commodity, falls under this category.[230]

Items like fog or distress signals, along with other necessities, are not considered "dangerous goods" by the International Maritime Organization. Furthermore, hazardous commodities do not

[226]Ibid
[227]Section 331(6) of the Merchant Shipping Act, 1958
[228]Ibid.
[229]Ibid.
[230]Section 331(3) of the Merchant Shipping Act, 1958.

include cargo delivered aboard a vessel, such a tanker, that has been specially adapted or manufactured for that purpose.

The ship's owner, master, or agent must provide the relevant information before leaving an Indian port if the ship is carrying or plans to convey dangerous commodities as cargo. A surveyor's job is to check the ship and make sure it complies with all the rules set out in this law.[231] If this is not the case, the ship will be considered unfit for its intended use.[232]

5.2.3 Merchant Shipping (Carriage of Cargo) RULES, 1991

According to this Rule, hazardous cargo consists of packaged dangerous commodities that pose a risk to the health and safety of people on board the ship or in the immediate vicinity of the vessel, such as explosives regulated by the Explosive Act of 1884 and the items specified in the International Maritime hazardous commodities Code.[233]. According to the International Maritime Dangerous products Code, "dangerous goods" include both solid and packed hazardous chemicals and pollutants that are harmful to the marine environment. [234].

The third and last section of these legislation deals with solid bulk cargo, deck freight, and packaged hazardous goods. Ships carrying dangerous goods in bulk were subject to strict controls under the International Maritime Dangerous Goods Code (IMDG Code).[235]. Dangerous goods must be wrapped properly and maintained in pristine condition. [236] properly marked to alert passers-by to the potentially dangerous nature of the load. [237] Proper storage is necessary for potentially lethal materials, explosives other than ammonium, and hazardous substances that are considered marine pollutants. [238]

[231]Section 2(j) of the M.S Rules 1991.
[232] Section 2(k) of the M.S Rules 1991
[233]Section 9 of the M.S Rules, 1991.
[234] section 11(1) of the M.S Rules, 1991.
[235] Section 11(5) of the M.S Rules, 1991.
[236]Section 12(1), (2), and (6) of the M.S Rules, 1991.
[237]Section 23(a) of the M.S Rules, 1991
[238]Section 23(b) of the M.S Rules, 1991.

The captain or agent, depending on the severity of the infraction, might face a fine or prison time of up to two years for failing to comply with laws for the transport of hazardous materials. If the infraction persists for any length of time, the fine might increase to ten thousand rupees or both parties could face legal action. [239] Any ship's owner, master, or agent who is responsible for an infraction carrying a fine of 1,000 and another 500 must pay the fine. [240]

5.3 INTERNATIONAL CONVENTIONS RATIFIED BY INDIA

5.3.1 IMDG CODE

The major goal of the IMDG Code is to increase safety measures for transporting dangerous goods. This regulation establishes responsibilities for the shipper, agents, packers, and others engaged in the shipment of dangerous goods from the factory to the warehouse.[241] Current Merchant Shipping (cargo) laws from 1991 have been revised to cover the void caused by the adoption of the new IMDG Code. The Merchant Shipping Act of 1958 and the Merchant Shipping Rules of 1991 must be followed by all involved parties in these circumstances. The new IMDG Code, which became law on January 1, 2010, includes nine distinct packing forms for dangerous goods.

5.3.2 SOLAS CONVENTION

The SOLAS Convention was first signed in 1974, and India has since ratified all subsequent revisions. The criteria for transporting hazardous goods by sea have been included into the Merchant Shipping Act of 1958 at Section 331 and the M.S. (carrying cargo) 1991 rules in conformity with this Convention. These provisions were added to the SOLAS Convention in response to the needs expressed in chapter VII. Packaged hazardous materials must be loaded, handled, and stored according to these regulations.[242].

5.3.3 MARPOL CONVENTION

[239]M.S Notice No. 06 of 2010, accessed on 1st October 2021.
[240]M.S Notice No. 06 of 2010, accessed on 1st October 2021.
[241]PressReleasePage, "Preventive steps taken to check marine pollution," posted on 25 August 2023 by PIB Delhi accessed on 1st September 2023.

India has given its approval for the MARPOL Convention to go into effect. There are six appendices to the convention that address specific types of pollution caused by ships. These include oil pollution prevention, the regulation of toxic liquid substance transportation in bulk, the prevention of pollution caused by rubbish discharged from boats, and the regulation of air pollution caused by ships. There are six annexations that India has accepted.

5.3.4 UN RECOMMENDATIONS ON THE TRANSPORT OF DANGEROUS GOODS

Although this recommendation is neither mandated by any international body or legally binding on any one country, it has nevertheless garnered significant acceptance across the world. All modes of transportation, with the exception of bulk tankers, are included in this proposal for moving potentially dangerous goods. Dangerous items might include everything from pure chemical compounds and chemical mixtures to manufactured goods. The manufacture, consumption, and discard of potentially dangerous goods are beyond the scope of this United Nations recommendation. According to this recommendation, ammonium nitrate should be treated with caution since it is an oxidizing agent. Ammonium nitrate is classified as an explosive in India by the country's 1884 Explosive Act.[243].

5.4 Conclusion

This section of the guide focuses on the Indian regulations pertaining to the transportation of dangerous goods. Among them are the Merchant Shipping Act of 1958 and the Merchant Shipping (Carriage) Cargo) Rules of 1991. The Indian Carriage Of Products By Sea Act dates back to 1925. This chapter looked at the IMDG Code, SOLAS, MARPOL, and UN Recommendations on the transit of Hazardous Products, all of which have been ratified by the Government of India to ensure the safe transit of hazardous commodities by sea. The responsibility of each party will be discussed in the next section.

[243]In Ionmar Compania Naviera S.A. v. Olin Corp. - 666 F.2d 897, 1982 A.M.C. 1489.

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CHAPTER 6

CHALLENGES REGARDING THE LIABILITY OF PARTIES

6.1 Introduction

There is always a degree of danger involved whenever dangerous items are delivered over water. As a result, everyone involved in the conveyance is responsible for fulfilling a set of duties. The onus for mitigating the danger presented by the hazardous goods is mostly on the shipper and the carrier. The legal duties of shippers and carriers have been the subject of various new regulations. However, these commitments come with their own set of problems. Concerns about the carrier's and the shipper's respective responsibilities in these areas are the focus of this chapter.

6.2 Unlimited Liability of the Shipper

The carrier's liability for missing, damaged, or delayed shipments is limited in several ways. However, the shipper faces an unlimited number of potential lawsuits. Having dangerous goods on board definitely had a role in the whole or constructive loss of the cargo and ship.[244] If the item being stored poses a threat, similar results might occur. When the bill of lading either directly or implicitly assigns safe-port responsibilities to the shipper, the latter may be exposed to significant responsibility. The monetary limits are set in place purely for the sake of the ship's security. In the event that the cargo is damaged, lost, or delayed, the shipper's open-ended obligations may be utilized as a defense for the restriction of duty.

Despite the fact that the shipper may dispel restriction of obligation by verifying the cargo's kind and value (which is acceptable), the same cannot be said for delay (where the limit is also imposed). Although happiness is possible, the same cannot be said of waiting.

It's also intriguing to think about how the carrier failed to meet his duty to provide a seaworthy ship and to handle the commodities with care before the journey ever began. He is nevertheless

[244]Watt/Burgoyne, "Know Your Cargo," [1999] 13(5) P&I Intl 102.

entitled to the protection afforded by the limitation of liability under Article IV.5 of the Hague-Visby Rules. The shipper of the products responsible for the destruction of the item in issue is responsible whether or not the commodity was dangerous if the damage was caused by other cargoes.

6.3 Insufficiency of Dangerous Goods Regulation

It will not be assumed that the shipper has fulfilled all of the shipper's responsibilities to the carrier just because the shipper has complied with the hazardous materials rules. Provision of specific warnings regarding the hazard and labeling of the cargo cannot be evaluated in isolation. One way to evaluate it is to consider the captain's and crew's degree of experience and knowledge with the ship's carrier.[245].

Lists of hazardous materials are organized by the International Maritime Dangerous Goods Code (IMDG Code) and other applicable legislation. These listings, however, are fairly restricted. The table does not identify the loads by name, but rather lists their attributes.[246].

Therefore, the shipper's assertion that the item in issue is not listed on the list of hazardous items does not relieve him of his need to provide notice.In the case of a mishap, it is regrettable that the new cargo has provided a UN Number, a record in the IMDG Code, and a listing in the Orange Book. Furthermore, there may be instances when the guidance provided by the IMDG Code is inadequate.[247].

6.4 Identity of the Shipper: Charter or Physical Shipper

There are three main players in a hazardous cargo shipment on the high seas: the shipper, the carrier, and the consignee. The Hague-Visby Rule treats the charterer or ship owner who signed the contract with the shipper as an integral element of the carrier. There is no clear definition of "shippers" under this regulation. But if you go by the carrier's definition, the shipper is

[245]Senator Linie GmbH v. Sunway Line - 291 F.3d. 145.
[246]"New IMDG Code 'dangerous' says club," 2000 (14 December) Fairplay 7.
[247]Gaskell, "Charterer's Liability to Shipowner, Orders, Indemnities and Vessel Damage," in Schelin (ed.) Modern Law of Charterparties (2003), 57

whomever signed the contract with the carrier. The charter party contract will have clauses for the carrier, the consignee, and the charter. The charter firm might alternatively be deemed the shipper depending on local law. If the charterer is in charge of packing the goods or delivering dangerous cargo to the shipowner, then the charterer is considered the goods' true shipper. In light of the above, he must fulfill the shipper's responsibilities under both Article IV.6 and the common law. If the actual shipper can be identified, then that party, and not the charterer, should bear responsibility for the shipment.

There might be a wide variety of causes for the need to label the shipper. The legal process of identifying the shipper will be complicated by several factors. It is acceptable to need proof that a person consented to be bound by a contract of carriage by permitting his name to be put as "shipper" in the bill of lading, and to have a detailed definition of shipper for the purposes of hazardous goods obligations. It seems sensible to establish a common definition for something like this. Although in most instances this will be the case, the mere fact that a person's name appears on a bill is not proof that they are a party to a contract of carriage with a carrier. It is important to identify the person who delivers the goods to the vessel for shipment by filling out the shipper box on the bill of lading. This person may be deemed FOB if the charterer entered into a transportation contract with the shipper. Therefore, it is important to tell the party that he may assume the liabilities of the shipper (such as paying the freight) if he agrees to be designated as the shipper. This highlights the need to distinguish between cases in which a person is considered a party to the carriage contract mentioned in bill of lading and those in which the law strives to identify the person who is physically delivering the goods.

6.5 Conclusion

In this chapter, we discussed some of the complications that might occur when discussing legal responsibility. In the event where the carrier is able to claim an exemption from the shipper's duty, but the shipper is unable to do so, the shipper's liability is unlimited. The regulations and laws give very little guidance when it comes to transporting hazardous materials. Therefore, this will have an effect on the shipper's duty as well as the carrier's. There is insufficient

differentiation between the symbolic carrier and the actual carrier. This makes it hard to tell who should shoulder which key responsibilities.

CHAPTER 7

CONCLUSION

This dissertation makes an effort to address the topic, which was challenging at the time. Given its significance to human and environmental well-being, marine transport of hazardous chemicals is an absolute need. These features of transporting hazardous materials are obligatory whether or whether preventive measures are used. There is no way to prevent accidents entirely, no matter how careful one is. There are private legal consequences that must be taken into account in addition to safety and environmental considerations. These ramifications concern the legal relationship of the shipper and the carrier with respect to issue of responsibilities and obligations. Because of the legal nature of our connection, we cannot disregard these ramifications. Private law and public law both affect national and international regimes, however in this case we are focusing on the Indian national regime.

For the sake of clarity, I have divided my dissertation into three parts. The first part of this article focuses on international regimes, sometimes known as convention instruments. In the second part, we'll look at the national laws that are in effect across India. Concerns about who is responsible for damage resulted by transporting hazardous goods by water are addressed in the third section.

Shipping hazardous goods is governed by international treaties such as the IMDG Code, the SOLAS agreement, and the MARPOL convention. They were created by IMO, a corporation. The Basel Convention was created by the United Nations Environment Program. Furthermore, the United Nations Recommendation on the Transportation of Dangerous Goods is an important agreement that is not backed by legislation but is frequently implemented.

According to the international agreements, law theorists , shipping industry, common law experts, and precedents, dangerous goods are:

(1) The cargo being transported by sea that, due to their combustible, explosive, corrosive, poisonous, radioactive, and other physical, chemical, biological, and mechanical features, could endanger the ship, the cargo, the people on board, and the environmentdamage to the environment and the requirement for specific protection;

(2) Products covered by IMDG regulations and dangerous commodities mentioned in thea listing of products from around the globe; however

(3) Items that are excluded are those that are deemed illegal by port state regulations or national policy intervention.

The shipper's and the carrier's respective contractual responsibilities stem from the relationship between them as described in the bill of lading. The charter party agreement is an exception to this norm.

The responsibility of third parties is far more crucial than that of contractual obligations. This duty arises in the case of nuclear damage, ship-source contamination, the transportation of hazardous and deadly substances, or the destruction of nuclear installations.

There are three types of tortious duty that apply to the transportation of hazardous goods by sea: fault-based, strict, and absolute culpability.

Major obstacles for those engaged in maritime transportation of hazardous materials include unrestricted liability, inadequate regulation of risky goods, and the difficulty of identifying shippers.

The movement of hazardous goods by marine transport is governed by just a small number of legislations in India. India's legislative framework for the movement of hazardous chemicals by marine transport consists of the Indian carriage of goods by sea Act of 1925, the Merchant Shipping Act of 1958, and the Merchant Shipping (Carrying Cargo) Rules of 1991.

My studies have shown me that there is a lack of precision and deficiencies in both the international and national regimes.

Before hazardous materials to be transported effectively, the HNS agreement and the approval of such agreement by the state are required. This agreement benefits all participating states since it establishes clear liability parameters and claims criteria.

The IMDG Code and accompanying regulations, in my opinion, should provide specific names to hazardous materials rather than just listing their characteristics. This would make sure that everyone knows what is safe to consume and what isn't.

India has not enacted any specialized regulation regarding the transport of hazardous materials by sea, despite having signed all of the necessary accords. Despite laws prohibiting the interstate and international movement of hazardous chemicals, this is the case in India. India must enact laws addressing the specific problems associated with shipping dangerous goods by sea.[7]

7.2 SUGGESTIONS

1. When both the shipper and the carrier are unsure whether the cargo qualifies as dangerous goods, define dangerous goods in a way that is more clear and practical. To prevent interfering with the seamless development of maritime transport, a specific authority should be designated to conduct identification.

2. Increase the safety of other cargo aboard the same ship from hazardous goods in the law and offer a solid legal foundation for claims linked to them.

3. When the transporter supports any loss due to a shipper's failure to comply with this commitment, the shipper may be required to pay. The shipper should package, check, and mark dangerous goods appropriately, to set a foundation for the shipper's liability for inappropriate package or marking of dangerous goods.

4. Recognise the changing nature of dangerous goods and modify legal frameworks to account for new types of cargo and the risks they pose.

5. To enable quick response and coordination in the event of incidents or emergencies, encourage transparency and information sharing among the involved parties.

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