

**A COMPARATIVE STUDY ON LIABILITY ISSUES
CONCERNING MARITIME TRANSPORTATION OF
DANGEROUS GOODS: INTERNATIONAL AND CHINESE
PERSPECTIVES**

by

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ABSTRACT

The subject of dangerous goods as it pertains to carriage by sea is of growing importance and concern because it impacts on safety as well as environmental issues. Both involve liability associated with maritime transportation and liability in respect of dangerous goods is a complex area of law both from an international as well as a domestic perspective. China is a rapidly emerging economic power and a major world player in shipping and seaborne trade including import and export of hazardous substances. Furthermore, China is undergoing remarkable reform and transformation in all respects, and legal regimes, especially in the maritime field, are in a state of evolution.

This thesis presents a two-fold area of concentration, that is, the international regime and the domestic Chinese law, looking at the safety as well as the environmental dimensions of international carriage of dangerous goods by sea. In order to carry out a comparative analysis of the international and Chinese legal regimes pertaining to the issues of contractual and tortious liability, a relatively detailed analytical examination of the international regime has been completed. Following this, the legal regime under Chinese law concerning the sea carriage of dangerous goods is critically evaluated in terms of the evolution of the domestic maritime law and the issues of application of international law and domestic law from the perspectives of regulatory law and civil liability. The discussion on the existing issues liability is centered on the principles of liability in tort and contract borne by private parties and state responsibility in respect

of damage arising from the maritime transportation of dangerous goods.

Conclusions are drawn from the summaries of chapters highlighting the critical issues in light of the findings of the research; the appropriate recommendations and suggestions for improvements to the international regimes; and proposals for law reform in the form of new legislation or amendments to existing legislation with the aim of improving the domestic regime to bring it into closer alignment with international law on the carriage of dangerous goods by sea.

TABLE OF CONTENTS

ABSTRACT	2
TABLE OF INTERNATIONAL CONVENTIONS.....	10
TABLE OF CHINESE LEGISLATION.....	11
TABLE OF U.S., U.K. AND OTHER COMMONWEALTH CASES	12
TABLE OF CHINESE CASES	14
ACKNOWLEDGMENT	15
ABBREVIATIONS.....	17
ORGANIZATIONS	18
COURTS.....	18
JOURNALS	19
PART I – INTRODUCTION	20
CHAPTER 1 – BACKGROUND AND INTRODUCTION	20
1.1 Background	20
1.2 Purpose of Thesis	26
1.3 Research Questions	28
1.4 Legal Theory and Methodology	29
1.4.1 Public Law and Private Law	29
1.4.2 Legal Theory	29
1.4.3 Research Methodology	31
1.5 Structure of Thesis	32
PART II - INTERNATIONAL LEGAL REGIMES	37
CHAPTER 2 - THE INTERNATIONAL REGULATORY REGIME OF DANGEROUS GOODS.....	37
2.1 The Notion of Dangerous Goods: Terminology in Perspective.....	37

2.2 Conventions and Codes.....	39
2.2.1 The IMDG and other Relevant Codes.....	39
2.2.2 Basel Convention, MARPOL and London Convention: Comparative Analysis	40
2.3 SOLAS	46
2.4 MARPOL	49
2.5 The UN Recommendations on the Transport of Dangerous Goods	51
2.6 Concluding Remarks.....	53
 CHAPTER 3 - CIVIL LIABILITY IN RESPECT OF SEA CARRIAGE OF DANGEROUS GOODS.....	 55
3.1 Preliminary Remarks - General Principles.....	55
3.2 Liability in Tort: Fault-based, Strict and Absolute	56
3.2.1 Fault-based Liability	56
3.2.2 Strict Liability	59
3.2.3 Absolute Liability	62
3.3 Liabilities in Contract.....	64
3.4 Remedies in Contract and Tort	65
3.4.1 Damage and Damages in General	66
3.4.2 Damage or Harm Pertaining to the Marine Environment	68
3.5 The Carrier – Shipper Relationship: Mutual Obligations and Liabilities	69
3.5.1 Liabilities under Conventions: Preliminary Observations	69
3.5.2 Hague-Visby Rules	72
3.5.3 Hamburg Rules	78
3.5.4 Rotterdam Rules: Background Evolution and Salient Features.....	81
3.6 Remedies under Convention Law	99
3.7 Concluding Remarks.....	101
 CHAPTER 4 - THIRD PARTY LIABILITY FOR DAMAGE CAUSED BY DANGEROUS GOODS	 103
4.1 Maritime Safety and Marine Pollution Related Liability: Preliminary Remarks	103
4.2 Ship-source Oil Pollution.....	105
4.2.1 Liability	106

4.2.2 Compensability	116
4.2.2.1 Damage to Property	119
4.2.2.2 Economic Loss	121
4.2.2.3 Consequential Loss	122
4.2.2.4 Pure Economic Loss.....	123
4.2.2.5 Relational Economic Loss	126
4.3 Liability under Convention Regimes	128
4.3 Hazardous, Noxious and Harmful Substances	132
4.3.1 Preliminary Observations.....	132
4.3.2 Development of HNS Convention	132
4.3.3 Summary Contents of HNS Convention	138
4.4 Nuclear Damage.....	143
4.4.1 Preliminary Remarks.....	143
4.5.2 Relevant Convention Law	144
4.4.3 Absence of General Carriage Conventions Relating to Nuclear Material	145
4.5.4 Special Convention Regime for Sea Carriage of Nuclear Material	145
4.5 Concluding Remarks.....	150
PART III - CHINESE LEGAL REGIME AND COMPARATIVE ANALYSIS.....	152
CHAPTER 5 - CHINA AND INTER-STATE LIABILITY.....	153
5.1 Damage in the Context of Inter-state Liability	153
5.2 State Responsibility and Liability in International Law	158
5.2.1 Doctrine of State Responsibility	158
5.2.2 Basis of Liability of a State: Strict Fault-Based or Other	163
5.2.3 The Present and Future of State Responsibility as a Legal Doctrine.....	167
5.3 Liability of Flag State of Polluting Ship	169
5.3.1 Liability of State for Damage Caused and Suffered by Private Actors	169
5.3.2 Floating Island Doctrine in Respect of Ships.....	171
5.4 Liability of Coastal and Port State	173
5.5 Concluding Remarks.....	175
CHAPTER 6 - LEGAL FRAMEWORK OF CHINESE LAW	178

6.1 Background to Chinese Maritime Law	178
6.2 The Legislative Process.....	184
6.3 The Legal System and the Maritime Judiciary	186
6.3.1 The Civil Law System.....	186
6.3.2 The Chinese Maritime Judiciary	189
6.4 Salient Features of the CMC	190
6.4.1 International Dimension.....	190
6.4.2 The Perimeter	191
6.5 Dangerous Goods	192
6.5.1 Preliminaries	192
6.5.2 Chinese Regulatory Law	194
6.6 Chinese Private Law	196
6.6.1 CMC and Contract Law on Sea Carriage.....	196
6.6.2 Tort law	197
6.7 Maritime Environmental Law	209
6.8 Carriage of Goods under CMC and other Domestic Law	215
6.9 Carriage of Goods under International Carriage Conventions.....	218
6.9.1 Implementation Process in China	218
6.9.2 Carriage Conventions, the CMC and other Chinese Legislation	220
6.9.3 Marine Environment Conventions	222
6.10 Concluding Remarks.....	223
 CHAPTER 7 - CHINESE LAW AND PRACTICE IN RELATION TO SEA CARRIAGE OF DANGEROUS GOODS	
7.1 Preliminary Remarks.....	225
7.2 Dangerous Goods Law in China	225
7.2.1 Issues Regarding Dangerous Goods	226
7.2.2The Legal Harm Issue in Practice	227
7.3 Cargo Care and Seaworthiness.....	228
7.3.1 Cargo Care on Board and Seaworthiness.....	228
7.3.2 Seaworthiness in Chinese Law	230

7.3.4 Chinese Case Study- Carrier’s duty	232
7.4 Shipper’s Obligation against Carrier’s Seaworthiness.....	239
7.5 Documentary Shipper and Actual Shipper under Chinese Law.....	243
7.5.1 Definition of Shipper	243
7.5.2 Definition of Shipper under Convention Law.....	244
7.5.3 Definition of Shipper under Chinese Law	245
7.5.4 Analysis.....	247
7.6 Other Domestic Statutory Laws	248
7.7 Tort Liability in Chinese Law	251
7.7.1 Tort liability based on “Someone’s Fault”	254
7.7.2 Tort Liability without Fault.....	255
7.7.3 Dangerous Cargo.....	258
7.8 Issues of Chinese Tort and Contract Law	259
7.8 .1Causation and Remoteness in Chinese Tort and Contract law	259
7.8.2 Damage to Property, Consequential Damage and Economic Losses	264
7.8.3The Issues of Compensation Defined in Tort Law	266
7.8.4 Merger of the Liabilities in Tort and Contract.....	267
7.9 Concluding Remarks.....	269
PART IV – CONCLUSION.....	272
CHAPTER 8 - SUMMARY AND CONCLUSIONS.....	272
8.1 General Summary.....	272
8.2 Summary Conclusions of Chapters.....	275
8.3 Summary of the Comparison between International Law and Chinese Law	283
8.4 Concluding Remarks.....	286
APPENDIX.....	288
APPENDIX I INTERNATIONAL CONVENTION ON LIABILITY AND COMPENSATION FOR DAMAGE IN CONNECTION WITH THE CARRIAGE OF HAZARDOUS AND NOXIOUS SUBSTANCES BY SEA, 2010 (2010 HNS CONVENTION)	288
APPENDIX II MARITIME CODE OF THE PEOPLE’S PUBLIC OF CHINA	329

APPENDIX III TORT LAW OF THE PEOPLE’S REPUBLIC OF CHINA	347
BIBLIOGRAPHY	355
BOOKS	355
ARTICLES.....	360
WEBSITES	383

TABLE OF INTERNATIONAL CONVENTIONS

Bulk Chemical Code

Civil Liability Convention

International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage

International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea

International Convention for the Unification of Certain Rules of Law relating to Bills of Lading, 1924 (The Hague Rules)

Brussels Protocol amending the Hague Rules relating to Bills of Lading, 1968 (The Hague-Visby Rules)

International Bulk Chemical Code

International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk

International Gas Carrier Code

International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk

International Maritime Dangerous Goods Code

International Oil Pollution Compensation

International Oil Pollution Fund

International Management Code for the Safe Operation of Ships and for Pollution Prevention (“International Safety Management Code”)

Limitation Convention on Maritime Claims

United Nations Commission on International Trade Law

United Nations Convention on the Law of the Sea, 1982

TABLE OF CHINESE LEGISLATION

Administrative Rules of the PRC Preventing Marine Pollution caused by Vessels
Administrative Regulations of the PRC on the Safety Supervision of
Dangerous Cargo on Vessels
Civil Code of China
Maritime Code of the People's Republic of China
General Principles of Civil Law
Marine Environmental Protection Law of the PRC
Maritime Safety Administration
Maritime Traffic Safety Law of the PRC
Limitation of Liability for Passengers and their Luggage
Regulations of the PRC on Administration of Dangerous Cargo at Port
Tort Law of the PRC

TABLE OF U.S., U.K. AND OTHER COMMONWEALTH CASES

Ann's v Merton London Borough Council [1978] AC 728

Bank Line Ltd. v. Capel & Co [1919] AC 435

Carlill v. Carbolic Smoke Ball Co. [1893] 1 Q.B. 256;

Corfu Channel (United Kingdom v. Albania.), 1949 I.C.J. 4 (Dec. 15)

Donaghue v. Stevenson (1932), AC 562

Effort Shipping Co. Ltd v. Linden Management SA (The Giannis NK) [1994] 2 Lloyd's Rep. 171; aff'd [1996] 1 Lloyd's Rep. 577 (C.A.); aff'd [1998] 2 W.L.R. 206 (H.L.), [1998] 1 Lloyd's Rep 337; [1998] A.C. 605

Junior Books Ltd v. Veitchi Co. Ltd [1983] 1 A.C. 520

Hedley Byrne & Co. Ltd. v. Heller & Partners Ltd., [1964] A.C. 465; [1963] 1 Lloyd's Rep. 485 (H.L.)

Hirji Mulji v Cheong Yue Steamship Co [1926] AC 497

Lac Lanoux (France. v. Spain), 12 R.I.A.A. 281 (1957)

Landcatch Ltd. v. International Oil Pollution compensation Fund; Landcatch Ltd. v. Braer Corporation & Others, [1998] 2 Lloyds Rep.

Mediterranean Freight Services Ltd v. B.P. Oil International Ltd (The Fiona) [1993] 1 Lloyd's Rep. 257, QB; [1994] 2 Lloyd's Rep. 506, CA

Maxine Footwear v. Canadian Government Merchant Marine [1959] A.C. 589 (HL)

McFadden v. Blue Star Line [1905] 1 K.B. 697

Nettleship v. Weston [1971] 3 WLR 370

Nuclear Tests Case (Australia. v. France), 1974 I.C.J., 253 (Dec. 20).

People v. Tyler, 7 Mich. 160 (1859).

Parsons Corp and Others v. CV Scheepvaartonderneming "Happy Ranger" and Others (The Happy Ranger) [2002] ECWA Civ 694; [2002] 2 Lloyd's Rep 357

R.v. Anderson, 11 Cox C.C., 198 (1868) [Eng.].

R.v. City of Sault Saint Marie [1978] 40 C.C.C. (2d) 353 (S.C.C.)

Rylands v. Fletcher Island (1868). L.R.3 H.L. 330

Spartan Steel and Alloys Ltd. v. Martin & Co. (Contractors) Ltd. [1973] Q.B. 27 (C.A.)
Senator Linie GMBH & Co. Kg v. Sunway Line, Inc. 291 F.3d 145 (2d Cir.2002)

Southport Corporation v. Esso Petroleum Co. Ltd [1954] Q.B. 182; (CA)

The Wagon Mound I and II [1961] AC 388 and [1966] 1 L.L.R. 657

Trail Smelter Arbitration (United States. v. Canada), 3 R.I.A.A. 1938 (1949); 35 Am. J. Int'l L. 684 (1941).

Union Carbide v. Union of India, (1989) 2 S.C.C. 540.

Ultramares Corporation v. Touche (1931), 255NY 170 at p 179.

TABLE OF CHINESE CASES

American President Lines Ltd. v. China Jiangsu International Economic and Technological Cooperation Company -Shanghai Maritime Court

China Foreign Trade Transportation Corporation v. China International Petroleum and Chemicals (Qinu) Company and Petroleum and Chemicals Import and Export Company of Shanghai- Shanghai Maritime Court

China National Chemical Construction Corp. Shenzhen Branch (CNCCC) v. Hyundai Merchant Marine Co., Ltd. -reported by Guangzhou maritime court 1996

Gao Kequan v. Sheyang Ocean Fishery Company Ltd; reported by This case was Reported in Zheng Zhaofang (editor), (2006) Casebook on Maritime Tort Liability (in Chinese), Shanghai People's Press

The People's Insurance Company, Guangxi Nan'ning Branch v. Tianjin Navigation Co. Ltd (The Jin Han),

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ABBREVIATIONS

LEGISLATION AND LEGAL TERMS

ARPMPV	Administrative Rules of the PRC Preventing Marine Pollution caused by Vessels
ARSSDCV	Administrative Regulations of the PRC on the Safety Supervision of Dangerous Cargo on Vessels
BCH	Bulk Chemical Code
CCC	Civil Code of China
CLC	Civil Liability Convention
CLC	International Convention on Civil Liability for Oil Pollution Damage
CMC	Maritime Code of the People's Republic of China
COGSA	Carriage of Goods by Sea Act
FUND	International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage
GPCL	General Principles of Civil Law
HNS	International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea
HR	International Convention for the Unification of Certain Rules of Law relating to Bills of Lading, 1924 (The Hague Rules)
HVR	Brussels Protocol amending the Hague Rules relating to Bills of Lading, 1968 (The Hague-Visby Rules)
IBC	International Bulk Chemical Code
IBC Code	International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk
IGC	International Gas Carrier Code
IGC Code	International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk
IMDG Code	International Maritime Dangerous Goods Code
IOPC	International Oil Pollution Compensation
IOPC Fund	International Oil Pollution Fund
ISM Code	International Management Code for the Safe Operation of Ships and for Pollution Prevention (“International Safety Management Code”)
LLMC	Limitation Convention on Maritime Claims
LNG	Liquid Natural Gas
LSA	Life-Saving Appliances
MARPOL	International Convention for the Prevention of Pollution

	from Ships
MEPL	Marine Environmental Protection Law of the PRC
MOT	Ministry of Transport of PRC
MSA	Maritime Safety Administration
MSA	Merchant Shipping Act
MSR	Merchant Shipping Regulations
MTSL	Maritime Traffic Safety Law of the PRC
OPA	Oil Pollution Act
PAL	Limitation of Liability for Passengers and their Luggage
RADCP	Regulations of the PRC on Administration of Dangerous Cargo at Port
RR	United Nations Convention on the Contracts for the International Carriage of Goods Wholly or Partly by Sea (The Rotterdam Rules 2009)
SCF	Supplementary Compensation Fund
SDR	Special Drawing Right
SMPEP	Shipboard Marine Pollution plan for Noxious Liquid Substances
SOLAS	Convention for the Safety of Life at Sea
TBM	Trans Boundary Movement
UNCITRAL	United Nations Commission on International Trade Law
UNCLOS	United Nations Convention on the Law of the Sea, 1982

ORGANIZATIONS

CMI	Comité Maritime International
CETG	United Nations Committee of Experts on the Transport of Dangerous Goods
ECOSOC	Economic and Social Council
PRC	People's Republic of China
IAEA	International Atomic Energy Agency
ILC	International Law Commission
LAC	Legislative Affairs Commission
MOT	The Ministry of Transport of PRC
MSC	Maritime Safety Committee of IMO
NPC	National People's Congress
UN/ECE	UN Economic Commission for Europe
UNCITRAL	United Nations Commission on International Trade Law
IMCO	International Maritime Consultative Organization
TCC	Transport and Communications Commission
UNCTAD	United Nations Conference on Trade and Development
UNEP	United Nations Environment Programme

COURTS

C.A.	Court of Appeal
C.A. (9th Cir.)	US Court of Appeals (9th Circuit)
H.C.	High Court
H.L.	House of Lords
P.C.	Privy Council
Sup. Ct	Supreme Court
SPC	Supreme People's Court
IJC	International Justice Court
UNEP	United Nations Environment Programme

JOURNALS

All E.R.Rev.	All England Law Reports Annual Review
Cal. L. Rev.	California Law Review
C.L.J.	Cambridge Law Journal
Colum. J. Env'tl. L.	Columbia Journal of Environmental Law
Colum. J. Transnat'l L.	Columbia Journal of Transnational Law
Chin. J. Int. Law.	Chinese Review of International Law
E.L.M.	Environmental Law and Management
Env.L.Rev.	Environmental Law Review
Env. Liability	Environmental Liability
ESTU	International Journal of Estuarine and Coastal Law
I.B.L.	International Business Lawyer
ICLQ	International & Comparative Law Quarterly
IJMCL	International Journal of Marine and Coastal Law
IJSL	The International Journal of Shipping Law
J.B.L.	Journal of Business Law
JETL	Journal of European Tort Law
J. Legal Stud.	Journal of Legal Study
J.Mar.L. & Com	Journal of Maritime Law and Commerce
J.I.M.L.	Journal of International Maritime Law
LI. L.R.	Lloyd's List Law Reports
Lloyd's Rep.	Lloyd's Law Reports
L.M.C.L.Q.	Lloyd's Maritime and Commercial Law Quarterly
Mar. Pol'y & Mgmt.	Maritime Policy & Management
MLAANZ	Journal Maritime Law Association of Australia and New Zealand Journal
REIEL	Review of European Community & International Environmental Law
Tul. Mar. L.J.	Tulane Maritime Law Journal
U. Pa. J. Int'l Econ. L.	University of Pennsylvania Journal of International Economic Law
U.S.F. Mar. L.J.	University of San Francisco Maritime Law Journal
Willamette J. Int'l L. & Dis. Res	Willamette Journal of International Law and Dispute Resolution

PART I – INTRODUCTION

CHAPTER 1 – BACKGROUND AND INTRODUCTION

1.1 Background

It is perhaps an understatement to say that transportation by sea is an inherently risky business. Undoubtedly there are numerous other dangerous occupations such as aviation in the air; and on land below the ground there is mining. But sea transportation is the oldest of all. In the present milieu, other activities at sea such as operation of offshore platforms for exploration and exploitation of oil and gas is an equally risk business.

The cause of shipboard danger is primarily attributable to the nature of the cargo and other substances that a ship carries which is a cause internal to the ship although external factors are there as well which emanate from the hostile environment to which the ship is exposed at sea.¹ Dangerous or hazardous substances on board ships mainly consist of oils, chemicals, radioactive materials and the like carried as cargo. But there are non-cargo substances as well such as fuel oil carried in the bunkers of a ship or lubricating oils carried as ship stores.² Aside from the dangerous or hazardous character of these substances, they are also pollutants which can cause damage or harm to the marine environment in addition to physical injury

¹ Holly Roark. “Explosion on the High Seas-The Second Circuit Promotes International Uniformity with Strict Liability for the Shipment of Dangerous Goods: *Senator v. Sunway*” (2003) 33 Sw.UL Rev. 139.

² Patricia .W. Birnie and Alan E, Boyle, *International Law and the Marine Environment*, (3rd edn, Oxford University Press, 2009), pp 398-404.

to humans not to mention loss of or damage to their property.³ Thus maritime safety and marine pollution are two sides of the same coin in relation to shipboard substances posing a variety of risks.

It is notable that the trend of transporting hazardous substances by sea whether as cargo or otherwise, has been increasing in the last decade because of global economic development. It is reported by the International Maritime Organization (IMO) that more than fifty percent of goods transported by sea are considered to be dangerous goods.⁴

Damage caused by dangerous or hazardous goods carried on board ships far outweigh damage arising from any other kinds of goods carried by sea. Whenever dangerous or hazardous goods are mentioned, the first thought that springs to mind is the threat to human safety and loss of or damage to property.⁵ While safety is doubtless of primary concern, environmental harm, real or potential, suffered by victims and the marine environment resulting from damage caused by dangerous or hazardous substances carried on ships, is equally important. The seriousness of environmental risks in connection with transportation of dangerous goods has been demonstrated time and again by many catastrophic pollution incidents since the

³ *Ibid*, p. 380.

⁴ L. Bergkamp, *Liability and Environment: Private and Public law Aspects of Civil Liability for Environmental Harm in an International Context* (Martinus Nijhoff Publishers 2001) at pp. 35-36.

⁵ Mullai, Arben. "A Risk Analysis Framework for Marine Transport of Packaged Dangerous Goods." *Supply chain risk, Großbritannien (2004)*: pp.128-159.

Torrey Canyon disaster of 1967.⁶ Damage arising from hazardous substances carried by ships can be of phenomenal proportions and sometimes beyond remedy both in terms of adequate compensation for victims as well as the restoration of the marine environment. In relatively recent times this has been exemplified by incidents such as the *Erika* and *Prestige* disasters among others.⁷

One aspect of the present theme of enquiry is - what are these dangerous goods that instigate the kinds of damage mentioned above? This work concerns those goods or substances that fall within the description and meaning of “dangerous” in the maritime context. Oil is carried on board ships both as cargo as well as fuel. There are different grades of cargo oil whose deleterious effects as pollutants are different depending on such factors as density, viscosity, inflammability, *etc.* Fuel oil is also of different grades and blends; some containing more carbon and lead than others. Chemicals, usually always carried as cargo, are of numerous varieties; some as liquids, others as solids. There are also gas carriers carrying liquid natural gas (LNG) or liquid petroleum gas (LPG) as cargo; as well, there are now LNG-fuelled ships. Nuclear ships are those that are nuclear powered; they may or may not carry nuclear materials as cargo. Chemical carriers, gas carriers and nuclear ships are specially designed vessels as are oil tankers. Hence these are all known as "purpose-built" ships.

⁶ Ved P. Nanda “The Torrey Canyon Disaster: Some Legal Aspects” (1967)*Denv. LJ* 44, 400, 410

⁷ Michael G. Faure, Lixin Han and Hongjun Shan, *Maritime Pollution Liability and Policy. China, Europe and the US* Vol. 13. (1st edn, Kluwer Law International, 2010), at p. 2.

The safety requirements of all ships are governed by Convention for the Safety of Life at Sea (hereafter SOLAS).⁸ The common denominator of the vessel types mentioned above is that they all carry, whether or not for transportation as cargo, substances that are dangerous or hazardous, which brings us to the question of whether there is a difference, and if so, whether it is simply a question of degree.

It must be pointed out that the terms "dangerous" and "hazardous" are used interchangeably. In this context the terms "ultra-hazardous" and "extra-hazardous" are also relevant which define or explain the degree of danger through hazard profiles found in relevant scientific literature and international convention instruments. For the present purposes, hazard profiles of hazardous materials can be obtained from the International Convention on Pollution of Prevention from Ships (hereafter MARPOL).⁹

Another aspect of the central theme is the issue of liability associated with dangerous substances carried on board ship both from a safety as well as an environmental perspective. Liability has both public law as well as private law implications. A general definition of liability in both connotations is that it is a

⁸ 1974 Convenção Internacional para a Salvaguarda da Vida Humana no Mar, *Solas: consolidated edition, 1992: Consolidated Text of the International Convention for Safety of Life at Sea, 1974, and its Protocol of 1978, Articles, Annex and Certificates* (2009) Edition, See also, International Convention for the Safety of Life at Sea (SOLAS), 1974, Adoption: 1 November 1974; Entry into force: 25 May 1980. International Convention for the Safety of Life at Sea (SOLAS), 1974, Adoption: 1 November 1974; Entry into force: 25 May 1980. [http://www.imo.org/en/About/conventions/listofconventions/pages/international-convention-for-the-safety-of-life-at-sea-\(solas\),-1974.aspx](http://www.imo.org/en/About/conventions/listofconventions/pages/international-convention-for-the-safety-of-life-at-sea-(solas),-1974.aspx); accessed 25th September, 2016.

⁹ International Convention on Pollution of Prevention from Ships, 1973 as Modified by its Protocols of 1978 and 1997, Consolidated Text, IMO (2011). See in particular Annex II and Several associated instruments; Air Pollution and Climate Secretariat, 'IMO MARPOL Convention' (2011)

condition which results from conduct or behaviour of a perpetrator that is unacceptable in the eyes of the law. In that sense liability which is a qualitative concept translates into risk allocation among the parties concerned.¹⁰ The perpetrator in question may be an individual or a legal or juridical entity including a company, a government or a state.

A distinction must be made between liability in public law and liability in private while recognizing that there are overlaps and interfaces between the two. The distinction is best understood by reference to the consequences or end results of public and private law legal actions. In public law the verdict of a court is usually in the form of a penal sanction imposed on the perpetrator which may be of a criminal or regulatory variety depending on the seriousness of the offence.¹¹ In contrast, in a private law action, the verdict of a court is in the form of a civil remedy usually comprising compensation.¹² It is interesting to note that inter-state litigation is of a hybrid form where the parties are subjects of international law but the verdict of the

¹⁰ Sophia Kopela. "Civil and criminal liability as mechanisms for the prevention of oil marine pollution: the Erika case" (2011) 20(3), REIEL 313, 312; see also, Proshanto K. Mukherjee, "Liability Issues Pertaining to Maritime Safety", in Jingjing Xu, Michael Roe, Dong Ping Song (eds.), *Contemporary Issues in Marine and Maritime Affairs*, Plymouth: University of Plymouth, 2011 at pp. 10-14.

¹¹ See Proshanto K. Mukherjee, "The Penal Law of Ship-Source Marine Pollution: Selected Issues in Perspective", in Tafsir Malick Ndiaye & Rudiger Wolfrum (eds), *Liber Amicorum Judge Thomas A. Mensah: Law of the Sea, Environmental Law and Settlement of Disputes*, Max Planck Institute for Comparative Public Law and International Law, Leiden, Boston: Martinus Nijhoff September 2007, pp. 463 - 496. See also Gunter Heine. "Marine (oil) pollution: Prevention and protection by criminal law—International perspectives, corporate and/or individual criminal liability" (2006) *Prevention and compensation of marine pollution damage: Recent developments in Europe, China and the US*, FAURE, MG en HU, J.,(eds.), Den Haag, Kluwer Law International 41

¹² Doug Rendleman. "Inadequate Remedy at Law Prerequisite for an Injunction" (1980) 33 U.Fla.L.Rev. 346,350.

tribunal in question involves compensation which is a private law remedy.¹³ Incidentally, in all of the above types of legal actions, the penal sanction or civil remedy, as the case may be, can be accompanied by a verdict in the nature of an order in administrative law.

In private law, liability can arise in respect of a breach of contract or a misrepresentation made in the course of negotiating a contract between carrier and shipper,¹⁴ and a variety of remedies may be available although they may be different in civil law and common law jurisdictions.¹⁵ Liability can also arise in tort where again, different types of remedies may be available.¹⁶ To put it in synoptic form, the legal framework within which the shipping industry operates extends from regulatory public law to liability in private law covering safety and environmental concerns.

The final strand of the central theme revolves around China as a state and Chinese law in the field of dangerous goods carriage. The position of China in terms of inter-state liability needs elaboration together with the implications and inadequacies of Chinese legislation in the field of sea carriage of dangerous and hazardous substances. The Chinese position relating to international sea carriage conventions must be considered given that China is a rapidly emerging economic

¹³ Smith, D. *State Responsibility and the Marine Environment: the Rules of Decision*, (Clarendon Press, 1988), pp 22, 247; pp.23-25

¹⁴ Guenter Heinz Treitel, *The Law of Contract* (Sweet & Maxwell 2003) pp. 54-56

¹⁵ Steven J. Burton. 'Breach of Contract and the Common law duty to Perform in Good Faith' (1980) *Harv Law Rev* 369, 370.

¹⁶ Guido Calabresi and Jon T. Hirschoff. 'Toward a test for strict liability in torts' (1972) 81(6) *Yale Law J* 1055, 1057.

power and a major world player in shipping and seaborne trade including import of hazardous substances.

1.2 Purpose of Thesis

Against the above background, the central purpose of the thesis is to carry out a comparative analysis of the international and Chinese legal regimes pertaining to liability for transportation of dangerous goods by sea. Needless to say, some elaboration is necessary to convey the precise intention of the researcher and her attempt to rationalize her choice of topic. As can be gleaned from the title, transportation of dangerous goods by sea is the core of the research effort leading to this thesis as the end product. In essence there is a three-prong objective.

The first is a relatively detailed analytical examination of the international regime concerning the sea carriage of dangerous goods. It must be appreciated that a large part of this regime belongs to the regulatory law domain largely contained in international conventions and codes. It is axiomatic that such international instruments provide for violations which need to be transformed into offences in domestic law which must provide for corresponding penal sanctions. Depending on its seriousness, an offence may be characterized as regulatory or criminal.¹⁷ Another side of the international regime is civil liability. Again much of this aspect of the law is covered by conventions which are of the private law variety. Hand in hand with civil liability stands the notion of civil remedies, the principal one being

¹⁷ Elaborated in Chapter 2

damages or compensation.

The second prong of the objective of this thesis is an examination of the legal regime of sea carriage of dangerous goods under Chinese law. Apart from the fact that the researcher is Chinese by nationality with a background in Chinese law, it must be appreciated that an understanding of Chinese law in the maritime field is virtually indispensable given the position of China in the international maritime arena.¹⁸ In this context, it must also be realized that China is undergoing remarkable reform and transformation in all respects, and legal regimes, especially in the maritime field, are in a state of evolution.¹⁹

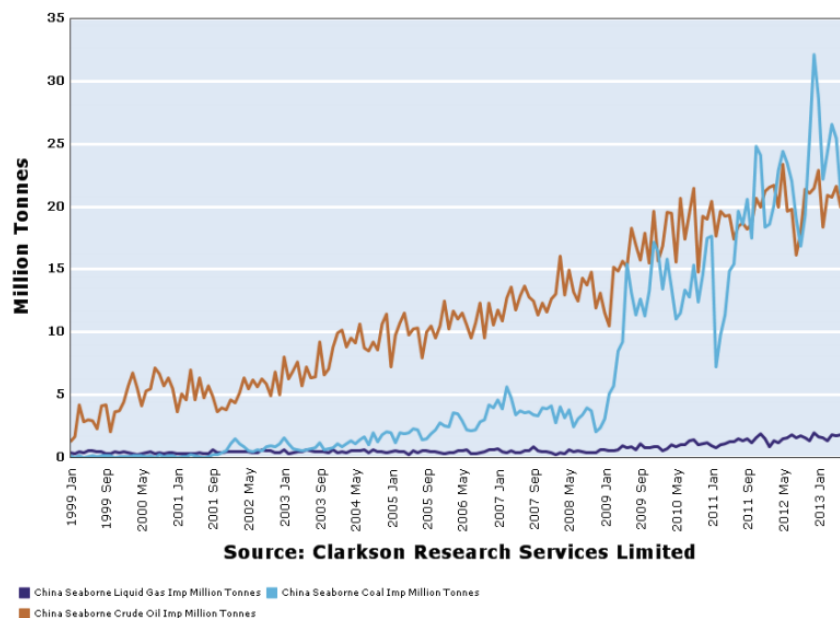


Figure: China Seaborne Liquid Gas Imports, China Seaborne Crude Oil Imports, China Seaborne Coal Imports Liquid Gas (CLARKSONS, 2010)

¹⁸ Elaborated in Chapters 6 and 7

¹⁹ See the Figure about the trend of three kinds of Chinese seaborne dangerous goods import since 1999,

The third prong of the research objective is the carrying out of a comparative analysis between the international and Chinese legal regimes in the subject field to assess their consistency and compatibility, and in the process, identify differences, inadequacies and shortcomings and suggest improvements.²⁰

1.3 Research Questions

The following research questions are formulated to address the stated purpose of the thesis:

- i) What are the main features of the international regulatory law relating to maritime carriage of dangerous goods and what are the legal implications for domestic regimes in respect of violations of that law?
- ii) What is the concept of liability with regard to contractual obligations *vis a vis* carriers and shippers pertaining to the carriage of dangerous goods?
- iii) What are the liability implications in tort with regard to loss or damage suffered by third parties and the environment from dangerous substances carried on ships?
- iv) What is China's position in terms of inter-state liability and its current legal regime on regulatory and private maritime law in general and in relation to carriage of dangerous goods by sea?
- v) What is China's position on acceptance of relevant international conventions pertaining to carriage of dangerous goods by sea and incorporating them the national legislative domain?

²⁰ Elaborated in the analysis in Chapter 6, 7 and 8.

vi) What proposals can be made for China's benefit in terms of alignment of Chinese law and practice with what prevails internationally?

1.4 Legal Theory and Methodology

1.4.1 Public Law and Private Law

At the outset it is important to distinguish between public and private law in the general sense. Public law is the law that governs legal relationships pertaining to public entities and also between members of the public and public entities. Thus penal laws including regulatory laws fall within the ambit of public laws.²¹ While regulatory law purports to regulate public conduct, in this context, the maritime public, private law refers to the law that governs the legal relationships between and among private entities.

1.4.2 Legal Theory

The legal theory in the context of this research essentially comprises the established rules in regulatory and private law. In terms of the regulatory law, the theoretical underpinning is based on penal law theories and their associated sanctions.²²

In penal law there is a spectrum of seriousness according to which an offence should be characterised. The serious ones are criminal offences requiring proof of *mens rea*, but the less serious, remotely criminal ones, described as "public welfare

²¹ Proshanto K. Mukherjee & Huiru Liu, 'Safety and Security in Shipping: International, Common Law and Chinese Liability Perspectives', in Albert Tavidze (Ed.) *Progress in Economics Research*, Vol. 33, New York: Nova Science Publishers Inc., 2015

²² Chambliss, William J. 'Types of deviance and the effectiveness of legal sanctions.' (1967) *Wis. L. Rev.* 703, 705

offences" are not "criminal" in the true sense and should not be treated as such. In this respect, the views of Professor Glanville Williams reflected in the decision of the Supreme Court of Canada in the case of *R.v. City of Sault Saint Marie*²³ are instructive. In this case, Dickson J. referred to a "field of conflicting values" in support of the "halfway-house" proposition lying halfway between strict liability and *mens rea* in terms of characterisation of typical pollution offences, while adhering to the fundamental tenet that the punishment should fit the crime. In keeping with that principle, strict liability in penal law terms cannot attract a high level sanction as in the case of a *mens rea* offence.²⁴

On the private law side, liability as a legal concept is the core of considerations. The rules of liability in tort and contract and their corresponding remedies form the legal theory on which this part of the exercise is based. In terms of both tort and contract the rules as contemplated in this thesis are primarily common law based. But these are obviously tempered by the provisions of the applicable conventions when the law is applied to a particular set of facts.²⁵

Civil liability principles can also extend to states on the question of inter-state liability in which the doctrine of state responsibility²⁶ in international law forms the theoretical basis. The legal theory here is that states assume the roles of non-state private actors in the resolution of responsibility and liability where entities of one

²³ [1978] 40 C.C.C. (2d) 353 (S.C.C.)

²⁴ See *Supra* note 11, pp. 463 - 496

²⁵ See Chapter 2&3,

²⁶ Elaborated in Chapter 5

state inflict damage on persons and property of another.

1.4.3 Research Methodology

The research methodology used is primarily what is known as the dogmatic or doctrinal approach to legal enquiry and examination.²⁷ (in this text the term "doctrinal" is used.) Indeed, some are of the view that in legal research this is the predominant if not the exclusive methodology that is to be employed. The doctrinal method involves the study of relevant international treaties, national legislation, case law and scholarly works in the field of inquiry.²⁸ In this regard, the regulatory international instruments including the various relevant codes are undoubtedly of prime importance. On the private law side, the conventions on carriage of goods by sea and those pertaining to civil liability especially the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, (HNS), 1996²⁹ (hereafter HNS Convention) are of equal importance as sources of law in terms of an enquiry based on the doctrinal approach.³⁰

The comparative analysis method inevitably comes into play in looking at the instruments such as the Rotterdam Rules in light of other sea carriage conventions

²⁷ McConville, Mike, and Wing Hong Eric Chui, eds. *Research methods for law*. (Edinburgh University Press, 2007.) p, 34.

²⁸ *Ibid.*

²⁹ See International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea (HNS) Adoption: 3 May 1996; Not in force; superseded by 2010 Protocol: Adoption: 30 April 2010; Not yet in force; on IMO website. <http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-on-Liability-and-Compensation-for-Damage-in-Connection-with-the-Carriage-of-Hazardous-and-Noxious-.aspx> accessed 25th September 2016.

³⁰ See *supra* note 27 (Edinburgh University Press, 2007), p. 26.

and domestic legislation. Differences between the regimes of maritime safety and marine environmental protection in the context of sea carriage of dangerous goods are examined which draws in some element of comparative analysis. This is closely aligned with analysis regarding damage from dangerous goods in contrast to damage caused by pollutants carried on board ships. The divergences between international and national regimes are critically evaluated by the comparative method which will in practice contribute to the domestic system.³¹ The research does not involve the methodological issues commonly associated with other social science disciplines such as statistical or quantitative analyses.

1.5 Structure of Thesis

To attain the objects and purposes set out above and address the research questions as formulated, the thesis is divided into four Parts. Apart from the Introduction and Conclusion, there are two substantive Parts in the thesis. Part I consists of this Introduction as the only chapter. Following the Introduction, Part II contains chapters 2, 3 and 4.

The second chapter provides in contextual detail an expose on the international regulatory regime of sea carriage of dangerous goods including the law set out in relevant conventions and codes. The notion of what is "dangerous" including other appellations such as "hazardous" and the likes are addressed. The discussion focuses

³¹*Ibid*, pp87-89.

on the SOLAS³² and MARPOL³³ Conventions and their associated codes together with a consideration of the Basel Convention³⁴. In the third chapter, the enquiry turns to the private law respecting sea carriage of dangerous goods including the associated liability regimes. The discussion invariably centres on the conventional law on the subject of carriage of goods by sea focusing on the dangerous goods aspects while recognizing the application of general principles of contract law in the carrier-shipper interrelationship. In this chapter, this important interrelationship is emphasized through an examination of the relevant features of the Hague-Visby, Hamburg and Rotterdam Rules including their evolutionary aspects extending to a comparative analysis. In particular, Articles 13, 15, 16 and 32 of the Rotterdam Rules are examined in relative detail as they reflect considerable improvements over their counterparts in the previous carriage conventions, even though the convention is not in force and the likelihood of that happening at least in the near future is in doubt.

It is recognized that one liability convention deals exclusively and entirely with the carriage by sea of "hazardous and noxious" substances both from a safety as well as an environmental perspective.³⁵ Another regime of equal significance is the one on

³² International Convention for the Safety of Life at Sea, 1974,

³³ International Convention on Pollution of Prevention from Ships, 1973.

³⁴ The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, 1989.

³⁵ See Article 6 of International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, 1996. "Damage" means: (a) loss of life or personal injury on board or outside the ship carrying the hazardous and noxious substances caused by those substances; (b) loss of or damage to property outside the ship carrying the hazardous and noxious substances caused by those substances; (c) loss or damage by contamination of the environment caused by the hazardous and noxious substances, provided that

carriage of nuclear materials on ships which is also governed internationally by convention law. The importance of both these regimes warrants separate critical examination in relative detail which is carried out in chapter 4. The discussions in these four chapters go beyond the general and peripheral observations made in the background section to this introductory chapter.

Part III represents the other substantive aspects of the thesis focusing entirely on China and the Chinese perspective on the law respecting carriage of dangerous goods by sea. This Part consists of chapters 5, 6, 7 and 8. Chapter 5 addresses China's position in the realm of inter-state liability where damage to persons and property may be caused by a Chinese ship carrying dangerous goods. In chapters 6 and 7, the Chinese law on the subject of sea carriage of dangerous goods is examined. In chapter 6 an overview is provided of the general legal framework in that jurisdiction including the Chinese perception of regulatory and private law. This is followed by the law of carriage of goods by sea in Chinese legislation in Chapter 7. In Chapter 8, the international and Chinese regimes on sea carriage of dangerous goods both from the regulatory as well as private law liability perspectives are analytically compared.

The final chapter is chapter 8 which is the only chapter in Part IV, the last Part. This chapter contains summaries of the critical issues of and comparisons between the

compensation for impairment of the environment other than loss of profit from such impairment shall be limited to costs of reasonable measures of reinstatement actually undertaken or to be undertaken; and (d) the costs of preventive measures and further loss or damage caused by preventive measures'

international and Chinese perspectives in light of the findings of the research and the conclusions drawn from them. The findings relate to the international law on the subject of sea carriage of dangerous goods pertaining to dangerous goods from regulatory and civil liability perspectives. In the concluding remarks, appropriate recommendations and suggestions for improvements in the international regimes are made including how the existing law can be best utilized to benefit world shipping and seaborne trade in legal and operational terms. In the final proposition, concrete proposals are made regarding the Chinese perspective based on the research findings which will hopefully be of substantial benefit to Chinese interests. This includes proposals for law reform in the form of new legislation or amendments to existing legislation with the aim of improving the regime to bring it into closer alignment with international law on the carriage of dangerous goods by sea.

It must be appreciated that the subject of carriage of goods is multifaceted it is therefore inevitable that some choices have to be made in deciding which facets of this challenging subject should be included in this thesis. In viewing the subject in general terms from an international perspective, it is observed that carriage of dangerous goods has both a strong public law as well as a private law dimension. The public law primarily comprises the regulatory control of this dynamic activity which at once is highly dangerous for life and property, and at the same time is potentially harmful for the marine environment if proper precautions are not taken.

As the discussion unfolds in the thesis, it will become apparent that the regulatory

dimension including the international instruments associated with it are discussed in detail. On the private law side, the focus is on two fronts; one relates to the contractual relationship between the carrier of dangerous goods and the shipper whose roles and responsibilities are governed by general principles as well as convention law involving carriage of goods by sea. On the other front, the focus is on liability and compensation in respect of loss and damage suffered by the third party. Here also the rule of international convention law is significant. Given these choices made consciously by the writer, other topics connected with the subject have not been addressed such as the implications, legal and practical, of marine insurance and general average. The writer has also decided to avoid discussion on other related topics, such as salvage and collision, although it will be seen that some of the case law discussed in the thesis does touch on this topic.

PART II - INTERNATIONAL LEGAL REGIMES

CHAPTER 2 - THE INTERNATIONAL REGULATORY REGIME OF DANGEROUS GOODS

2.1 The Notion of Dangerous Goods: Terminology in Perspective

The expression of this aspect of the theme immediately evokes the notion of danger in the maritime sense and raises the question of what is the definition and legal status of dangerous goods in maritime law. Notably, the legal connotation of what is "dangerous goods" only materialised in the late nineteenth century through British legislation³⁶ before which there were hardly any occasions of dangerous goods being carried by sea. The need for regulatory regimes was thus not perceived internationally.³⁷

Carriage of dangerous or hazardous goods by sea is rapidly increasing with potentially dangerous situations such as explosions, fires, oil spills and the likes looming large in all maritime quarters of the globe.³⁸ There is more public awareness of the impacts of dangerous goods carried on ships and consequently more demands for actions from public authorities. Public and private concerns have led to formulation of more rational policies and articulation of stringent regulatory rules with attendant penal sanctions for non-compliance.³⁹

³⁶ Merchant Shipping Act 1894, Section 301 and 446 of the UK

³⁷ Güner-Özbek, Meltem Deniz. *Hamburg Studies on Maritime Affairs : The Carriage of Dangerous Goods by Sea*. (Berlin, Heidelberg, DE: Springer, 2007); pp50-60.

³⁸ *Ibid.*

³⁹ Chambliss, William J. "Types of Deviance and the Effectiveness of Legal Sanctions." (1967) *Wis. L. Rev.*, 703.

As mentioned above, much of the law today belongs to the regulatory domain and is voluminous in content and detail.⁴⁰ To fully comprehend the regulatory law one needs to grapple with the relevant terminology to determine similarities and distinctions from legal as well as scientific and technical viewpoints. As mentioned at the outset, danger is inherent in shipping and often imminent at sea given internal conditions on board combined with external forces exerted by the environment to which the ship is exposed during most of its lifetime. In view of this fact of maritime life, danger is a condition that is largely generic in character.⁴¹ Specific synonyms such as harm, risk and their corresponding consequences characterized by the notions of loss, damage and injury may be used in certain particular circumstances, but often distinctions are blurred and attempts to construe the terms in a meaningfully discernible way end up being futile exercises in semantics.

Fortunately, the terminology issue does not engender any significant confusion in practical terms, but the legal implications may be different depending on how a term is used in connection with a specific maritime incident. In several instances terms can be and are used interchangeably depending on the context in which they need to be utilised. Thus, there are varieties of adjectives surrounding the generic term "dangerous"⁴² such as "hazardous", "unsafe" and "harmful" pertaining to the safety

⁴⁰ For example, the International Maritime Dangerous Goods (IMDG); Code and the Carriage of Dangerous Goods (CDG) Regulations of SOLAS.

⁴¹ See *supra* note 37, pp50-60

⁴² See IMDG Code; See also Articles about dangerous goods in Article 32 of the Rotterdam Rules, article

as well as the environmental connotation. Added to this are the consequential terms loss, damage, harm and injury which are all appropriate in contextual usage in relation to sea transportation of substances of those descriptions as mentioned above. In the HNS Convention of 1996 the expression "hazardous and noxious" is used to describe cargo carried on board a ship which possesses characteristics which fit the definitions of the two terms as provided in the convention.⁴³ This is a private law liability convention which addresses both safety and pollution issues.

It is also important in this connection to have due regard to terms and their definitions in statutory instruments both in the international as well as domestic legal regimes.

2.2 Conventions and Codes

2.2.1 The IMDG and other Relevant Codes

The IMDG Code which has already been mentioned above is a mandatory instrument associated with both SOLAS and MARPOL. It was originally adopted as a non-mandatory instrument *para droit* under SOLAS. But with increasing incorporation of it into the domestic statutory regimes of state parties to SOLAS as compulsory regulatory law, it eventually gained the status of a mandatory instrument in January 2004.⁴⁴ The IMDG Code is arguably the most important

4(6) of the HagueVisby Rules and article 13 of the Hamburg Rules. See also Article 1(5) HNS Convention, "Hazardous and noxious substances" (HNS) means: (a) any substances, materials and articles carried on board a ship as cargo, referred to in (i) to (vii).

⁴³ Article 1(5) . International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, 1996

⁴⁴ See "International Maritime Dangerous Goods (IMDG) Code" – "Development of the IMDG Code http://www.imo.org/blast/mainframe.asp?topic_id=158#1 ; accessed 25 September 2016

regulatory instrument in the international sphere of dangerous goods. It is a voluminous set of regulations consisting of two volumes. The Code deals with technical requirements pertaining to packing, stowage, container traffic, segregation of incompatible substances and other matters relating to care of dangerous goods transported by sea.⁴⁵

There are three important regulatory Codes all of which are now mandatory and are associated with both SOLAS and MARPOL. They deal with carriage of chemicals and gas by sea and are called the Bulk Chemical Code (BCH), the International Bulk Chemical Code (IBC) and the International Gas Carrier Code (IGC).⁴⁶ One recent draft instrument still in the developmental stage at IMO is the IGF Code⁴⁷.

2.2.2 Basel Convention, MARPOL and London Convention: Comparative Analysis

One important regulatory instrument in the field of hazardous substances is the Basel Convention of 1989 (BASEL).⁴⁸ It is a product of the United Nations Environment Programme (UNEP) and regulates the trans-boundary movement of

⁴⁵ See “International Maritime Dangerous Goods (IMDG) Code” http://www.imo.org/blast/mainframe.asp?topic_id=158#1 ; accessed 25 September 2016.

⁴⁶ John Norton Moore IMO “Interface with the Law of the Sea Convention.” In Myron H. Nordquist, John Norton (eds) *Current Maritime Issues and the International Maritime Organization; Volume 4 of Center for Oceans Law and Policy*, (London, Martinus Nijhoff Publishers, 1999) 269; pp 223.364.

⁴⁷ International Gas-Fuelled Ships Code, 2015. More details see <http://www.imo.org/en/MediaCentre/PressBriefings/Pages/26-MS-95-ENDS.aspx> accessed 25 September 2016

⁴⁸ Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, 1989

"hazardous" wastes.⁴⁹ Basel is typically a regulatory, non self-executing convention and contains no provisions that directly impinge on ships or shipowners/operators. Basel obligations are mainly imposed on or directed to state parties. The convention regulates and controls trans-boundary movement (TBM) of hazardous wastes and other wastes for their environmentally sound management (ESM). Notably, the Basel Convention, MARPOL and the London Convention on Dumping of Wastes at Sea (London Dumping),⁵⁰ are closely interrelated which calls for a comparative analytical treatment of the three instruments together with a consideration of the IBC Code ⁵¹as well. This analysis is depicted in the text below.

In Article 1(4) of Basel it is provided that “[W]astes which derive from the normal operations of a ship, the discharge of which is covered by another international instrument, are excluded from the scope of this Convention”. This clause was inserted at the instigation of the IMO to ensure the co-existence of two clear and distinctive international regimes, one regulating “discharge of operational wastes from ships”, and the other governing the control of trans-boundary movements and disposal of hazardous wastes.⁵²

Incidentally, sub-paragraph 20.3.2.1 of the IBC Code provides that the requirements of chapter 20 do not apply to “wastes derived from shipboard operations covered by

⁴⁹ Hackett, David P. “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.

⁵⁰ Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (Dumping)1972, Protocol, 1996

⁵¹ International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code)

⁵² See IMO Resolution A.676(16) dated 19 October 1989.

the requirements of MARPOL 73/78”.⁵³ Thus, it must be observed that MARPOL and London Dumping, MARPOL and Basel, and MARPOL and IBC Code chapter 20 are mutually exclusive. Indeed it is submitted that MARPOL and Basel are mutually incompatible.

The expression "normal operations"⁵⁴ in the Basel convention has raised some differences of opinion in terms of how it should be construed. One commentator has opined as follows: “[I]t appears to be generally understood that wastes derived from or generated during normal operations of ships are those directly related to the *purpose of a ship* (emphasis added), that is transporting of goods at sea. Wastes generated during such transport are from machinery spaces (bilge water, cooling water, *etc.*), cargo and tank spaces (tank residues, tank washings, ballast water, cargo pump room bilges), The discharge at sea of these kinds of “wastes” is regulated by MARPOL.”⁵⁵ It has been stated that “[T]he word ‘normal’ is irrelevant to the exclusion clause and does not have to be defined. The exclusion was intended to differentiate wastes generated on board a ship from wastes carried as cargo.”⁵⁶ A contrary view is that the word “normal” is not categorically

⁵³ The use of “shipboard” is arguably wider than “normal”.

⁵⁴ See 20.3.1 of IBC Code – “The requirements of this chapter are applicable to the transboundary movement of liquid chemical wastes in bulk by seagoing ships and shall be considered in conjunction with all other requirements of this Code. 20.3.2 of IBC Code-The requirements of this chapter do not apply to: 1 wastes derived from shipboard operations which are covered by the requirement of MARPOL 73/78; and substances, solutions or mixtures containing or contaminated with radioactive materials which are subject to the applicable requirements for radioactive materials.”

⁵⁵ Iwona Rummel-Bulska, “The Basel Convention and the UN Convention on the Law of the Sea” in Henrik Ringbom (Ed.) *Competing Norms in the Law of Marine Environmental Protection – Focus on Ship Safety and Pollution Prevention*, London-The Hague-Boston: Kluwer Law International, 1997 at p.102. The author was previously Executive Secretary of the Basel Convention Secretariat.

⁵⁶ Louise Angelique de La Fayette. “The International and European Community Law Applicable to the *Probo Koala* Affair” (unpublished) London: October 2008, p.17.

superfluous.⁵⁷ The normality of a shipboard operation is a function of the ship-type and the trade in which it is engaged. Ships today are purpose-built. Therefore, an operation that is normal for an oil tanker is not necessarily normal for a container ship or a passenger ship or a fishing vessel.

Another relevant issue is - what constitutes wastes under the Basel Convention. In Article 2.1 “wastes” is defined as “substances or objects which are disposed of or are required to be disposed of by the provisions of national law”. The first part of the definition points to a plain or ordinary meaning; the second part particularizes the definition by making it subject to whatever is prescribed under domestic law. Article 1 provides that the scope of the Convention extends to hazardous wastes and other wastes. Paragraph 1(a) refers to substances listed in Annex I which are *prima facie* hazardous wastes unless they do not possess any of the characteristics set out in Annex III.⁵⁸

This aspect of paragraph 1 reflects an express objective characterization of what is intended to be considered as hazardous waste. By contrast, subparagraph (b) reflects a subjective determination through domestic legislation of a state party to the Convention of what constitutes hazardous waste. “Other wastes” are those contained in Annex II⁵⁹ which only refer to household wastes and are irrelevant. Incidentally the terms “waste water” and “food waste” are used respectively in

⁵⁷ Proshanto K. Mukherjee, Legal Opinion, given in respect of the *Probo Koala* and *Probo Emu* cases involving applications of Basel and MARPOL; Class Lecture in 2007,

⁵⁸ See Article 2 of Basel Convention.

⁵⁹ See Annex II Categories of Wastes Requiring Special Consideration of Basel Convention.

Annexes III and IV of MARPOL.⁶⁰ In Annex VI “shipboard incineration” is defined as “incineration of waste or other matter on board a ship if such wastes or other matter were generated during the normal operation of that ship.”⁶¹ Notably, the expression “wastes or other matter” is imported from the London Convention which deals with shipboard incineration.

Furthermore, the term “disposal” requires attention. It is defined in Article 2.4 of Basel Convention as “any operation specified in Annex IV”.⁶² This Annex contains the caption “Disposal Operations” and consists of a list of operations divided into two groups. Operations under the first group are those which do not lead to resource recovery, recycling, reclamation, direct reuse or alternative uses. The other group encompasses operations which are the opposite of the first group.⁶³ Disposal under Basel is not simply the concept of discarding wastes such as in the London Convention where it is characterized as “dumping”; rather the focus is on disposal of “hazardous” wastes.

The definition of “transboundary movement” is in Article 2, paragraph 3 which specifies “any movement of hazardous wastes or other wastes from an area under the national jurisdiction of one state to or through an area under the national jurisdiction of another state or to or through an area not under national jurisdiction

⁶⁰ See 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.

⁶¹ See Annex II Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk. Annex; 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.

⁶² See Article 2 DEFINITION of Basel Convention .

⁶³ See Annex IV of Disposal Operations of Basel Convention

of any state, provided at least two states are involved in the movement”. The movement of hazardous waste from the high seas does not fall within the scope of the definition.⁶⁴

The notion of "transboundary movement" (TBM) is the very essence of the Basel Convention which is reflected in the title of the instrument in conjunction with hazardous wastes and their disposal.⁶⁵ TBM is associated with the notions of importation and also export of hazardous wastes together with the notion of planned or actual disposal. The connections are evident in the definitions of “State of export”, “State of import” and State of transit” in Article 2, paragraphs 10, 11 and 12.⁶⁶ It is submitted that all these notions are relevant in respect of movements across the seas only where the object is to dispose of hazardous wastes and are not applicable to commercial ship operations where the object is to carry cargo and discharge slops generated on board by compulsion under MARPOL.⁶⁷

The Basel Convention has thus far been also used as the governing international instrument for dealing with vessels on their "end of life" voyage heading for the scrap yard.⁶⁸ It is the notion of TBM as defined in the convention which makes Basel applicable to ship recycling even though there is now a new convention

⁶⁴ See “The Application of the Basel Convention to Hazardous Wastes and other Wastes Generated on Board Ships” (Basel Secretariat Document, 4 April 2011) at p.6.

⁶⁵ Kummer, Katharina. *International Management of Hazardous Wastes: the Basel Convention and Related legal Rules*. (Oxford University Press on Demand, 1999); pp 101-140

⁶⁶ Article 2, paragraphs 10, 11 and 12 of Basel Convention.

⁶⁷ See Hackett, David P. “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.

⁶⁸ Kummer, Katharina. “The international regulation of transboundary traffic in hazardous wastes: The 1989 Basel Convention.” (1992) 41 ICLQ 03, 530, 551

addressing that issue. Arguably, the application of Basel to such vessels has now been overtaken by the Hong Kong Convention on Recycling of Ships of IMO.⁶⁹

In bringing this discussion to a close it is noted that the issue of terminology which is at the heart of all the conventions and other instruments referred to above, is not exhaustive. In the context of consequences arising from the carriage of dangerous or hazardous substances on board ship that is likely to involve liability, there will inevitably be further references to various terms associated with the concept of "danger" or "hazard" as the discussion unfolds.

2.3 SOLAS

The first SOLAS Convention was adopted in 1914, long before the IMO opened its doors for business in 1958. It took ten years for the Convention adopted in 1948 establishing the Intergovernmental Maritime Consultative Organization (IMCO) as it was then known to enter into force. The name was changed to International Maritime Organization (IMO) in 1982.⁷⁰ Once IMCO started operating, administration of SOLAS became the first item in its order of business. In the first 1914 version of SOLAS, there was provision for the regulation of “carriage of goods which by reason of their nature, quantity and mode of stowage” posed a danger to the safety of ships and the lives of passengers.⁷¹

⁶⁹ The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009.

⁷⁰ See “Brief History of IMO” <http://www.imo.org/en/About/HistoryOfIMO/Pages/Default.aspx>; accessed 25 September 2016; see also Kopacz, Z., W. Morgas, and J. Urbanski. “The Maritime Safety System, its Main Components and Elements.” (2001) 54 *The Journal of Navigation* 02, 199, 204.

⁷¹ Hesse, Hartmut G. “Maritime Security in a Multilateral context: IMO Activities to Enhance Maritime

There was no prescription on what constituted dangerous goods which allowed state parties to the convention to designate that and provide advice and instructions regarding precautionary measures to be taken on matters such as packing, stowage, segregation and transportation mode, among other things, a trend that resulted in fragmented national and regional practices which lacked uniformity. Incidentally, due to reasons related to the international political turmoil of those times, the 1914 SOLAS failed to enter into force and the practice of unilateral and regional regulation of dangerous goods carried by sea over subsequent years with the provisions of SOLAS 1914 continuing into its 1929 version.⁷² Through Article 24 of the new version, the subject of dangerous goods was combined with provisions on "life-saving appliances" (LSA). SOLAS 1929 did see the light of day by becoming effective internationally in 1933.⁷³

It was observed at the diplomatic conference leading up to the adoption of the 1948 version of the convention that several states engaged in trading in chemical cargoes had instituted regulatory measures pertaining to such trade. At the conference it was agreed that the characteristics and scientific properties of goods should determine whether they are dangerous.⁷⁴ Substances and materials should be classed according to the nature of the danger, and they should be marked and labeled

Eecurity." (2003) 18 ESTU, 327, 332.

⁷² See *supra* note 70, 204.

⁷³ See *supra* note 37, pp 5-34.

⁷⁴ Henry, Cleopatra Elmira. *The Carriage of Dangerous Goods by Sea: the Role of the International Maritime Organization in International Legislation*. (Pinter, 1985), pp. 40-61.

accordingly by appropriate symbols.⁷⁵

Thus, in the 1948 version of the convention, revised safety standards were established through a new chapter VI entitled "Carriage of Grain and Dangerous Goods" which was still considered inadequate. Eventually, a Recommendation was adopted emphasizing the importance of carriage of dangerous goods by sea and the need for uniformity of regulation in the face of apparent lack of interest within the international maritime community attributed to the relatively sparse quantities of dangerous goods being shipped by sea at the time.⁷⁶

In 1956, a report published by the United Nations Committee of Experts on the Transport of Dangerous Goods (CETDG) set out minimum standards for transportation of dangerous goods including all transportation modes on the basis of which Recommendations were generated to serve as a legal regulatory framework aimed at global uniformity.⁷⁷ The 1960 SOLAS which became effective in 1965 established chapter VII the purpose of which was to deal exclusively with the subject of carriage of dangerous goods by sea.

This convention was replaced by the current 1974 version of SOLAS. It contains a comprehensive chapter VII covering bulk and packaged dangerous goods applicable

⁷⁵ Gold, Edgar. "Legal Aspects of the Transportation of Dangerous Goods at Sea." (1986) 10 Marine Policy 3, 185, 191.

⁷⁶ See *supra* note 37, pp. 50 -62.

⁷⁷ *Ibid*, pp. 50-62.

to all SOLAS ships as well as cargo ships under 500 gross tonnage.⁷⁸ Part A of this chapter deals with the carriage of packaged dangerous goods and Part A-1 with dangerous goods carried in solid bulk form. Regulation 3 of Part A requires compliance with the IMDG Code in respect of carriage of packaged dangerous goods.⁷⁹ Part B contains provisions on construction and equipment of ships carrying bulk liquid chemicals and requires compliance with the IBC Code in respect of chemical tankers built after 1986.⁸⁰ Requirements for construction and equipment in respect of ships carrying liquefied gases in bulk are found in Part C. Such ships built after 1986 must comply with the IGC Code. In Part D there are special requirements pertaining to packaged irradiated nuclear fuel, plutonium and high level radioactive wastes, the carriage of which must be in compliance with the INF Code.⁸¹

2.4 MARPOL

MARPOL is a convention designed to curb or prevent ship-source pollution.⁸² As mentioned earlier, it primarily deals with operational discharges; indeed that was the original object and purpose of the convention when it was adopted in 1973, then referred to as "MARPOL 73". But by virtue of its 1978 Protocol which was merged

⁷⁸ See *supra* note 70, 206.

⁷⁹ See details in Part A-1 of SOLAS Convention - Carriage of dangerous goods in solid form in bulk - covers the documentation, stowage and segregation requirements for these goods and requires reporting of incidents involving such goods; see also Chapter VII of IMDG Code- the mandatory provisions governing the carriage of dangerous goods in packaged form.

⁸⁰ See details in Part B of SOLAS Convention; see also [http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-for-the-Safety-of-Life-at-Sea-\(SOLAS\),-1974.aspx](http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-for-the-Safety-of-Life-at-Sea-(SOLAS),-1974.aspx) ; accessed 25 September 2016.

⁸¹ International Code for the Safe Carriage of Packaged Irradiated Nuclear Fuel, Plutonium and High-Level Radioactive Waste on Board Ships. See also See *supra* note 37, pp89-100.

⁸² Peet, Gerard. "MARPOL Convention: Implementation and Effectiveness," (1992) 7 The Int'l J. Estuarine & Coastal L., 277, 280.

into the original 1973 Convention engendering the title "MARPOL 73/78" the revised instrument also entered into the arena of accidental pollution prevention. MARPOL 73 contained five Annexes, each respectively dealing with five different types of pollutants, namely, Annex I - oil, Annex II - noxious liquid substances (NLS), Annex III - packaged harmful substances, Annex IV - sewage and Annex V - Garbage. Each Annex contains regulations which essentially constitute the technical law of the convention.⁸³

While all the Annexes are equally important from the point of view of prevention and control of ship-source pollution, it is noteworthy that Annex III purports to regulate harmful substances in packaged form carried by ships.⁸⁴ Here, the use of the term "harmful" is significant in view of the previous discussion in this chapter regarding terminology. In this Annex, the primary concern, as in the other Annexes, is marine pollution caused by harmful substances carried in packaged form. The requirements pertain to such substances, basically transported as cargo in containers, portable tanks, as well as tank wagons by rail or on road as part of a multi-modal transport operation.⁸⁵

Under this Annex, polluting substances in packaged form need to be identified to facilitate safe and proper packing and stowage on ships to avoid, prevent or mitigate

⁸³ Proshanto K. Mukherjee and Mark Brownrigg, *Farthing on International Shipping*, (4th edn, Berlin-Heidelberg: Springer-Verlag, 2013), at p.274

⁸⁴ See Annex III of MARPOL Convention; see also Becker, Rebecca. "MARPOL 73/78: An Overview in International Environmental Enforcement." (1997) *Geo. Int'l Env'tl. L. Rev.* 10, 625, 625-630.

⁸⁵ *Ibid.*, see Annex III of MARPOL Convention

pollution resulting from accidents or otherwise and the ensuing damage⁸⁶ Importantly notable in this regard is the provision which permits jettisoning of harmful substances in circumstances where it may be necessary for the purpose of securing the safety of the ship or saving human life at sea, even though such action would otherwise be prohibited.⁸⁷ Needless to say, the Annex is linked to the IMDG Code in terms of the definition of "harmful substance" being substances that are marine pollutants which harks back to the interrelationship between safety and pollution or between what is dangerous from a safety point of view and what is environmentally harmful.⁸⁸

2.5 The UN Recommendations on the Transport of Dangerous Goods

Reference has already been made to the United Nations Committee of Experts on the Transport of Dangerous Goods in the discussion on SOLAS and the evolutionary process involved in the establishment of the regulatory regime for sea carriage of dangerous goods. The discussion now moves forward to look at the United Nations Recommendations on the Transport of Dangerous Goods which was alluded to earlier.⁸⁹ At the outset it must be noted that the caption "United Nations" here refers to the Economic and Social Council (ECOSOC),

⁸⁶ See *supra* note 82, 280. Becker, Rebecca. "MARPOL 73/78: An Overview in International Environmental Enforcement." (1997) *Geo. Int'l Env'tl. L. Rev.* 10, 625, 625-630; see also *supra* note 37; pp 50-52.

⁸⁷ See *supra* note 82, 280; see also *supra* note 37; pp 50-52

⁸⁸ *Ibid.*

⁸⁹ 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 September 2016.

the biggest organ of the United Nations,⁹⁰ and in particular its Transport and Communications Commission (TCC). It was perceived at the time in the 1950s, that international regulations concerning the transportation of dangerous goods were woefully fragmented and lacked uniformity.⁹¹

The TCC viewed this as a global problem and made a recommendation that ECOSOC approach the U.N. Secretary General to instigate an examination of the issue in collaboration with various interested international bodies. This initiative eventually resulted in the presentation of the report of the CETDG.⁹² This Committee was mandated to carry out a number of tasks including defining and classifying dangerous goods based on their characteristics and the risks involved, preparing lists of dangerous goods being transported for commercial purposes and classifying them, recommending their marking or labeling and required documentation in connections with consignments of dangerous goods. The initiative ultimately culminated into the issue of the ECOSOC approved first edition of the United Nations Recommendations on the Transport of Dangerous Goods, otherwise colloquially referred to as the “Orange Book”.⁹³

The Recommendations served as the blueprint for the development of uniform model regulations usable by concerned public authorities facilitating the safe and

⁹⁰ <https://www.un.org/ecosoc/en/>, accessed 25 September, 2016.

⁹¹ *Supra* note 89, accessed 25th September 2016.

⁹² See *supra* note 75, 191; see also *supra* note 89, accessed 25th September 2016.

⁹³ See *supra* note 37, pp.80-87.

efficient movement of dangerous goods by any mode of transportation.⁹⁴The "model" provides a flexible regulatory framework for domestic as well as international use, its only limitation being that it does not cover dangerous goods carried in bulk. The Recommendations have gained universal recognition since their publication, particularly by the IMO which, as mentioned earlier, adopted them as the basis for the Dangerous Goods Regulations under SOLAS.⁹⁵

Recently, the Recommendations have acquired the status of model rules or model regulations its principles being appropriated into use by national and regional public authorities and entities. This goes a long way towards the promotion of universal harmonization of the regulatory regime of carriage of dangerous goods including carriage by sea.⁹⁶ Notably, even though the Recommendations are non-mandatory, that is of *para droit* character, the drafting style and manner makes them conducive to incorporation as mandatory instruments in the domestic legislative domain. Notably, revisions of the Recommendations are an on-going process which makes them readily adaptable to domestic legislative use.⁹⁷

2.6 Concluding Remarks

This chapter deals with the international regulatory regime concerning dangerous goods carried on ships promulgated through convention instruments. It is

⁹⁴ See *supra* note 89 accessed 25th September 2016; see also *supra* note 37, pp.80-87.

⁹⁵ *Ibid*, pp.80-87.

⁹⁶ 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 September 2016.

⁹⁷ See *supra* note 37, pp 80-87.

recognized that regulation and control of such carriage takes primacy over all other considerations in terms of preventive measures; and in the context of dangerous goods, safety of lives and property and environmental protection must be given the highest priority in terms of law-making. As such, liability concerns in these matters have been relegated to second place in the scheme of things regarding articulation of international legal regimes.

In this chapter, the principal regulatory convention instruments have been discussed in contextual detail starting with the IMDG Code and moving on to an analytical appreciation of MARPOL and SOLAS which are all instruments generated by the IMO. The Basel Convention which is not an IMO but an UNEP instrument is discussed after the IMDG Code. The discussion on SOLAS is followed by the UN Recommendations on Transportation of Dangerous Goods. The thesis now poised to move into the arena of civil liability concerning the carriage of dangerous goods in the next chapter focusing on the carrier-shipper contractual relationship and relevant conventions.

CHAPTER 3 - CIVIL LIABILITY IN RESPECT OF SEA CARRIAGE OF DANGEROUS GOODS

3.1 Preliminary Remarks - General Principles

Disputes arising from carriage of dangerous goods on board ship often relate to a contract. The parties involved could be the shipowner, charterer, shipper or other cargo interest such as a consignee. The liabilities or responsibilities borne by these parties are governed by their respective contractual instruments. A claim by a party suffering damage arising from dangerous goods on a ship will usually be made as an allegation of breach of the relevant contract and appropriate remedies to that effect will be sought.⁹⁸

To be more precise, a shipowner may bring a claim against a shipper alleging that he suffered damage because of the nature of the cargo being dangerous. A charterer placing his own cargo on a ship chartered by him, or a shipper putting cargo on a general or chartered ship may bring a claim against the shipowner or charterer as carrier.⁹⁹ A cargo owner may, for example, bring such a claim if his cargo suffers damage on board due to some physical phenomenon or condition of the ship or the dangerous characteristics of other cargo.

The presence of dangerous cargo on board may lead to unanticipated eventualities for which any of the parties mentioned above, including the carrier or a shipper

⁹⁸ Wilson, John F. *Carriage of Goods by Sea*. (Essex, 6th edn, Pearson Education, 2008.) pp.1-7.

⁹⁹ *Ibid.*

may suffer damage and have a claim against another party. In the present milieu of commercial shipping, liabilities are inextricably associated with carriage contracts, namely, contracts evidenced by bills of lading, or waybills, or charterparties.¹⁰⁰ It is to be noted, however, that contractual relationships between carrier and a shipper, are almost always pursuant to convention law or legislation giving effect to conventions to which the state in question is a party.¹⁰¹ In the realm of carriage of dangerous goods by sea, the influence and application of convention law is virtually inescapable.¹⁰² The main thrust of this chapter is therefore understandably on the relevant convention law.

Apart from contractual liability, a claim may also be based on tort in which case tortious liabilities and corresponding remedies will be pursued by the claimant¹⁰³. As will be seen in the next chapter, tortious liability may ensue in respect of third parties suffering damage from the dangerous nature of cargo carried on board or also suffering pollution damage. It is therefore expedient to examine the basics of liability in tort and contract and their related remedies.

3.2 Liability in Tort: Fault-based, Strict and Absolute

3.2.1 Fault-based Liability

By definition a tort is a civil wrong and liability of the wrong-doer is normally based on proof of fault. Liability itself, whether it pertains to any loss, damage or

¹⁰⁰ *Ibid.*

¹⁰¹ Sturley, Michael F. "Uniformity in the Law Governing the Carriage of Goods by Sea." (1995) *J. Mar. L. & Com.* 26: 553. See also *supra* note 98.

¹⁰² Tetley, William. "Uniformity of international private maritime law-the pros, cons, and alternatives to international conventions-how to adopt an international convention." (1999) *Tul. Mar. LJ* 24, 775.

¹⁰³ Street, Thomas Atkins. *The Foundations of Legal Liability: Theory and principles of tort.* (Vol. 1. Edward Thompson Company, 1906.), 10.

harm inflicted on a victim by the tortfeasor, is a qualitative concept.¹⁰⁴ In other words, it is the quality or standard of conduct that makes an action or omission wrongful and reprehensible or repugnant in the eyes of the law, and for which the law provides a sanction in the form of a civil remedy.¹⁰⁵

Because of linguistic anomalies and nuances, often the terms “liability” and “responsibility” are misunderstood if used interchangeably.¹⁰⁶ In certain jurisdictions, there is no separate specific word equivalent to “liability” as perceived in English law. In French and Spanish, for example, the English law concept of liability is expressed by the word “*responsabilite*”. Thus, that word is used as a synonym for liability.¹⁰⁷ However, in terms of English law and the English language, the two words have two different meanings. The subtlety is expressed by stating that “liability” connotes “legal responsibility the exaction of which is legally enforceable and failure of which attracts legal sanction”, whereas responsibility *simpliciter* does not have any legal consequence if it is not discharged.¹⁰⁸

Fault in tort law comes in different varieties such as in trespass and nuisance, which

¹⁰⁴ Dobbs, Dan B. *The Law of Torts*. (2nd edn ,Vol. 2. West Group, 2001) ; §2,3,4.

¹⁰⁵ See Proshanto K. Mukherjee, “Liability Issues Pertaining to Maritime Safety” in Jingjing Xu, Michael Roe, Dong Ping Song (eds.) *Contemporary Issues in Marine and Maritime Affairs*, Proceedings of 1st International Conference on Marine and Maritime Affairs, University of Plymouth, April 2011 at p. 13

¹⁰⁶ Anthony Kenny “Responsibility; the Conceptual Problems” in Frey, Raymond Gillespie, and Christopher W. Morris. (eds), *Liability and Responsibility: Essays in law and morals*. (Cambridge University Press, 1991), pp13-19

¹⁰⁷ *Ibid.*

¹⁰⁸ Proshanto K. Mukherjee and Huiru Liu, “Safety and Security in Shipping: International, Common Law and Chinese Liability Perspectives” in Albert Tavidze (eds.) *Progress in Economics Research*, Vol. 33, New York: Nova Science Publishers, Inc., 2015, at p. 37.

are stand-alone tortious acts, or such acts as assault, battery and false imprisonment which are also criminal offences.¹⁰⁹ Of all the faults in tort law, the most prominent one is the tort of negligence. Where the plaintiff alleges negligence on the part of the defendant resulting in loss, damage, injury or harm, he carries the burden of proof and must satisfy the ingredients set out by Lord Atkin in the celebrated case of *Donoghue v. Stevenson*.¹¹⁰ In addition to those ingredients, the plaintiff must show that the defendant had reasonably foreseen the consequences of his negligent act.¹¹¹ Thus the plaintiff must prove that the defendant owed him a duty of care, that he was in breach of that duty, that he suffered damage and that the breach was the proximate cause of the damage. Following the decision of the Privy Council in the Australian maritime cases known as *The Wagon Mound I and II*¹¹², foreseeability also became a necessary ingredient of the law of negligence.

Liability for negligence is invariably fault-based. In maritime law the main areas that constitute maritime torts are collision liability, personal injury claims and pollution liability. However, whereas collision liability and personal injury are fault-based, in pollution cases, where convention law applies, the norm is strict liability.¹¹³

¹⁰⁹ *Supra* note 104; §10, 11.

¹¹⁰ (1932), AC 562

¹¹¹ Lunney, Mark, and Ken Oliphant. *Tort Law: Text and Materials*. (3rd edn, Oxford University Press, 2008), pp106-110

¹¹² [1961] AC 388 and [1966] 1 L.L.R. 657

¹¹³ International Convention on Civil Liability for Oil Pollution Damage, (CLC) 1992, International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (FUND), 1992, International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea (HNS), 1996, and International Convention on Civil Liability for Bunker Oil Pollution Damage (Bunkers), 2001.

At common law, outside the domain of conventions, fault-based liability continues to apply in pollution cases unless domestic legislation provides for strict liability.¹¹⁴

Where dangerous cargo carried at sea is the cause of loss, damage, injury or harm, the liability, in the absence of any specific convention law, is fault-based. If the Hazardous and Noxious Substances Convention is applicable liability is strict. Notably, the tort law that applies in respect of ship-source pollution outside the sphere of the conventions, is fault-based which in English law, is exemplified by the case of *Southport Corporation v. Esso Petroleum Co. Ltd.*¹¹⁵

Whereas liability is qualitative the corresponding remedy of damages is a quantitative phenomenon.¹¹⁶ In other words, the issue is one of quantum of damages. Finally, in cases of maritime torts, the shipowner is entitled to limit its liability¹¹⁷ within the perimeters provided by convention or domestic legislation.

3.2.2 Strict Liability

In plain terms, strict liability can be defined as liability without fault. In other words, the plaintiff need not prove any fault committed by the defendant; he simply has to prove that the act or omission was committed by the defendant and that there was

¹¹⁴ For example under the Oil Pollution Act, 1990 of the United States. See Gotthard Gauci, *Oil Pollution at Sea: Civil Liability and Compensation for Damage*, (Chichester, John Wiley & Sons, 1997), p. 23.

¹¹⁵ [1954] Q.B. 182; (CA)

¹¹⁶ Goldie, Louis FE. "Liability for Damage and the Progressive Development of International law." (1965) 14 ICLQ 04, 1189, 1190.

¹¹⁷ Donovan, James J. "Origins and Development of Limitation of Shipowners' Liability." (1978), Tul. L. Rev. 53, 999, 121.

loss, damage, or harm suffered by the plaintiff.¹¹⁸ In the maritime domain, it is significant that civil liability in convention law in respect of ship-source pollution damage is strict. Notably, however, in common law jurisdictions where convention law does not apply because the state in question is not a party to the relevant convention, the case of *Southport Corporation v. Esso Petroleum Co. Ltd.* mentioned above will apply which stands on fault-based liability.¹¹⁹

It has been mentioned that in the pre-convention era, that is, prior to 1969, in English law only fault-based liability prevailed and it was based on nuisance or negligence or both in respect of pollution damage.¹²⁰ The notion of strict liability was introduced in the Civil Liability Convention, 1969 (CLC 1969) following the *Torrey Canyon* disaster in 1967.¹²¹ During the diplomatic conference in Brussels convened by what was then the International Maritime Consultative Organization (IMCO), there was considerable debate over what should be the basis of liability.¹²² Finally, after protracted negotiations, the international maritime community agreed on strict liability as the basis. At the behest of the British delegation the classic House of Lords decision in *Rylands v. Fletcher*¹²³ was cited

¹¹⁸ Shavell, Steven. "Strict Liability versus Negligence." (1980) 9 J. Legal Stud., 2,5.

¹¹⁹ Mason, Michael. "Civil Liability For Oil Pollution Damage: Examining the Evolving Scope for Environmental Compensation in the International Regime." (2003) 27 Marine Policy 1, 20.

¹²⁰ See *Southport v. Esso Petroleum Co. Ltd.* and *The Wagon Mound* cases cited above

¹²¹ Wood, Lance D. "Integrated International and Domestic Approach to Civil Liability for Vessel-Source Oil Pollution" 1975 J. Mar. L. & Com. 7, 1, 5.

¹²² Healy, Nicholas J. "CMI and IMCO Draft Conventions on Civil Liability for Oil Pollution" 1969 J. Mar. L. & Com. 1, 93, 100-101. Van Hanswyk, Beth. "The 1984 Protocols to the International Convention on Civil Liability for Oil Pollution Damages and the International Fund for Compensation for Oil Pollution Damages: An Option for Needed Reform in United States Law." (1988) The International Lawyer, 319-343.

¹²³ (1868). L.R.3 H.L. 330

as the premise on which the standard of strict liability could be established.¹²⁴ In that case it was decided that where the defendant was engaged in an extra-hazardous activity which caused the damage suffered by the plaintiff, it would be too onerous for the plaintiff to have to prove fault on the part of the defendant.¹²⁵ Incidentally, in an international law case involving air pollution which was an interstate arbitration case between the United States and Canada, the principle of strict liability was also applied according to certain scholars.¹²⁶

Ship-source pollution liability is, in the first instance, the liability of the shipowner. At the diplomatic conference in 1969 it was also debated whether the cargo owning community, namely, the oil industry, should also bear some responsibility for pollution damage. The existing state of the law did not provide for such possibility because at the time the act of pollution is committed, the polluting agent, that is, the oil cargo is in the care and custody of the shipowner. However, it was argued that the oil cargo being of a dangerous and polluting nature, some responsibility should be borne by the cargo owner. This led to the adoption of the International Oil Pollution Compensation (IOPC) Fund Convention in 1971 which became a companion instrument to the CLC.¹²⁷ In 1992, both these conventions were revised through protocols and are currently in force replacing their predecessors. Following the so-called CLC/Fund package, the HNS and Bunkers conventions were adopted. All

¹²⁴ See *Ibid* Van Hanswyk, Beth.

¹²⁵ (1868). L.R.3 H.L. 330

¹²⁶ *Trail Smelter Arbitration*, Arbitral, Trib., 3 U.N. Rep. Int'l Arb. Awards 1905 (1941); See *supra* note 2, p.27.

¹²⁷ See *supra* note 119,1-12.

these conventions provide for a strict liability regime.¹²⁸

3.2.3 Absolute Liability

The rationale for the imposition of absolute liability as a concept developed in the nuclear liability treaties more effectively than any other concept in preventing the creator of a risk from passing that risk onto the public. In 1962, the Convention on the Liability of Operators Nuclear Ships was adopted.¹²⁹ This convention expressly provides for absolute liability on the part of a nuclear ship operator for nuclear damage caused by the ship. Paragraph 1 of this Article reads as follows:

The operator of a nuclear ship shall be absolutely liable for any nuclear damage upon proof that such damage has been caused by a nuclear incident involving the nuclear fuel of, or a radioactive products or waste produced in, such ship.

In Article 1 paragraph 8, “nuclear incident” is defined to mean “any occurrence or series of occurrences having the same origin which causes nuclear damage”; and in paragraph 7 “nuclear damage” is defined as – loss of life or personal injury or loss or damage to property which arises out of or results from the radioactive properties or a combination of a radioactive properties with toxic, explosive or the other hazardous properties of nuclear fuel or of radioactive products or waste; any other loss, damage or expenses so arising or resulting shall be included only if and to the extent that the applicable national law so provides.¹³⁰

¹²⁸ Kiss, Alexandre, and Dinah Shelton. “Strict liability in International Environmental Law.” *Law of the Sea, Environmental Law and Settlement of Disputes*. (Brill, 2007). 1131-1152.

¹²⁹ Konz, Peider. “The 1962 Brussels Convention on the Liability of Operators of Nuclear Ships.” (1963) 57 JSTOR 1, pp. 100–111.,

¹³⁰ See Article 1 of Convention on the Liability of Operators of Nuclear Ships.

These provisions provide a complete statement on the absolute liability of a nuclear ship operator. However, no clear explanation of what is absolute liability is provided.¹³¹ In 1971 the Convention relating to Civil Liability in the Field of Maritime Carriage of Nuclear Materials was adopted.¹³² This convention deals with the liability of operators of nuclear installations and provides for exoneration of liability where any other convention in the field of maritime transport governs the liability of the operator.¹³³ While there is no express mention of a nuclear ship operator, the exoneration in question would presumably apply in such instance. The 1971 convention does not mention absolute liability and therefore no intended meaning of that term that can be gleaned.¹³⁴

The 1962 convention deals with liability associated with nuclear powered ships and nuclear damage caused by nuclear fuel or radioactive products or waste produced in such ship. No mention is made of carriage of nuclear material carried as cargo. It would appear that in anticipation of a worst case scenario of nuclear damage, the liability regime was made “absolute”.

In connection with the above observations, the question arises as to whether and to what extent, strict and absolute liability is different. The distinction between the two stated in simple terms is that in strict liability a number of specified defences are

¹³¹ See *supra* note 129.

¹³² Faure, Michael G., and Göran Skogh. “Compensation for damages caused by nuclear accidents: A convention as insurance.” *Geneva Papers on Risk and Insurance. Issues and Practice* (1992): 499-513.

¹³³ *Ibid.*

¹³⁴ *Ibid.*

available to the defendant polluter. In absolute liability no defences are allowed.¹³⁵

The principal defences allowed in strict liability are act of God or *force majeure* or where entities other than the ship owner are the cause of pollution and are therefore liable.¹³⁶

In this context it should be noted that some scholars do not categorically make a distinction regarding permissibility or non- permissibility of defenses, but rather express the view that the distinction is based on the “greater range of exculpatory factors which may negative responsibility”.¹³⁷

3.3 Liabilities in Contract

In contract law in common law jurisdictions, liability is almost invariably fault-based.¹³⁸ Liability may arise in various ways; for example, from misrepresentations made by one party to induce the other to enter into a contract.¹³⁹ Liability may indeed arise from a party simply extending an "invitation to treat".¹⁴⁰ Liability may also arise from a breach of contract which is most often the case. Such a breach may involve failure to perform a contract or conduct amounting to a repudiation of the contract. If a breach goes to the root of a contract, the contract may collapse due to the subject matter of the contract becoming non-existent such

¹³⁵ Currie, Duncan EJ. “Problems and Gaps in the Nuclear Liability Conventions and an Analysis of How an Actual Claim Would be Brought under the Current Existing Treaty Regime in the Event of a Nuclear Accident,” (2006) 35 Denv. J. Int'l L. & Pol'y 85, 89.

¹³⁶ See Article 7 (b) HNS Convention; also see Article 4 CLC and Fund

¹³⁷ See *supra* note 2, p.216

¹³⁸ Bebchuk, Lucian Arye, and Steven Shavell. Information and the scope of liability for breach of contract: The rule of *Hadley v. Baxendale*. No. w3696. National Bureau of Economic Research, 1991.

¹³⁹ See Christopher Hill, *Maritime Law*, Six Edition, London: LLP, (2003), pp. 53-56

¹⁴⁰ See *Carlill v. Carbolic Smoke Ball Co.* [1893] 1 Q.B. 256;

as a ship suffering a total loss by sinking or being destroyed by fire. However, if a contract is frustrated, that is, it is impossible for it to be performed due to extenuating circumstances for which neither can be held responsible, there will be no liability on the part of any of the parties. But self-induced frustration is not free from liability for breach.¹⁴¹

3.4 Remedies in Contract and Tort

The term “remedy” is used to refer to a sanction in private law.¹⁴² In general terms, there are different varieties of remedies available under the law depending on the nature of the dispute. The object of a remedy is to put a successful plaintiff in the position he would have been if the wrongful act or omission had not been committed by the defendant.¹⁴³ This principle is rooted in the Roman law doctrine of *restitutio in integrum*¹⁴⁴. In tort law, the remedy would depend on the wrongful act or omission and the extent of the loss, damage or injury and the subject matter involved.¹⁴⁵ In both contracts and torts, while damages or compensation (as it is known in most civil law jurisdictions) is the most usual type of remedy, other non-monetary forms of remedies are also available such as rescission and specific

¹⁴¹ *Hirji Mulji v. Cheong Yue SS. Co.; Bank Line Ltd. v. Capel and Co.; Ocean Tramp Tankers Corp. v. V/O Sovfracht*

¹⁴² Harris, Donald, David Campbell, and Roger Halson. *Remedies in Contract and Tort*. (Cambridge University Press, 2002.), 23-67.

¹⁴³ *Ibid.*

¹⁴⁴ Proshanto K. Mukherjee, “Liability Issues Pertaining Maritime Safety” in Jingjing Xu, Michael Roe, Dong Ping Song (eds.) *Contemporary Issues in Marine and Maritime Affairs*, Proceedings of 1st International Conference on Marine and Maritime Affairs, University of Plymouth, April 2011 at pp 10-11

¹⁴⁵ Foote, Caleb. “Tort remedies for Police Violations of Individual Rights.” *Minn. L. Rev.* 39 (1954): 493.

performance in contract law.¹⁴⁶ The remedy of rescission is given to the innocent party where a repudiatory breach has been committed by the other.¹⁴⁷ Specific performance is an equitable remedy in common law jurisdictions and given only in extraordinary circumstances.

Often a particular wrongful act can be actionable in private law; as well it might be a criminal offence such as fraud in contracts and assault in tort.¹⁴⁸ Acts such as causing death or personal injury, which may well arise in connection with carriage of dangerous or hazardous substances on board, can lead to both tortious as well as criminal consequences.¹⁴⁹ Indeed, hazardous and noxious substances can also cause pollution resulting in humans becoming victims in a variety of ways including suffering loss of or damage to property and other kinds of financial deprivation.¹⁵⁰ Thus, where the consequences pertain to health, safety or pollution, collectively they are all maritime torts. With respect to pollution, regardless of its type or nature, it always poses a risk to the marine environment.

3.4.1 Damage and Damages in General

In considering remedies with regard to safety pertaining to carriage of dangerous goods and marine environmental concerns, the question arises as to what exactly is the notion of damage which brings us back to the issue of terminology. It is

¹⁴⁶ See *supra* note 139, at pp. 54-55, 67 and 215.

¹⁴⁷ See *supra* note 145, 493.

¹⁴⁸ Ames, James Barr. "How Far an Act may be a Tort Because of the Wrongful Motive of the Actor." *Harvard Law Review* 18.6 (1905): 411-422.

¹⁴⁹ *Supra* note 103, pp.20-21

¹⁵⁰ Murphy, Sean D. "Prospective Liability Regimes for the Transboundary Movement of Hazardous wastes." *The American Journal of International Law* 88.1 (1994): 24-75.

instructive to probe further into the word "damage" because as mentioned before, "damages" is the principal remedy for tort and contract liability.¹⁵¹ While "damage" is a generic term, there are alternative expressions in usage such as harm, injury and loss.¹⁵² In ordinary parlance these words are usually considered to be synonymous and usable interchangeably, but from a legal viewpoint each of them may bear different and distinctive legal implications.¹⁵³ In essence, these are all consequences of wrong-doing perpetrated by a wrong-doer whether in tort or contract and suffered by a victim or sufferer of the wrong.

Before proceeding further, it must be noted that in legal jargon the same word expressed in the singular and in the plural have different substantive meanings. Even though in ordinary parlance "damages" is the plural of "damage", that is not the case in legal terminology.¹⁵⁴ The former is not the plural of the latter; rather, "damage" connotes loss, harm or injury as noted above, whereas "damages" means the compensation payable at law for damage caused by the wrong-doer, that is, tortfeasor or one who is in breach of contract.¹⁵⁵ The term "damages" is used in common law jurisdictions whereas "compensation" is used in civil law jurisdictions and in international conventions. This distinction is often not readily appreciated even by scholars and practitioners, which can lead to misunderstanding of the two

¹⁵¹ Larsson, Marie-Louise, ed. *The Law of Environmental Damage: Liability and Reparation*. (Vol. 1. Martinus Nijhoff Publishers, 1999),55.

¹⁵² *Ibid*, 56-59

¹⁵³ *Supra* note 103, p.23.

¹⁵⁴ *Supra* note 116, 1190.

¹⁵⁵ Proshanto K. Mukherjee, "Liability and Compensation for Environmental Damage Caused by Ship-Source Pollution: Actionability of Claims" in Michael G. Faure, Han Lixin and Shan Hongjun (eds.) *Marine Pollution Liability and Policy: China, Europe and the U.S.*, The Netherlands: Wolters Kluwer, 2010, pp. 75-90 See also Ogus on Judicial Remedies.

terms “damage” and “damages” used interchangeably even if it is not conscious or deliberate use.¹⁵⁶

3.4.2 Damage or Harm Pertaining to the Marine Environment

In relating to the environment, we speak of environmental harm, environmental damage or damage to the environment. Unfortunately, pollution liability conventions such as the CLC and Fund Convention¹⁵⁷ do not provide a definition for "environmental harm", "environmental damage"¹⁵⁸ even though Article 1(d) of the International Convention on Salvage, 1989 does provide a loose somewhat inconsequential definition for "damage to the environment".¹⁵⁹ It is expressed as "substantial physical damage to physical health or to marine life or resources in coastal or inland waters or areas adjacent thereto, caused by pollution, contamination, fire, explosion or similar major incidents".¹⁶⁰ Scholars have commented on the difficulty with the "limited geographical reach of that definition" even though it covers a wide range of causes of damage.¹⁶¹ Except in instances noted above, it seems that the terms "loss" or "injury" are not generally used in connection with the environment.

¹⁵⁶ In the Rotterdam Rules, the term “damage” is used correctly but in the Hague-Visby Rules in Article III Rule 5, the word “damages” in the expression “loss, damages and expenses” is used incorrectly. What is meant there is “damage”. This anomaly is also found in some scholars’ writings. See for example, Baatz, *et al*, *The Rotterdam Rules a practical annotation*, London : Informa, (2009), Pages 31 and 88; but notably it was used correctly at p. 29

¹⁵⁷ See *infra*, text in 4.3 below – CLC Fund

¹⁵⁸ Michael Mason. “Civil liability for Oil Pollution Damage: Examining the Evolving Scope for Environmental Compensation in the International regime” (2003) 27(1) Mar Policy 1,5.

¹⁵⁹ Edgar Gold. 'Marine salvage: Towards a New Regime' (1989) 20 J.Mar.L.& Com. 487.

¹⁶⁰ See Article 1(d) of the International Convention on Salvage, 1989

¹⁶¹ See *supra* note 159.

3.5 The Carrier – Shipper Relationship: Mutual Obligations and Liabilities

The relationship between the carrier and the shipper is essentially one that is established by contract either evidenced by a bill of lading or a transport document¹⁶². Pursuant to such a contract, the party suffering damage, usually the shipper (cargo owner), can avail of recourse under the contract, or proceed in tort or in both contract and tort. A contract as mentioned above is usually governed by an international carriage of goods convention.¹⁶³

The object of the discussion in this section of the chapter is to examine the carrier-shipper relationship in the context of damage attributable to carriage of dangerous goods by ship primarily by reference to convention law. Incidentally, the charterparty which is another variety of carriage contract, is not subject to any international convention.

3.5.1 Liabilities under Conventions: Preliminary Observations

In this section of the chapter the object is to examine the provisions in the Hague-Visby and Hamburg Rules in relation to dangerous goods and associated obligations and liability of the shipper as well as certain corresponding rights and duties of the carrier.

¹⁶² The term used in the Rotterdam Rule; see Art 58 r.2, a holder is not the shipper and the exercises any right under the contract of carriage assumes any liabilities imposed on it under the contract of carriage to the extent that such liabilities are incorporated in or ascertainable from the negotiable transport document or the negotiable electronic transport record.

¹⁶³ Girvin, Stephen. *Carriage of goods by sea*. (2nd edn, University Press, 2007), 56-67

At the very outset, three significant points must be noted. First, it is unfortunate that there are three conventions operating internationally in parallel dealing with the subject of sea carriage of goods.¹⁶⁴ In this context, it is useful to recall that one of the purposes of the Rotterdam Rules is to replace these three extant regimes with a singular comprehensive regime which would also include multimodal transportation.¹⁶⁵ For this reason, Article 89 of the Rotterdam Rules expressly requires state parties to denounce all other sea carriage conventions.¹⁶⁶ However, there is a fear in the international maritime community that even if the Rotterdam Rules come into force by reaching the requisite number of ratifications or accessions, which at this point in time is doubtful, the other three conventions may still remain afloat if there are states parties to them who would not wish to join the Rotterdam Rules.¹⁶⁷ If that happens, the Rotterdam Rules will suffer the same fate as the Hamburg Rules, in other words, there will be no universal application of the Rules. Thus, there are will be four international convention regimes relating to carriage of goods by sea which would be highly undesirable.

The second point to be made is that the Hague-Visby Rules really represents a modified version of the Hague Rules by incorporating a number of improvements

¹⁶⁴ Yancey, Benjamin W. "Carriage of Goods: Hague, Cogs, Visby, and Hamburg." (1982) Tul. L. Rev. 57.1238.

¹⁶⁵ Sturley, Michael F., Tomotaka Fujita, and Gertjan J. Van Der Ziel. *The Rotterdam Rules: The UN Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea*. Sweet & Maxwell, 2010, pp 78-79

¹⁶⁶ See Article 89 Denunciation of other conventions of Rotterdam Rules.

¹⁶⁷ Baatz, Yvonne, et al. *The Rotterdam Rules: a practical annotation*. CRC Press, 2013.

introduced through the Visby Protocol of 1968.¹⁶⁸ However, since there is no compulsion on the parties to the Hague Rules to accept the Visby Protocol, the two regimes have coexisted in the international sphere. In essence, for the purposes of comparison *vis a vis* the Hamburg Rules and the Rotterdam Rules, they are often treated as one regime in respect of most of the principal provisions except those that were newly introduced through the Visby Protocol. In this thesis, the Hague and Hague-Visby regimes are treated as one regime particularly in the context of the discussion in this section.¹⁶⁹

Finally, the third point of observation is that the statistics show that even though the Hague-Visby Rules is regarded as the most widely used regime governing international sea carriage, in reality there are more state parties to the Hague Rules. The perceived popularity of the Hague-Visby Rules is probably attributable to fact that virtually all major traditional maritime states, or at least the vast majority of them, subscribe to the Hague-Visby Rules.¹⁷⁰

In this section, the focus is on the Hague-Visby Rules as one and the Hamburg Rules as the other convention regime in terms of comparison with the Rotterdam Rules. The discussion is first based on a review of the relevant provisions in the Hague-Visby regime compared with the corresponding provisions in the Rotterdam

¹⁶⁸ Berlingieri, Francesco. "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.

¹⁶⁹ *Ibid.*

¹⁷⁰ Most OECD states comprising the western European countries, Canada, Japan, and Australia are parties to the Hague-Visby Rules. Notably, the United States and Germany are not. They have remained as parties to the Hague Rules available at <http://www.informare.it/dbase/convuk.htm>; accessed August 2016 update.

Rules presented above. In the second instance, the relevant provisions of the Hamburg Rules will be treated in like manner by comparison with the Rotterdam Rules provisions. Needless to say, the emphasis will be on the provisions relating to dangerous goods but associated shippers' obligations and liabilities will be dealt with as well in contextual detail. It is inevitable that in any discussions involving the Hague-Visby Rules, references to case law will appear. However, the case law analysis will be addressed separately in the next section of this chapter.

3.5.2 Hague-Visby Rules

The starting point of the discussion is the observation that express provision is made in the Hague-Visby Rules relating to the carriage of dangerous goods; they are identical to the provisions existing already in the Hague Rules. In other words, the Visby Protocol made no changes to the original Hague Rules respecting this subject matter. The provision is contained in Article IV rule 6 and stated as follows:

Goods of an inflammable, explosive or dangerous nature to the shipment whereof the carrier, master or agent of the carrier, has not consented, with knowledge of their nature, may at any time before discharge be landed at any place or destroyed or rendered innocuous by the carrier without compensation, and the shipper of such goods shall be liable for all damages and expenses directly or indirectly arising out of or resulting from such shipment.

If any such goods shipped with such knowledge and consent shall become a danger to the ship or cargo, they may in like manner be landed at any place or destroyed or rendered innocuous by the carrier without liability on the part of the carrier except to general average if

any.¹⁷¹

An analysis of the above provision independent of how it compares with Article 32 of the Rotterdam Rules, leads to the first observation that three adjectives are used to describe the nature of the goods covered by that Rule namely, inflammable, explosive, or dangerous. The second element refers to the situation where the carrier or its agent or the master of the ship has not given consent to its shipment. Thirdly, the lack of consent is combined with the knowledge of the said carrier, agent or master, of the nature of the goods. When all these conditions are met, the carrier, agent or master may do a number of things before the goods are discharged. They can cause the goods to be landed at any place or destroy them or render them innocuous, and for carrying out any such act, the carrier will not be liable to pay any compensation. Rather, it is the shipper who is liable to pay damages including any expense incurred directly or indirectly as a consequence of such action.¹⁷²

The second component of the rule in the Hague-Visby Rules is depicted in a separate paragraph. It provides that in the circumstances referred to in the first component, if the goods become a danger to the ship or cargo, they may be subjected to the same actions as mentioned in the first component of the rule; except that the carrier will be liable for any general average contribution.

It is obvious that the two paragraphs noted above cover two distinctively different

¹⁷¹ Article IV rule 6 of Hague/ Visby Rules.

¹⁷² *Ibid.*

situations. The first deals with the situation where the carrier, its agent, or master is aware of the nature of the goods but has not consented to their shipment. In those circumstances the carrier may land or destroy the goods or render them innocuous without paying any compensation; in addition to that it can extract from the shipper damages and expenses associated with the shipment.¹⁷³ The carrier's right of recovery is regardless of whether the damages and expenses have arisen directly or indirectly as a consequence of the shipment. The legal significance of this aspect of the provision is that the entitlement of recovery is not contingent upon any particular causative factor in terms of tort law.¹⁷⁴ It is sufficient that the shipment of goods in question was the cause regardless of whether it was direct or indirect. Support for this proposition is found in the decision of Hoffman L.J. in *The Fiona*¹⁷⁵ where the issue was the primacy of the carrier's liability for breach of its duty to exercise due diligence to make the ship seaworthy and its entitlement to extract indemnity from the shipper under Article IV rule 6 in connection with the shipment of dangerous goods.

The second component of this Rule simply deals with the situation where even if the carrier was aware of the nature of the goods and had consented to its shipment finds out later that the goods have in point of fact become a danger to the ship or other cargo on board.¹⁷⁶ The carrier, in such instance, is entitled to deal with the

¹⁷³ See *supra* note 98, p.36

¹⁷⁴ *Ibid*, p.35

¹⁷⁵ [1994] 2 Lloyd's Rep. 506.

¹⁷⁶ Article IV rule 6 of Hague/ Visby Rules, see also *supra* note 186, 5-6; See also Thomas, D. Rhidian. "Special Liability Regimes Under The International Conventions for The Carriage Of Goods by Sea-

goods in the same manner as provided in the first component of the rule.¹⁷⁷As mentioned above, the exception is that in the event of any general average, the carrier will be liable for contribution even though it will not be liable to the shipper for any action it may take in conformity with the paragraph in question.

Before finalising the discussion on Article IV paragraph 6, it may be stated in summary that the first component of the rule deals with goods that are inflammable, explosive or dangerous at the time of shipment and the second component deals with goods bearing the same characteristics becoming a danger to ship and cargo. Having said that, one item of significance remains to be addressed; that is the issue of the expression "inflammable, explosive or dangerous" in the context of shippers' obligations under Article IV rule 6. An elaboration of this is warranted in the context of comparing Article IV rule 6 of the Hague-Visby Rules with Article 32 of the Rotterdam Rules.

At this juncture, a most striking observation by way of comparison between the Hague-Visby Rules and the Rotterdam Rules in respect of carriage of dangerous goods, is that the Hague-Visby Rules contains no provisions relating to shipper obligation. The Hague-Visby Rules deals essentially only with carrier obligations.¹⁷⁸

The rights given to the carrier to dispose of goods of a dangerous nature where there

Dangerous Cargo and Deck Cargo." *Nederlands Tijdschrift Voor Handelsrecht* 5 (2010): 198,199.

¹⁷⁷ Article IV rule 6 of Hague/ Visby Rules, see also *ibid* Thomas, D. Rhidian. 198,198-199.

¹⁷⁸ See *supra* note 173, pp.194-196

was no consent or knowledge of the dangerous character of the goods does not attract any liability of the carrier to pay compensation to the shipper. Indeed the shipper is liable for all the damages and expenses arising out of or resulting from such shipment, but there is no express statement on whether the damages and expenses referred to are those incurred by the carrier. However, there would appear to be an implied obligation on the shipper to inform the carrier of the dangerous nature of the goods, and the carrier must agree to their shipment.¹⁷⁹

By contrast, in paragraph (a) of Article 32 of the Rotterdam Rules, there is a positive obligation on the shipper to inform the carrier of the dangerous nature of the goods,¹⁸⁰ In rule 6 of Article IV of the Hague-Visby Rules, there is no such positive obligation; rather the provision simply dictates what the carrier may do if he has knowledge of the nature of the goods and has consented to its shipment.¹⁸¹ This is quite a significant difference between the two rules. Under Article 32 provision is made for the possibility that the carrier has acquired the knowledge in question even if the shipper has not informed the carrier.

Under rule 6 of Article IV of the Hague-Visby Rules, there is a specific rule regarding what the carrier is entitled to do where the carrier has no knowledge at all and has given no consent to the shipment, and makes the shipper liable for damages and expenses arising out of such shipment. In contrast, Article 32 of the Rotterdam

¹⁷⁹ See Article IV.r 6 of HV Rules.

¹⁸⁰ See Article 32 of the Rotterdam Rules; see *supra* note 176, Thomas, D. Rhidian. see also *supra* note 168, 5-6; See also J. Wilson, *Carriage of Goods by Sea*, 7th Edition, Essex: Pearson, 2010, pp . 234-235

¹⁸¹ Article IV, r 6 of the Hague-Visby Rules

Rules only provides for liability on the part of the shipper for not providing in a timely manner, information regarding the dangerous nature of the goods.¹⁸² Furthermore, Article 32 provides for another positive obligation on the shipper, to mark or label the dangerous goods. There is no corresponding provision like this under rule 6 of Article IV and thus no such obligation; instead the carrier under that rule is given a right to deal with the subject goods in a prescribed manner even if the goods become a danger to the ship or the cargo.¹⁸³

It is apparent from the above observation that the two rules are fundamentally different in scope and character. Indeed, there is no semblance of one in the other. In Article 32, the shipper only has the duty to inform and provide accurate marking and labeling. In rule 6, the carrier has positive rights and the shipper has no specific duties.

Finally, the substantial difference between the two rules hinges on the exclusive use of the term "dangerous" in Article 32 which raises the issue of the definition of that term. In the opinion of this writer, the most constructive and useful way to define "dangerous" is by reference to regulatory international instruments as well as national legislation dealing with the issue of dangerous goods. As mentioned earlier, the IMDG Code is indisputably the best source for a definition.

¹⁸² See Article 32 of the Rotterdam Rules; see also Thomas, D. Rhidian. "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. *Nederlands Tijdschrift voor Handelsrecht* 5 (2010): 198. See also *supra* note 186; See also *supra* note 180, J. Wilson, 234-235

¹⁸³ *Ibid*; see also Berlingieri, Francesco. "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;

3.5.3 Hamburg Rules

In the context of this discussion, it is conspicuous that previous to the Rotterdam Rules, the Hamburg Rules already contained provisions on shipper obligation and liability. There are basically two obligations which are to be found in paragraphs 1 and 2 of Article 13 which bears the caption “Special Rules on Dangerous Goods”. They read as follows:

The shipper must mark or label in a suitable manner dangerous goods as dangerous.

Where the shipper hands over dangerous goods to the carrier or an actual carrier, as the case may be, the shipper must inform him of the dangerous character of the goods and, if necessary, of the precaution to be taken...¹⁸⁴

It is obvious from the above provisions that that there is no need to imply or assume any obligation on the part of the shipper to provide such information as in the case of Article IV, paragraph 6 of the Hague-Visby Rules. As mentioned previously, in Article 32 of the Rotterdam Rules which also bears the caption “Special Rules on Dangerous Goods”,¹⁸⁵ there is a similar express obligation imposed on the shipper to inform the carrier of the dangerous nature of the goods, similar to Article 13 paragraph 2 of Hamburg Rules. Article 13 of the Hamburg Rules also contains in paragraph 2(a) a statement regarding shipper’s liability which reads as follows:

¹⁸⁴ Article 13 of Hamburg Rules.

¹⁸⁵ Article 32 of the Rotterdam Rules; see also *supra* note 182, Thomas, D. Rhidian. 198; see also *supra* note 168.

...If the shipper fails to do so and such carrier or actual carrier does not otherwise have knowledge of their dangerous character:
(a) the shipper is liable to the carrier and any actual carrier for the loss resulting from the shipment of such goods...¹⁸⁶

In the Rotterdam Rules, an almost identical provision appears in Article 32 (a) which provides that "...the shipper is liable to the carrier for loss or damage resulting from such failure to inform". The above-noted provision in the Hamburg Rules is similar to Article IV, paragraph 6 of the Hague-Visby Rules which provides for liability of the shipper for all damages and expenses resulting from the shipment of dangerous goods without the knowledge or consent of the carrier but without any reference to whether it is the carrier in respect of whom the liability applies.¹⁸⁷ In the Rotterdam Rules there is an express liability provision in Article 32(b) with respect to the failure of the shipper to mark or label the dangerous goods in accordance with government requirements. The Hamburg Rules has no such provision and also the marking and labeling obligation is not tied to government requirements but rather left open to the shipper to do it "in a suitable manner". Notably, in The Hague-Visby Rules there is no express stipulation regarding marking or labeling of dangerous goods.

The next point to note in this comparative analysis is the issue of carrier's rights in the event of the shipper's failure to comply with its obligations discussed above.

Article 13, paragraph 2(b) of the Hamburg Rules provides that-

¹⁸⁶ Article 13 of the Hamburg Rules.

¹⁸⁷ See *supra* note 185, Berlingieri, Francesco

The goods may at any time be unloaded, destroyed or rendered innocuous, as the circumstances may require, without payment of compensation.¹⁸⁸

The words are virtually identical to the corresponding words in Article IV, paragraph 6 of the Hague-Visby Rules but in the Rotterdam Rules, there is no specific provisions providing for the right of the carrier to dispose of the dangerous goods in the event of failure of the shipper to inform the carrier of the dangerous nature of the goods although this may be covered by Article 15 which refers to “unloading, destroying, or rendering goods harmless if they appear likely to become an actual danger...”

Another point of observation in the Rotterdam Rules, as mentioned earlier, is that the dangerous character of the goods is defined in a relatively expansive manner by the use of the words “potential danger to persons, property and the environment”.¹⁸⁹ This degree of specificity exists neither in the Hamburg Rules nor the Hague-Visby Rules which simply bears the description “inflammable, explosive or dangerous nature” of the goods in Article IV, paragraph 6. The Hamburg Rules only refers to the term “dangerous goods” in Article 13.¹⁹⁰

It is notable that in relation to carriage of dangerous goods, Article 15 paragraph 1 (a) of the Hamburg Rules provides that the bill of lading issued by the carrier must

¹⁸⁸ Article 13, paragraph 2(b) of the Hamburg Rules.

¹⁸⁹ Article 15 of Rotterdam Rules; see also *supra* note 167, 90-94.

¹⁹⁰ Andrews, Mark J., et al. “International Transportation Law.” *The International Lawyer* (2011): 313-327.

contain an express statement regarding the dangerous character of the goods.¹⁹¹

3.5.4 Rotterdam Rules: Background Evolution and Salient Features

International carriage of goods by sea has been governed by convention law for almost one hundred years starting with the adoption of the Hague Rules in 1924¹⁹² which was inspired by the U.S. Harter Act of 1893 and the legislation of Canada, Australia and New Zealand. It was considered to be a landmark event which was instrumental in breaking the stranglehold of British carriers. The Visby Protocol to the Hague Rules hailed as a significant improvement on the original Hague Rules was adopted in 1968 and came to be known as the Hague-Visby Rules. Even though these Rules represented a favourable move in the direction of shipper interests, in the post-Hague/Visby period, shipper states felt that the pendulum had not swung enough in their favour especially in terms of the liability regime. Their voices were heard and complaints were heeded in some quarters internationally as a result of which the Hamburg Rules were adopted in 1978¹⁹³ under the auspices of the United Nations Commission on International Trade Law (UNCITRAL) with major input from the United Nations Conference on Trade and Development (UNCTAD) widely regarded as a champion of the third world (developing countries).¹⁹⁴ Even though the Hamburg Rules did eventually enter into force in 1992 after a prolonged interval since its adoption, the convention did not gain much support universally.

¹⁹¹J. Wilson, *Carriage of Goods by Sea*, 7thed (Pearson, 2010) , 224

¹⁹²The International Convention for the Unification of Certain Rules Relating to Bills of Lading, 1924, 120 U.N.T.S. 155

¹⁹³ United Nations Convention on the Carriage of Goods by Sea, 17 I.L.M. 608

¹⁹⁴ Moore, John C. "Hamburg Rules" J. Mar. L. & Com. 10 (1978): 1.

In the late 1990s, going into the next decade, the CMI embarked on a fairly ambitious programme aimed at a major reform of the law relating to international carriage of goods. In fact it was a joint effort of CMI and UNCITRAL which got the project underway and was eventually placed in the hands of Working Group III (Transport Law) of UNCITRAL. The intention of the deliberators comprising national delegations at CMI and UNCITRAL was to draw into the fold of convention law through the reform mechanism, the subject of multimodal transportation.¹⁹⁵ Hence the term "transport law" and not carriage of goods by sea emerged as the terminological norm which was subsequently changed to the descriptive expression "carriage wholly or partly by sea".¹⁹⁶

The proliferation of conventions had led to the parallel existence of three sets of international Rules which was obviously inconsistent with the objective of creating worldwide uniformity and universality of application of carriage law. On top of that there were the so-called "hybrid" national regimes which had legislation containing combinations of different aspects of different conventions.¹⁹⁷ A good example is China, which as the world's second biggest trading nation has a Maritime Code incorporating elements of the Hague/Visby and the Hamburg Rules.¹⁹⁸ The UNCITRAL initiative eventually culminated in the adoption in 2008 of the United

¹⁹⁵ Karan, Hakan. "Any Need for a New International Instrument on the Carriage of Goods by Sea: The Rotterdam Rules." *J. Mar. L. & Com.* 42 (2011), 441,443

¹⁹⁶ https://www.uncitral.org/pdf/english/yearbooks/yb-2008-e/11-86490_ebook_2008_e.pdf, accessed 25 September 2016.

¹⁹⁷ Bal, Abhinayan Basu. "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.

¹⁹⁸ Ben Beaumont, Philip Yang and Steven Hazelwood, *Chinese maritime law and arbitration* (Simmonds & Hill 1994), at p 6

Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea. The signing ceremony was held in Rotterdam in September 2009 and the convention has thus come to be known as the Rotterdam Rules.¹⁹⁹

3.5.4.1 Significant Salient Features

The Rotterdam Rules serves at once as the foundation and the framework for liability issues pertaining to carriage of dangerous goods under a newly envisaged regime. The main thrust, is consideration of the liability regime for carriage of dangerous goods under the Rules. The issues are addressed in analytical detail in this chapter. The essentials of such liability in the context of Chinese law, represent another dimension of the thesis which are also dealt with separately and covered in two chapters.

Against the above backdrop and given the complexities of interrelationships among the parties involved in global shipping, it would not be unusual to view all the provisions of the Rotterdam Rules as being salient in one way or another. However, a selective choice of features is needed for focusing on the central theme; thus only those provisions that add-value to it are highlighted for discussion. Notable in this context is the fact that since well before the adoption of the Rotterdam Rules in 2008, a considerable amount of scholarly works have been published in open literature as well as reports and documents of various bodies and national

¹⁹⁹ 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

governments including China have been produced.

A related observation is that not many non-Europeans have written on the subject and published their views in the open literature. For example, Chinese scholars have written on the Rotterdam Rules but mainly in the Chinese language.²⁰⁰ Additionally, hardly anything has been written on liability in respect of carriage of dangerous goods under the Rotterdam Rules. This endeavour is thus an exercise in treading on uncharted waters to some extent but there is the incentive for being innovative and examining the landscape from a Chinese perspective relying primarily on the convention texts and other sources such as the *travaux préparatoires* which are publicly available and commentaries of experts available in the public domain. Only a few provisions of the Convention, namely Articles 15, 27, 30 and 32 in Chapter 7 dealing with obligations of the shipper and by cross-reference the whole of that Chapter, in particular, Articles 31 and 34 are directly relevant to the carriage of dangerous goods on board; and these are the ones discussed in this chapter.

3.5.4.2 Analysis of Articles 15, 27, 30 and 32 of Rotterdam Rules

3.5.4.2.1 Article 32

The provisions relating to dangerous goods under the Rotterdam Rules are contained in Articles 15, 27, 30 and 32. In addressing this, one must start with an examination of Article 32 which is to be found in Chapter 7. This Chapter bears the caption “Obligation of the shipper to the carrier”. In turn, the heading of Article 32

²⁰⁰ Ping, Guo, and Zhang Wenguang. “Commentary on the Rotterdam Rules.” *Global Law Review* 3 (2009): 017.

is “Special rules on dangerous goods”. Therefore, it is obvious that the liability regime concerning the transportation of dangerous goods by sea is a special regime, which is quite different from the carriage of goods by sea that are not dangerous.²⁰¹ The liability regime regarding such goods is based primarily on the shipper’s obligations under the convention. It is notable that Article 32 is the main substantive provision in the convention that deals with dangerous goods. It provides as follows:

When goods by their nature or character are, or reasonable appear likely to become, a danger to persons, property or the environment:

- a) The shipper shall inform the carrier of the dangerous nature or character of the goods in a timely manner before they are delivered to the carrier the carrier or a performing party. If the shipper fails to do so and the carrier or performing party does not otherwise have knowledge of their dangerous nature or character, the shipper is liable to the carrier for loss or damage resulting from such failure to inform; and
- b) The shipper shall mark or label dangerous goods in accordance with any law, regulations or other requirement of public authorities that apply during any stage of the intended carriage of the goods. If the shipper fails to do so, it is liable to the carrier for loss or damage resulting from such failure.²⁰²

There are several elements to this provision including three statements of law embedded in paragraphs (a) and (b) which pertain to obligations and liability for failure. The chapeau depicts the circumstances under which the obligations and the attendant liability arising from the failure operate.

²⁰¹ See *supra* note 182 Thomas, D. Rhidian. “Special Liability, 200 and 201.

²⁰² Article 32 of Rotterdam Rules.

Obligations and liability both stem from the condition where the goods in question are inherently of a dangerous nature or character likely to affect a person or the environment. The first obligation is that of the shipper to inform the carrier of the dangerous character of the goods in advance of their delivery to the carrier or performing party. Failure to discharge this obligation, or if the carrier or the performing party does not otherwise get to know of the dangerous nature of the goods, the liability provision is triggered.²⁰³

In the circumstances mentioned above, the shipper is liable for loss or damage arising from the failure to inform.²⁰⁴ In addition, the shipper is required to identify the dangerous goods by marking or labeling them according to any relevant regulatory law that may be applicable during any stage of carriage. Failure to mark or label the goods leads to liability of the shipper towards the carrier for loss or damage consequential thereto.²⁰⁵

It is apparent from Article 32 that the scope or extent of liability relating to dangerous goods is based on what may be considered as dangerous under the Rotterdam Rules. The definition of what is dangerous in terms of the nature or character of goods is conspicuous by its absence in the Rules. This can be attributable to the fact that in the wider scheme of things, the subject of dangerous goods occupies a relatively small position within the perimeter of the rules. In order

²⁰³ See *supra* note 197.

²⁰⁴ Yvonne Baatz, et. al. , *The Rotterdam Rules: A Practical Annotation*, (London: Informa, 2009), pp. 84-86

²⁰⁵ *Ibid*; see also *supra* note 182, Thomas, D. Rhidian.: 198, 199

to comprehend what may be the dangerous nature or character, one can look at English case law the relevant contents of which extend to several other issues relating to dangerous goods. An instructive rendition of this is to be found in the decision of the House of Lords in *The Giannis NK*²⁰⁶ discussed in the well-known scholarly writings of Treitel and Reynolds.²⁰⁷

One relevant issue is whether "dangerous" includes or is synonymous with "harmful". This in turn raises the question of physical versus legal harm. These matters will be addressed later in the thesis. Apart from that, it is to be observed that the danger arising from the nature or character of goods is not restricted to danger to persons but also to property and the environment. As opined by some commentators, simply carrying pollutants on board ship may well trigger an obligation and attendant liability on the part of the shipper even if the pollutant in question is an inert substance such as oil or a chemical fertilizer of stable character.²⁰⁸ This makes the operation of the provision wider in scope. Another feature of Article 32 is the rather fluid or open-ended concept of what may "reasonably appear likely to become a danger". In this regard it has been pointed out that-

The proviso fails to clarify to whom the goods should reasonably appear likely to become a danger: a further difficulty, as it is not hard to anticipate how the view of a reasonable master may differ from that of an equally reasonable shipper.²⁰⁹

²⁰⁶ [1998] AC 605

²⁰⁷ See G. Treitel and F.M.B. Reynolds, *Carver on Bills of Lading*, 2nd Edition, London: Sweet & Maxwell, 2005 at para 9-279.

²⁰⁸ *Supra* note 204, 91-92

²⁰⁹ *Ibid*, at p. 92; see also Thomas, D. Rhidian. "Special Liability Regimes under the International

Furthermore, it is said that the phraseology so formulated seems to "purposely exclude" goods that "become dangerous, where they did not reasonably appear likely to become so",²¹⁰ but in the opinion of this writer the comment to the effect that there is a deliberate exclusion stretches the construction of the phrase unduly and borders on semantic hair-splitting. Nevertheless, the formulation as it stands is a potential recipe for dispute.

The duty of the shipper to inform the carrier regarding the dangerous nature or character of the goods is a positive obligation or duty which exists in current carriage regimes.²¹¹ However, in Article 32 of the Rotterdam Rules there are express requirements in reference to the goods for providing the information "in a timely manner before they are delivered to the carrier or the performing party". The implication of the timeliness of the notification by the shipper is that the failure to do so gives rise to liability. The practicality of this requirement is that the carrier is able to consider the situation in preparing for the delivery of the cargo and the preparation of the relevant documentation including the cargo manifest and stowage plan.²¹²

While the duty of the shipper to inform or notify is a positive one, it would appear

Conventions for the Carriage Of Goods by Sea–Dangerous Cargo And Deck Cargo.” *Nederlands Tijdschrift voor Handelsrecht* 5 (2010),198

²¹⁰*Ibid*, Thomas, D. Rhidian .

²¹¹ Fujita, Tomotaka. “Shipper's Obligations and Liabilities under the Rotterdam Rules.” *University of Tokyo Journal of Law and Politics* 8 (2011): P62.

²¹² Nikaki, Theodora. “Carrier's Duties under the Rotterdam Rules: Better the Devil You Know, The.” *Tul. Mar. LJ* 35 (2010): 1.

that there is no compulsion on him in this respect where the carrier would have otherwise had knowledge of the dangerous nature or character of the goods.²¹³ It is unclear from the provision whether to escape liability the shipper must prove that the carrier had or should have had knowledge of the dangerous character of the goods, although arguably a prudent carrier under ordinary industry practice would be expected to make the necessary inquiries regarding the attributes of the cargo it has agreed to carry.²¹⁴ It can also be surmised from the wording used in Article 32 paragraph (a) that a performing party is in the same position as the carrier which would include imputed knowledge regarding the dangerous nature or character of goods based on the performing party's prudence or reasonableness as an industry player.

The shipper's duty to mark or label dangerous goods under Article 32 paragraph (b) is considered to be a new obligation in sea carriage law because it carries with it liability for failure.²¹⁵ Notably, the liability in question is potentially of a two-fold variety because it is referenced to "any law, regulation or other requirements of public authorities ". In other words, the failure to mark or label can, in the first instance, attract a regulatory sanction such as a fine and also civil liability for loss or damage resulting from such failure.²¹⁶ The regulatory law alluded to would typically be the International Maritime Dangerous Goods Code (IMDG), or its

²¹³ See *supra* note 204, pp. 92 and 93

²¹⁴ See *The Athanasia Comminos and Georges Chr Lemos* [1990] 1 Lloyd's Rep 277

²¹⁵ Fujita, Tomotaka. "Shipper's Obligations and Liabilities under the Rotterdam Rules." University of Tokyo Journal of Law and Politics 8 (2011): P62.

²¹⁶ See *supra* note 204, pp. 92 and 93; See also *ibid* Fujita, Tomotaka, p. 62.

domestic law counterpart.²¹⁷ If the goods are stowed in a container and the carriage is multimodal, the requirement to mark or label would apply to all modes of transportation under Article 32 (b), and in addition, any relevant domestic or international law relating to a particular regime of unimodal transportation may also apply.²¹⁸

It is clear from Article 32 that both obligations are owed by the shipper, or, by virtue of Article 33, the documentary shipper, to the carrier.²¹⁹ However, as the wording in paragraph (a) indicates, the discharge of the obligation of the shipper impinges on the performing carrier as well. There is no indication that the obligations are owed to third parties or whether such parties can benefit from the failure of the shipper to discharge the obligations.²²⁰ But in the absence of any express provision to that effect, it may well be that domestic tort law may apply in favour of a third party who has suffered loss or damage as a result of failure on the part of the shipper with respect to the two obligations mentioned.

3.5.4.2.2 Article 30

With regard to Article 32, two other points need to be made regarding the shipper's liability. The first is the nature of the liability and the second is whether it is subject to limitation. On the first issue, there is no express statement of law in Article 32 as

²¹⁷ See also *ibid* Fujita, Tomotaka, p. 62.

²¹⁸ Article 32 (b) of HV Rules.

²¹⁹ See 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.

²²⁰ See also *ibid* Zeng-jie, Z. H. U.12,14.

to whether the liability of the shipper is strict;²²¹ in other words, whether the carrier as a claimant is required to prove fault on the part of the shipper to obtain relief either in tort or in contract. However, there is some indication of strict liability in Article 30, the caption of which is "Basis of shipper's liability to the carrier". Granted that this provision applies across the board and is not specific to dangerous goods, but given that there is a cross-reference to Article 32, the application of strict liability can be extrapolated from the words used in Article 30 (2) which are as follows:

Except in respect of loss or damage caused by a breach by the shipper of its obligations pursuant to articles 31, paragraph 2, and 32, the shipper is relieved of all or part of its liability if the cause or one of the causes of the loss or damage is not attributable to its fault (emphasis added) or to the fault of any person referred to in article 34.

It is common ground that where there is liability without attribution of fault, the liability is strict where only loss or damage need be proven by the claimant.²²² Based on this premise, it is arguable that liability of the shipper in respect of loss or damage caused by dangerous goods is of the strict or "no fault" variety. At least in the context of the Hague-Visby Rules and domestic legislation giving effect to those Rules, in some common law jurisdictions, the case law expressly provides for strict liability in cases of loss or damage attributable to failure by the shipper to give notice or to provide requisite marking or labeling in connection with the carriage of

²²¹ See Article 32 of Rotterdam Rules

²²² Epstein, Richard A. "A theory of strict liability." (1973) 2 T. Legal Stud.151, 151-204.

dangerous goods.²²³ It is submitted, however, that the Rotterdam Rules are not yet in force and its provisions are as yet judicially untested. To what extent, if at all, decisions of common law courts rendered in the context of another convention or domestic law will influence courts in civil law jurisdictions remains uncertain at best, especially where in such jurisdictions the notion of "presumed fault" prevails rather than strict liability. In the opinion of this writer, therefore, any statement to the effect that the shipper's liability under the Rotterdam Rules in the circumstances under discussion is strict must be viewed only in light of Article 30(2).

With regard to limitation of liability, it is notable that this right does not extend to shippers.²²⁴ One may wonder why that is so; suffice it to say that it was a negotiated conscious decision of the architects of the Convention and the delegates at UNCITRAL for reasons that are unclear.

3.5.4.2.3 Article 15

With respect to Article 15, it must be noted that this short provision deals not with goods that were dangerous by definition when loaded on board but rather goods that may become dangerous or may "reasonably appear likely to become" dangerous during the voyage. The exact wording of this Article is depicted as follows:

²²³ See *supra* note 204 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)

²²⁴ See *supra* note 98, pp 237-238.

Notwithstanding Article 11 and 13, the carrier or performing party may decline to receive or to load, and may take such other measure as are reasonable, including unloading, destroying, or rendering goods harmless, if the goods are, or reasonably appear likely to become during the carrier's period of responsibility, an actual danger to property or the environment.²²⁵

The first point of observation is that this provision overrides Articles 11 and 13 both of which are different varieties of carrier's obligations. Article 11 deals with the obligation of the carrier to carry and deliver the goods. Article 13 contains certain specific obligations relating to their receipt, carriage and discharge. One peculiarity of Article 15 is that it has similar words to these in Article 32 relating to the situation where the goods may "reasonably appear likely to become....an actual danger to persons, property or the environment". In this regard, it is to be noted that whereas in the chapeau to Article 32, the reference is simply to "danger", Article 15 speaks to "actual danger". Furthermore, the provision applies during the period of responsibility of the carrier which in the case of a maritime carrier under the Rotterdam Rules will be the period generally referred to as "port to port".²²⁶ Aside from the above-noted observation, uncertainty and lack of clarity surrounding the words "reasonably appear likely to become " must bear the same critical comment as made by this writer in the discussion above relating to Article 32.

Apart from the above observations, it must be noted that the carrier or a performing party is permitted to take a number of optional measures in cases where goods are

²²⁵ Article 15 of Rotterdam Rules.

²²⁶ Bovio, David Moran. "Ocean Carriers' Duty of Care to Cargo in Port: The Rotterdam Rules of 2009." *Fordham Int'l LJ* 32 (2008), 1162.

likely to become dangerous or may reasonably appear likely to become dangerous. The first option is that the carrier or the performing party may refuse to receive the goods, the second to refuse to load and the third, to take any reasonable measures which include a number of sub-options, namely, unloading, destroying, or rendering goods harmless.²²⁷ Article 15 has an overriding effect, any potential breaches of Articles 11 and 13 resulting from any of measures can be overcome.²²⁸

The rights of the carrier and the performing party as provided in Article 15 has the potential to lead to complicated situations in multimodal operations where one performing party may consider it's part of the transportation chain safe but another performing party such as the one responsible for loading the goods onto the ship or even the sea carriage segment not to be safe.²²⁹ The right pertaining to each carrier or performing party are separable and can be exercised separately by choosing an option that is suitable for its purpose.²³⁰

It is submitted that as compared with goods that reasonably appear to become dangerous those that pose an actual danger are easier to deal with in practical terms. Even so, there is the dilemma regarding whether the danger is simply physical or whether the provision would apply to what maybe dangerous in legal terms. It is submitted that even though the expression “actual danger to property” may accommodate a wide construction, drawing in the notion of “legal danger” or a

²²⁷ *Ibid.* pp 1167-1168.

²²⁸ Article 15 of Rotterdam Rules. See also *supra* note 98, pp.235-236

²²⁹ Article 15 of Rotterdam Rules.

²³⁰ *Ibid.*

legally dangerous circumstance may be stretching the construction too far.²³¹

The expression "actual danger to environment"²³² is equally unclear and perplexing, particularly whether it includes sea, the land, and the air in relation to the carriage of the goods in question. There are other implications in relation to how far the notion of the environment can be stretched to include eco-system, such as flora and fauna and other biological features resident in the environment. It should also be noted that in relation to the environment other terms come into play such as pollution and contamination; and questions may arise to whether they are the same as danger or endangerment. Finally, it is notable that no liability is attached to any failure of the carrier or performing party to exercise the options referred to in this Article.²³³

3.5.4.2.4 Article 27

The shipper's obligations relating to delivery of goods to the carrier is contained in Article 27. This Article requires the shipper to deliver the goods in a condition that will withstand the carriage as well as the various elements of cargo work associated with the carriage in compliance with the contract of the carriage entered into with the carrier.²³⁴ The specifics of the shipper's obligation in this regard are set out in Article 27 as follows:

²³¹ See however, *supra* note 204p. 41, where examples " legal danger" are cited in relation to risks confiscation or destruction of cargo because it infested and prohibited.

²³² Article 33.1 of Rotterdam Rules.

²³³ Article 33 of Rotterdam Rules.

²³⁴ Article 27 of Rotterdam Rules.

1. Unless otherwise agreed in the contract of carriage, the shipper shall deliver the goods ready for carriage. In any event, the shipper shall deliver the goods in such condition that they will withstand the intended carriage, including their loading handling, stowing, lashing and securing, and unloading, and that they will not cause harm to persons or property.
2. The shipper shall properly and carefully perform any obligation assumed under an agreement made pursuant to article 13, paragraph 2.
3. When a container is packed or a vehicle is loaded by the shipper, the shipper shall properly and carefully stow, lash and secure the contents in or on the container or vehicle, and in such a way that they will not cause harm to persons on property.

According to paragraph 1 the shipper must deliver the goods to the carrier in the "ready for carriage" condition unless the contract of the carriage provides otherwise.²³⁵ This means that the contract can provide terms that may not require such delivery to be in "ready for delivery" condition. The exact state of readiness is subject to the specifics provided in the contract and may vary according to the nature of the cargo, the custom of the port, the destination and other factors.

The second segment of paragraph 1 requires delivery in such condition as specified in that segment. The condition must be such that the goods will be able to withstand the vagaries of the carriage intended by the parties and include the specific elements enumerated in the provision, namely, loading, handling, stowing, lashing, securing and unloading. An additional requirement is that no harm will be caused to any person or property.²³⁶

²³⁵ Article 27.1 of Rotterdam Rules

²³⁶ See elaboration of the notion of "harm" discussed below.

It is contended that even if the goods are not delivered ready for carriage because the contract provided otherwise, the requirement relating to the specific enumerated elements of the condition in which delivery will be made is independently mandatory including the requirement not to cause harm to persons or property. This is apparent from the use of the words "in any event" which has been judicially held to mean that unlimited and without exception.²³⁷ Any non-compliance with the mandatory requirement leading to loss or damage will fall on the shipper in any dispute relating to division of liability between carrier and shipper. The carrier should at any rate be able to rely on the exceptions set out in Article 17 paragraph 3 subparagraphs (h), (j) and (k) of the catalogue of exceptions to escape liability. While the division of shipper obligations is apparent from the two segments of paragraph (1) their co-relation and interaction is less than a model of clarity.

As mentioned above, a mandatory requirement imposed on the shipper in paragraph 1 is to deliver the goods in such condition as not to cause "harm" to persons or property.²³⁸ In a similar provision in the chapeau to Article 32, the term "danger" is used in reference to persons and property.

This immediately raises the question of whether and how the two terms are different. It is said that "danger" implies a need for assessing the risk of "potential threat of

²³⁷ *Parsons Corp and Others v. CV Scheepvaartonderneming "Happy Ranger" and Others (The Happy Ranger)* [2002] ECWA Civ 694; [2002] 2 Lloyd's Rep 357, at p. 38)

²³⁸ Article 27 of Rotterdam Rules

damage" whereas "harm" is a rather physical phenomenon and "implies the realisation of such threat and actual damage eventually caused". Also, whether or not a condition will cause harm can only be determined *ex post facto* at the end of the transportation.²³⁹ Any reference to the environment in this provision is conspicuous by its absence although its omission may well be intentional on grounds that are specifically relevant.²⁴⁰

Presumably, environmental damage can be caused by cargo that is not inherently environmentally dangerous.²⁴¹ Therefore it would be unreasonable to impose on the shipper the obligation to deliver goods in a condition so as not to cause any harm to the environment whether through the convention or the contract of carriage.

Paragraph 2 of Article 27 makes a cross reference to paragraph 2 of Article 13 pursuant to which the shipper and the carrier may reach agreement regarding the loading, handling, stowing, or unloading of the goods to be performed by the shipper, the documentary shipper or the consignee, and any such agreement must be referred to in the contract. Paragraph 2 of Article 27 requires the shipper to perform any such obligation properly and carefully. This is a straightforward and uncontroversial provision. Paragraph 3 of Article 27 has the same requirements pertaining to containers as in paragraph 2 including the duty to make the container

²³⁹ See *supra* note 231, p. 81

²⁴⁰ *Ibid* at. 91.

²⁴¹ *Ibid*.

or vehicle for delivery so as not to cause harm to persons or property.²⁴²

3.6 Remedies under Convention Law

In the case of contracts of carriage evidenced by bills of lading they would usually be subject to the Hague-Visby Rules or Hamburg Rules, and in the case of a transport document, would be subject to the Rotterdam Rules if it were in force and applicable in the particular jurisdiction.²⁴³

It is notable that under the Rotterdam Rules there are no specific provisions in respect of remedies available for damage in relation to dangerous goods; except that, Article 22 provides for calculation of compensation assuming that damages are payable by the carrier for loss or damage by delay.²⁴⁴ Article 15 dealing with “goods that may become a danger” has no specific provision relating to remedies. Similarly, in Article 32 which contains special rules on dangerous goods is silent on the matter of remedies.²⁴⁵ This Article basically imposes certain obligations on the shipper, specifically providing information, labeling and marking. A breach of each can give rise to liability on the part of the shipper towards the carrier.²⁴⁶ However, there is nothing stated about what remedies may be available to the carrier in the event of the failure by the shipper to carry out its obligations.²⁴⁷

²⁴² Paragraph 2 and 3 of Article 27.

²⁴³ See *supra* note 98, pp 183-184; pp 213-215;

²⁴⁴ Article 22 of Rotterdam Rules.

²⁴⁵ Article 32 of Rotterdam Rules.

²⁴⁶ *Ibid.*

²⁴⁷ Article 15 of Rotterdam Rules

In the circumstances, one would have to assume that the usual remedies available under the law of contract in a particular jurisdiction would be applicable; and it would be the remedy of damages. In such case, the prescription for calculation of compensation in Article 22 would have to be observed.²⁴⁸ In essence, the compensation would be based on the value of the goods at the place and time of delivery of the goods as agreed in the contract or according to the custom of the trade where such specifics are absent in the contract. However, Paragraph 3 of Article 22²⁴⁹ provides that the parties may calculate the compensation payable in a different manner if so agreed subject to the stipulations provided in Chapter 16 of the convention.

In the Hague/Hague-Visby Rules, there is no provision relating to remedies but it is assumed that carrier liability would result in payment of compensation in accordance with the amounts specified in the limitation of liability provisions set out in Article IV paragraph 5 (b) and Article IV *bis* paragraph 3 which provide for calculation of the compensation by reference to the value of the goods at the place and time of discharge according to the contract of carriage.²⁵⁰ This provision is

²⁴⁸ Article 22 of Rotterdam Rule, Calculation of compensation

“1. Subject to article 59, the compensation payable by the carrier for loss of or damage to the goods is calculated by reference to the value of such goods at the place and time of delivery established in accordance with article 43.”

²⁴⁹ Article 22 of Rotterdam Rule, Calculation of compensation 3. “In case of loss of or damage to the goods, the carrier is not liable for payment of any compensation beyond what is provided for in paragraphs 1 and 2 of this article except when the carrier and the shipper have agreed to calculate compensation in a different manner within the limits of chapter 16.”

²⁵⁰ Article IV paragraph 5 “The total amount recoverable shall be calculated by reference to the value of such goods at the place and time at which the goods are discharged from the ship in accordance with the contract or should have been so discharged. The value of the goods shall be fixed according to the commodity exchange price, or, if there be no such price, according to the current market price, or, if there be no commodity exchange price or current market price, by reference to the normal value of goods of the

similar to the corresponding provision in Article 22 paragraph 3 of the Rotterdam Rules referred to above.²⁵¹

In the Hamburg Rules there are also no provisions relating to remedies generally or in Article 13 which contains special rules on dangerous goods in respect of shippers' liability, but it must be implied that compensation in respect of carrier liability is according to the limits provided in Article 6.²⁵² These limits extend to the actual carrier and their servants and agencies under Article 10 paragraph 5.²⁵³ Notably, there is no limitation of liability afforded to the shipper. In all such cases, it is submitted that the general rules of contract law pertaining to damages will apply in a particular jurisdiction in so far as there is no conflict with the relevant convention law if the state in question is a party to the convention.²⁵⁴

3.7 Concluding Remarks

In this chapter, the focus is on liability issues arising from the carrier-shipper interrelationship in the context of carriage of dangerous goods. It is pointed out that this interrelationship is essentially contract based and mostly pursuant to an international carriage of goods by sea convention where such carriage is under a bill

same kind and quality"; See also Article IV *bis* paragraph 3 of Hague Visby Rules 3. "The aggregate of the amounts recoverable from the carrier, and such servants and agents, shall in no case exceed the limit provided for in these Rules."

²⁵¹ Article IV paragraph 5 (b) and Article IV *bis* paragraph 3 of HVRules, See also, Article 22 paragraph 3 of the Rotterdam Rules..

²⁵² Article 6 of Hamburg Rules.

²⁵³ See Article 10.5 of Hamburg Rules, The aggregate of the amounts recoverable from the carrier, the actual carrier and their servants and agents shall not exceed the limits of liability provided for in this Convention.

²⁵⁴ Article 10 paragraph 5 of Hamburg Rules.

of lading as far as the extant law is concerned. Under the Rotterdam Rules which has not entered into force, and it is doubtful that it will happen anytime soon, the instrument evidencing the contract is not a bill of lading but rather a transport document because the convention extends to multimodal transportation. It is also pointed out that charterparties, which are also contracts of carriage or affreightment, are not covered by any convention and are not addressed in this chapter.

The Hague-Visby, Hamburg and Rotterdam Rules are discussed in contextual detail, the discussions being concentrated on and limited to the provisions relating to the carriage of dangerous goods and the mutual responsibilities of carriers and shippers with attendant liabilities. Having looked at the carrier-shipper relationship it is now incumbent upon the writer to delve into the questions of third party liability which are presented in the next chapter.

CHAPTER 4 - THIRD PARTY LIABILITY FOR DAMAGE CAUSED BY DANGEROUS GOODS

4.1 Maritime Safety and Marine Pollution Related Liability: Preliminary Remarks

This chapter deals with liability to third parties for damage caused by dangerous or hazardous goods. At the outset it must be clarified that "third parties" in this context are individuals and entities other than the carrier (shipowner) and shipper (cargo owner). The discussions are inevitably centred on relevant international conventions addressing liability and limitation of liability issues pertaining to ship-source oil pollution, hazardous and noxious substances (HNS) and nuclear damage, in that order, suffered by third parties. The conventions and related case law are examined as thoroughly as may be necessary. Pollution is discussed ahead of HNS simply because in terms of the adoption of the relevant conventions, the pollution conventions came first.

Indeed the HNS Convention is not yet in force and has been waiting in the sidelines for a long time, but its importance to this thesis is beyond any doubt. A point of interest and observation in this regard is that whereas the Hague/ Visby Rules, Hamburg Rules and Rotterdam Rules are not concerned with third party liability *per se*, the provisions relating to carrier liability under the convention take account of environmental protection issues which was not the case hitherto with respect to

carriage of goods conventions.²⁵⁵ Special attention is given to goods that are dangerous or hazardous and are also pollutants are discussed. Added to this, the carriage of nuclear substances as a specific category of dangerous goods are also discussed together with their liability implications mainly by reference to the Nuclear Convention of 1971 and relevant case law. The subject of damage from HNS invariably warrants an introductory discussion on maritime safety which is presented below.

There are four branches of maritime safety, namely, safety of the ship, safety of navigation, cargo safety and occupation of safety which includes personal safety of crew members on board as well as other person such as passengers.²⁵⁶ With respect to carriage of dangerous goods on board, we are primarily concerned with cargo safety which involves the safe condition of the cargo as well as what harm or damage a particular cargo might cause to other property and persons on board of the ship.

Notably, the dangerous characters of cargo may lead to potential harm to persons on board which then links the phenomenon of cargo safety with occupational safety.²⁵⁷ To expand on the characterisation of cargo safety, it is to be observed that the nature of the cargo being dangerous potentially affects the safety of the ship and any other property on board and also the marine environment external to the ship carrying

²⁵⁵ See Rotterdam Rules Articles 15, 17 and 32

²⁵⁶ AFM de Bievre, Aline FM. "Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea." (1986) 17 J. Mar. L. & Com. 61.

²⁵⁷ See *supra* note 108, at pp. 39-42.

dangerous goods.²⁵⁸ The subject of cargo safety is predominated by regulatory law which is international in scope.²⁵⁹ In conjunction with the regulatory law, the private law dimension which operates on the principles of liability in tort of which negligence is the most important have already been discussed. The legal principles of these pertain to liability of the ship owner towards third parties who suffer damage or harm.²⁶⁰ Indeed, it must be appreciated that the cargo owner is equally exposed to third party liability because of the dangerous nature of the goods in question.

It is significant that whereas there is established convention law relating to ship-source pollution damage, there is no such liability and compensation regime in respect of damage attributable to the carriage of dangerous goods by sea except the HNS Convention discussed in detail in this chapter. One must therefore resort to the general law of torts and attendant remedies to deal with damage or harm so caused whether in terms of international or national transport.

4.2 Ship-source Oil Pollution

The private law of ship-source marine pollution mainly concerns third party liability of the carrier of pollutant goods, the most predominant of which is oil cargo. Oil is also a pollutant when carried as fuel in the bunkers of a ship.²⁶¹ The law in question

²⁵⁸ See *supra* note 256.

²⁵⁹ Elaborated in Chapter 2

²⁶⁰ Rengifo, Antonio. "The International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances at Sea, 1996." (1997) *RECIEL* 6.2: 191-197.

²⁶¹ Wu, Chao. "Liability and Compensation for Bunker Pollution." *J. Mar. L. & Com.* 33 (2002), 553, 105

essentially consists of two components; namely, the liability of the polluter and the compensation or damages payable to third party victims of pollution damage.²⁶² The polluter, as mentioned above, is primarily the shipowner on whose ship the polluting cargo is carried.²⁶³ However, the owner of the polluting cargo, in the case of oil, the international oil industry, is indirectly also a polluter by virtue of the character of the cargo that it owns.²⁶⁴ As the following discussion will show, originally such cargo owner could not be held liable under established legal principles simply because at the time of a pollution incident, the cargo is not in its possession or control but rather is in the charge of the carrier.

4.2.1 Liability

The principal feature of the liability component respecting pollution damage is two-fold; namely, the type of the claim and the type of liability. Ship-source pollution damage is essentially a maritime tort. In civil law jurisdictions it is known as a delict and the law relating to it would be found in some form of statute or legislation such as the Civil Code.²⁶⁵ By contrast, in common law jurisdictions the law of torts is not to be found in any statute law as such, but is almost entirely contained in the case law jurisprudence.²⁶⁶ However, where a convention is the source of the law with respect to ship-source pollution, there is almost invariably

556.

²⁶² Gauci, Gotthard M. "Protection of the Marine Environment through the International Ship - Source Oil Pollution Compensation Regimes." (1999) REIEL 8.1: 29-36.

²⁶³ *Ibid.*

²⁶⁴ Hartje, Volkmar J. "Oil pollution Caused by Tanker Accidents: Liability versus Regulation." (1984) Nat. Resources J. 24. 41.

²⁶⁵ Tetley, William. "Mixed Jurisdictions: Common Law v. Civil Law (Codified and Uncodified)." *La. L. Rev.* 60 (1999): 677.

²⁶⁶ *Ibid.*

some implementing legislation setting out the details of the regime. The type of claim and the liability and remedies associated with it would thus emanate from the statute giving effect to the convention.²⁶⁷ This is undoubtedly the case in dualistic jurisdictions, and in the same vein, the convention law will also be reflected in national legislation in civil law jurisdictions which follow dualism. When it comes to monistic jurisdictions, whether or not they are of civil or common law persuasion, the law may be directly derived from the relevant convention if that convention is considered to be self-executing or directly applicable.²⁶⁸

Thus, we see that the nature of a claim for ship-source pollution damage can be found in case law relating to the law of torts in common law jurisdictions or statute law or convention law in both civil and common jurisdictions.²⁶⁹ In relation to the first source of law, it is particularly important in respect of common law jurisdictions which are not parties to ship-source pollution conventions on private law. At this juncture, it must be realized that in the United States, which is not a party to any relevant convention, the Oil Pollution Act 1990 (OPA 90) is the governing legislation. Given the fact that the U.S. is the world's second biggest oil importer and tanker traffic in U.S. waters is among the highest in the world,²⁷⁰ the effect of OPA 1990 on the rest of the shipping world is quite significant virtually representing a third international regime for liability and compensation in respect of

²⁶⁷ See *supra* note 119

²⁶⁸ Proshanto K. Mukherjee, *Maritime Legislation*, Malmo: WMU Publications; 2002, pp. 126-129

²⁶⁹ Tan, Alan Khee-Jin. *Vessel-source Marine Pollution: the law and Politics of International regulation.* (Vol. 45. Cambridge University Press, 2005); pp288-290

²⁷⁰ Ofiara, Douglas D. "Natural Resource Damage Assessments in the United States: Rules and Procedures for Compensation from Spills of Hazardous Substances and Oil in Waterways under US Jurisdiction." *Marine Pollution Bulletin* 44.2 (2002): 96-110.

ship-source pollution damage.²⁷¹

In the discussion earlier it has already been mentioned that in the realm of tort law in general, whether or not in the maritime field, fault-based liability is the norm.²⁷² Naturally, in this discussion we are not concerned with liability in contract or what obtains in the law of property or commercial law whether in the maritime or non-maritime context. All of these involve civil liability and proof of fault is the necessary ingredient for the claimant plaintiff in a legal action. Thus, if the defendant is not at fault or is culpable under the relevant law, it is not liable. Unless its conduct or behaviour is unacceptable to the law or is recognized as repugnant, no liability can arise on its part. Thus the quality of the defendant's conduct determines its liability in law regardless of how that conduct may be viewed outside the premises of the law.²⁷³ In such a case no recourse or remedy can be afforded to the plaintiff.

In the case of a claimant for pollution damage, however, the standard required is different. Although the quality of the defendant's conduct is still relevant, the plaintiff claimant does not have to prove any fault or culpa on the part of the defendant.²⁷⁴ In other words, the liability of the polluter is strict. The notion of strict liability in ship-source pollution law comes from convention law, the first of

²⁷¹ Rodriguez, Antonio J., and Paul AC Jaffe. "Oil Pollution Act of 1990." Tul. Mar. LJ 15 (1990): 1.

²⁷² Deakin, Simon F., Angus Johnston, and Basil S. Markesinis. Markesinis and Deakin's tort law. Oxford University Press, 2012; p41-44

²⁷³ *Ibid.*

²⁷⁴ Tan, Alan Khee-Jin. *Vessel-source Marine Pollution: the Law and Politics of International Regulation*. (Vol. 45. Cambridge University Press, 2005), pp. 337-338

which is the Civil Liability Convention of 1969.²⁷⁵ The legal rationale for it has already been explained above. The general rule can be stated as follows-

[O]ne who carries on an ultrahazardous activity is liable to another whose person, land or chattels the actor should recognize as likely to be harmed by the unpreventable mis-carriage of the activity for harm resulting thereto from that which makes the activity ultrahazardous, although the utmost care is exercised to prevent the harm.²⁷⁶

Whether terms such as “ultrahazardous”, “extra-hazardous” or “extraordinarily dangerous” are used, the essence is the same. Although there is still some lingering question about whether the activity must be dangerous, or whether the effect of the activity must result in dangerous consequences, or both, it is now well-established that the basis of liability for a ship-source pollution claim is strict.²⁷⁷

In terms of the subject matter of this thesis, the risk of third party liability of the polluter is undoubtedly focused on the hazardous or dangerous effect of the activity rather than the dangers associated with its conduct. It is the regulatory law of ship-source pollution, incidentally also derived from international conventions, which governs the issue of how shipping is to be conducted safely and with due regard to environmental protection. The enforcement of the regulatory measures is a matter for national law implementing the requisite convention provisions.²⁷⁸ The

²⁷⁵ See *supra* note 119.

²⁷⁶ American Law Institute, *First Restatement of Torts*, § 519 and 520

²⁷⁷ “An activity is ultra hazardous if it (a) necessarily involves a risk of serious harm to the person, land or chattels of others which cannot be eliminated by the exercise of the utmost care, and (b) is not a matter of common usage”. See Wright and Linden, *Canadian Tort Law* at p. 559.

²⁷⁸ Shearer, Ian A. “Problems of Jurisdiction and Law Enforcement against Delinquent Vessels.”

object of the regulatory law is to prevent pollution from happening, but if the measures fail, the issues of liability and compensation in the private law sphere become crucial.

There is no doubt that international uniformity in the area of private law of ship-source pollution damage can be best achieved through convention law.²⁷⁹ It was the *Torrey Canyon* oil spill that provided the impetus for the evolution and onward development of the convention law once again reinforcing the allegation that the international maritime law in the field of safety and environmental protection is reactive rather than proactive and usually follows in the heels of a maritime disaster. The Liberian tanker *Torrey Canyon* ran aground on Seven Stones Reef off the coast of southwest England in March 1967. The location of the spill was at that time a part of the high seas. The grounding caused a spill of approximately 80,000 tons of crude oil of Kuwaiti origin which was almost two thirds of the cargo on board. Neither the local coastal community nor the international maritime community was able to cope with the disastrous consequences of this unprecedented oil spill. The British Government had the vessel towed out to the high seas and bombed to destruction where it sank.²⁸⁰

International and Comparative Law Quarterly 35.02 (1986): 320-343.

²⁷⁹ Healy, Nicholas J. "International Convention on Civil Liability for Oil Pollution Damage, 1969" J. Mar. L. & Com. 1 (1969): 317.

²⁸⁰ Edgar Gold, "Pollution of the Seas and International Law", *J. Mar Law & Com.*, (1971) Vol. 3(1). See also Proshanto K. Mukherjee and Robert S. Lefebvre, "Fishermen and Oil Pollution Damage: The Regimes of Compensation" in J-L. Chaumel (ed.) *Labour Developments in the Fishing Industry*, Canada: Special Publication Fisheries and Aquatic Sciences 72 at p.74.

Under the auspices of the IMO²⁸¹ a diplomatic conference was convened in Brussels. The deliberations culminated in the adoption of the Intervention Convention²⁸² to address the public international law aspect of the problem giving the right to coastal states to intervene on the high seas in cases of imminent threat of pollution to their coastlines and related interests, and the International Convention on Civil Liability for Oil Pollution Damage, 1969²⁸³ to deal with the private law liability and compensation aspects of the problem. The two conventions were adopted in 1969.²⁸⁴ Following this event, the Legal Committee of IMO was created to deal with private law maritime issues falling under the mandate of the IMO. In 1971, the International Convention on the Establishment of a Fund for Compensation for Oil Pollution Damage²⁸⁵ was adopted as a companion to CLC to provide for the oil industry's role in contributing towards compensation where the amounts under the limitation regime of the CLC was insufficient to meet the claims of pollution victims or the shipowner's liability was excepted under the convention. The additional compensation is financed through a levy imposed on oil importers. The CLC 1969 and Fund 1971 conventions were substantially amended in 1992; from that time, 1992 is identified as the year of adoption of both conventions. The aim of the CLC/Fund package was to establish a uniform liability and compensation regime for ship-source pollution victims.²⁸⁶

²⁸¹ Then known as IMCO

²⁸² International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, 1969

²⁸³ International Convention on the Establishment of a Fund for Compensation for Oil Pollution Damage

²⁸⁴ See *supra* note 279, 317.

²⁸⁵ Fund Convention.

²⁸⁶ Xu, Jingjing. "The Law and Economics of Pollution Damage Arising from Carriage of Oil by Sea."

Through two resolutions of the Legal Committee adopted in 2000 the combined amount of compensation was raised by 57.3% to an aggregate of 203 million SDR and through a Protocol adopted in 2003, an optional third tier Supplementary Compensation Fund (SCF) was established. The maximum compensation, including that payable under the third tier Supplementary Fund, became 750 million SDR.²⁸⁷

Among the salient features of the CLC/Fund regime, two have already been discussed; namely, the nature and legal basis of the claim and the basis of liability being strict. Indeed the now-established strict liability basis respecting liability for ship-source pollution damage stems from the CLC.²⁸⁸ The issue of the contribution of the oil industry as an integral component of the scheme or package has also been discussed together with a synoptic consideration of the development of the limitation regime to its extant state.²⁸⁹

Aside from the limitation amounts, another important issue concerns circumstances under which the shipowner's limitation can be barred. Under the original limitation law, the "conduct barring limitation" provisions in conventions provided for the so-called "actual fault or privity" test which still prevails in the domestic regimes of

Maritime Policy & Management 36.4 (2009): 309-323.

²⁸⁷ *Ibid*; see also *supra* note 119, pp.1-12.

²⁸⁸ Wren, John. "Overview of the Compensation and Liability Regimes under the International Oil Pollution Compensation Fund (IOPC)." *Spill Science & Technology Bulletin* 6.1 (2000): 45-58.

²⁸⁹ *Ibid*.

certain jurisdictions such as the United States.²⁹⁰ Under this test, the shipowner could be deprived of its right to limit liability if it was found to be actually at fault or was privy to the act or omission that resulted in the damage leading to its liability.²⁹¹ In terms of international convention law, the CLC 1969 also contained the same test, but following the 1974 Athens Convention on Limitation of liability for Passengers and their Luggage (PAL) and the 1976 global Limitation Convention on Maritime Claims (LLMC), the test was changed.²⁹² In a number of English cases (for example,) the courts tended to allow limitation to be broken leaving insurers stuck with unlimited liability.²⁹³ The insurance industry instigated this change to the regime in exchange for agreeing to higher limits of liability and to be reasonably certain of what liability for indemnification they might face and what premium to charge so that they would not be unduly disadvantaged after the fact. Under this new test, the claimant has to bear the burden of proving its case on the merits against the defendant shipowner; and in addition, it must prove that the shipowner is not entitled to limit its liability. In other words, the claimant must fulfill a two-prong requirement.²⁹⁴ This new test was incorporated in CLC 1992 and contains a formula that is virtually a watertight assurance of non-breakability of the

²⁹⁰ Jingjing. Xu “The Law and Economics of Pollution Damage Arising from Carriage of Oil by Sea.” *Maritime Policy & Management* 36.4 (2009): 309-323; See also *supra* note 119.

²⁹¹ See Proshanto K. Mukherjee, “Essentials of the Regimes of Limitation of Liability in Maritime Law”, *The Admiral*, Vol. IV, Accra: Ghana Shippers’ Council, Unik Image, 2009, pp. 39-57.

²⁹² See Wang, Hui. *Civil Liability for Marine Oil Pollution Damage: a Comparative and Economic Study of the International, US and the Chinese Compensation Regime*, (Vol. 19. Kluwer Law International, 2011), pp 69-73; See also Eyer, Walter W. “Shipowners' Limitation of Liability. New Directions for an Old Doctrine.” *Stanford Law Review* (1964): 370-393.

²⁹³ Jingjing Xu, “The International Legal Framework Governing Liability and Compensation for Ship-Source Oil Pollution Damage” in Max Q. Mejia Jr., (Ed.) *Selected Issues in Maritime Law and Policy – Liber Amicorum Proshanto K. Mukherjee*, New York: Nova Science Publishers Inc., 2013 at p. 114

²⁹⁴ See Proshanto K. Mukherjee, “Essentials of the Regimes of Limitation of Liability in Maritime Law”, *The Admiral*, Vol. IV, Accra: Ghana Shippers’ Council, Unik Image, 2009, pp. 39-57.

limits much of which was put in place at the behest of the marine insurance industry, particularly the third party liability insurers, the P&I Clubs.²⁹⁵ The new formula was not well-received initially because the wording of the clause involved a reversal of onus allegedly converting what was originally a privilege of the shipowner into a right.²⁹⁶ Notably, the application of the *alter ego* concept has remained intact in the determination of conduct barring limitation. This concept recognizes the fact that when it comes to liability of a corporate or other inanimate entity as shipowner, it is the action of a director or officer of that entity who has the legal decision-making authority, that is determinant of the entity's liability or lack thereof, and it is he or she who stands as *alter ego* of the entity in relation to such issues.²⁹⁷

Another salient feature of the CLC/Fund scheme is the geographical scope of application of the conventions. The original CLC of 1969 was applicable to any pollution incident occurring within the territorial sea of a state party with no regard being paid to whether the flag state of the polluting ship is a party to the convention. At the time of the *Torrey Canyon* incident, the breadth of the territorial sea under international law was 3 nautical miles. Today, pursuant to UNCLOS and current customary international law, it is 12 nautical miles from the baseline of the coastal state. The geographical scope of application has been extended by the 1992 CLC to 200 nautical miles or the exclusive economic zone (EEZ). The convention being

²⁹⁵ Barbara J. Goldsmith, Tara K. Waikem, and Tara Franey (2014) Environmental Damage Liability Regimes Concerning Oil Spills - A Global Review and Comparison. International Oil Spill Conference Proceedings: May 2014, Vol. 2014, No. 1, pp. 2172-2192.

²⁹⁶ See *supra* note 290, Jingjing Xu.

²⁹⁷ *Ibid.*

geographically location-specific, it is different from typical flag state IMO conventions which apply to a ship on the high seas, at least, only where the flag state is a party to the convention.²⁹⁸

The CLC of 1969 was only applicable in respect of persistent oil carried in bulk as cargo That has not changed in the 1992 Convention. The 1969 convention only applied where the vessel was a laden tanker. But that has now changed under the 1992 CLC so that the vessel need not exclusively be a laden tanker. where the vessel was a laden tanker.²⁹⁹ That has now changed under the 1992 CLC. Non-persistent oils are now covered and the vessel need not exclusively be a laden tanker. Where it is a combination carrier and there are remnants of oil cargo remaining in the tanks following a voyage in which oil was carried as cargo the convention is applicable. Oil emanating from the bunkers of a tanker is covered; therefore pollution from bunker oil makes the owner liable. The liability is specific to the registered owner so that other entities such as operators and charterers are not caught by the convention.³⁰⁰

Pollution resulting from the spill of fuel oil in the bunkers of a tanker was covered by the CLC from the beginning but there was no regime dealing with bunker oil spills emanating from non-tankers. This gap in the law has now been addressed by

²⁹⁸See *supra* note 290, Jingjing xu.309-323.

²⁹⁹ See Article 1. 5 of CLC, 1969 “ “Oil” means any persistent oil such as crude oil, fuel oil, heavy diesel oil, lubricating oil and whale oil, whether carried on board a ship as cargo or in the bunkers of such a ship.”

³⁰⁰Article 1.5 of CLC, 1992.

the Bunkers Convention.³⁰¹ This Convention follows the scheme of the CLC/Fund package including the requirement for compulsory third party liability insurance but does not have a specific limitation regime. The limitation regime of the LLMC is recommended to be used by the state party to the Bunkers Convention.³⁰² The definitions of “pollution damage” as appearing in CLC 1992 as well as “preventive measures” and “incident” are inter-related and are much the same in the Bunkers convention as well.

The Fund consists of an Assembly, an Executive Committee and a Secretariat. Its headquarters are located in the IMO building at 4 Albert Embankment in London. The main task of the Executive Committee is to consider and approve settlements of major claims made against the Fund.³⁰³

4.2.2 Compensability

The issue of compensation must now be addressed. As mentioned earlier, compensation is a kind of civil remedy. The basic premise of a civil remedy is the doctrine of *restitutio in integrum* which has its roots in Roman Law and is expressed by the explanation that the plaintiff must be put back in the same position where he would have been if the wrong committed by the defendant had not been

³⁰¹ See Zhu, Ling. “International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001—Liability and Insurance Aspects.” *Pollution of the Sea—Prevention and Compensation*. Springer Berlin Heidelberg, 2007. 171-180; see also International Convention on Civil Liability for Bunker Oil Pollution Damage (Bunkers), 2001.

³⁰² *Ibid*, Zhu, Ling. 171-180; see also Wang, Hui. *Civil Liability for Marine Oil Pollution Damage: a Comparative and Economic Study of the International, US and the Chinese Compensation Regime*, (Vol. 19. Kluwer Law International, 2011), pp 70-72

³⁰³ See Jacobsson, Måns. “The International Oil Pollution Compensation Fund: ten years of claims settlement experience.” *International Oil Spill Conference*. Vol. 1989. No. 1. American Petroleum Institute, 1989, p. 509.

inflicted on him.³⁰⁴ The defendant who is liable must make restitution in totality to the plaintiff. Only then can the plaintiff be placed in the same position where he would have been had he not suffered the injury, loss or damage attributable to the defendant.³⁰⁵ In the realm of pollution damage from oil spills, compensation is virtually the only remedy with which the law is concerned. The compensability of a claim is what determines whether compensation will be forthcoming, whether under convention law, domestic statute law or through court decisions.

Assuming a claim falls under a convention, the statute may well be one that is giving effect to the convention; and the case law, at least in a jurisdiction where convention law applies, will reflect the judicial pronouncement, including interpretation of the convention in question. There is an added dimension and that is the so-called “Fund jurisprudence” These are cases decided by the Director of the IOPC or relevant Fund. Though the decisions do not have any legal weight, in practical terms they are useful because numerous claims do not go to the courts but are decided by the Fund. At any rate, compensability or what is compensable damage is the key question and the focus of our discussion.³⁰⁶

In terms of compensability under the conventions, it is to be observed that any claim that falls within the scope of “pollution damage” is compensable and it is a defined

³⁰⁴ Kiern, Lawrence I. “Liability, Compensation, and Financial Responsibility under the Oil Pollution Act Of 1990: A Review of the First Decade.” (1999) Tul. Mar. LJ 24 481, 487.

³⁰⁵ See *supra* note 290, Jingjing Xu, pp.309-323; see also Doud, Alden Lowell. “Compensation for Oil Pollution Damage: Further Comment on the Civil Liability and Compensation Fund Conventions.” J. Mar. L. & Com. 4 (1972): 525.

³⁰⁶ Rue, Colin M. De La, and C. B. Anderson. *Shipping and the Environment. Law and Practice. Shipping and the Environment : Law and Practice*. Informa, 2009, 79-86.

term. Indeed, the term has undergone considerable revision since the 1969 version of the CLC through to the current 1992 version; and in the opinion of some scholars,³⁰⁷ it is still far from perfection.

At the outset it must be appreciated that not all injury, loss or damage suffered is compensable at law. In the common law system only a claimant who has *locus standi* in respect of the damage claimed and in the court where the action is commenced will be compensated.³⁰⁸ Some mistakenly view *locus standi* and jurisdiction as one and the same. The distinction lies in the fundamental precept that a court may have jurisdiction over the subject matter of the dispute as well as over the person as litigant, but the litigant may not have the standing to appear before that court or in respect of the particular subject matter. When the court has such jurisdiction it can accept it and becomes seized of the case. But even if the court has jurisdiction but the litigant has no *locus standi*, the court cannot proceed with the matter and pass judgment.³⁰⁹ Notably, the convention law is silent in this matter and therefore one must resort to domestic law, which unfortunately lacks uniformity across the board in different jurisdictions. As a result, the convention law also cannot be applied uniformly.

³⁰⁷ See *supra* note 155; and See also, Proshanto K. Mukherjee, “Economic Losses and Environmental Damage in the Law of Ship-Source Pollution” in Aldo Chircop *et al.* (eds.) *The Regulation of International Shipping: International and Comparative Perspectives, Essays in Honor of Edgar Gold*, Leiden, Boston: Martinus Nijhoff, 2012.

³⁰⁸ Zhu, Ling, 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.

³⁰⁹ See *supra* note 155, pp. 75-95; and See also, Proshanto K. Mukherjee, “Economic Losses and Environmental Damage in the Law of Ship-Source Pollution” in Aldo Chircop *et al.* (eds.) *The Regulation of International Shipping: International and Comparative Perspectives, Essays in Honor of Edgar Gold*, Leiden, Boston: Martinus Nijhoff, 2012; *Guidelines for Maritime Legislation*, 2nd. Edn, Bangkok: ESCAP, etc. 1992, at p.53.

Be that as it may, there are essentially three issues involved in the law of compensation for ship-source pollution damage. These are compensation for loss of or damage to property, economic losses and environmental damage.³¹⁰

4.2.2.1 Damage to Property

To the extent that the convention definition of “pollution damage” is met, any damage to physical property would be compensable. Notably, the damage to property must be “loss or damage caused outside the ship by contamination resulting from the escape or discharge of oil from the ship, wherever such escape or discharge may occur.” Perhaps the best relevant example of damage to property resulting from ship-source pollution is the loss or damage relating to the fishing vessel of a fisherman including nets, trawls and other fishing gear.³¹¹

Other examples of physical damage to property would include damage to buildings and structures on land as well as the land itself located within close proximity of the oil spill and polluted by it. ³¹²Similar damage could be suffered by property at sea such as buoys, beacons, oil platforms artificial islands and the like. The example of physical damage to a fisherman’s property can be manifested in several ways. If a fishing vessel is located fairly close to a holed ship from which oil is gushing out, it may well be that the oil directly hits the fishing vessel with full force causing it to

³¹⁰ See *supra* note 83, pp.309-313.

³¹¹ See Jacobsson, Måns. “The International Oil Pollution Compensation Fund: ten years of claims settlement experience.” International Oil Spill Conference. Vol. 1989. No. 1. American Petroleum Institute, 1989, p. 519 and see also IOPC Fund Claims Manuals.

³¹² See *supra* note 293, pp. 105-133.

sink or suffer serious damage.³¹³ Conversely, the fishing vessel maybe at a fair distance away from the polluting ship but may suffer physical pollution damage caused by the spilled oil floating on the surface of the water and reaching the fishing vessel. Here, the damage is indirect being caused through the intermediary of the water carrying the pollutant.³¹⁴ This frequently happens in oil spill cases where physical damage is easily identifiable whether or not the property suffering pollution damage is a fishing vessel, any other kind of vessel or anything that is not a vessel including moored objects such as aids to navigation installed by coastal state authorities or structures connected to or protruding from land such as jetties, wharves pipe lines,*etc.*

The kinds of physical damage which attract most attention in the public eye are pollution damage suffered by beaches and shorelines as well as trees and other forms of vegetation. Under the conventions, a claimant who has suffered physical loss or damage from ship-source pollution need not prove any fault or negligence of the polluting ship.³¹⁵ Under the strict liability regime of the convention, is simply required to show that he suffered the damage and that the pollutant came from the polluting ship in question. However, the claimant must in all cases show that he has *locus standi* to bring a claim; this is best demonstrated by establishing some form of proprietary interest in the damaged property.

³¹³ See *supra* note 83, pp.309-313.

³¹⁴ See *supra* note 293.

³¹⁵ Doud, Alden Lowell. "Compensation For Oil Pollution Damage: Further Comment on the Civil Liability and Compensation Fund Conventions." J. Mar. L. & Com. 4 (1972): 525,530.

4.2.2.2 Economic Loss

As distinguished from physical loss, economic loss relates to a loss suffered by a victim of pollution damage which can only be depicted in financial or monetary terms. To be precise, physical loss is a loss arising directly from the pollution event in question.³¹⁶ Outside the realm of pollution damage, a financial loss can also be direct if it arises in connection with a financial transaction; on the other hand, an economic loss which is related to a physical loss has a distinctive status in law.³¹⁷ Generally speaking, economic losses are not compensable but there are exceptions. The fundamental reason why economic loss is not generally compensable is because of the lack of certainty and accuracy in its computation. In *Ultramares Corporation v. Touche*³¹⁸ Cardozo J. referred to liability for economic loss as "... liability in an indeterminate amount for an indeterminate time to an indeterminate class". This is a classic expression of the "floodgates of litigation" argument.

On the other hand, in many instances not allowing compensation for economic loss may pose undue hardship for a claimant and may result in justice not being served. On the whole, as a matter of general principle both in common law and civil law jurisdictions economic losses are not compensable. However, the generality of this proposition has been diluted by the making of exceptions in specific cases including

³¹⁶ Garza-Gil, M. Dolores, 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.

³¹⁷ Blume, Lawrence, and Daniel L. Rubinfeld. "Compensation for Takings: An Economic Analysis." *Cal. L. Rev.* 72.4 (1984): 569-628.

³¹⁸ (1931), 255NY 170 at p 179.

cases of ship-source pollution damage as discussed below.

4.2.2.3 Consequential Loss

By its very nature and definition, a consequential loss is indirect. It simply means a financial loss that results from or is consequential to a physical loss of or damage to property.³¹⁹ In the law of ship-source pollution, such consequential loss is compensable. As an example, where due to an oil spill a fisherman suffers damage to his property, such as his fishing vessel and fishing gear such as nets, trawls and other equipment, any loss of income consequential to such loss of property is compensable under general principles.

Consequential loss can also arise out of damage to the marine environment caused by an oil spill. In both cases, the fisherman is prevented from engaging in his fishing activity which is his source of livelihood, and therefore suffers a loss of income. The fisherman's inability to fish may result from a ban on fishing imposed by government authorities because of the waters being contaminated by pollution.³²⁰ Even if there was no such ban, the fish caught by the fisherman would be contaminated and he would be unable to sell his catch. Similarly, shorefront businesses could suffer financial losses as a consequence of the waters in the

³¹⁹ Spies, Emerson G., and John C. McCoid. "Recovery of Consequential Damages in Eminent Domain." *Virginia Law Review* (1962): 437-458.

³²⁰ See *Landcatch Ltd. v. International Oil Pollution Compensation Fund; Landcatch Ltd. v. Braer Corporation & Others*, [1998] 2 Lloyd's Rep. 552 (Outer House of the Court of Session of Scotland), See Gauci, Gotthard. "Ship-source Oil Pollution Damage and Recovery for Relational Economic Loss." *Journal of Business Law* (2000): 356-361; see also Gauci, Gotthard Mark. "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.

vicinity being polluted and business being detrimentally affected. Such consequential loss could also arise from physical losses suffered by the buildings or other structures of the business concern. In all cases of consequential loss, compensability rests on the proximity or remoteness of the financial loss to the physical loss suffered by the claimant or victim of pollution damage.³²¹ In other words, the consequential loss must be the proximate cause of the physical damage to property or the marine environment.

4.2.2.4 Pure Economic Loss

Apart from consequential losses which are compensable as economic losses, generally speaking a pure economic loss with few exceptions is not compensable.³²²

Pure economic loss is distinguishable from consequential loss as being independent of any property damage. Thus, pure economic loss is unrelated to the tortious act of the polluter and is only related to the financial loss suffered by the claimant. The principle of “special relationship of proximity” postulated by the House of Lords in the case of *Junior Books Ltd v. Veitchi Co. Ltd*³²³ is an exception in the general law of economic losses which has an analogous counterpart in ship-source pollution law.³²⁴ Loss of income suffered by subsistence fishermen who earn their livelihood from fishing in specific waters which have become polluted is compensable by virtue of the special relationship between the fishing vocation of the fisherman and

³²¹ Gauci, Gotthard Mark. “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.

³²² Van Dunné, Jan M. “Liability for Pure Economic Loss: Rule or Exception? A Comparatist's View of the Civil Law-Common Law Split on Compensation of Non-physical Damage in Tort Law.” *European Review of Private Law* 7.4 (1999): 397-428.

³²³ [1983]1 A.C. 520

³²⁴ See CMI Guidelines on Oil Pollution Damage, *Unif. Law Rev.* (1994) os-22 (1): pp. 327-339.

the polluted waters. This represents a modified application of the *Veitchi* doctrine³²⁵.

Pure economic loss can include loss of income, loss of profits and loss of opportunity to earn income. Their compensability as economic losses are tempered by sometimes vague and confusing notions of the nature of the loss. For example, in accounting terms gross profit is the difference between income and expenditure, and net profit is profit after taxes.³²⁶ However, the term profit and income are often used interchangeably so that in the present context, loss of profit and loss of income can mean the same thing.³²⁷ The question is what exactly is compensable if profit and income are to be differentiated. At any rate, losses are characterized as pure economic losses unless they fall within an exception. Unfortunately, there is a perceived lack of inconsistency in the way civil and common law courts deal with pure economic losses particularly in cases involving the CLC and Fund Convention. As well, the IOPC Funds take a different view of this issue resulting in further uncertainty for a claimant.³²⁸

In several maritime cases, in common law jurisdictions claims for pure economic losses have been upheld by the courts based on such principles as reasonable

³²⁵ [1983]1 A.C. 520

³²⁶ Van Dunné, Jan M. "Liability for Pure Economic Loss: Rule or Exception? A Comparatist's View of the Civil Law-Common Law Split on Compensation of Non-physical Damage in Tort Law." *European Review of Private Law* 7.4 (1999): 397-428.

³²⁷ Silverstein, Eileen. "On Recovery in Tort for Pure Economic Loss." *U. Mich. JL Reform* 32 (1998): 403.

³²⁸ Jacobsson, Mans, and Norbert Trotz. "The Definition of Pollution Damages in the 1984 Protocols to the 1969 Civil Liability Convention and the 1971 Fund Convention." *J. Mar. L. & Com.* 17 (1986): 467.

foreseeability of harm inflicted by the defendant on persons or property by negligent acts or omissions (*Veitchi case, supra*) or reasonable foreseeability by the defendant of reliance placed by the plaintiff on statements made by the defendant negligently,³²⁹ or if the economic loss was reasonably foreseeable by the defendant and resulted directly from the defendant's failure to discharge his duty of care owed to the plaintiff.³³⁰

A number of Canadian cases have also upheld or rejected recovery for economic losses based on the principles of foreseeability, remoteness and directness but the decisions are notoriously inconsistent.³³¹ Thus it is virtually impossible to derive any definitive principles with regard to recoverability for pure economic losses. Notably these were all non-ship source pollution cases where liability was based on negligence. It must be remembered that in the case of ship-source pollution, convention regimes apply which are based on strict liability, therefore the related case law must be appreciated in light of the strict liability regime.

Questions remain with regard to compensability of economic losses in the context of ship-source oil spills pertaining to such things as loss of access to fishing grounds and loss of future earnings of a fisherman or other claimant. There are taxation issues which beg the question of which law is applicable under which rules of

³²⁹ (*Hedley Byrne & Co. Ltd. v. Heller & Partners Ltd.*, [1964] A.C. 465; [1963] 1 Lloyd's Rep. 485 (H.L.))

³³⁰ *Spartan Steel and Alloys Ltd. v. Martin & Co. (Contractors) Ltd.* [1973] Q.B. 27 (C.A.) per Lord Denning where he cautioned against the floodgate of needless and baseless actions).

³³¹ Benson, Peter. "The Problem with Pure Economic Loss." *South Carolina Law Review* 60.4 (2009).

conflict of laws given that the jurisdiction of the spill and the tax jurisdiction of the claimant may be quite different.³³² Added to all of this, the decisions of the Funds are internally inconsistent although an emerging pattern may be detected through a perusal of the Annual Reports and Claims manuals where summaries of the decisions are reported. In this context it must be remembered that at least as far as English courts are concerned, the so-called "Fund jurisprudence" is of no legal consequence.³³³

4.2.2.5 Relational Economic Loss

Relational or secondary economic loss is a brand of pure economic loss which is not compensable and in respect of which no exceptions are made.³³⁴ Whereas a fisherman's claim for loss of income is compensable even though it is an economic loss, the claim of a fish processing plant or exporter of processed fish is not compensable because it is secondary and too remote from the pollution incident. To put it another way, the fisherman's claim is not secondary because he derives his livelihood from fishing which is affected by the pollution being the proximate cause of the loss. As can be gleaned from the non-maritime cases mentioned above, the deciding factor on compensability for economic loss rests on remoteness or proximate cause and the extent to which the polluter could have reasonably foreseen the damage.³³⁵ Thus, whereas the fisherman's claim meets that criteria, the fish

³³² See *Landcatch Ltd. v. International Oil Pollution compensation Fund; Landcatch Ltd. v. Braer Corporation & Others*, [1998] 2 Lloyds Rep. 552.

³³³ *Ibid.*

³³⁴ Goldberg, Victor P. "Recovery for Economic Loss Following the Exxon" Valdez" Oil Spill." *J. Legal Stud.* 1 (1994): 1-39.

³³⁵ Bernstein, Anita. "Keep It Simple: An Explanation of the Rule of No Recovery for Pure Economic

processor's claim does not because its loss is an indirect consequence of the pollution and it is therefore relational or secondary.

The notion of economic loss has been demonstrated in two cases decided by UK courts connected to the *Braer* oil spill in the Shetland Islands in Scotland and the *Sea Empress* in West Wales. As a result of the *Braer* oil spill Landcatch Ltd. which was in the business of rearing salmon from eggs to smolt in freshwater and then selling the smolts to sea water salmon farmers, brought two actions in the Scottish court; one against the IOPC Fund and the other against the owners and underwriters of the vessel.³³⁶ The losses were described as lack of sale and reduction in sale prices of smolts. Claims were also made for the additional costs of rearing and expenses incurred in respect of pursuing the claim. The IOPC Fund argued that its liability would only arise in the event the shipowners and underwriters were unable to meet the claims in full. Both defendants in their respective actions alleged that these were pure economic loss claims which were not compensable under common law principles.³³⁷ The actions were dismissed by the court on grounds of remoteness. On appeal by Landcatch, the lower courts' decisions were upheld. Notably, the economic loss claims of fishermen were admissible but the claim of Landcatch was not, on the ground that it was a relational economic loss which did

Loss.” Arizona Law Review 48 (2006): 773.

³³⁶ *Landcatch Ltd. v. International Oil Pollution compensation Fund; Landcatch Ltd. v. Braer Corporation & Others*, [1998] 2 Lloyds Rep. 552 (Outer House of the Court of session of Scotland), See Gothard Gauci, “Ship- source Oil Pollution Damage and Recovery for Relational Economic Loss” ,Journal of Business Law (2000): 356-361

³³⁷ *Ibid.*

not meet the proximate cause requirement.³³⁸ Another case is *Algrete Shipping v. IOPC Fund 1971 (The Sea Empress)*,³³⁹ in which the English court reached a similar decision. In this case, Tilbury, a company engaged in fish processing in Devon brought a claim against Algrete Shipping, owners of the *Sea Empress* which ran aground off Milford Haven in West Wales causing an oil spill. The local public authorities instituted a fishing ban. The claim was in respect of lost profits which Tilbury would have gained by selling processed whelks in the Korean market which it would have obtained under contracts with Welsh fishermen had it not been for the fishing ban. At the trial level, the claim for economic loss was rejected on the ground of remoteness, Steel J. holding that it was “secondary, derivative, relational and/or indirect” which was upheld on appeal.³⁴⁰

4.3 Liability under Convention Regimes

Ship-source pollution liability is largely if not entirely convention-based at least in terms of international law. The genesis of the convention regimes is the infamous *Torrey Canyon* disaster of 1967.³⁴¹ This was a Liberian tanker which ran aground on Seven Stones Reef off the west coast of England on 18 March 1967.³⁴² The pollution so caused was of unprecedented proportions leaving not only the local community and the British government, but also the international community at

³³⁸ *Ibid.*

³³⁹ [2003] 1 Lloyd's Rep 227

³⁴⁰ See B. Soyer, “Ship-sourced oil pollution and pure economic loss: The quest for overarching principles”, (2009), 17 *Torts Law Journal*, pp. 270-294

³⁴¹ Reichenbach, Franz. “Legislative Developments Concerning Oil Pollution of the Seas.” *Int'l Bus. Law.* 8 (1980): 9.

³⁴² Jingjing Xu, “The International Legal Framework Governing Liability and Compensation for Ship-source Oil Pollution Damage”, in Maximo Q. Mejia, Jr. *Policy- Liber Amicorum Proshanto K. Mukherjee, Selected Issues in Maritime Law and Policy*, New York: Nova Science Publishers, 2013 at pp. 105-133

large, in a state of unprepared despair.³⁴³ The British Government had the ship taken out to the deep sea and bombed it to destruction. The vessel sank and left the maritime world stunned and bewildered. Neither the shipping industry nor lawyers, policy makers and scientists had a clue as to how the catastrophe was to be handled. Local residents collectively poured laundry detergents from wherever they could but later it was found that the chemicals did more harm to the marine environment than the oil.³⁴⁴

On the positive side, in 1969, IMCO as it was then, (now IMO) swung into action and convened a diplomatic conference in Brussels.³⁴⁵ From its deliberations two international conventions emerged; one on public international law and the other on private maritime law. The public international convention was the Intervention Convention³⁴⁶ which allows coastal states to intervene on the high seas in the event of a pollution incident if its coast line or coastal interests are in imminent danger of suffering pollution damage. This convention was a landmark achievement of the IMO because it was the first time an impingement on exclusive flag state jurisdiction on the high seas was legislated through convention law. The other was the Civil Liability Convention (CLC) which dealt with liability for pollution damage of the registered owner of a laden tanker.³⁴⁷ This convention was also in

³⁴³ Nanda, Ved P. "Torrey Canyon Disaster: Some Legal Aspects, The." Denv. LJ 44 (1967): 400.

³⁴⁴ See Edgar Gold, "Pollution of the Seas and International Law", J. Mar Law & Com, (1971) Vol. 3(1)

³⁴⁵ See "Brief History of IMO" <http://www.imo.org/en/About/HistoryOfIMO/Pages/Default.aspx> accessed 25 September 2016.

³⁴⁶ International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, 1969

³⁴⁷ See *supra* note 119.

many ways a landmark because it was the first of its kind. Also, it had several features which were special if not unique in the genre of convention law.³⁴⁸

Among other features, the CLC not only governs ship-source oil pollution from laden tankers caused by cargo oil but also bunker oil. Only the registered owner of the vessel can be liable. This feature was introduced because of the difficulties faced by claimants in the *Torrey Canyon* incident to track down the entity who could be held liable for the pollution damage.³⁴⁹ At the diplomatic conference, there was considerable debate over the nature of liability. This was resolved by the convention providing for strict liability of the ship owner.³⁵⁰ The issue of who should be liable was a subject of debate in relation to whether the cargo owner should bear any liability.

The issue was left in limbo because no legal basis could be found on which the cargo owner could be held liable. The argument was made that the cargo being in the custody of the ship-owner at the time of the pollution incident, only the ship-owner could be liable. The counter-argument was that had the cargo not been oil; had it been for example, fertilizers there would have been no pollution damage suffered by any victim or damage to the marine environment.³⁵¹ The matter was brought back to the IMO two years later in 1971, once again in Brussels at another

³⁴⁸ See *supra* note 102.

³⁴⁹ Boyle, Alan E. "Globalising environmental liability: the interplay of national and international law." *Journal of Environmental Law* 17.1 (2005): 3-26.

³⁵⁰ See *supra* note 124, 319-343.

³⁵¹ *Ibid.*

diplomatic conference at the end of which the International Oil Pollution Compensation Fund Convention was adopted.

Going back to the CLC the strict liability character of the convention carries with a number of defences available to the shipowner, which can relieve him from liability. The strict liability regime was rationalized by reference to the House of Lord decision in *Rylands v. Fletcher* (1868).³⁵² which put forward the notion that for a plaintiff to have to prove the defendant's fault or negligence in the event of damage resulting from an ultra-hazardous activity was too onerous a burden for him to bear. Incidentally, as mentioned earlier, whereas strict liability can be subject to certain specific defences, in absolute liability there is no such avenue of escape for the defendant polluter.³⁵³ Strict liability defences include act of god or *force majeure*, situations where a person other than the ship-owner may be the one causing the pollution or where the pollution resulted from an act or omission of a third party with intent to cause damage, or caused by the negligence of a government authority in relation to maintenance of navigational aids.³⁵⁴ Article III, paragraph 2 of CLC 1992 provides that the owner can escape liability if he proves that the damage resulted from *inter alia*, a *force majeure* situation or a third party act or omission wholly caused by that party as mentioned above, or the negligence of a government or other authority as mentioned above. Subparagraph (a) specifically refers to “...act of war, hostilities,, civil war, insurrection or a natural phenomenon of an

³⁵² *L.R.3 H.L. 330*

³⁵³ See *supra* note 119.

³⁵⁴ Article III, paragraph 2 of CLC Convention.

exceptional, inevitable and irresistible character...”

4.3 Hazardous, Noxious and Harmful Substances

4.3.1 Preliminary Observations

There are numerous varieties of dangerous goods ranging from cargo that is inflammable such as oil and gas to substances with the potential for explosion. There are many types of other cargo such as species of grains as well as coal, newsprint or paper pulp carried in rolls that are dangerous in various ways. Some types of cargo can expand in weight drastically if they become wet by exposure to sea water. Such increase in the weight of the cargo may result in the cargo increasing the deadweight of the ship and resulting in a reduction of its freeboard. There are other types of cargoes that emit dangerous gases. These matters are controlled by application of the various IMO codes designed to prevent or minimise unsafe conditions resulting from the dangerous nature of the cargo.³⁵⁵

4.3.2 Development of HNS Convention

To cover more substances other than oil with a view not only to ensure maritime safety and prevent marine pollution, but also to address the issues of liability and compensation, the HNS Convention was adopted by IMO in 1996.³⁵⁶ Concerning carriage of dangerous goods by sea, the regulatory law embedded in the IMDG Code has been the main international instrument to which reference has been made.

³⁵⁵ Pawlow, Jonathan R. “Liability for Shipments by sea of Hazardous and Noxious substances.” *Law & Pol’y Int’l Bus.* 17 (1985): 455.

³⁵⁶ Goransson, Magnus. “HNS Convention.” *Unif. L. Rev.* ns 2 (1997): 249; see also “HNS Convention Implementation” <http://www.imo.org/en/OurWork/Legal/HNS/Pages/HNSConvention.aspx> accessed 25 September 2016

However, with increasing quantities of dangerous goods being carried by sea, the awareness of protecting the ship and its crew from danger has extended to the marine environment. The maritime community started to pay more attention to the characteristics of the dangerous goods transported by sea resulting in serious damage to the marine environment and caused by different categories of dangerous, hazardous and noxious cargoes other than oil.³⁵⁷

However, the HNS Convention 1996 has not entered into force as yet. Going back in time, an "Overview" of the convention was approved by the IMO Legal Committee at its eighty-fourth session in April 2002. An international conference held in 2010 adopted a Protocol to the 1996 Convention which was designed to address the practical problems preventing many States from subscribing to the Convention. The 1996 Convention together with the 2010 Protocol constitutes the 2010 HNS Convention. Subsequently another Overview was prepared pursuant to Resolution 4 of the Conference calling for a revision of the original document, taking account of the changes effectuated through the 2010 Protocol.³⁵⁸

The so-called Overview in its revised form is consistent with the IMO Assembly Resolution A.932(22) adopted at its twenty-second session the object of which was to encourage states to give priority to sorting out the difficulties impeding ratification of the convention and moving towards taking the convention on board

³⁵⁷ Wetterstein, Peter. "Carriage of Hazardous Cargoes by Sea-The HNS Convention." (1996) 26 Ga. J. Int'l & Comp. L.595.

³⁵⁸See *supra* note 70, pp. 40-61

and implementing it.³⁵⁹ The Overview is basically an explanatory document providing useful information but does not provide any recommendations. As such it has no legal significance and is even at a lower state of persuasiveness than *para droit*. In terms of its explanatory value, it provides a basis for facilitating responses to questions from parties interested in the convention regarding its object and implications.³⁶⁰

The notion of what exactly is HNS is defined by reference to lists of substances found in numerous international instruments including important safety codes, the objects of which are to enhance maritime safety and prevent or mitigate ship-source pollution damage.³⁶¹ Article 1(5) of the HNS Convention provides by reference the various instruments in which the hazardous and noxious substances of the convention are addressed. By and large, amendments made to these instruments by the relevant IMO Committees since 1996, are included. One exception in this regard is hazardous chemicals contained in solid bulk materials that are subject to provisions of the IMDG Code and other instruments which were in effect in 1996 when the HNS was adopted.³⁶²

³⁵⁹ Kiran, R., and Bhanu Krishna. "Liability and Compensation for Oil Pollution Damage: An Examination of IMO Conventions." (2010) 3 NUJS L. Rev. 399.

³⁶⁰ *Ibid*; see also Bleyen, Lief. "Liability for pollution from hazardous and noxious substances: The revival of the 1996 HNS Convention." (2011).

³⁶¹ Verlaan, P. "Selected Summary Highlights from the 55th Meeting of the intergovernmental Marine Environment Protection Committee (MEPC 55) of the International Maritime Organisation (IMO), 9–13 October 2006, held at Central Hall, Westminster, London." *Underwater Technology* 27.2 (2007): 67-68.

³⁶² See IMO Circular letter No.3144, dated 6 January 2011, listing solid bulk materials possessing chemical hazards mentioned by name in the IMSBC Code and also in the IMDG Code in effect in 1996, and solid bulk materials possessing chemical hazards mentioned by name in the IMSBC Code but not mentioned in the IMDG Code in effect in 1996.

From the viewpoint of the evolutionary development of the international regime of dangerous goods, an important observation is that traditionally such goods were only carried in packaged form. The object of instruments such as the IMDG Code was to institute a regulatory regime with respect to dangerous goods so transported by sea to provide for shipboard maritime safety. Regulations were thus designed to curb and prevent such hazardous occurrences as fires and explosions.³⁶³ As the movement of hazardous goods by sea increased and the quantities of such goods increased correspondingly, public awareness of the potential negative impacts of such carriage of goods rose exponentially, particularly in relation to areas outside the ship, more attention was being given to the hazardous characteristics of the cargoes.³⁶⁴ Serious damage resulting from fires, explosions and toxicity, to name some of the growing concerns, with the addition of accidental spills and disposal of pollutants at sea further raising threats of pollution became preoccupations of law and policy makers. Several useful initiatives were taken by IMO exemplified by the adoption of MARPOL 73, the IMDG Code and the BCH Code.³⁶⁵ These are all regulatory standard-setting instruments heavily technical in content and geared towards safety of ships and crew as well as protection of the marine environment. In terms of hazardous and noxious substances, the articulation of Annex II of MARPOL 73 addressing noxious liquid substances transported in bulk was

³⁶³ Wetterstein, Peter. "Carriage of Hazardous Cargoes by Sea-The HNS Convention." *Ga. J. Int'l & Comp. L.* 26 (1996): 595.

³⁶⁴ See *supra* note 256.

³⁶⁵ International Code for the Construction, Equipment and Operation of Ships Carrying Dangerous Chemicals in Bulk, see more information about BCH in paragraph- "Code for the Construction Equipment of Ships Carrying Dangerous Chemicals in Bulk (BCH Code)" of IBC Code on <http://www.imo.org/en/OurWork/Safety/Cargoes/CargoesInBulk/Pages/IBC-Code.aspx> , accessed 25 September

undoubtedly a major step towards developing a much-needed international regime in the field of sea carriage of dangerous goods. It remains an important facet of the universality of regulation and control of such goods transported by sea.³⁶⁶

Arguably, regulatory measures are never finite, and in the subject field much still remains to be done given that risks from dangerous goods continue to pose significant dangers and new risks arise every day. Thus, some are of the view that technical rules and standards pertaining to maritime safety and environmental protection are still inadequate.³⁶⁷ In this regard, it can be said that conceptually prevention and remedy lie on opposite sides of a continuum when considering safety in relation to carriage of dangerous goods by sea and the risks associated with environmental damage.

All this to say that whereas the preventive dimension of the problem received at least sizable attention,³⁶⁸ considerations of civil liability and compensation in this field remained in the doldrums for a very long time until the adoption of the CLC. Public sentiment as well as maritime interests remained conspicuously oblivious to the need for a private law regime addressing liability and compensation issues with

³⁶⁶ Becker, Rebecca. "MARPOL 73/78: An Overview in International Environmental Enforcement." *Geo. Int'l Envtl. L. Rev.* 10 (1997): 625.

³⁶⁷ McConnell, Moira L., and Edgar Gold. "Modern Law of the Sea: Framework for the Protection and Preservation of the Marine Environment, ." *Case W. Res. J. Int'l L.* 23 (1991): 83; See also Ayorinde, Akintayo A. "Inconsistencies between OPA'90 and MARPOL 73/78: What is the Effect on Legal Rights and Obligations of the United States and Other Parties to MARPOL 73/78." *J. Mar. L. & Com.* 25 (1994): 55.

³⁶⁸ L de La Fayette, Louise. "The Marine Environment Protection Committee: the conjunction of the Law of the Sea and international environmental law." *The International Journal of Marine and Coastal Law* 16.2 (2001): 155-238.

regard to third party victims of damage suffered from the carriage of dangerous and polluting goods by ships. Claims of such victims include damage to property, loss of life, harm to one's person and health. But the emphasis of law and policy makers was on preventive rather than on remedial measures including imposition of civil liability and recovery of damages.³⁶⁹

The lethargy of concerned interests in pursuing private law goals was partly attributable to their lack of experience in dealing with dangerous goods liability coupled with the static position of judicial decisions relating to liability and compensation matters involving this subject.³⁷⁰ The IMO Legal Committee was slow in dealing with the development of the law.³⁷¹ Several issues arose which prevented or stalled progress with regard to the development of a liability and compensation regime in respect of dangerous or hazardous goods carried by sea. At one stage consideration was also being given to extending the reach and application of the CLC to encompass substances other than oil such as dangerous and hazardous goods.³⁷² Several questions arose in this context including who should be liable, what should be the nature of the liability, what limitation regime should be established and whether there should be a requirement for compulsory insurance.

³⁶⁹ BrunnÉee, Jutta. "Of Sense and Sensibility: Reflections on International Liability Regimes as Tools for Environmental Protection." *ICLQ*. 53.02 (2004): 351-368; See also Gehring, Thomas, and Markus Jachtenfuchs. "Liability for Transboundary Environmental Damage Towards a General Liability Regime." *Eur. J. Int'l L.* 4 (1993): 92.

³⁷⁰ Daniel, Anne. "Civil liability regimes as a complement to multilateral environmental agreements: sound international policy or false comfort?." (2003):12 *REIEL3* .225-241.

³⁷¹ Schuda, Robert S. "International Maritime Organization and the Draft Convention on Liability and Compensation in Connection with the Carriage of Hazardous and Noxious Substances by Sea: An Update on Recent Activity, The." *U. Miami L. Rev.* 46 (1991): 1009.

³⁷² Wetterstein, Peter. "Carriage of Hazardous Cargoes by Sea-The HNS Convention." (1996) 26 *Ga. J. Int'l & Comp. L.*595.

Another point of consideration was whether a fund should be established like in the case of oil through the Fund Convention to provide for compensation beyond the limits of liability of the shipowner; or whether some other mechanism should be contemplated.³⁷³

Eventually, a convention was adopted in 1996 in the manner described earlier. The definition of shipowner is expanded in the HNS Convention to include the registered shipowner as well as agent, operator and disponent owner.³⁷⁴ Any of them can be liable under the strict liability regime designed in the same manner as in the CLC. Thus the ship owner (as defined) of a ship carrying HNS is subject to strict liability and liable to pay damages or compensation to victims of HNS damage regardless of fault. Proof of damage is all that is necessary to attract liability.³⁷⁵ There is an HNS Fund established under the Convention, but there is no separate convention as in the case of the Fund Convention. There is limitation of liability of the shipowner. If claims exceed the limitation of liability of the shipowner, the HNS Fund is activated subject to some conditions. There is a compulsory insurance requirement as in the CLC. These are among the very salient features of the HNS Convention.³⁷⁶

4.3.3 Summary Contents of HNS Convention

³⁷³ *Ibid*, p. 597.

³⁷⁴ See *supra* note 372.

³⁷⁵ HNS Convention International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, 1996 ; including the final act of the International Conference on Hazardous and Noxious Substances and Limitation of Liability, 1996, and resolutions of the conference, London International Maritime Organization 1997, pp. 54-57.

³⁷⁶ See *supra* note 372.

It is not intended in this section to enter into a clause-by-clause description and analysis of the convention but rather to identify the salient features which were the outcome of protracted and intensive deliberations at IMO. Given that the convention has two dimensions to it, from the safety point of view of carriage of HNS and environmental concerns, it is important to note that the liability regime is hybrid in scope and nature.³⁷⁷ It has been pointed out earlier that there is no specific safety convention dealing with liability issues as in the case of liability associated with ship-source pollution damage.³⁷⁸ Therefore, it is to be noted that the general principles of liability apply in respect of the safety dimension of the convention tempered by the provisions in the convention which focus on the HNS characteristics of the damage causing agents.

As with regard to any other convention, it is important at the outset to look at some of the definitions. First, the definition of "ship" as provided in Article 1 (1) should be noted which means "any sea-going vessel and sea-borne crafts, any types what so ever." Naturally, tankers carrying persistent or non-persistent oil as well as chemical tankers would be included in this definition.³⁷⁹ State party to this HNS convention are permitted under Article 5(1) to exclude from application, ships less than 200 gross tonnage, carrying HNS in packaged form only while transiting between

³⁷⁷ *Ibid.*

³⁷⁸ Rengifo, Antonio. "The International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances at Sea, 1996." (1997) 6REIEL2.191-197.

³⁷⁹ Article 1 (1) of HNS Convention.

national ports or terminals.³⁸⁰ The term HNS is defined broadly and inclusively as as packaged goods, bulk solids, liquids, liquefied gases including LNG and LPG.³⁸¹ In the convention, the extended definition appears by references to lists of substances found in various IMO instruments dealing with maritime safety and pollution prevention, mainly IMDG Code and MARPOL.³⁸² The HNS convention applies only with respect to these substances carried as cargo or found on board as cargo residuals from previous voyage, but it does not apply radioactive materials.³⁸³

The convention covers oils listed in MARPOL Annex I Appendix I and are divided into eight categories with each category consisting of a number of oils. The convention refers to the word "damage" as distinguished from the term "pollution damage " used in the CLC, Fund and Bunkers Conventions. It should be obvious that the reasons the word damage is that it is not restricted the damage arising from pollution but is also associated with the notion of safety in terms of HNS.³⁸⁴ It is important to note that this definition includes loss of life or personal injury, loss of or damage to property outside of the ship, loss of damage by contamination of the environment and costs of preventive measures, or associated with the carriage of HNS. Notable in this context is that the definition of "pollution damage" in the CLC

³⁸⁰ Article 5(1) of HNS Convention.

³⁸¹ *Supra* note 378,191-197.

³⁸² See Article 1.5 “Hazardous and noxious substances” (HNS) means...in Chapter I. General Provisions Definitions of HNS Convention.

³⁸³ Jingjing Xu “the International Legal Framework Governing Liability and Compensation for Ship-source Oil pollution Damage” in Maximo Q. Mejia, Jr. (Ed.), *Selective Issues in Maritime Law and Policy- Liber Amicorum Proshanto K. Mukherjee*, New York: Nova Publishers, 2013, p.105 at 122

³⁸⁴ See Article 1.6 ““Damage” means means...” in Chapter I. General Provisions Definitions of HNS Convention.

and Fund Conventions understandably do not contain references to loss of life or personal injury.

The geographical scope of application of the HNS Convention is somewhat complex and differs according to the type of damage. In some instances, it applies even if the damage takes place in a state that is not a party to the convention. As explained by the notable author in this field, the scope of application is particularized by a reference to four situations in Article 3 as follows:

- in the case of loss of life or personal injury, the convention applies to "any damage caused in the territory including the territorial sea, of a State Party";
- in the case of "damage by contamination of the environment", it applies to the EEZ of a State party;
- for damage other than by contamination of environment outside the territory or territory sea of any state, it applies if caused by a substance carried on board a ship of which the flag state is a State Party; and
- for preventive measures wherever it may be taken ³⁸⁵

It should be noted that damage caused by HNS other than environmental damage attracts the application of the convention and "preventive measures" qualifies as damage if the measures are taken within the territory, territorial sea, or EEZ as mentioned in paragraphs (a), (b) and (c) of Article 3.³⁸⁶

³⁸⁵ See Article 3 of HNS ; see also *supra* note 383, p.24

³⁸⁶ *Ibid*, pp 124-125

As in the other ship-source pollution conventions the number of defences are available to the carrier which are basically the same except for an extra item of defense provided in Article 7(2)(d) which refers to the shipper's failure to provide information on the HNS nature of cargo shipped which has caused the damage in question or which has prompted the owner not to obtain insurance, with the proviso that the owner or his servants and agents had no knowledge of the nature of the substances shipped.³⁸⁷

There is a provision for compulsory insurance and for direct action against the insurer by the claimant.³⁸⁸ The owner can invoke limitation of liability unless it is proved that "the damage resulted from the personal act or omission of the owner, committed with the intent to cause such damage, or recklessly and with knowledge that such damage would probably result".³⁸⁹ The convention provides the two tier systems pursuant to which compensation is payable by the registered owner under the first tier and the second tier comprising the HNS Fund financed by the cargo industry which is available for payment of claims beyond the limitation of liability of the registered shipowner..³⁹⁰ The HNS Fund consists of an oil account, and LNG account, and LPG account and a general account.³⁹¹

The above discussion concludes the consideration of HNS and the HNS Convention

³⁸⁷ Article 7(2)(d) of HNS Convention

³⁸⁸ Article (8) HNS Convention

³⁸⁹ Article 9 (2) HNS Convention

³⁹⁰ Article 7 HNS Convention

³⁹¹ See Article 16 in General provisions on contributions HNS Convention.

as the prime ingredients of private law pertaining to dangerous goods.

4.4 Nuclear Damage

4.4.1 Preliminary Remarks

There is no doubt that damage caused by nuclear substances whether or not they are carried as goods and regardless of whether they pertain to a carrier-shipper transaction or to third parties, is the deadliest of all dangerous goods.³⁹² Nuclear matter carried on board ship is referred to as “material” and is not limited to cargo or goods in terms of the rules that apply by virtue of convention law.³⁹³ They apply across the board where they do and the obvious focus is on liability to third parties beyond the scope of the carrier-shipper relationship.³⁹⁴ As such, the issue of carriage of nuclear material on ships is dealt with under the sub-heading of "Nuclear Damage" but is by no means constrained by consideration of the carrier-shipper relationship.

Liability issues relating to danger and damage emanating from nuclear material in relation to ships largely involve their impact on third parties. In this regard, issues pertaining to liability for nuclear damage, including the nature of the liability and limitation are discussed specifically with regard to third party liability. The discussion is therefore contained in this chapter which deals with third party liability. In this context it is notable that there are several conventions dealing with

³⁹² McRae, Ben. “The Compensation Convention: Path to a Global Regime for Dealing with Legal Liability and Compensation for Nuclear Damage.” (1998) *Nuclear Law Bulletin* 61.25-38.

³⁹³ See *supra* note 135.

³⁹⁴ *Ibid.*

nuclear materials. They are all relevant in some way or another because they are interrelated.

4.5.2 Relevant Convention Law

In so far as liability for transnational nuclear damage is concerned, there are six relevant conventions. These are - Convention on Third Party Liability in the Field of Nuclear Energy, 1960 (Paris Convention), Protocols 2004³⁹⁵ Convention on the liability of the Operators of Nuclear Ships, 1962,³⁹⁶ Convention Supplementary to the (OEEC) Paris Convention 1963 (Brussels Supplementary Convention),³⁹⁷ International Convention on Civil Liability for Nuclear Damage, 1963 (Vienna Convention), Protocol 1997;³⁹⁸ Convention Relating to Civil Liability in the Field of Maritime Carriage of Nuclear Material, 1971³⁹⁹ and the Convention on Liability of Operators of Nuclear Installations check date. The application of the rules of the Paris Convention was originally limited to the European Member States of the Organization for European Economic Cooperation (OEEC) which later came to be known as the Organization for Economic Co-operation and Development (OECD). The rules were subsequently incorporated into the Vienna Convention on Civil Liability for Nuclear Damage, 1963.⁴⁰⁰ The Vienna Convention was global in scope

³⁹⁵ *European Yearbook* 1960, 203, 268

³⁹⁶ *American Journal of International Law* 1963, 268

³⁹⁷ *International Legal Materials* 1963, 685

³⁹⁸ *UN Treaty Series* Vol. 1963, Nr 1-16197, p. 263

³⁹⁹ *International Legal Materials* 1972, 277

⁴⁰⁰ *UNTS*, Vol. 1063, No. 1-16197, 263

as compared with the original Paris Convention. It was developed within the operational framework of the International Atomic Energy Agency (IAEA).⁴⁰¹

4.4.3 Absence of General Carriage Conventions Relating to Nuclear Material

As can be seen from the above, only two, namely, the 1962 and 1971 Conventions relate directly to civil liability for nuclear damage in connection with ships. But there are no conventions dealing with the carrier-shipper relationship in respect of carriage of nuclear goods on board ships and none of the other carriage conventions specifically address this matter. Needless to say, the legal obligations are based on the contractual relationship between the two parties and arguably tilted in favour of the carrier as in the case of other kinds of dangerous goods.⁴⁰² The rationale for this is that the shipper of the cargo is in the best position to know of its characteristics and the potential harm it may cause.⁴⁰³ The shipper is therefore under a stringent duty of disclosure and must discharge that duty faithfully and without fail.⁴⁰⁴ Added to this verity is the fact that nuclear substances are ultra-hazardous to society as a whole and therefore engender responsibilities on the part of the states involved in the carriage of such substances.⁴⁰⁵

4.5.4 Special Convention Regime for Sea Carriage of Nuclear Material

⁴⁰¹ Doeker, Gunther, and Thomas Gehring. "Private or International Liability for Transnational Environmental Damage-The Precedent of Conventional Liability Regimes." (1990) *J. Envtl. L.* 2: 1.

⁴⁰² See discussion in Chapter 3

⁴⁰³ Roark, Holly. "Explosion on the High Seas-The Second Circuit Promotes International Uniformity with Strict Liability for the Shipment of Dangerous Goods: *Senator v. Sunway*." *Sw. UL Rev.* 33 (2003): 139.

⁴⁰⁴ See *supra* note 256.

⁴⁰⁵ See Article 235 of UNCLOS dealing with responsibility and liability of states regarding protection and preservation of the marine environment.

As mentioned above, in the context of carriage of nuclear materials by sea, there is no convention regime governing carrier-shipper relationships. The regime is based on national statute law or the principles of contract law pertaining to carriage of goods by sea as found in the law evolving out of the customary law in the private law domain.⁴⁰⁶ The convention regimes only address international law from the perspective of concerns of states, one object of which is to attempt to create uniformity in the law while recognizing the role of private maritime law in this field.

The convention regime consisting of the five conventions referred to above basically exist because nuclear materials, whether transported by ship or other modality, including and stretching into the arena of nuclear installations, involves state and inter-state interests.⁴⁰⁷ The reason for a conglomerate of conventions is mainly due to the extraordinary or ultra-hazardous character of anything nuclear and its potentially devastating effects on human society as a whole if damage ensues regardless of how it happens or who in law might be responsible. The international and political dimension of transportation of nuclear materials is thus abundantly apparent which has provided the impetus for the development of convention law but without detailing out the parameters of liability except for depicting an express recognition of the principle of absolute liability.⁴⁰⁸

⁴⁰⁶ See *supra* note 2, pp 520-532

⁴⁰⁷ See Goldie, "International Principles of Responsibility for Pollution", *Colum. J. Transnat'l L.* 1970, 311

⁴⁰⁸ See *supra* note 2, pp 526-527

The conventions mentioned above introduce the system of “channeling” of liability; the channeling process is through the ownership of the nuclear installation. It is submitted in this context that where there is a nuclear power plant on board a ship, in other words, it is a nuclear-powered ship, the power plant in question would be considered to be a nuclear installation in the event of nuclear damage attributable to a nuclear incident.⁴⁰⁹ Incidentally, the obligation of channelling liability is not confined to liability following a breach of a norm of international law but rather is set out in terms of primary rules,⁴¹⁰ and includes the development of criteria and procedures such as compulsory insurance and compensation funds.⁴¹¹ It is notable in this context that with regard to marine pollution damage, it was agreed at a fairly early stage of the negotiations at the Third United Nations Conference on the Law of the Sea that no detailed rules on liability issues would be adopted.⁴¹²

The focus in terms of “channeling” was placed on consolidating all liability onto the operator of a nuclear installation. Any liability borne by any other potential defendant will be shifted on the operator too. It is perhaps surprisingly conspicuous that no substantial limitation is stipulated; rather only fairly low compensation is actually made available in the event of nuclear damage.⁴¹³ The combined Paris/Brussels regime was not geared towards enhancing the position of innocent parties, real or potential, but rather the intention was to develop a liability regime

⁴⁰⁹ *Ibid*, pp488-489

⁴¹⁰ See Handl, “International Liability of States for Marine Pollution”, *Canadian Yearbook of International Law* 1983, 103 seq.48 See Art 253.3:

⁴¹¹ See also Stein, “Principles of Responsibility and Liability in the Law of the Sea”, in R. Stein (ed), *Critical Environmental Issues on the Law of the Sea*, 1975, 50.

⁴¹² See G. Timagenis, *International Control of Marine Pollution*, New York 1980, Vol 2, 624.

⁴¹³ See *supra* note 2, pp. 520-525

with a view to promoting unimpeded technological development. The suppliers of nuclear material influenced states into accepting government financed compensation schemes which in turn reinforced the channeling principle. The end result was a placement of caps on limitation of liability in respect of the quantum of compensation and also the parties liable and to whom the limitations would apply.⁴¹⁴

The above-noted intentions are reflected in the Paris and Vienna Conventions under which operators of nuclear plants are subjected to absolute liability for all damage resulting from their activity, including any damage occurring in the course of transportation of nuclear material. It is notable, nevertheless, that in the preparation of the 1960 Convention relating to nuclear energy, there was no inclination on the part of the drafters to interfere with private maritime law that already existed and was functional in terms of carriage of nuclear goods.⁴¹⁵

Thus, the application of shipowner liability in connection with carriage of nuclear goods was consciously and expressly not excluded by the convention regime. Curiously enough, whereas absolute liability as a principle in the new nuclear energy law, although substantially limited in amount, was extended to maritime transport of nuclear material, the provision regarding channeling of liability was not

⁴¹⁴ Doeker, Gunther, and Thomas Gehring. "Private or International Liability for Transnational Environmental Damage-The Precedent of Conventional Liability Regimes." *J. Env'tl. L.* 2 (1990): 1.

⁴¹⁵ Doeker, Gunther, and Thomas Gehring. "Private or International Liability for Transnational Environmental Damage-The Precedent of Conventional Liability Regimes." *J. Env'tl. L.* 2 (1990): 1.

correspondingly included.⁴¹⁶ The limited absolute liability of the operator as compared with the unlimited liability imposed on the shipowner in certain instances, made maritime transport of nuclear material virtually impossible without a contractual obligation being put into place by the parties concerned.⁴¹⁷ In this way the questions of the relative degrees of risk to be borne by the operator and the victims of damage, and the extent to which states should make public funds available for compensation were addressed.⁴¹⁸

The absolute liability established under this scheme channels liability directly towards operators of nuclear plants to accept unlimited reimbursement of possible claims against the shipowner, thus he is not entitled to have the privilege to limitation of liability⁴¹⁹ The scheme of Paris/ Brussel conventions was devised by the Weston European and United states, aiming to ensure the economic benefit of transportation of nuclear by sea as well as the operators' privilege of limitation of liability.⁴²⁰ This was manifested in the 1971 convention the main purpose of which was to avoid any liability of shipowners in respect of maritime transport of nuclear material.⁴²¹ Thus, the effectiveness of this instrument means there will appear a gap

⁴¹⁶ Hardy, M. J. L. "Nuclear Liability: The General Principles of Law and Further Proposals." Brit. YB Int'l L. 36 (1960): 223.

⁴¹⁷ See *supra* note 415.

⁴¹⁸ Explanatory Memorandum' (n 55), para 6.

⁴¹⁹ See *supra* note 2, pp. 520-530

⁴²⁰ *Supra* note 116, 1190.

⁴²¹ 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, see details on [http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/Convention-relating-to-Civil-Liability-in-the-Field-of-Maritime-Carriage-of-Nuclear-Material-\(NUCLEAR\).aspx](http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/Convention-relating-to-Civil-Liability-in-the-Field-of-Maritime-Carriage-of-Nuclear-Material-(NUCLEAR).aspx) accessed 25 September 2016

under the compensation scheme as some damage cannot be indemnified due to the limitation of liability regime of the international nuclear law.⁴²² The essence of the 1971 Convention is set out below which is of prime importance in terms of the central theme of this thesis.

In 1971, the IMO, in collaboration with the IAEA and the European Nuclear Energy Agency of the Organization for Economic Cooperation and Development (OECD), assembled a Conference for the adoption of the “Convention to Regulate Liability in respect of Damage Arising from the Maritime Carriage of Nuclear Substances”.⁴²³ The conference was convened to solve difficulties and conflicts resulting from the application of the instruments dealing with shipowners liability.⁴²⁴ The another point about this Convention stipulated that a person who has the responsibility to compensate the damage incurred by a nuclear incident should be exempted from liability where the operator of a nuclear installation is liable.⁴²⁵

4.5 Concluding Remarks

This brings to end the discussion on third party liability in connection with the sea

⁴²² O von Busekist, Otto. “A Bridge between Two Conventions on Civil Liability for Nuclear Damage: the Joint Protocol Relating to the Application of the Vienna Convention and the Paris Convention.” Nuclear Law Bulletin 1.989 (2006): 1.

⁴²³ 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, see details on [http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/Convention-relating-to-Civil-Liability-in-the-Field-of-Maritime-Carriage-of-Nuclear-Material-\(NUCLEAR\).aspx](http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/Convention-relating-to-Civil-Liability-in-the-Field-of-Maritime-Carriage-of-Nuclear-Material-(NUCLEAR).aspx) accessed 25 September 2016

⁴²⁴ *Ibid*; see also *supra* note 422.

⁴²⁵ Paris Convention in the Field of Nuclear on Third Party Liability in the Field of Nuclear Energy; or the Vienna Convention of 21 May 1963 on Civil Liability for Nuclear Damage; Additionally,

carriage of dangerous and hazardous substances on board. Third party liability is equally if not more important than the mutual liabilities arising out of the carrier-shipper relationship entrenched in carriage by sea conventions. The third party liability issues addressed in this chapter are concentrated on three aspects. First, a detailed analytical discussion is presented on the environmental aspect, namely, ship-source oil pollution damage mainly addressed through a multiplicity of conventions and also non-convention law applicable in certain jurisdictions. The related case law is also examined. Second is the consideration of carriage of hazardous and noxious substances covered by the HNS Convention, which incidentally is not yet in force. Even so, from the viewpoint of the substantive law central to the theme of this thesis, it is a crucial convention instrument.

Hopefully the HNS Convention will enter into force in the not too distant future after the diplomatic, political and scientific wrangling is finally over. Third and final is the discussion on nuclear damage in relation to carriage of nuclear material on board ship or arising from a shipboard nuclear installation which essentially refers to nuclear powered ships. This aspect of third party liability is equally important given the growing incidence of nuclear material being carried on ships and the increase of nuclear powered ships traversing the seas.

It has not been the intention in this chapter to enter into a clause-by-clause analysis of the provisions of each convention pertinent to the topic under discussion, but to address the principles emanating from or embedded in them with a view to

presenting their salient features and rendering a rounded appreciation of each. In this regard, the evolutionary process involved in the making of these conventions is also presented which is important for a clear understanding of the regimes. This also brings to end discussion on all of the aspects of international law, mainly focusing on relevant conventions, relating to the subject of sea carriage of dangerous goods. We now proceed to the next Part of the thesis which addresses the Chinese law in perspective relating to the carriage of dangerous goods by sea.

PART III - CHINESE LEGAL REGIME AND COMPARATIVE ANALYSIS

CHAPTER 5 - CHINA AND INTER-STATE LIABILITY

This Part of the thesis is concerned with Chinese law in the context of carriage of dangerous goods by sea and extends to a comparative analysis of the Chinese law with the international law in this field. Whereas chapters 6 and 7 in this Part address the domestic Chinese law in the main, and the comparison in terms of the international law which is basically the regulatory maritime law and private maritime law regimes contained entirely in convention instruments, this chapter dwells on the public international law which by definition is the law that governs inter-state relationships. The immediate focus is on the position of China as a state in the arena of inter-state liability with regard to dangerous goods, but the central issue raised in this discourse is whether the flag state of a ship carrying dangerous goods, being the instrument of damage or injury, can be liable to the state on which such damage or injury has been inflicted.

5.1 Damage in the Context of Inter-state Liability

In 2007, China delivered the statement on "Responsibility of States for Internationally Wrongful Acts" at the Sixth Committee of the 62nd Session of the UN General Assembly.⁴²⁶ In terms of this statement, China's position on state

⁴²⁶ Statement by Mr. MA Xinmin, Chinese Delegate, at the Sixth Committee of the 62nd Session of the UN General Assembly, on Item 78 "Responsibility of States for Internationally Wrongful Acts" New York, 23 October 2007; <http://www.china-un.org/eng/lhghyywj/ldhy/ld62/t375208.htm> accessed 25 September 2016.

responsibility was positive in general. However, China also clearly stated that some controversial issues need to be addressed, such as "Serious breaches of obligations under peremptory norms of general international law", "countermeasures" as well as " conflict resolution".⁴²⁷

Notably, in the context of the doctrine of state responsibility which is a branch of public international law, it has been stated that damage and injury "represents a distinction without substance".⁴²⁸ In this area of law the concepts of damage and injury are virtually synonymous and have a specific and peculiarly distinctive connotation where the breach of an obligation by a state towards another "in itself constitutes a damage, material or moral".⁴²⁹ and "every violation of a right is a damage".⁴³⁰ In the present discussion, this question and related issues are examined based on the hypothetical situation in which the nationality of the ship causing the damage is Chinese. Conversely, if damage is suffered by persons or property in China and the instrument of damage is a foreign ship carrying dangerous goods, does China as a state have recourse in law against the flag state of that ship pursuant to the principles of inter-state liability?

These issues are examined in this chapter without specific reference to China but

⁴²⁷ *Ibid.*

⁴²⁸ Boyle, Alan E. "State Responsibility and International Liability for Injurious Consequences of Acts Not Prohibited by International Law: A Necessary Distinction?." (1990) 39 Int'l & Comp. L.Q. 01, 5-12.

⁴²⁹ Ago, Roberto. "Second Report on State Responsibility." (1970) Yb. Intern. Law Commiss 2. 177-197.

⁴³⁰ Nolte, Georg. "From Dionisio Anzilotti to Roberto Ago: The Classical International Law of State Responsibility and the Traditional Primacy of a Bilateral Conception of Interstate Relations." (2002) European journal of international law 13.5: 1083-1098.

rather in terms of the general principles of law relating to inter-state liability, or the doctrine of state responsibility for the damage caused by the maritime transportation of hazardous substances such as oil and chemicals carried on board ships that can pose hazardous risks to the marine environment. Other substances such as nuclear materials can even be said to pose ultra-hazardous risks.

With the increasing number of shipping incidents resulting in pollution damage suffered by victims and the marine environment itself, the world community has responded robustly to these phenomena by creating and propagating international legal regimes covering virtually all types of ship-source pollution and damage from dangerous goods carriage by ships.⁴³¹ The regimes concern both preventive and mitigative measures in terms of regulatory law as well as liability and compensation schemes in private law for damage resulting from such dangerous activities. But *lacunae* and incompleteness remain as this chapter will reveal as the analysis unfolds.

It has been broadly accepted that the United Nations Convention on the Law of the Sea, 1982 (UNCLOS) represents a landmark development of the international legal regime with regard to the protection and preservation of the marine environment in its Part XII. The significance of this convention relating to the marine environment is reflected in the general obligation imposed on States to protect and preserve the

⁴³¹ Tan, Alan Khee-Jin. *Vessel-source Marine Pollution: the law and Politics of International Regulation*. (Vol. 45. Cambridge University Press, 2005), pp. 337-338

marine environment.⁴³² Furthermore, Article 235 (1) of Convention confirms the traditional proposition that "states are responsible for the fulfilment of their international obligations concerning the protection and preservation of the marine environment".⁴³³ Given the references to the terms "responsibility" and "liability" in Article 235 and in light of the features of shipboard hazardous activities, four key issues warrant specific attention and consideration. These are as follows:

- i. the interrelationship between a state's responsibility and its liability and their nature and legal consequences for damage arising from shipboard hazardous activities;
- ii. the contextual application of the so-called "polluter-pays" principle to states as a function of the doctrine of state responsibility in international law;
- iii. the vicarious or direct application of the doctrine of state responsibility to flag states of ships carrying hazardous substances; and
- iv. the specific type of liability that should be imposed on the state concerned.

In addressing the above-mentioned issues, this chapter aims to examine the application of the doctrine of state responsibility to flag states in respect of pollution damage caused by hazardous substances carried on board ships. Needless to say, the discussion will include, among other things, a consideration of how and to what extent the doctrine is entrenched in international law. In the private law of ship-source pollution, it is now well established that the basis of liability is strict

⁴³² United Nations Convention on the Law of the Sea, Dec. 10, 1982, 1833 U.N.T.S. 397 [hereinafter UNCLOS], art. 192.

⁴³³ M. L. McConnell and E. Gold. 'Modern Law of the Sea: Framework for the Protection and Preservation of the Marine Environment' (1991) 23 Case W.Res.J.Int'l L. 83 (1991).

except in the domain of liability for nuclear damage where absolute liability is the established norm.⁴³⁴

Whether strict or absolute liability can be invoked in respect of state responsibility for damage caused by ship-borne hazardous substances is a relevant question. Another related matter is the allocation of liability between flag states and coastal states based on the argument that pollution could have been prevented, avoided or minimised if the coastal state had taken prompt and decisive action. A consideration of liability allocation would hinge on the respective jurisdictions of the flag and coastal state over the polluting vessel.⁴³⁵

Civil liability convention regimes in respect of damage caused by hazardous substances, including from shipboard oil have proved to be more appealing and functionally successful⁴³⁶ compared with remedies sought through inter-state litigation aimed at imposing liability by application of the doctrine of state responsibility.⁴³⁷ The role of a state, in particular, the flag state of a polluting ship or a ship causing damage attributable to dangerous goods carried on board, as an entity that derives considerable benefit, pecuniary and otherwise, from such hazardous activities in a similar manner as private operators, even if indirectly,⁴³⁸ is

⁴³⁴ See *supra* note 372.

⁴³⁵ Boyle, Alan E. "Marine pollution under the Law of the Sea Convention." *The American Journal of International Law* 79.2 (1985): 347-372.

⁴³⁶ See *supra* note 119, 1-12; see also AFM de Bievre, Aline FM. "Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea." *J. Mar. L. & Com.* 17 (1986): 61

⁴³⁷ See *supra* note 2, pp.146-147.

⁴³⁸ G. Handl. 'International Liability of State for Marine Pollution' (1983) 21 *Can.YB Int'l L.* 85.

another factor to be considered in this regard. Thus, this chapter purports to assess the respective roles of flag and coastal states with regard to liability for damage resulting from ship-borne hazardous substances at sea based on the legal obligations of states to protect and preserve the marine environment as stipulated in Part XII of UNCLOS by analysing the issues identified above.

5. 2 State Responsibility and Liability in International Law

China holds the view that state responsibility means the responsibility of a state entailed by its internationally wrongful act, which is in line with the approach adopted by Article.1 of the draft.⁴³⁹ However, China commented on the doctrine of state responsibility as follows: “what constitutes the responsibility of State for internationally wrongful acts”. The following sections will discuss the issues in respect of the doctrine of state responsibility for the damage arising from maritime transportation of hazardous and noxious substances.

5.2.1 Doctrine of State Responsibility

In general it can be said that where protection of the marine environment under international law is concerned, the traditional approach towards reparation of pollution damage is based on the doctrine of state responsibility and the varieties of dispute settlement mechanisms set out in Article 33 of the Charter of the United Nations.⁴⁴⁰ However, the starting point of discussion under the above caption in our

⁴³⁹ Statement by Mr. MA Xinmin, Chinese Delegate, at the Sixth Committee of the 62nd Session of the UN General Assembly, on Item 78 “Responsibility of States for Internationally Wrongful Acts” New York, 23 October 2007; <http://www.china-un.org/eng/lhghyywj/ldhy/ld62/t375208.htm> accessed 25 September 2016.

⁴⁴⁰ See *supra* note 2, p.211

particular context must be Article 235 of UNCLOS which has already been mentioned.⁴⁴¹ It is worthwhile to cite relevant extracts of this Article including its very title "Responsibility and Liability" which, in the first instance points to the proposition that the two terms are distinctively different.

Article 235

Responsibility and liability

1. States are responsible for the fulfilment of their international obligations concerning the protection and preservation of the marine environment. They shall be liable in accordance with international law.
2. States shall ensure that recourse is available in accordance with their legal systems for prompt and adequate compensation or other relief in respect of damage caused by pollution of the marine environment by natural or juridical persons under their jurisdiction.
3. With the objective of assuring prompt and adequate compensation in respect of all damage caused by pollution of the marine environment, States shall cooperate in the implementation of existing international law and the further development of international law relating to responsibility and liability for the assessment of and compensation for damage and the settlement of related disputes, as well as, where appropriate, development of criteria and procedures for payment of adequate compensation, such as compulsory insurance or compensation funds.

In attempting to analyse the above Article, focus must first be placed on paragraph 1, and in particular, the words "responsible", "obligations" and "liable" expressed in that order in the context of international law. The first sentence in this paragraph

⁴⁴¹ Article 235 of UNCLOS

virtually repeats Article 192 of UNCLOS which provides that "States have the *obligation* (emphasis added) to protect and preserve the marine environment" except that the sentence in paragraph 1 of Article 235 refers to the responsibility of states to fulfil the obligations(s).⁴⁴² The question is whether this is simply an exercise in semantics undertaken by the drafters of UNCLOS, or if there is a legal significance to the choice and usage of words; and also whether "obligation" is synonymous with "duty". It would appear that "responsibility" refers to fulfilment of obligations, so states being "liable" as expressed in the second sentence of paragraph 1 must mean something else.

The general obligation in customary international law is reflected in Principles 7 and 21 of the Stockholm Declaration on the Human Environment.⁴⁴³ UNCLOS contains more detailed expressions of this obligation as illustrated above but the question remains as to whether the obligation to protect and preserve the marine environment covers both accidental as well as non-accidental pollution, which would be particularly relevant to ship-source pollution, in terms of detrimental effects inflicted on states.

Initially, the International Law Commission (ILC) used the terms "responsibility" and "liability" interchangeably. It subsequently took the view that "responsibility" should bear the connotation of breach of obligation, whereas "liability" should refer

⁴⁴² Article 235.1 of UNCLOS

⁴⁴³ Principles 7 & 21 of the Stockholm Declaration, in Report of the United Nations Conference on the Human Environment, U.N. Doc. A /CONF. 48/14 and Corr.1 (1972).

to situations where an activity which is otherwise lawful, meaning no wrongful act is committed, results in environmental damage.⁴⁴⁴ This is particularly relevant to ship-source pollution cases where the ship's activity *per se* is not unlawful. Notably, the terms "responsibility" and "liability" have been used according to the ILC explanations given above.⁴⁴⁵ Brian D. Smith has expressed the modified view that "responsibility" refers to an international obligation, the breach of which leads to "liability" as a legal consequence and the attendant obligation of the state to provide reparation for the breach.⁴⁴⁶ Smith refers to Eagleton,⁴⁴⁷ who in essence states that international liability is the obligation of a state which has committed an unlawful act and thereby caused damage to another state to make good such damage.⁴⁴⁸ The responsibility of a state in environmental cases, and presumably cases involving damage from dangerous goods, arising from an obligation in international law can be one that prevails in customary or in treaty law but it pertains only to the state's own obligation since private entities are not generally subjects of public international law.⁴⁴⁹

It is submitted that this view is consistent with Article 235 of UNCLOS and was the one used by the International Court of Justice (ICJ) in the Namibia Advisory Opinion in which it referred to "responsibility" as the obligation of states and

⁴⁴⁴ For example in the *Trail Smelter* case; see *supra* note 2, p. 141.

⁴⁴⁵ See *supra* note 428, 1-26.

⁴⁴⁶ Smith, Brian D. *State Responsibility and the Marine Environment: the Rules of Decision*, (Clarendon Press, 1988), pp 22, 247

⁴⁴⁷ *Ibid.* pp. 5-6.

⁴⁴⁸ C. Clyde Eagleton, *The Responsibility of States in International Law* (Kraus reprint 1970), 67.

⁴⁴⁹ See *supra* note 2 pp. 139-140.

"liability" as the consequence of a breach of the obligation in question.⁴⁵⁰ The views noted above are not entirely consonant with the ILC position but rather reflect the distinction between primary and secondary obligations made by the ILC in the work that it has undertaken on the development of the law of state responsibility.⁴⁵¹ Since the Commission adopted the draft article on state responsibility in 2001, the General Assembly has commented on the article several times and has acknowledged that an increasing number of decisions of international courts, tribunals and other bodies referred to the article in 2013. No concrete development seems to have taken place on the substantive issue of state responsibility; however, the General Assembly has requested the Secretary- General to invite Governments to submit further written comments on any future action regarding the article.⁴⁵²

Even if this distinction in construing the two terms as explained by the ILC can be maintained in the English language, there are difficulties. In legal parlance in common law Anglophone jurisdictions, the distinction is that "responsibility" connotes the concept of a non-binding moral duty whereas "liability" connotes quality of conduct repugnant to the law.⁴⁵³ Thus it is a legal duty or obligation the breach of which can result in sanctions prescribed by law. In non-Anglophonic civil

⁴⁵⁰ Legal Consequences for States of the Continued Presence of South Africa in Namibia (South West Africa) notwithstanding Security Council Resolution 276 1971 I.C.J.Rep.16, ¶ 118 (June 21). [hereinafter Namibia Advisory Opinion].

⁴⁵¹ See *supra* note 428, 9.

⁴⁵² See the Resolution 68/104 of 16 December 2013; Resolution 65/19 of 6 December 2010 ; Resolution 62/61 of 6 December 2007; Resolution 59/35 of 2 December 2004 adopted by General Assembly

⁴⁵³ Proshanto K. Mukherjee, *Essentials of the Regimes of Limitation of Liability in Maritime Law*, (2009) 4 THE ADMIRAL.39, 40-42

law jurisdictions, the difficulties with the ILC view are more acute. In French and Spanish the linguistic equivalent of "responsibility" (*responsabilite*) connotes both "responsibility" and "liability" as used in English.⁴⁵⁴ There seems to be divided opinion and lack of consensus on the ILC's choice of terminology and its expressed explanation, in light of the legal implications which the words "responsibility" and "liability" generate in different jurisdictions.

At any rate, regardless of the semantics and the use of terminology that may or may not be appropriate, the concept of liability of the state characterized as a legal duty to make reparation for the infliction of transnational environmental harm, or harm caused by dangerous or hazardous substances, is being increasingly de-emphasized.⁴⁵⁵ It is evident that victims of cross-border pollution whether marine or otherwise, are seeking recourse under private law conventions such as the CLC and Fund Convention which appear to be more expedient in terms of providing fast and adequate monetary compensation as well as non-monetary remedies such as restoration of the environment which has suffered pollution damage.⁴⁵⁶

5.2.2 Basis of Liability of a State: Strict Fault-Based or Other

While the notion of strict liability as described above in respect of cross-border pollution damage does have a basis in theory and practice, states have not accepted

⁴⁵⁴*Ibid*, 50-57.

⁴⁵⁵See *supra* note 2, pp. 139-140. 146-147.

⁴⁵⁶ *Ibid*, pp214-221.

it unequivocally.⁴⁵⁷ Thus it has not been established as a firm principle of customary international law. Indeed, it is evident that the current trend is to move away from treating it as the basis for imposition of state responsibility in cases of trans-boundary environmental damage.⁴⁵⁸ Strict liability appears to be viewed in contemporary international environmental law and practice rather as a supplementary device where traditional civil liability remedies may not be readily available. It does not seem to be enjoying the status of a primary basis of liability where a state causing environmental harm or damage, or the same from dangerous or hazardous substances, to another state can be held liable in law without further ado.⁴⁵⁹

It is notable that in Article 235 of UNCLOS or elsewhere in the convention, there is no mention of strict liability as a legal basis for the application of the doctrine of state responsibility regardless of whether the damage suffered by one state attributable to another in the case of a trans-boundary pollution incident was actually caused by a private entity.⁴⁶⁰ Indeed, as exemplified in the *Trail Smelter* Arbitration,⁴⁶¹ the state cannot avoid "its duty of control, cooperation or notification" by simply placing the activity in question into private hands. In this sense, the state is "a guarantor of private conduct but its responsibility is direct, not

⁴⁵⁷ *Ibid*, p.431.

⁴⁵⁸ *Supra* note 363, p. 525.

⁴⁵⁹ *Ibid*, at 527.

⁴⁶⁰ Article 235. UNCLOS

⁴⁶¹ *Trail Smelter Arbitration (United States. v. Canada)*, 3 R.I.A.A. 1938 (1949); 35 *AM. J. INT'L L.* 684 (1941).

vicarious."⁴⁶² Even where there are references in the convention of a state's liability for transnational environmental damage attributable to activities carried out by private entities under the control of the state, no strict liability is implied. Indeed fault-based liability or application of other principles such as imposition of liability in the event of lack of due diligence have not been written off as discussed below. Evidence of this is found in Article 139 of UNCLOS dealing with seabed activities carried out by private entities under the control of the state where the state is to ensure that such activities are carried out in accordance with the provisions of the convention on exploitation of seabed resources beyond national jurisdiction.⁴⁶³ Similar phraseology is to be found in Principle 21 of the Stockholm Declaration characteristically echoing the sounds of fault-based liability not premised solely on the happening of an incident.⁴⁶⁴

Arguably, the imposition of strict liability depends on whether a state had any actual or presumed knowledge of any cross-border risk the activity in question might generate.⁴⁶⁵ In addition, strict liability can be justified on grounds of reduction in litigation costs and sentiments of fairness and equity in view of the dangerous nature of an activity leading to environmental damage and its potentially disastrous consequences which should militate in favour of the claimant not having to prove fault.⁴⁶⁶ Generally, the state carrying out the kind of activity described above confers certain substantial benefits on its citizenry which should be

⁴⁶² See *supra* note 2, p. 40.

⁴⁶³ *Supra* note 363, p.525.

⁴⁶⁴ See *supra* note 2, p. 143.

⁴⁶⁵ *Supra* note 363,86.

⁴⁶⁶ *Ibid.* at 99.

counter-balanced by its obligation to provide reparation for damage caused to another state and compensate it accordingly without the latter state being compelled to prove fault against the offending state. It has even been argued that strict liability can arise independently of any breach of obligation by the state, but premised on such parameters as "general principles of law, equity, sovereign equality or good neighbourliness".⁴⁶⁷

However, options other than strict liability have also been argued by scholars to form the legal basis for state responsibility. As mentioned above, fault-based liability of sorts has not been ruled out entirely; evidence of lack of due diligence on the part of the offending state may well be construed as a kind of fault. Incidentally, fault may be subjective or objective. The former is exemplified by notions of intention, recklessness or negligence on the part of the offending state or an entity acting as its agent. Within the subjective element of fault, there are again two alternative approaches to the nature of the state's conduct, namely, *dolus* and *culpa* which are predominantly civil law concepts rooted in Roman law. *Dolus* imports the notion of malicious intent which is normally never considered to be the basis of state responsibility in environmental disputes⁴⁶⁸ and carries a flavour of criminal

⁴⁶⁷ Handl and Goldie have advanced such propositions. See *supra* note 2 , p.216 , at that page for citations of their works.

⁴⁶⁸ See *supra* note 2, p. 142.

conduct. *Culpa*, on the other hand, is associated with culpable negligence identified with tortious rather than criminal conduct.⁴⁶⁹

The objective side of the "fault" coin simply illustrates the fact of a breach of obligation which gives rise to state responsibility. It is generally the view that the objective fact of a breach of obligation is the true test and basis of state responsibility - not *culpa*.⁴⁷⁰ However, whether fault is characterized in the subjective or objective sense, the question arises as to the effect of failure of the state to exercise due diligence in discharging its obligation in international law. Some are of the view that failure of due diligence amounts to *culpa* as a prerequisite to the imposition of state responsibility not denied by the objective approach to fault, and that in this vein, *culpa* is reconcilable with the objective doctrine. Here due diligence is also associated with the failure of a state to prevent or punish the conduct of private entities within its control.⁴⁷¹

5.2.3 The Present and Future of State Responsibility as a Legal Doctrine

The legal basis for the doctrine of state responsibility has remained an open question since the ILC undertook this task over half a century ago.⁴⁷² The classic leading case is the 1941 *Trail Smelter Arbitration*⁴⁷³ (*United States v. Canada*), a case of cross-border air pollution, which some view as authority for the proposition

⁴⁶⁹ For a detailed discussion on *dolus* and *culpa* in this context see Smith, Brian D. *State Responsibility and the Marine Environment: the Rules of Decision*, (Clarendon Press, 1988), pp. 12-15.

⁴⁷⁰ *Ibid*, p. 16.

⁴⁷¹ *Ibid*, p. 17.

⁴⁷² *Ibid*, p. 5.

⁴⁷³ *Trail Smelter Arbitration (United States. v. Canada)*, 3 R.I.A.A. 1938 (1949); 35 *AM. J. INT'L L.* 684 (1941).

that strict liability is the legal basis for state responsibility. Other cases of consequence include *Lac Lanoux*⁴⁷⁴ (*France v. Spain*) of 1946, and the 1949 *Corfu Channel* case⁴⁷⁵ (*United Kingdom v. Albania*), both decisions of the ICJ. There are also the *Nuclear Test* cases⁴⁷⁶ and the *Union Carbide* (Bhopal) case⁴⁷⁷ which are more about health and safety than about pollution. Indeed, *Union Carbide* was neither a trans-boundary nor an interstate incident. *Corfu Channel* was an interstate matter to the extent that British ships were damaged by mines laid at sea by Albania.⁴⁷⁸ The case law on the whole is sparse and is of little help in terms of establishing clear and unequivocal principles.

Strict liability as a basis may be construed as a breach of an unqualified obligation of a state to prevent harm as set out in Principle 21 of the Stockholm Declaration. In the alternative, liability can be based on a failure to observe due diligence. Both approaches can be accommodated within the perimeter of objective responsibility.⁴⁷⁹ The question remains as to what is the preferred route? It appears that Dupuy, Handl and other scholars basing their views on dominant state practice are strongly supportive of states being liable for environmental damage only if it results from a want of due diligence except in cases of exceptionally dangerous activities where strict liability may be more appropriate.⁴⁸⁰ In the final analysis, it is

⁴⁷⁴ *Lac Lanoux* (*France v. Spain*), 12 R.I.A.A. 281 (1957).

⁴⁷⁵ *Corfu Channel* (*United Kingdom v. Albania*), 1949 I.C.J. 4 (Dec. 15).

⁴⁷⁶ *Nuclear Tests Case* (*Australia v. France*), 1974 I.C.J., 253 (Dec. 20).

⁴⁷⁷ *Union Carbide v. Union of India*, (1989) 2 S.C.C. 540.

⁴⁷⁸ Rosas, Allan. "Issues of State Liability for Transboundary Environmental Damage." *Nordic J. Int'l L.* 60 (1991): 29, 30-31.

⁴⁷⁹ *Supra* note 363, 525.

⁴⁸⁰ See *supra* note 2, pp. 144-145.

legal policy that dictates, and given that international tribunals may be reluctant to impose strict or absolute liability as a general principle regardless of state practice and liability conventions in private law, perhaps "objective responsibility for breach of an appropriately defined obligation is a firmer foundation for a standard of responsibility not dependent on a failure of due diligence".⁴⁸¹

5.3 Liability of Flag State of Polluting Ship

5.3.1 Liability of State for Damage Caused and Suffered by Private Actors

In a scenario where damage is caused by a private entity in one state and consequential damage is suffered by a private entity in a state across the border, why the state of the entity which caused the damage should be liable to the other state is a perplexing question. This was precisely the factual situation in the *Trail Smelter* case⁴⁸² where residents of the state of Washington in the U.S. suffered property damage as a result of pollutants emanating from a smelter located in Trail, in the province of British Columbia in Canada.⁴⁸³ Basically the issue is one of a private claim against a private offender, but where the potential litigants are from different states, there may be impediments for the claimant obtaining a remedy due to jurisdictional and *locus standi* problems. In such instances, interstate litigation where the doctrine of state responsibility can be applied may be of advantage. But the cause of action and attendant procedures must be pursuant to precepts of public international law. There is also the philosophical question of why a state should be

⁴⁸¹ See the opinions expressed by authors, *supra* note 2, p.216.

⁴⁸² *Trail Smelter Arbitration (United States. v. Canada)*, 3 R.I.A.A. 1938 (1949); 35 *AM. J. INT'L L.* 684 (1941).

⁴⁸³ Rosas, A.; *Issues of State Liability for Transboundary Environmental Damage*. 60 *Nordic J.Int'l L.*, 29 (1996).

liable for damage not caused by it. The answer lies in the argument that where the offending private actor is a subject of that state, is under its legal control and the damage is trans-boundary, liability of the state is justifiable. Even so the rationale is not entirely clear.⁴⁸⁴

One argument is that payment of compensation by a state for pollution caused by industry effectively amounts to a subsidy provided by the state which undermines the "polluter pays" principle.⁴⁸⁵ Indeed making the private entity polluter pay makes for sound economic sense in terms of allocation of costs for trans-boundary pollution or damage from dangerous or hazardous substances, rather than application of the doctrine of state responsibility.⁴⁸⁶ In practical terms, as mentioned earlier, undoubtedly the contemporary trend is to downplay the state responsibility doctrine and embrace the remedies available in private law pollution and safety conventions employing strict liability.⁴⁸⁷ In interstate litigation it is not always easy to find the right forum; both states must consent which is why fewer claims for trans-boundary pollution damage are brought under the doctrine of state responsibility.⁴⁸⁸ Given the advantages of actions brought by injured private parties against polluters and harm inflictors who are also private entities, the use of state responsibility should only be used as a residual measure of redress.⁴⁸⁹

⁴⁸⁴ *Supra* note 363, p. 534.

⁴⁸⁵ See *supra* note 2, pp. 432-433.

⁴⁸⁶ *Ibid*, pp. 221-222

⁴⁸⁷ *Ibid* p. 221.

⁴⁸⁸ *Supra* note 363, p.74.

⁴⁸⁹ Doeker, Gunther, and Thomas Gehring. "Private or International Liability for Transnational Environmental Damage-The Precedent of Coventional Liability Regimes." (1990) 2 J. Env'tl. L. 1.

5.3.2 Floating Island Doctrine in Respect of Ships

Pollution or other harm from ships carrying hazardous substances is typically one where the polluter or inflictor of harm is a private entity although the victims of pollution damage can be both private as well as public interests. The following line of enquiry revolves around the question of whether the flag state of a ship can be held liable under the doctrine of state responsibility.

Consider the following hypothetical scenario:

In the midst of cyclonic weather the Singapore flag chemical carrier **Chemola** on a voyage from Shanghai to Kolkata with a cargo of dry tetrachlorides collides off the Indonesian coast with a Maltese container ship **Boxcarina** bound for Manchester with a full load of containers from Hong Kong. The collision results in an explosion on board the **Chemola** causing personal injury to five Chinese crew members. Tetrachlorides and fuel oil spill into the sea from the two ships. A thick slick of fuel oil drifts towards the coastline of Sumatra in Indonesia which also suffers chemical contamination. As a result of the pollution disaster, Indonesia is considering legal action against Singapore and Malta at the International Tribunal for the Law of the Sea (ITLOS) based on the doctrine of state responsibility.

If there is any chance of Indonesia succeeding in the action, it must be based, *inter alia*, on the proposition that the ships *Chemola* and *Boxcarina* are extensions of the land territories of their respective flag states Singapore and Malta. An argument can be made that any wrong committed by those ships resulting in pollution damage to

Indonesian territory must be attributable to and imputed to Singapore and Malta jointly and severally. Whether such argument can be upheld in law may be somewhat speculative but it can conceivably rest on the theory of ship nationality which is partly premised on the "floating island" doctrine also variously referred to as the "extension or elongation of territory" doctrine.

In the *SS Lotus* case⁴⁹⁰ which involved a collision on the high seas between a French ship and a Turkish ship, the Permanent Court of International Justice held that -

a ship on the high seas is assimilated to the territory of the State the flag of which it flies, for, just as in its own territory, that State exercises its authority upon it and no other State may do so. ... a ship is placed in the same position as national territory; ... It follows that what occurs on board a vessel on the high seas must be regarded as if it occurred on the territory of the State whose flag the ship flies. If, therefore, a guilty act committed on the high seas produces its effects on a vessel flying another flag or in foreign territory, the same principles must be applied as if the territories of two different States were concerned, ...⁴⁹¹

In *People v. Tyler*,⁴⁹² an American case, Judge Christiancy referred to vessels on the high seas as "parts or elongations of the territory of the nation under whose flag they sail". In *R.v. Anderson*,⁴⁹³ Byles J. of the Criminal Court of Appeal held that a ship was "like a floating island" and Blackburn J. held that " a ship on the high seas, carrying a national flag, is part of the territory of that nation whose flag she

⁴⁹⁰ *S.S. Lotus (France v. Turkey)*, 1927 P.C.I.J. (ser. A) No. 10 (Sept. 7).

⁴⁹¹ *Ibid*, at 25.

⁴⁹² *People v. Tyler*, 7 Mich. 160 (1859).

⁴⁹³ *R.v. Anderson*, 11 Cox C.C., 198 (1868) [Eng.].

carries;".⁴⁹⁴ This case involved the commission of a criminal offence by an American national on board a British ship located in French waters.

Based on the judicial statements made in the above cases, Indonesia may have a valid cause of action against Singapore and Malta as flag states of the two ships that caused the pollution damage, and may invoke the doctrine of state responsibility in support of its legal position. However, in recent times, there has been a proliferation of open registries which allegedly do not fully comply with the requirement of genuine link in the law of ship nationality.⁴⁹⁵ It is uncertain what impact this development may have on the floating island doctrine and the consequent application of the doctrine of state responsibility in a scenario typical of the one described above.

5.4 Liability of Coastal and Port State

In the relatively recent *Prestige* oil spill which resulted in damage of disastrous proportions off the Galician coast of Spain and also in French waters, it was alleged that the pollution damage increased severely because of navigation contrary to good seamanship conducted by the ship's master on orders from the Spanish shore-based authorities following the initial incident which caused the oil spill.⁴⁹⁶ The Spanish

⁴⁹⁴ *Ibid*; See also the section of Nationality of Ship, Robinson, James J. "Conflict of Criminal Laws, by Edward S. Stimson." *Indiana Law Journal* 13.5 (1938): 15.

⁴⁹⁵ Anderson, H. Edwin. "Nationality of Ships and Flags of Convenience: Economics, Politics, and Alternatives, The." *Tul. Mar. LJ* 21 (1996): 139.

⁴⁹⁶ Andreen, William L. "Environmental Law and International Assistance: The Challenge of Strengthening Environmental Law in the Developing World." *Colum. J. Envtl. L.* 25 (2000): 17-69. Daniel, Pierre, et al. "Forecasting the Prestige Oil Spills." *Proceedings of the Interspill 2004 Conference*. EMSA,

authorities refused to provide the leaking Bahamian tanker a place of refuge and ordered it to steam away from its coast in a direction relative to wind and current force and directions which actually worsened the situation and proved to be detrimental in terms of the pollution.⁴⁹⁷

In such circumstances, whether the coastal state can be found wanting in discharging its international obligations pursuant to the doctrine of state responsibility remains to be explored. Arguably, in view of the expanding scope of jurisdiction and powers enjoyed by port and coastal states under UNCLOS, they could be made subject to application of the doctrine of state responsibility if pollution damage is suffered by other states or their agents. But the proposition is untested and speculative at best. One difficulty in such cases is that most claimants will be persons belonging to the coastal or port state which will not involve cross-border interstate claims.⁴⁹⁸

On the other hand, it is conceivable that the flag state of the polluting ship may counterclaim against the coastal state which has suffered pollution damage from the oil spill in respect of its liability towards third parties. It can also counterclaim against the coastal state in respect of damage suffered by itself as a consequence of the coastal state's actions. In that counterclaim it can invoke the doctrine of state

2004.

⁴⁹⁷ Daniel, Pierre, et al. "Forecasting the Prestige Oil spills." Proceedings of the Interspill 2004 conference. EMSA, 2004.

⁴⁹⁸ Doeker, Gunther, and Thomas Gehring. "Private or International Liability for Transnational Environmental Damage-The Precedent of Coventional Liability Regimes." J. Env'tl. L. 2 (1990): 1.

responsibility on the grounds that the coastal state has inflicted trans-boundary damage on the flag state of which the ship is a territorial extension.⁴⁹⁹ Whether such an argument is legally viable, remains to be seen. Finally, from the perspective of economics and the welfare of society as a whole including the maritime community, perhaps consideration should be given to allocation of liability between the coastal or port state and the flag state of the ship in ship-source pollution cases. In this context, account would have to be taken of the relative positions of the flag and coastal states for avoidance of the risk of pollution in addition to allocation of liability.

5.5 Concluding Remarks

The doctrine of state responsibility in terms of the rules that should be applied for its proper effectuation remains unsettled under international law even though the ILC has been deliberating on this matter for over fifty years.⁵⁰⁰ A convention instrument is not yet in sight or even on the horizon. The distinction between responsibility and liability in this regard is not entirely clear in legal terms to which the linguistic dimension is an additional source of confusion. Both the terms are used in Article 235 of UNCLOS but in the absence of any express indication, definitions are open to interpretations given in scholarly writings and marginally in case law. The basis of liability, whether it is or should be strict or based on fault or lack of due diligence in the observation of an international obligation, is also as yet unsettled. The case law is not very helpful in this regard although some are of the

⁴⁹⁹*Supra* note 363, p. 527.

⁵⁰⁰See *supra* note 2, pp 37-38.

view that the leading case, the *Trail Smelter* Arbitration, is supportive of the strict liability approach.

How the doctrine of state responsibility can apply to environmental pollution caused by hazardous substances carried on board is still in a state of speculation in the absence of any test cases. To meet the requirement of trans-boundary harm or damage for the doctrine to apply, it can be argued that a ship is an extension of the land territory of the flag state and relevant case law can be cited in support of this proposition. Whether the coastal or port state can be subjected to the doctrine of state responsibility given the expanded powers and jurisdictions they enjoy under UNCLOS is also a matter of speculation.

Economic arguments for the benefit of society as a whole can be advanced by proposing a system of allocation of liability between flag states and coastal or port states in cases of marine pollution resulting from the carriage on board of hazardous substances. Whether such arguments can be premised on the legal concept of state responsibility is uncertain but raising the issue may open the door for strengthening the application of strict liability and provide the incentive for further research in academia outside the perimeter of the ILC where efforts continue to bring about an international regime with definitive rules.

The discussion above will hopefully provide some indication in terms of whatever legal position China may adopt if a Chinese ship was the polluter or inflictor of harm emanating from the carriage of dangerous goods, or if a foreign flag ship were to cause

similar pollution or dangerous goods damage to China's coastline or persons or property in China. China recognises and supports the definition of state responsibility provided by “Responsibility of States for Internationally Wrongful Acts”, though China questioned the clarity of the basis of state responsibility. State liability for transportation of dangerous goods by sea based on a failure of due diligence will not cover all damage, such as unforeseeable damage. Despite that, the doctrine of state responsibility may undermine the principle of “polluter pays”, claims for compensation from governments can be an approach used to solve the issue of insufficiencies of the civil liability scheme.

CHAPTER 6 - LEGAL FRAMEWORK OF CHINESE LAW

6.1 Background to Chinese Maritime Law

Before entering into a discussion on the Chinese law relating to maritime transportation of dangerous goods, a brief background to development of the system of Chinese maritime law must be presented, in particular, the law relating to the carriage by sea of dangerous goods. In the 1950s, the Chinese government realized that it was necessary to enact legislation on maritime law which could be incorporated into the general legal system of China.⁵⁰¹ This came about as a result of movements towards consolidating foreign economic relations hand in hand with China's rights and interests in foreign trade.⁵⁰² It was realized in this regard that sea transportation is inextricably linked to national aspirations in trade and commerce. This realization and a series of preparatory initiatives eventually led to the enactment in 1993 of the Maritime Code of the People's Republic of China, herein referred to as the CMC.⁵⁰³

In this regard it must be noted at the outset that the legal system in China is civil law characterized by legislation consisting of Laws, Codes and Regulations as the main sources of law. The legal framework governing maritime transportation in China comprises such legislation which include substantive and procedural provisions some of which relate to liability for carriage of dangerous goods by sea.

⁵⁰¹ Huanning, Wu. "Maritime Legislation in China." (1988) 5 *Austl. & NZ Mar. LJ* 19. 40.

⁵⁰² Li, Sharon, and Colin Ingram, eds. *Maritime Law and Policy in China*. (London 1st edn, Routledge, 2013), pp.54-59.

⁵⁰³ See *supra* note 501, 41.; See also Huanning, W. U. "The Evolution of Chinese Maritime Law." (2007) *SMU Law Review*. 004.

The law stretches across a spectrum which includes *inter alia*, the CMC, the Contract Law of 1999, the Civil Law, the Tort Law and the Environmental Law.⁵⁰⁴ Indeed other general legislation would also apply to maritime matters in appropriate cases such as the Administrative Law, the Civil Procedure Law and the Criminal Procedure Law.⁵⁰⁵

In attempting to understand the evolution of Chinese maritime law as it stands today, one needs to appreciate China's maritime history which is over 2,000 years old. China has always been a great seafaring nation. The history can be traced back to earlier than the start of the first millennium A.D. when the Chinese had a large fleet of ships and navigational expertise far superior to any other maritime country of the times.⁵⁰⁶ As early as in the period between the Tang Dynasty (618-907 AD) and the Ming Dynasty (1368-1644), China was well known for its seaborne trade and advanced architectural abilities in ship building reflected in the thriving industry in that field existing in those times.⁵⁰⁷

However, there appears to be no recorded evidence of an organized and identifiable maritime legal order until relatively recently which prompts us to conclude that historically the maritime law of China is barely out of its infancy.⁵⁰⁸ This is a

⁵⁰⁴See Maritime Code of the People's Republic of China (1993); The Marine Environment Protection Law of People's Republic of China, 1982 (revised in 1999); The Maritime Safety Law of People's Republic of China (1983)

⁵⁰⁵ Ziwen, L. I. "Review on China's Maritime Law Research in 1999" (1999) Annual of China Maritime Law: 1999-00.

⁵⁰⁶ See *supra* note 501, p.20

⁵⁰⁷ *Ibid*, p. 22.

⁵⁰⁸ Duyvendak, Jan Julius Lodewijk. "The True Dates of the Chinese Maritime Expeditions in the Early Fifteenth Century." (1939) T'oung Pao 34.Livr. 5: 341-413.

striking observation when compared with the leading maritime countries of the western world. The Rhodian Sea Law,⁵⁰⁹ for example, dates back to pre-Roman times; the Athenian Maritime Courts were well known for their supra-national character, and the Medieval Maritime Codes⁵¹⁰ of the Mediterranean region and of Northern Europe provide the foundation for the present-day maritime laws of the countries of continental Europe.⁵¹¹ Even the English maritime law derives from a medieval civil law Code - the Roles d' Oleron of French origin.⁵¹²

In terms of modern maritime law, the development of Chinese maritime legislation is relatively recent. Some scholars attribute this to the high degree of importance and concentration accorded to criminal law and other areas of public law rather than commercial law.⁵¹³ The efforts expended towards drafting maritime legislation in China has largely been a process of transplanting the legislation of other maritime countries into the Chinese legislative system rather than developing an indigenous, home-grown regime.⁵¹⁴ But that is not necessarily an undesirable way of dealing with this issue given that much of maritime law today is convention-based, and China being a party to most maritime conventions, it is expedient for Chinese law-makers to look to other state parties with considerable experience in the field of maritime legislation especially in implementing conventions.

⁵⁰⁹ Paulsen, Gordon W. "Historical Overview of the Development of Uniformity in International Maritime Law." (1982): *Tul. L. Rev.* 57,1065.

⁵¹⁰ Gormley, W. Paul. "Development of the Rhodian-Roman Maritime Law to 1681, with Special Emphasis on the Problem of Collision,." (1961) 3 *Inter-Am. L. Rev.* 317.

⁵¹¹ Proshanto K. Mukherjee, *Maritime Legislation*, Malmo: WMU Publications, 2002, pp 19-20 and 31 - 32

⁵¹² *Ibid.*

⁵¹³ See *supra* note 501, p. 27.

⁵¹⁴ See *supra* note 511, pp 19-20 and 31 - 32

In ancient times, China's commercial links with other countries were few and far between. The geographical remoteness of China being in the far east was the main reason for this lack of connectivity.⁵¹⁵ But another reason was its autonomous disposition and reliance on its self-sufficiency, which has changed dramatically in recent times. Its window to the world opened ironically with the opium trade which subsequently culminated into the opium war during the reign of the Qing Dynasty (1644 – 1912) in its late years.⁵¹⁶

China was virtually forced into opening its market to the world and was hugely influenced by the market driven capitalist economy which penetrated deep into the traditional natural economic mould.⁵¹⁷ As an outcrop of this paradigm change was a huge stimulus to the progressive development of Chinese trade and commerce. A substantial amount of maritime legislation including legal concepts began to be imported from leading western maritime powers and transformed into local domestic legislation.⁵¹⁸ This was the embryonic stage of the development of modern Chinese maritime legislation. The first such independent commercial law legislation was the Qing Imperial Business Law, which essentially meant the "Commercial law of the Qing Dynasty authorized by the emperor".⁵¹⁹ A part of this Law was the Ship Act which was the first appearance in Chinese legal history of

⁵¹⁵ Li, Sharon, and Colin Ingram, eds. *Maritime Law and Policy in China*. (London 1st edn, Routledge, 2013), pp .1-6.

⁵¹⁶ Robert KG Temple, *The Genius of China: 3,000 Years of Science, Discovery, and Invention* (Prion Books 1998)

⁵¹⁷ See *supra* note 501; see also, *supra* note 516, 20-29.

⁵¹⁸ See *supra* note 501, p. 22.

⁵¹⁹ *Ibid*, at 23-34

legislation specifically enacted to govern and regulate maritime matters.⁵²⁰

The legislation known as the Ship Act contained 263 articles, most of which were adapted from Japanese and German law.⁵²¹ Its contents included provisions on the legal and operational relationships between a ship and its crew, ship contracts, general average, and maritime salvage.⁵²² This was the advent of maritime law as a concept being incorporated into Chinese law.

It was the genesis of modern Chinese maritime legislation as well as the basis of its subsequent development. However, the parent legislation, that is, the Qing Imperial Business Law being an imported foreign law in substance was not considered to be compatible with local commercial practices and was found to be of little practical and operational consequence. The Ship Act thus did not enter into force.⁵²³ The Qing Dynasty suffered collapse following the Revolution of 1911 which led to the demise of feudalism in China and the establishment of the Republic of China⁵²⁴. On 18 November, 1926, the government published the Seagoing Ship Act.⁵²⁵ Its contents largely reflected the provisions of the previously drafted Ship Act. This legislation also failed to enter into force due to the frequent outbreak of civil wars and consequent changes of political power.⁵²⁶ In 1929, the government in Nanjing

⁵²⁰ See *supra* note 515, pp .21-34.

⁵²¹ See *supra* note 501, p. 25

⁵²² *Ibid.*

⁵²³ See *supra* note 516, 20-29.

⁵²⁴ John Mo, *Shipping Law in China* (Hongkong, Sweet & Maxwell 1999), pp. 6-12.

⁵²⁵ See *supra* note 501, p.26

⁵²⁶ See *supra* note 524 pp. 13-14

commenced drafting the Maritime Code of the Republic of China.⁵²⁷

In comparison with the previous Ship Act, the new legislation embraced the case law of common law jurisdictions as well as principles of international maritime conventions with a view to establishing a viable and comprehensive legal infrastructure. But many of the rules imported from Japanese and German legislation were retained which were considered to be useful.⁵²⁸ This Maritime Code was the first maritime legislation that actually became effective nationally through its entry into force on 1 January 1933.⁵²⁹ Unfortunately, the Code was rejected by the influential Shanghai Commercial Association because it was not considered to be a workable piece of legislation in practical terms. It was alleged that the Code failed to take account of the China's economic condition at the time and national objectives in this regard.⁵³⁰

A landmark event of recent Chinese history is that when the People's Republic of China was established in 1949, the new government struck down all legislation brought in by the previous government which included the Maritime Code.⁵³¹ The new government initiated the preparation of a new Maritime Code in anticipation of an expanding Chinese shipping industry in the forthcoming era.⁵³² But the

⁵²⁷ See *supra* note 501, p. 27

⁵²⁸ See *supra* note 505.

⁵²⁹ Yuzhuo, Si. *Chinese Maritime Law* (Beijing, 1st edn, China Renmin University Press, 2007), 32.

⁵³⁰ *Ibid.*

⁵³¹ See *supra* note 528.

⁵³² See *supra* note 529, pp. 34-37. See also Huanning, W. U. "The Evolution of Chinese Maritime Law." *SMU Law Review* (2007): 004.

legislative process encountered several hiccups before it eventually got enacted.⁵³³

In the remainder of this chapter, China's position with regard to specific convention instruments is addressed. The focus of the discussion is obviously on regulatory and private law conventions relating to dangerous goods, including accession and giving effect to them through the domestic legislative framework. The instruments in question extend, *inter alia* to the IMDG Code and carriage conventions including the Rotterdam Rules. Under Chinese law, liability in contract is subject to the Contract Law of China which is the applicable general law but specifics in relation to maritime contracts and associated liability regimes are to be determined by reference to the Maritime Code of the People's Republic of China (CMC).⁵³⁴ It is notable that the provisions in the CMC are extracted from both the Hamburg Rules as well as the Hague-Visby Rules.⁵³⁵

6.2 The Legislative Process

The evolution of the legislative process in China occurred in four stages.⁵³⁶ The first stage was from 1951 to 1963. At the beginning of the first stage in 1951, a professional group of drafters was established known as the "People's Republic of China Maritime Law Drafting Group" which undertook the initial task of drafting the new Chinese Maritime Code.⁵³⁷ The Group produced a total of nine drafts by

⁵³³ *Ibid*, Huanning, W. U.4, pp 6-7

⁵³⁴ See Article 124, Contract Law of PRC

⁵³⁵ Ben Beaumont, Philip Yang and Steven Hazelwood, "*Chinese maritime law and arbitration*" (Simmonds & Hill 1994), p 52.

⁵³⁶ See *supra* note 515, p.2.

⁵³⁷ See *supra* note 533.

1963.⁵³⁸ The Group started the second stage of its work in 1964 and continued until 1980. At this point the work was interrupted by the occurrence of the Cultural Revolution.⁵³⁹

In 1981, drafting was resumed and continued with the oversight of the Ministry of Transportation under the State Council.⁵⁴⁰ In 1985, the Group produced the fifteenth draft but the work suffered another setback because of drastic changes of personnel in the State Council.⁵⁴¹ The fourth and final stage began in 1989. Following several modifications to the previous drafts, the twenty-ninth draft was produced which was approved by the State Council. The draft legislation was finally adopted by the Standing Committee of the Seventh National Peoples' Congress (the Chinese legislative authority) at their 28th Meeting on 7 November, 1992.⁵⁴² The Maritime Code of China (CMC) which represents the present law thus entered into force on 1 July, 1993.⁵⁴³

In comparison with previous Chinese maritime legislation, the CMC was undoubtedly inspired by foreign maritime legislation but it was also took account of the prevailing shipping practice. During the legislative process, numerous meetings were held where the drafters interacted with experts from all walks of the shipping

⁵³⁸ See *supra* note 515, pp .3,4

⁵³⁹ See *supra* note 533.

⁵⁴⁰ See *supra* note 501, p. 25

⁵⁴¹ *Ibid.*

⁵⁴² See *supra* note 533; See also General Provision of the Maritime Code of the People's Republic of China (CMC)

⁵⁴³ See the Maritime Code of the People's Republic of China (CMC)

industry.⁵⁴⁴ The opinions of the industry experts were highly respected and the drafting Group did not hesitate to accept and implement them.⁵⁴⁵

Incidentally, even prior to the enactment of the CMC, since the People's Republic was established, there were several pieces of legislation including rules and regulations involving shipping and maritime matters, albeit in a fragmented state that governed a multitude of maritime matters within the general legal framework of China.⁵⁴⁶ These were, *inter alia*, the Regulations for the Carriage of Goods by Water 1972, the Economic Contract Law 1981, and the Marine Environment Protection Law 1982. However, the legislation was inadequate and failed to meet the increasing industry demands for a system of maritime law that was legally and technically sound in all respects.⁵⁴⁷

6.3 The Legal System and the Maritime Judiciary

6.3.1 The Civil Law System

The legal system in China being civil law, all the attributes of this system are present in Chinese legislative and judicial practice. Conversely, none of the tenets of the common law system apply even though in the field of maritime law, Chinese

⁵⁴⁴ See *supra* note 529, 56-57

⁵⁴⁵ Ping, Guo, and Zhang Wenguang. "Commentary on the Rotterdam Rules." *Global Law Review* 3 (2009): 017.

⁵⁴⁶ Provisional Rules of Procedure of the Maritime Arbitration Commission of the China Council for the Promotion of International Trade (CCPIT), the Regulations for the Carriage of Goods by Water (1972), the Regulations Governing Supervision and Control of Foreign Vessels (1979), the CCPIT Provisional Rules for General Average Adjustment (Peking Adjustment Rules 1975), the Economic Contract Law (1981), the Marine Environment Protection Law (1982), Part V of the Civil Procedure Law (for Trial Implementation 1982) "Special Stipulations Governing Civil Procedures Involving Foreign Elements", the Maritime Traffic Safety Law (1983), the Foreign-Related Economic Contract Law (1985) and the Civil Law General Principles (1986).

⁵⁴⁷ See *supra* note 501, p. 30

law-makers, judges and the academia are increasingly looking to the law and practice in the English common law jurisdictions in much the same way as other relatively new entrants into the modern maritime law domain.⁵⁴⁸ Be that as it may, one important point of observation must be that the common law doctrine of precedent or *stare decisis* does not apply in China.

In the same vein it must be noted that courts in all civil law jurisdictions do not hesitate to look at their own previous decisions, or even at decisions rendered by other courts, both domestic and foreign; and, in maritime law, often at decisions of common law courts. This is a natural tendency where much of private and commercial maritime law emanates from international conventions to which both civil law and common law countries are parties.⁵⁴⁹ The difference is that in China as in other civil law jurisdictions,⁵⁵⁰ previous decisions are not binding. The singular source of law is the legislation or codified law, which in respect of maritime law is the CMC.

As distinguished from the common law system, the jurisprudence in civil law is the law entrenched in the legislation mainly manifested in the relevant Codes.⁵⁵¹ By

⁵⁴⁸ Eckart J. Broedermann. "China and Admiralty-An Introduction to Chinese Maritime Law and US-Chinese Shipping Relations" (1984) 15 J.Mar.L.& Com. 539

⁵⁴⁹ A. N. - Yiannopoulos. "The Unification of Private Maritime Law by International Conventions Unification of Law" - Law & Contemp Probs - 370

⁵⁵⁰ Stanley B. Lubman, *China's legal reforms* (Oxford University Press 1996) pp 79-80.

⁵⁵¹ See *supra* note 501, p. 28; see also John Henry Merryman and Rogelio Pérez-Perdomo, *The civil law tradition: an Introduction to the Legal Systems of Europe and Latin America* (Stanford University Press 2007)pp.20-23

contrast, jurisprudence in the common law is the case law, that is court decisions.⁵⁵²

As mentioned above, there is nothing to stop civil law judges from looking at decisions of other courts which affords a high degree of flexibility whereby a court may be at liberty to decide differently in different cases at different times. Arguably, this does not foster certainty in the law, but that is another matter. At any rate, courts are constitutionally bound to observe only the law enacted through legislation and have no power to make law by being legally innovative through judicial interpretation. That is exclusively the province of the Supreme People's Court by reference to it of an issue by a lower court which ostensibly requires interpretation of a legislative provision in the course of judicial proceedings before that court. This was decreed in 1981 by the Standing Committee of the National People's Congress.⁵⁵³ Judicial interpretation under the common law system is always in the context of particular cases before the courts. The function of judicial interpretation by the Supreme People's Court (SPC) is not restricted to any particular cases. The SPC will provide judicial interoperation whenever an issue arises in the context of any Chinese legislation or statutory provision.⁵⁵⁴

Indeed the Supreme People's Court since that time has made many pronouncements of interpretation of legislative provisions and has issued judicial documentation to that effect in the form of notices and circulars. While technically such documents are

⁵⁵² *Ibid*

⁵⁵³ Margaret Woo. "Law and Discretion in the Contemporary Chinese Courts" (1999) 8(3) Pacific Rim Law & Policy Journal 581

⁵⁵⁴ Wei, Li. "Judicial interpretation in China." Willamette J. Int'l L. & Dis. Res. 5 (1997): 87.

not binding, they are followed by all courts and so in effect they serve as precedents for the benefit of the lower courts of the land.

6.3.2 The Chinese Maritime Judiciary

Prior to 1984 there were no courts within the Chinese judiciary specializing in maritime cases. Nor were there any courts with special jurisdiction or expertise in maritime causes. On 14 November 1984, the Standing Committee of the National People's Congress instructed the Supreme People's Court to initiate the process for the establishment of courts specializing in maritime law in a number of port cities. These courts were to operate as forums of first instance in maritime cases.⁵⁵⁵ This initiative led to the expeditious establishment of maritime courts in Guangzhou, Dalian, Shanghai, Qingdao and Tianjing. Subsequently maritime courts were also established in Wuhan, Haikou, Xiamen, Ningbo, and Beihai bringing the total number of them to 10 which obtains to this day. Each maritime court operates under a designated jurisdictional ambit established geographically.⁵⁵⁶

Law and policy-makers in China had realized that at the core of maritime litigation were issues involving foreign entities and foreign law as well as convention law where the subject matter fell under a maritime convention whether or not China was a party to it.⁵⁵⁷ To be able to grapple with such issues, Chinese judges needed to acquire the necessary legal skills and expertise in the discipline of maritime law

⁵⁵⁵ Kevin X. Li. "Review of Chinese Maritime Law: 2006" (2007) 38 J.Mar.L.& Com. 369

⁵⁵⁶ Curtis E. Pew, Robert M. Jarvis and Mark Sidel. "Maritime Courts in the Middle Kingdom: China's Great Leap Seaward" (1986) 11 Mar.Law. 237

⁵⁵⁷ Zou Keyuan. "China's Marine Legal System and the Law of the Sea" (2005) 48 Publications on Ocean Development, 396

including knowledge and understanding of the relevant conventions.

Courts were duly established in and later and today there are 10 maritime courts in China, each having a designated geographic jurisdiction. A decision of a first instance maritime court is appealable to the High Court of the Province, and from thence to the Supreme People's Court but only in particular cases, such as where new evidence has come to light and is to be proffered.⁵⁵⁸ Ordinarily, under Chinese law, an appeal can only be made once from the Court of First Instance to the Provincial High Court. Incidentally, in recent times maritime cases going to court have increased quite remarkably.⁵⁵⁹

6.4 Salient Features of the CMC

6.4.1 International Dimension

Despite the fact that the Maritime Code of China is essentially domestic legislation, its global impact is bound to be significant given the contemporary status of China as an economic powerhouse and a major maritime state. This is tempered by the fact that trade is the life blood of every nation and shipping, which accounts for over 90% of world trade, by its very nature, involves international relations.⁵⁶⁰ Ocean-going vessels flying the flag of the PRC operate in all waters throughout the world and sail around far-flung seas from one country to another. Thus, foreign maritime laws and

⁵⁵⁸ Youjun, Wang Liming Zhou. "A Review of China's Civil Law Study." China Legal Science 1 (2008): 013

⁵⁵⁹ See *supra* note 524, pp. 35-79. Zhang Wenguang. "The Evaluation of China Maritime Law Studies" (2015) 4 Chin. J. Int. Law. 007

⁵⁶⁰ Gordon W. Paulsen. "Historical Overview of the Development of Uniformity in International Maritime Law" (1982) 57 Tul.L.Rev. 1065

international legislation and practice must be taken into consideration and carefully examined so that China can both profit from foreign experience and avoid conflict with other jurisdictions, being cognizant of and appreciating common international usage and practice.⁵⁶¹ Under the Chinese legal regime, contractual liability for maritime transportation is governed by Chapter IV of Maritime Code 1993, which to a great extent is modeled on the Hague Rules, the Hague/Visby Rules, and the Hamburg Rules.⁵⁶²

6.4.2 The Perimeter

A Code by its very nature is all-embracing. In other words, it is expected to cover all aspects of the subject-matter being legislated. It must be appreciated that a typical Maritime Code is decidedly comprehensive in terms of its reach and coverage. Thus, the perimeter of the legislation is wide enough to accommodate virtually all topics falling with the rubric of "maritime law". While it is generally thought that the subject of maritime law in this sense is confined to the region of private maritime law and does not extend to law of the sea, it is accepted that regulatory maritime law subjects may be covered, at least in terms of the principal provisions. This is the case in the Merchant Shipping Acts in several common law jurisdictions.⁵⁶³ Notably, in China these are addressed in separate regulations.

Thus the CMC provides for such private maritime law matters as torts and contracts

⁵⁶¹ Ben Beaumont, Philip Yang and Steven Hazelwood, "*Chinese maritime Law and Arbitration*" (Simmonds & Hill 1994) pp 75-76

⁵⁶² Zhi-wen LI, Xing-li SI and Xiao-jing SUN. "Review on China's maritime law research in 2005" (2005) *Annual of China Maritime Law* 025

⁵⁶³ See *supra* note 548.

falling within the maritime domain, and property rights in ship and cargo. To be more specific, the subject matters covered include manning of ships, crew qualifications and other maritime labour matters, oversight of China's international maritime transportation, ship sales and purchases, shipbuilding contracts, maritime liens, enforcement of maritime claims, ship arrest, collision, salvage, general average, carriage of goods and passengers by sea, charter parties and marine insurance.⁵⁶⁴

In the articulation of CMC provisions, international practice has been taken into account in many specialized spheres of maritime law. There are also several administrative law provisions dealing with rules regarding vessels that qualify to be registered under the Chinese flag, provisions relating to the cabotage trade, and other maritime matters such as coastal and inland waters transportation. Administrative law provisions are implemented and enforced by designated administrative bodies with the government structure.⁵⁶⁵ In typical civil law fashion, many legal provisions of maritime character are cross-referred to other general legislation such as the Civil and Criminal Codes and the Civil Procedure Law as the legislation real rights in the context of ship mortgages. Many of the provisions thus fall within the scope of the civil law.

6.5 Dangerous Goods

6.5.1 Preliminaries

⁵⁶⁴ See *supra* note 501, p.35.

⁵⁶⁵ Zhang Wenguang, "The Evaluation of China Maritime Law Studies", Vol 4 (2015) 007

As mentioned above, liabilities involving maritime transportation of dangerous goods can be in respect of loss or damage relating to property including cargo, or maritime safety, or the marine environment.⁵⁶⁶ Damage resulting from carriage by sea of dangerous goods on a ship evolves into two dimensions leading to legal disputes. One involves the bilateral contractual relationship between the carrier (shipowner or charterer) and the shipper or consignee of goods.⁵⁶⁷ The second involves damage suffered by third parties as well as harm inflicted on the environment itself.⁵⁶⁸

The legal regime governing the relationship between the first two parties stems from contract between them which may be governed by international convention or domestic law independent of any such convention where the convention does not apply.⁵⁶⁹ In the other scenario, namely, where damage is suffered by third parties, the legal regime also may or may not be governed by an international convention. In the case of China, maritime conventions in force internationally pertaining to carriage of goods by sea have some application through domestic legislation.⁵⁷⁰ Also, the international regulatory instruments relating to dangerous goods and damage to the environment all apply to China.⁵⁷¹

⁵⁶⁶ Holly Roark, "Explosion on the High Seas-The Second Circuit Promotes International Uniformity with Strict Liability for the Shipment of Dangerous Goods: *Senator v. Sunway*", vol 33 (HeinOnline 2003) 139

⁵⁶⁷ AFM de Bievre, Aline FM. "Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea." J. Mar. L. & Com. 17 (1986): 61

⁵⁶⁸ See *supra* note 182, Thomas, D. Rhidian. 198

⁵⁶⁹ See *supra* note 74, pp.40-61

⁵⁷⁰ LI, Zhi-wen, Xing-li SI, and Xiao-jing SUN. "Review on China's Maritime Law Research in 2005." Annual of China Maritime Law (2005): 025.

⁵⁷¹ See *supra* note 524, pp. 12-20.

Notably, liability conventions pertaining to dangerous goods have not yet been incorporated into Chinese legislation. Therefore, the general rules respecting these matters extracted from existing Chinese legislation comprise the maritime legal regime for damage resulting from the carriage by sea of dangerous, hazardous and noxious substances.

6.5.2 Chinese Regulatory Law

Chinese legislation on dangerous cargo consists of laws and regulations adopted by the Ministry of Transport of PRC (MOT)⁵⁷² and certain rules addressing specific matters. As a consequence of the principal concerns on issues of safety, some are general legislation on transport safety or pollution prevention. However, there is no specific definition of "dangerous cargoes" provided in such legislation.⁵⁷³ Others focus on the carriage of dangerous cargoes where dangerous cargo is described in a particular clause. Since 1982, more than twenty laws and regulations relating to dangerous cargoes have been promulgated by the Chinese government, but only two of them, generated by the MOT, provide a specific definition.⁵⁷⁴ They are the ones mostly used by Chinese maritime courts in the litigation of disputes involving dangerous cargoes. These two MOT regulations promulgated on 4 November 1996,

⁵⁷² See the Duties of Ministry of Transport of PRC http://english.gov.cn/state_council/2014/09/09/content_281474986284076.htm accessed on 18/09/2016 See also the official website of Ministry of Transport of PRC. <http://www.moc.gov.cn/> accessed on 18/09/2016

⁵⁷³ Changbing, L. I. U. "On Carriage of Dangerous Goods under the Maritime Code of the People's Republic of China—Apprehension and Revising suggestions of Article 68." *Annual of China Maritime Law* (1999): 1999-00.

⁵⁷⁴ Guo-ping, Y. U. "Legal Issues Relative to Carriage of Dangerous Goods by Sea." *World Shipping* 1 (2008): 020.

in conformity with the “Recommendation on the Transport of Dangerous Goods” (Orange Book) mentioned in chapter 2 of this thesis earlier.⁵⁷⁵ The structure and contents of the regulations are similar to the IMDG Code. But it is only applicable to domestic transport. The regulatory law governs the shipment of dangerous cargo and marine pollutants in packaged form, dangerous chemicals in bulk, liquid gas in bulk, liquid chemicals in bulk either on board ships or in port areas.⁵⁷⁶ It also includes “emergency procedures for ships carrying dangerous goods” and “the medical first aid guide for use in accidents involving dangerous goods”.⁵⁷⁷

Dangerous cargoes are defined in Article 3 as follows:

“Any goods with an inflammable, explosive, corrosive, noxious, hazardous or radioactive nature, which are dangerous in water transportation or are likely to injure people or damage property during the loading and discharging or storage, are classified as dangerous goods. According to People’s Republic of China GB 6944 (“National standard on classification and numbers given to names of dangerous goods”) and People’s Republic of China GB 12268 (“National standard on names of dangerous goods in table format”), dangerous goods are divided into nine classes: Explosives; Compressed gases and liquid gases; Flammable liquids; Flammable solids; Oxidising substances and organic peroxides; Poisonous and infection substances; Radioactive materials; Corrosives and Miscellaneous dangerous substances and articles.”⁵⁷⁸

The term "dangerous cargo" is defined in the Regulations on Administration of Dangerous Cargoes at Port (RADCP) 2003. The definition is considered to be

⁵⁷⁵ “Recommendation on the Transport of Dangerous Goods” issued by UN mentioned in chapter 2

⁵⁷⁶ Guo-ping, Y. U. “Legal Issues Relative to Carriage of Dangerous Goods by Sea.” World Shipping 1 (2008): 020

⁵⁷⁷ *Ibid.*

⁵⁷⁸ Regulations on Administration of Dangerous Cargoes at Port of PRC1996

similar to the one in the MOT Regulations mentioned above.⁵⁷⁹ Incidentally, the RADCP was also promulgated by the MOC. It became effective on 1 January 2004. Articles 15 to 17 of it are related to the supervision and control of the transport of dangerous cargoes in ports. It replaced the "1984 Interim Regulations on Administration of Dangerous Cargoes at Port" and regulates the loading and discharging, barge, storage, package and consolidation of dangerous cargos.⁵⁸⁰

The definitions referred to above indicate that in the Chinese regime, dangerous cargoes are a category, comprising substances listed in the regulations. The extent of which is developed by statutory regulation based on a substantial list. The regulations defines "dangerous cargo" by reference to an international list such as the one in the IMDG Code or to relevant national standards.

6.6 Chinese Private Law

6.6.1 CMC and Contract Law on Sea Carriage

The CMC is undoubtedly the most important legislative instrument dealing with international maritime issues, although its historical evolution started only in the 1990's. However, the CMC is not the only source of law relied on by the Chinese maritime courts. There are ~~an~~ other legislative instruments as well which are applicable to cases involving international maritime issues before Chinese courts under the Chinese legal regime.⁵⁸¹ One such legislative instrument is the Contract Law. The

⁵⁷⁹ No English version of the Regulations or the definition of "dangerous cargo" is available.

⁵⁸⁰ See *supra* note 576

⁵⁸¹ Si Yuzhuo (ed), *Maritime Law Monograph* (Beijing; Remin University of China Press 2007) pp.99

relationship between the Contract law and the CMC is that relatively speaking, the former is general whereas the latter is specialized law.⁵⁸² Also, the Contract Law is supplementary to the CMC.⁵⁸³ Accordingly, the principles and rules stipulated in the Contract Law serve the functions and applications of the CMC where certain provisions in the CMC are not explicit and difficulties are encountered in implementing or giving legal effect to them.⁵⁸⁴ However, it is important to note that in terms of application of the law substantively in the resolution of disputes on contracts relating to carriage of goods by sea, the CMC being the specialized law has primacy over the Contract Law. Thus it can be gleaned that in terms of practical use and application, a collaborative relationship exists between the CMC and the Contract Law.⁵⁸⁵

6.6.2 Tort law

In the field of transportation of dangerous goods by sea, liability arising in tort is one of the potential types of liabilities arising in relation to loss or damage suffered by third parties in particular. Prior to the promulgation of the Torts Law in 2009,⁵⁸⁶ the applicable rules in relation to the tort liabilities existed in different pieces of legislation in connection with different legal issues.

⁵⁸² Kwan Tai Sik and Jim Mi Jimmy. "Chinese Maritime Law Update -- 2013" (2013) 44(3)J. Mar. L. & Com. 379

⁵⁸³ Yuzhuo Si and Zuoxian Zhu, "On the Legal Status of Port Operators under Chinese Law" (2005) 2 (7) USChina Law Review 1. 101

⁵⁸⁴ See *supra* note 505.

⁵⁸⁵ Si Yuzhuo, "Maritime Law Monograph"(Remin University of China Press 2007) 200. pp7-9

⁵⁸⁶ Wang Liming. "On the Construction of China's Tort Liability Legal System [J]"(2008) 4 China Legal Science 003

To clearly understand the principles and rules of tortious liability in Chinese law, it is instructive to take a retrospective approach to the law of torts.⁵⁸⁷ Chinese law traditionally did not differentiate between private law and public law, as in most ancient legal systems where the totality of the law was identified by an amalgamation of *ius publicum* and *ius privatum*.⁵⁸⁸ As result, the basis for tortious liability did not originate and develop from any autonomous position in the Chinese legal system.⁵⁸⁹ There did not exist any discernible distinction between a tort and a criminal offence.⁵⁹⁰ This was an impediment to the development of tort in terms of principles such as the basis of liability being fault in some shape or form although it must be recognized that the development of tort in the western hemisphere also grew gradually.⁵⁹¹ In China, eventually law reform in this area took place during the era of the Qing Dynasty. Changes to the traditional legal system became correspondingly inevitable when changes began to occur in the political and economic arenas in China.

6.6.2.1 Comprehensive Law Reform

The law reform which took place at the end of the Qing Dynasty (1644–1911) invariably changed much of the traditional Chinese legal system,⁵⁹² but in the

⁵⁸⁷ Koziol, Helmut, and Yan Zhu. "Background and key Contents of the New Chinese Tort Liability Law." JETL. 1.3 (2010): 328-361.

⁵⁸⁸ Wang Liming, 'On the Construction of China's Tort Liability Legal System [J]', vol 4 (2008) 003

⁵⁸⁹ See *supra* note 587.

⁵⁹⁰ Morris, Clarence. "The Relation of Criminal Statutes to Tort Liability." Harvard Law Review 46.3 (1933): 453-477.

⁵⁹¹ ZHU Yan. "On the System Transformation of the Tort Law Based on Mass Tort [J]" (2009a) 3 Journal of Renmin University of China 006

⁵⁹² Stanley B. Lubman, *China's Legal Reforms* (Oxford University Press 1996) pp106-108; see also See *supra* note 533.

beginning it was predominantly a paper exercise through documentation of statements of intent. Practical and workable changes only took place gradually and after encountering and overcoming stiff opposition emanating from certain quarters. The legislative reform (xiulü) took place compulsively due to historical factors and events. Following the Opium War (1839–1842) China was compelled to open its doors to trade with western countries which in turn necessitated protection of foreign investment interests. The emerging industrial and commercial sectors in China in reaction to the impact of prevailing economic forces, called for new transaction rules to have better protection of their interests.⁵⁹³

From the political perspective, it was realized that only law reform would enable China to follow the exemplary Japanese stance of abolishing systematic privileges given to foreigners (extra-territoriality, zhiwai faquan) which was rightly perceived to be unfair in many social and business circles.⁵⁹⁴ Furthermore, there were serious internal problems at the time including peasant uprisings and revolutionary activities conducted by the republican faction.⁵⁹⁵ These events left the Qing Dynasty with no other choice but to aggressively expedite law reform in earnest.⁵⁹⁶

6.6.2.2 Development of a Civil Code

China has a long history of codifying laws not only consistent with the European

⁵⁹³ See *supra* note 587; see also Vincent R. Johnson. “The Rule of Law and Enforcement of Chinese Tort Law” (2011) 34(1) Thomas Jefferson Law Review 43

⁵⁹⁴ See *supra* note 592. p.110

⁵⁹⁵ Jingwei, Liu. “Theoretical Transition of Civil Law since Reform and Opening-up: A Second Review on Century-old Chinese Civil Law” *Journal of CUPL* 3 (2010).

⁵⁹⁶ See *supra* note 533.

civil law tradition but also based on ancient Chinese tradition and philosophy through which the deductive approach gained prominence. Thus, European Civil Law precepts were imported into the Chinese legal system for the first time.⁵⁹⁷ This was in addition to the adaptation of the Japanese legal tradition which evolved naturally because of Japan's geographical proximity to China accompanied by deep and intensive intellectual interactions between the two countries.

The first draft of a Chinese Civil Code (daqing minlü caoan) was published in 1911. The German pandect system was inevitably and unhesitatingly adopted with the exception of two books on family law and the succession law. In respect of these two matters, the family-oriented customs of traditional Chinese society were understandably retained.⁵⁹⁸ With regard to tort law, the closeness of Chinese tort law principles to their counterparts in German tort law is demonstrated in three general clauses, namely, Articles 945, 946 and 947.⁵⁹⁹ Unfortunately, the draft Civil Code failed to enter into effect due again to historical events. The last vestiges of feudalism in China fell with the collapse of the Qing Dynasty in China instigated by the Republican Revolution in 1911. Even so, the draft was undoubtedly a significant contribution to the development of modern Chinese civil law. For one thing, it introduced modern legal theories and well articulated definitions and explanations of legal principles. Subsequently, a second draft was created in 1925

⁵⁹⁷Mingrui, Guo. "Several Thoughts on Legislation of Tort." *China Legal Science* 4 (2008): 004.

⁵⁹⁸ Mo Zhang. "Tort Liabilities And Torts Law: The New Frontier of Chinese Legal Horizon" (2011) 10 *Rich. J. Global L. & Bus.* 415

⁵⁹⁹ Conk, George W. "A New Tort Code Emerges in China: An Introduction to the Discussion and a Translation of Chapter 8-Tort Law of the Official Discussion Draft of the Proposed Revised Civil Code." *Fordham International Law Journal* 30.935-999 (2007).

which continued to consolidate the pandect system. Again, this draft also failed to enter into force but fortunately the Supreme Court (dali yuan) of the time made pronouncements holding that it could be applicable to disputes in litigation. As such, the second draft became effective law at least in practical terms.

The first enacted Civil Code of China (CCC) was promulgated by one book at a time between 1929 and 1930. It is divided into five parts consisting of 5 Books identified as follows: Book I - General Part, Book II - Law of Obligations, Book III - Law of Real Rights, Book IV - Family Law, and Book V - Law of Succession. There are 29 Chapters and 1225 Articles.⁶⁰⁰ The CCC continues to be effective in Taiwan albeit with modifications introduced through several amendments.⁶⁰¹ In the CCC many new legal theories together with lawmaking techniques have been incorporated such as combining civil law principles with commercial law concepts originating from the Swiss Civil Code (Zivilgesetzbuch, ZGB).⁶⁰² As well, the CCC takes account of important social interests in its provisions.⁶⁰³

As an integral part of Book 2 (Law of Obligations) of the CCC, the law of torts is based on three general clauses provided in Article 184 as follows:⁶⁰⁴

⁶⁰⁰ Youjun, Wang Liming Zhou. "A Review of China's Civil Law Study." *China Legal Science* 1 (2008): 013.; see also Koziol, Helmut, and Yan Zhu. "Background and key Contents of the New Chinese Tort Liability Law." *JETL* 1.3 (2010): 328-361.

⁶⁰¹*Ibid.*

⁶⁰² Stanley B. Lubman, "China's legal reforms" (Oxford University Press 1996) pp.57. 58; see also, Yi, Wang. "Substantive Rules of Reasoning for Value Judgment in Civil Law: In the Context of Academic Practice of Civil Law in China." *Social Sciences in China* 6 (2004): 008.

⁶⁰⁴*Ibid.*, Stanley B.Lubman, pp.77

- (1) A person who, intentionally or negligently, has wrongfully damaged the rights of another is bound to compensate him for any injury arising therefrom. The same rule shall be applied when the injury is inflicted intentionally in a manner against the rules of morals.
- (2) A person who violates a statutory provision enacted for the protection of others and therefore prejudice to others is bound to compensate for the injury, unless no negligence in his act can be proved.

As in the case of tort law in the German Civil Code⁶⁰⁵, the tort law embedded in the CCC provides for fault-based liability. Strict or no-fault liability is not recognized as an autonomous ground of liability. This leads to a potential conflict between the tort law in the CCC and other laws which emerged with the development of industrialization and urbanization, when ~~he~~ the person referred to in Article 184 of the Tort Law illegally interferes with ~~the~~ rights provided in the other laws ~~of in the~~ ~~latter~~ with intention or negligence.⁶⁰⁶

Although China had adopted the German pandect system without any material changes, the People's Republic of China (PRC) founded in 1949, repealed all substantial laws of significance introduced by the Republican government on political grounds (feichu liufa quanshu).⁶⁰⁷ The subsequent legislation of China was totally based on the Marxist philosophy of the former Soviet Union in which the central position of civil law in the governance of the society was manifestly denied

⁶⁰⁵ Conk, George W. "A New Tort Code Emerges in China: An Introduction to the Discussion and a Translation of Chapter 8-Tort Law of the Official Discussion Draft of the Proposed Revised Civil Code." *Fordham International Law Journal* 30.935-999 (2007).

⁶⁰⁶ Vincent R. Johnson, 'The Rule of Law and Enforcement of Chinese Tort Law' , vol 34 (Thomas Jefferson School of Law 2011) 43

⁶⁰⁷ Koziol, Helmut, and Yan Zhu. "Background and key Contents of the New Chinese Tort Liability Law." *JETL* 1.3 (2010): 328-361.

as were the concepts of market economy, horizontal social relations and individual freedoms.⁶⁰⁸

During this period, attempts at drafting a Civil Code were made three times over the years from 1954 to 1956, from 1962 to 1964 and from 1979 to 1982.⁶⁰⁹ But the attempts failed which were attributable to the prevailing social, political and economic circumstances. social, political and economic circumstances Even though the last draft of 1982 failed to become effective law,⁶¹⁰ it exerted a significant influence on legislation subsequently enacted. It therefore warrants some analytical appreciation in the context of the development of the law of torts.

First of all, through Chapter VI of the General Principles of Civil Law (GPCL) of 1984, a model was introduced pursuant to which contractual liability and non-contractual liability were integrated into a unified civil liability system. Secondly, whereas fault-based liability reained the foundation, the concept of liability without fault could, in certain special circumstances, be applicable through specific provisions. These would be, *inter alia*, liability in connection with highly dangerous activities, traffic accidents and environmental liability. Finally, ten types of civil liability were listed which formed the basis of Article 134 of the GPCL.⁶¹¹

⁶⁰⁸ Xie Gen. “On the Implication of Regulation in Tort Law Context [JJ]” (2009) 2 China Legal Science 008

⁶⁰⁹ See Zhongxie Mei, Key Points of Civil Law (China University of Political Science and Law Press 1998) (reprinted) 19; R Pound, The Chinese Civil Code in Action, 29 Tulane aw Review 289 (1955).

⁶¹⁰ See *supra* note 501.p 40.

⁶¹¹ See Qinghua He/Xiaohu Yin (eds), A History of Civil Law in the People’s Republic of China (Fudan University Press 1999).

This Article provided that-

The main methods of bearing civil liability shall be: (1) cessation of infringements; (2) removal of obstacles; (3) elimination of dangers; (4) return of property; (5) restoration to original condition; (6) repair, reworking or replacement; (7) compensation for losses; (8) payment of breach of contract damages; (9) elimination of ill effects and rehabilitation of reputation; and (10) extension of apology. The above methods of bearing civil liability may be applied exclusively or concurrently.⁶¹²

Incidentally, the issue of compensation was not of any great significance in this scheme of things. The remedies were derived from a combination of the Law of Real Rights, the Contract Law and the Tort Law.

Before the new Tort Law was enacted in 2009⁶¹³ the final phase of development of the Tort Law consisted of a 3-tier set of rules.⁶¹⁴ First, Chapter VI of the GPCL, particularly Part 3 on Tortious Liability was pre-eminent in this regard. Under Article 106 (2) of the GPCL, fault-based liability was the foundation for liability.⁶¹⁵ The provision was a virtual emulation of Article 1382 of the French Code Civile.⁶¹⁶ Second, in civil proceedings, a court could, in addition to the application of the above-noted provisions, serve admonitions or require the offender to sign an expression of remorse in the form of a legally binding promise.⁶¹⁷ The court could also confiscate the property used for carrying out the unlawful activity in question

⁶¹²See Article 134 of the GPCL.

⁶¹³ The Tort Law of PRC Entered into Force in 2010; http://www.gov.cn/flfg/2009-12/26/content_1497435.htm accessed on 18/09/2016

⁶¹⁴ See Tort Law of the People's Republic of China; the English version is available at <http://english.mofcom.gov.cn/article/policyrelease/Businessregulations/201312/20131200432451.shtml> accessed on 18/09/2016

⁶¹⁵ See Article of 106 (2) of Chapter VI of the General Principles of Civil Law; see also *supra* note 598.

⁶¹⁶ See *supra* note 591

⁶¹⁷ Wang Liming, "On the Construction of China's Tort Liability Legal System [J]", vol 4 (2008) 003

as well as the illegal income derived from such activity, and could impose sanctions including fines or detentions as provided in the law.⁶¹⁸

At this juncture, a point of clarification must be made regarding the basis of liability. Even though liability without fault was provided for in Article 106 (3) of the GPCL, it did not establish strict liability as an independent or standalone basis of liability. Third, apart from these general provisions, eleven specific areas of law attracting tortious liability were identified. These included liabilities for violation of tangible and intangible property rights, product liability, liability for abnormally dangerous or ultra-hazardous activities and environmental liability. These were listed in Articles 117 to 127 of the GPCL.⁶¹⁹

Now that the new Tort Law is effective, it must be noted that rules relating to tortious liability in connection with administrative law (regulatory law in common law jurisdictions) is equally important in terms of legal and judicial practice.⁶²⁰ There are administrative regulations which apply in conjunction with the relevant provisions of the Tort Law.⁶²¹ The Supreme People's Court (SPC) is at liberty to issue Judicial Interpretations (*sifa jieshi*)⁶²² which in practical terms can often be of

⁶¹⁸ See *supra* note 591. 006; see also Paul H. Robinson. 'The Criminal-Civil Distinction and the Utility of Desert' (1996) 76 Boston University Law Review 201

⁶¹⁹ Articles 117 to 127 of the GPCL; http://www.npc.gov.cn/englishnpc/Law/2007-12/12/content_1383941.htm, accessed on 18/09/2016

⁶²⁰ Conk, George W. "A New Tort Code Emerges in China: An Introduction to the Discussion and a Translation of Chapter 8-Tort Law of the Official Discussion Draft of the Proposed Revised Civil Code." *Fordham International Law Journal* 30.935-999 (2007).

⁶²¹ Wei Zhenying. 'The Status of Tort Liability Law in Civil Law and Its Relation to other Parts [JJ]' (2010) 2 *China Legal Science* 004

⁶²² Ronald C. Brown, *Understanding Chinese courts and legal process: Law with Chinese characteristics*

more importance than the laws and regulations themselves. The Judicial Interpretations play an indispensable role in filling gaps in the law addressing legal and practical needs hitherto unrealized.⁶²³ There are also economic laws relating to economic torts such as the Anti-Trust Law (2007) and the Unfair Competition Law (1993).⁶²⁴ Numerous laws have also been enacted in the field of intellectual property law.

6.6.2.3 Reform of the Tort Law under the Civil Code

Since 1993, concerted efforts have been made in China to produce a Civil Code. Thus far, this has not happened. The law-makers realizing that this is a monumental task which cannot be achieved in one go, due to lack of preparatory work stemming from insufficient theoretical understanding of the laws as well the political complexity involved in such an endeavour. The National People's Congress (NPC) thus decided to address the issue in phases. Following the enactment of the Contract Law in 1999, the first draft of the Tort Law was issued in December 2002.⁶²⁵

The work was undertaken within the framework of the first draft of the Civil Code but was subjected to criticisms alleging that it was vague and lacking in clarity.⁶²⁶

(Kluwer Law International 1997) pp 39-40

⁶²³ Nanping Liu, *Opinions of the Supreme People's Court: Judicial Interpretation in China* (Thomson Professional Pub Cn 1997) pp 44-45

⁶²⁴ Koziol, Helmut, and Yan Zhu. "Background and key Contents of the New Chinese Tort Liability Law." *JETL* (2010): 328-361.

⁶²⁵ See *supra* note 591.

⁶²⁶ Tsung-Fu Chen. "Transplant of Civil Code in Japan, Taiwan, and China: With the Focus of Legal Evolution" (2011) 6 *NTU L.Rev.* 389; WANG Li-ming. "Certain Issues in Enacting Tort Law" (2008a) 5 *Contemporary Law Review* 001

These activities were aimed at the eventual enactment of legislation.⁶²⁷ Unofficial efforts initiated in academic circles were also being made with a view to producing "model laws" in the area of tort law.⁶²⁸ The idea was to provide law-makers with drafts which could be useful for the official adoption of legislation. These drafts being concentrated on theoretical considerations of the law, their utilization was rather limited in so far as the official legislative process was concerned.⁶²⁹

The process was dominated by the Legislative Affairs Commission (LAC) of the Standing Committee of the NPC.⁶³⁰ With a view to improving the quality of draft legislation, the LAC of the NPC held consultation meetings to which several internationally reputed foreign experts were invited to participate.⁶³¹ The draft of the Tort Law contained, *inter alia*, the subject matters of Part II - Compensation for Harm, Part III - Defences, Part IV - Motor Vehicle Accident Liability, Part V - Liability for Environmental Pollution, Part VI - Product Liability, Part VII - Liability for Ultra-hazardous Activities, Part VIII - Liability for Damage Caused by Animals, Part IX - Liability for Damage Caused by Objects, and Part X - Special Provisions regarding the Subject of Tort Liability.⁶³² Among the total of 1,209 Articles in the draft Civil Code, the ones relevant to the subject matter of this thesis are - Contract Law (454 articles), Law of Personality Rights (29 articles), Tort Law

⁶²⁷ *Ibid.*

⁶²⁸ Conk, George W. "A New Tort Code Emerges in China: An Introduction to the Discussion and a Translation of Chapter 8-Tort Law of the Official Discussion Draft of the Proposed Revised Civil Code." *Fordham International Law Journal* 30.935-999 (2007).

⁶²⁹ Mingrui, Guo. "Several Thoughts on Legislation of Tort." *China Legal Science* 4 (2008): 004.

⁶³⁰ See *supra* note 628.

⁶³¹ Andrew J. Green. 'Tort Reform with Chinese Characteristics: Towards a 'Harmonious Society' in the People's Republic of China' (2008) 10 *San Diego International Law Journal* 121

⁶³² See *supra* note 628.

(68 articles), and International Private Law (94 articles). The Contract Law and the Tort Law are presently in effect.⁶³³

The second draft was discussed by experts in December 2008 but before that a temporary draft was prepared which formed the basis for the second draft⁶³⁴ together with suggestions coming from experts. These were considered at a meeting aimed at improving and consolidating the draft which was to be an independent part of the future CCC. This effort was considered quite innovative as it contributed immensely to the modification of the pandect system under which tort law fell under the legislative framework of the law of obligations.⁶³⁵ Be that as it may, regardless of the importance of tort law as an independent subject matter, it is still regarded as part and parcel of the broader law of obligations. Clearly, tort liability has the same obligatory force as contractual liability under the law of obligations.

A third draft was presented to the Law Committee of the Standing Committee at the Eleventh Session of the NPC in October 2009. This draft had already incorporated several suggestions of the consulting experts. The law-makers were not keen on getting into discussions on sensitive topics such as equal damages for personal injuries suffered by persons from urban and rural areas.⁶³⁶ They simply wished to expedite the enactment of the Civil Code. Thus, in December 2009 the final draft

⁶³³ Pitman B. Potter, *The Chinese legal system: Globalization and local legal culture* (Routledge 2005) pp 24-25

⁶³⁴ Zhu Yan. "Risk Society and Basic Structure of Tort Law System "(2009) 5 Chinese Journal of Law 003

⁶³⁵ Li-ming, W. A. N. G. "Certain Issues in Enacting Tort Law." *Contemporary Law Review* 5 (2008): 001.

⁶³⁶ *Ibid.*

was submitted to the Standing Committee bypassing the Assembly of the NPC. The Tort Law was finally adopted at the Twelfth Session of the NPC on 26 December 2009 and came into effect on 1 July 2010.⁶³⁷ Without a doubt new important groundwork was established to lead to the Civil Code following the passing of the Law of Real Rights in 2007 and the Contract Law of 1999.⁶³⁸

Unlike the Law of Real Rights of 2007, which in Article 178 clearly regulates its interrelationship with the Security Law of 1995,⁶³⁹ the Tort Law does not provide any indication of its influence on existing laws in the field, such as the GPCL. However, according to the principle, *lex posterior derogat legi priori*,⁶⁴⁰ clearly the Tort Law should prevail in the event of any conflicting provisions in other laws such as the corresponding provisions in the GPCL, including certain Administrative Regulations. The legislation also has the objective of resolving existing conflicts among different tort law enactments. As an example, the liability system for medical malpractice was previously in a state of legal chaos. The Tort Law attempted to remedy the situation by establishing new rules of damage and liability.

6.7 Maritime Environmental Law

The Marine Environmental Protection Law (MEPL) was originally adopted in 1982,

⁶³⁷ Pitman B. Potter, 'The Chinese legal system: Globalization and Local Legal Culture' (Routledge 2005)

⁶³⁸ Zhu Yan, "Risk Society and Basic Structure of Tort Law System" [J], vol 5 (2009b) 003

⁶³⁹ Conk, George W. "A New Tort Code Emerges in China: An Introduction to the Discussion and a Translation of Chapter 8-Tort Law of the Official Discussion Draft of the Proposed Revised Civil Code." *Fordham International Law Journal* 30.935-999 (2007).

⁶⁴⁰ Koziol, Helmut, and Yan Zhu. "Background and key Contents of the New Chinese Tort Liability Law." *JETL* (2010): 328-361.

and subsequently revised in 1999.⁶⁴¹ After MEPL was amended, Article 66 stipulates that the state must apply and implement a civil liability regime for marine environmental damage arising from oil pollution and also provide oil pollution insurance coverage and establish a compensation fund.

This Article reads

- “The state shall make perfect and put into practice a responsibility system for civil liability and compensation for oil pollution by vessels, and shall establish an insurance system for oil pollution from vessels, a compensation fund system for oil pollution by vessel in accordance with the principles of sharing of owners of the vessel and the cargo of the compensation liabilities for oil pollution by vessel.”⁶⁴²

By reference to Article 66, Chinese legislators followed the international conventions of establishing the compensation scheme for marine oil pollution. Moreover, it is the first time the channeling of liability is through the shipowner as well as the cargo owner⁶⁴³ which will exemplify the compensation scheme of the CLC and the HNS Convention. However, the question is how to implement these principles in judicial practice. China is undergoing remarkable reform and transformation in all respects, and legal regimes, especially in the maritime field,

⁶⁴¹ The MEPL 1982 was adopted on 23 August 1982, and has come into effect as of 1 March 1983; the MEPL 1999 was adopted on 25 December 1999, and has come into effect as of 1 April 2000. For a detailed analysis of the MEPL 1982, Stefanie Beyer. 'Environmental Law and Policy in the People's Republic of China' (2006) 5(1) Chinese Journal of International Law 185; see also Eckart J. Broedermann. 'China and Admiralty-An Introduction to Chinese Maritime Law and US-Chinese Shipping Relations' (1984) 15 J.Mar.L. & Com. 539

⁶⁴² *Ibid.*

⁶⁴³ Alex Wang and Jie Gao. “Environmental Courts and the Development of Environmental Public Interest Litigation in China” (2010) 3 Journal of Court Innovation 37

are in a state of evolution. No doubt, it will be difficult to enforce this without implementation measures. The most critical aspect is that the compensation fund has not yet been established, therefore, this principle still remains on a theoretical level under Chinese regime.

Article 90 stipulates that “Those who cause pollution damage to the marine environment shall eliminate the damage and compensate the losses”.⁶⁴⁴ It clearly reflects the adoption of principle of “polluter pay” under this regime. Therefore, the polluter is obliged to “eliminate the damage” and “pay compensation”, both of which are civil remedies for torts provided in Chinese law. According to one interpretation, it is contemplated that the polluter must pay for the full amount of the loss or damage with the benefit of any limitation of liability.⁶⁴⁵ Another interpretation is that the strict liability principle is applicable here which means the polluter is strictly liable for the damage. With regard to the actual amount of compensation, the shipowner, charterer or operator may limit liability under the CMC provided there is compliance with the conditions required under that legislation.⁶⁴⁶

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⁶⁴⁴ Stefanie Beyer, “Environmental Law and Policy in the People's Republic of China”, vol 5 (Oxford Univ Press 2006) 185

⁶⁴⁵ Michael G. Faure, *Prevention and compensation of marine pollution damage: Recent developments in Europe, China and the US*, vol 9 (Kluwer Law International 2006), 90

⁶⁴⁶ Michael G. Faure, Lixin Han and Hongjun Shan, “Maritime Pollution Liability and Policy. China, Europe and the US” (2010)

environment shall eliminate the damage and compensate the losses”.⁶⁴⁷ It clearly reflects the adoption of principle of “polluter pay” under this regime. Therefore, the polluter is obliged to “eliminate the damage” and “pay compensation”, both of which are civil remedies for torts provided in Chinese law. According to one interpretation it is contemplated that the polluter must pay for the full amount of the loss or damage with the benefit of any limitation of liability.⁶⁴⁸ Another interpretation is that strict liability principle is applicable here which means the polluter is strictly liable for the damage. With regard to the actual amount of compensation, the shipowner, charterer or operator may limit liability under the CMC provided there is compliance with the conditions required under that legislation.⁶⁴⁹

In Article 90, paragraph 2, it is stipulated that “If the State suffers heavy losses from damage to marine ecosystems, marine aquatic resources and marine nature reserves, the departments invested by this law with the power of marine environment supervision and administration shall, on behalf of the State, put forward compensation demand to those who are responsible for the damage.”⁶⁵⁰ This provision is the legal basis for recovery by the state for damage to natural resources.

However, the provision applies only to “heavy losses” and there is no provision

⁶⁴⁷ See *supra* note 644. p187.

⁶⁴⁸ Michael G. Faure, *Prevention And Compensation of Marine Pollution Damage: Recent Developments in Europe, China And The US*, Vol 9 (Kluwer Law International 2006)P 90

⁶⁴⁹ Michael G. Faure, Lixin Han and Hongjun Shan, “Maritime Pollution Liability and Policy. China, Europe and the US” (2010)

⁶⁵⁰ HAN Li-Xin. “Study on The Scope Of Compensation For Marine Environmental Damage Caused by Ships' Pollution “ (2005) Annual of China Maritime Law 2005

regarding how losses that are not considered “heavy” are to be compensated.⁶⁵¹ Also there is no definition of “heavy losses” or any indication of what are the standards under which damage may comprise “heavy losses”. Furthermore, this Article only regards the damage to natural resources suffered by the public entities-“State”. However, concerning individuals or other private entities, there is no clear stipulation on the scope of damages recoverable or what is the specific compensation scheme in respect to damage sustained by individuals or other private entities caused by the oil pollution.

As a result, when a claimant brings an action for compensation for oil pollution damage, the MEPL alone is insufficient to offer satisfactory recompense or resolve the compensation problem in practice. Given the fact that there is no specific provision on compensation for private parties who suffer losses from oil pollution, the alleged polluter often invokes the CMC China Maritime Code in attempting to limit liability.⁶⁵² Besides the inadequacy of the MEPL, its applicability is also debated. Some Chinese scholars are of the view that the MEPL is by its character an administrative (regulatory) statute,⁶⁵³ whereas compensation for oil pollution damage is a civil law matter for which the civil law statutes should be resorted to instead of the administrative law.

⁶⁵¹ Xia Chen, *Limitation of Liability for Maritime Claims: A Study of US Law, Chinese Law, and International Conventions* (Martinus Nijhoff Publishers 2001)

⁶⁵² See *supra* note 644.

⁶⁵³ Alex Wang and Jie Gao. “Environmental Courts and the Development of Environmental Public Interest Litigation in China” (2010b) 3 *Journal of Court Innovation* 37

A point of observation is that most of the provisions of the MEPL are indeed are related to regulation and administration of activities that might be detrimental to the marine environment.⁶⁵⁴ Article 71, for example, provides how the competent authority use certain measures by their authority to prevent or mitigate pollution damage, such as administrative fines, which is provided for under Article 91. Notably, there is also a "Regulation Concerning the Prevention of Pollution of Sea Areas by Vessels" which apparently is regulatory legislation.⁶⁵⁵

There seems to be no legislation clearly providing for liability and compensation in respect of marine oil pollution damage. There are no specific provisions on who should be paying compensation for oil pollution liability, and what exactly is the compensation regime in terms of the scope of payable compensation. It can be surmised, however, that the "polluter pays" principle applies,⁶⁵⁶ in other words, the one who pollutes is liable and is required to pay compensation. In so far as cleanup costs and other government expenses—and state losses are concerned, it is the shipowner's responsibility to pay; victims of pollution such as fishermen who sustain damage or loss.

Under Chinese law regime, the approach of *lex specialis derogat lex generalis* is

⁶⁵⁴ Xia Chen, "Limitation of Liability for Maritime Claims: A Study of US Law, Chinese Law, and International Conventions" (Martinus Nijhoff Publishers 2001)pp 210

⁶⁵⁵ HAN Li-xin, "Study on the Scope of Compensation for Marine Environmental Damage Caused by Ships' Pollution" (2005) 2005

⁶⁵⁶ Wang, Hui. *Civil Liability for Marine Oil Pollution Damage: a Comparative and Economic Study of the International, US and the Chinese Compensation Regime*, (Vol. 19. Kluwer Law International, 2011),p 89.

adopted to deal with the application of national laws. The MEPL and the CMC may be considered to be *lex specialis*.⁶⁵⁷ But there is debate over which of the two should be considered first. Where no article in these specific laws can be applied, the general principles of the Civil Law must be resorted to.

In summary it must be stated that the whole regime is convoluted and grossly inadequate lacking in proper legislative rationale. Regulatory, administrative and private law seemed to be all placed in the same boiling pot leading to uncertainty and confusion.

6.8 Carriage of Goods under CMC and other Domestic Law

In China carrier liability is subject to two regimes, one for international sea carriage and the other for domestic inland waters carriage of cargo.⁶⁵⁸ For international carriage, Chapter IV of the CMC is the applicable legislation whereas for domestic transportation of goods, a variety of other legislation, including the Rules Regarding Transport of Goods by Domestic Waterway 2001, the Contract Law and the Civil Code would apply in appropriate cases.⁶⁵⁹ Under the domestic transportation situation, strict liability is the norm for carrier liability. In other words, with the exception of *force majeure*, or defect in the goods, or where the shipper or consignee is that fault, the carrier is liable for the loss or damage suffered by the goods. No other exceptions as provided for international carriage are available in

⁶⁵⁷ See *supra* note 655.

⁶⁵⁸ Zhang Xianwei. "Comment on the Legal Regime of Limitation of Actions Regarding Carriage of Cargo by Sea in China" (2006) 37 J.Mar.L.& Com. 261

⁶⁵⁹ Xia Chen. "Chinese Law on Carriage of Goods by Sea under Bills of Lading" (1999) 8 Currents Int'l Trade LJ 89

respect of domestic transportation. The main document used in domestic transport is the sea waybill.

By contrast, in international sea carriage, the carrier's liability is fault-based. There is a list of exceptions under which the carrier can exonerate itself from liability.⁶⁶⁰ The carriage is subject to the issue of a bill of lading. The duality of the system is largely because as a matter of policy it was decided that although the rules applicable to international sea carriage should be fault-based liability in line with international law and practice, in the domestic arena, strict liability should prevail to provide for consistency among all modes of transport.⁶⁶¹

For historical reasons, Chapter IV of CMC is applicable for contracts pertaining to carriage of goods by sea between mainland China and Hong Kong or Macao.⁶⁶² The term "contract of carriage of goods by sea" is defined as "a contract under which the carrier, against payment of freight, undertakes to carry by sea the goods contracted for shipment by the shipper from one port to another".⁶⁶³ There are essentially three kinds of carriage contracts governed by Chapter IV. These are contracts of carriage evidenced by a bill of lading or other similar document of title in the liner trade; voyage charterparties as contracts of affreightment; and multimodal transport contracts. The voyage charterparty and the multimodal

⁶⁶⁰ Stephen Zamora. "Carrier Liability for Damage or Loss to Cargo in International Transport"(1975) *The American Journal of Comparative Law* 391

⁶⁶¹ See *supra* note 548.

⁶⁶² Ben Beaumont and Philip Yang, *Chinese Maritime Law and Arbitration* (Simmonds & Hill Pub. 1994); See also *supra* note 562.

⁶⁶³ See *supra* note 548.

transport contract fall respectively under Sections 7 and 8 of Chapter IV. In these two Sections specific rules and separate definitions are provided.⁶⁶⁴ Thus Sections 1 to 6 of this Chapter are mandatorily applicable only to contracts evidenced by bills of lading.

With regard to voyage charter parties, provisions dealing with shipowner's obligations on seaworthiness are mandatorily applicable to the shipowner while other provisions under Sections 1 to Section 6 regarding the rights and obligations of the contracting parties apply only where relevant provisions in Section 7 are absent in the case of a voyage charter.⁶⁶⁵ A Multimodal transport contract under Section 8 is "a contract under which the multimodal transport operator undertakes to transport the goods, against the payment of freight for the entire transport, from the place where the goods were received in his charge to the destination and to deliver them to the consignee by two or more different modes of transport, one of which being sea carriage".⁶⁶⁶

The Multimodal transport operator (MTO) is 'the person who has entered into a multimodal transport contract with the shipper either by himself or by another person acting on his behalf'.⁶⁶⁷ In the CMC, these concepts have been adapted from the United Nations Convention on International Multimodal Transport of

⁶⁶⁴ Chapter IV, Article 41. 21 of CMC

⁶⁶⁵ See *supra* note 533.

⁶⁶⁶ See *supra* note 562.

⁶⁶⁷ *Ibid.*

Goods, 1980.⁶⁶⁸ This Convention was held at Geneva in 1980 and was signed by 67 Convention States including China⁶⁶⁹ but did not attract a sufficient number of ratifications to enter into force.⁶⁷⁰

Section 8 of Chapter IV provides rules for the period of the MTO's responsibility, and sets out the relationship between Chapter IV and other legal instruments in multimodal transportation, but there are no substantive rules on the MTO's obligations and liabilities. If a loss or damage cannot be localized to a particular mode of transport, or can be ascertained to have occurred during the sea carriage part, the liabilities of the MTO will be decided according to the provisions in other Sections of Chapter IV.⁶⁷¹ According to Articles 94 and 102(1) of Chapter IV, because different rules are provided for domestic and international carriage, they are treated as different modalities.⁶⁷² A multimodal transport contract can thus apply to carriage which combines domestic transport of goods and international sea carriage.

6.9 Carriage of Goods under International Carriage Conventions

6.9.1 Implementation Process in China

There are essentially two main approaches to implementation of international conventions that a state can employ according to its constitutional dictates. These

⁶⁶⁸ Ralph De Wit, *Multimodal transport: carrier liability and documentation* (Lloyd's of London Press 1995).

⁶⁶⁹ *Ibid.*

⁶⁷⁰ See *supra* note 533.

⁶⁷¹ See *supra* note 656, pp. 225-227.

⁶⁷² CMC, Chapter IV, Article 102(2). 122 Si, Maritime Law Monograph (n 94) 117. 123; see *ibid.*, the Convention requires ratification of 30 States to become into force. 125 CMC, Chapter IV, Article 105.

are the monistic and dualistic approaches.⁶⁷³ Under monism, once an international convention is ratified or acceded to by a state, it automatically becomes a part of the law of the land without the need for enactment of any domestic legislation provided the convention in question is self-executing or directly applicable. Under dualism an international convention to which a state has become party is required to enact domestic legislation in all circumstances without which the convention cannot be applicable in that jurisdiction.⁶⁷⁴

The Chinese approach with regard to implementation of international conventions is neither wholly monistic nor dualistic.⁶⁷⁵ Indeed, according to one scholar, both the monistic and dualistic approaches are incompatible with the Chinese concept of sovereignty which embraces Marxist thinking although it is uncertain whether that is strictly the case at present.⁶⁷⁶

It is said that-

[T]he monist theory with primacy of international law is criticized as denying state sovereignty and as reflecting an imperialist policy to control the world through world law. The dualist theory is regarded as overemphasizing the formal antagonistic aspect of international law and municipal law. Instead, commentators favour a ‘dialectical model’ borrowed largely from Soviet legal doctrine.⁶⁷⁷

⁶⁷³ Zou Keyuan. “China’s Marine Legal System and the Law of the Sea”(2005) 48 *Publications on Ocean Development* 396; see also Jerome Alan Cohen and Hungdah Chiu, *People’s China and international law: a documentary study*, vol 1 (Princeton University Press Princeton, NJ 1974)

⁶⁷⁴ Proshanto K. Mukherjee *Maritime Legislation*, Malmo: WMU Publications, 2002 at pp. 126-133.

⁶⁷⁵ See *supra* note 673. Zou Keyuan.

⁶⁷⁶ Björn Ahl, “The Application of International Treaties in China” in *Beträge zum ausländischen öffentlichen Recht und Völkerrecht*, Band 207, (2009), 355 at p. 356)

⁶⁷⁷ *Ibid.*

With regard to maritime conventions quite frequently the approach taken is to embrace the principles of the convention to which China has subscribed and apply them to the related Chinese law, which is akin to the monistic methodology.⁶⁷⁸ As an example, in Chapter 8 of the CMC the provisions on collisions of ships are based on the principles found in the Collision Convention of 1910 which was ratified by China, but there is no reference to that convention in the legislation. Another example is Article 66 of MEPL 1999 which is based on the general principles of the CLC and the Fund Convention. After an international convention is ratified or acceded to by China, the relevant Government authority such as the Ministry of Transport distributes a notification to interested parties, to advise them of the time when the convention comes into effect in China.⁶⁷⁹ But the notice does not indicate how it is to be implemented.

6.9.2 Carriage Conventions, the CMC and other Chinese Legislation

As a preface to the discussion below it must first be noted that to a large extent the CMC reflects the main features of the Hague-Visby Rules even though China is not a party to it; indeed China is not a party to any international sea carriage conventions but provisions of the Hamburg Rules have also been incorporated into the CMC. Thus many significant elements of the Hamburg Rules are found not only in the CMC⁶⁸⁰ but also a number of other Laws, regulations and rules⁶⁸¹ such as

⁶⁷⁸ *Ibid.*

⁶⁷⁹ See *supra* note 515, pp . 56-57

⁶⁸⁰ Binling Zhou. (2014) Carrier's Obligations and Liabilities in International Sea Carriage: A Comparative Study of the Nordic Maritime Codes, Chinese Maritime Code and Rotterdam Rules

the Marine Environment Pollution Law¹⁹⁸², Administrative Rules of the PRC for Preventing Marine Pollution caused by Vessels 198; Maritime Traffic Safety Law of the PRC 1983(MTSL); the Civil Law 1986, Maritime Code 1992; Product Quality Law (PQL)1993, Regulations of the PRC on Administration of Dangerous Cargo at Port (RPADCP)2003; Administrative Regulations of the PRC on the Safety Supervision of Dangerous Cargo on Vessels (ARPSSDV)2003; the Port Law 2003; and Tort Law 2010.

As is evident from the history of the development of the CMC China lacked sufficient legislative experience in this field. During the drafting process, a basic technique used was making references to international conventions.⁶⁸² As a result, substantial parts of the CMC are actually based on international maritime conventions and shipping practices. The CMC in essence follows the Hague-Visby Rules but as indicated, also incorporates some elements of the Hamburg Rules.⁶⁸³ It is to be observed that generally speaking international conventions do take account of differences between civil law and common law systems. It is notable in this regard that the Hague-Visby Rules adopted the common law style whereas the drafters of the Hamburg Rules produced an instrument which took account of the civil law style.

The scope of application of the CMC extends to the maritime transportation of

⁶⁸¹ See *supra* note 515, pp. 40-42

⁶⁸² CMC, Chapter I, Article 2.

⁶⁸³ Beaumont, Ben, and Philip Yang. *Chinese maritime law and arbitration*. (Simmonds & Hill, 1994),120-123.

goods which includes direct transportation between sea and river. As mentioned earlier, Chapter IV of the CMC applies specifically to international carriage of goods rather than transportation of goods between Chinese ports.⁶⁸⁴

6.9.3 Marine Environment Conventions

China is a party to the Civil Liability Convention, 1992 (CLC) but not to the Fund Convention, 1992. Interestingly enough, the Fund Convention is applicable in Hong Kong.⁶⁸⁵ Thus any amendment to CLC is effective in the whole of China but an amendment to the Fund Convention is only effective in Hong Kong. The CLC became applicable in China in April 1980 and the 2000 Amendments are effective in China as well.⁶⁸⁶ The Fund Convention applies in Hong Kong because its application was effectuated from the time when the United Kingdom joined the Fund. At that time Hong Kong was an overseas territory of the United Kingdom. After Hong Kong was returned to China, the Chinese government decided that the Fund Convention should continue to apply to it.⁶⁸⁷ China is a party to 1971 Fund Convention but not to the 1992 Fund Convention. Even so, in 2012, China established its own national ship-source pollution fund which serves as a supplementary source of compensation in ship-source pollution cases occurring in Chinese waters.

An important point of observation is that there are provisions on shipowner's

⁶⁸⁴ *Ibid.* at pp 89-90.

⁶⁸⁵ *Ibid.* at 90.

⁶⁸⁶ *Ibid.*, at 91.

⁶⁸⁷ *Ibid.*, at 92.

limitation of liability in both the CMC and the CLC,⁶⁸⁸ What is not clear is whether in cases of liability for pollution damage arising from oil spills, it is the CLC that is applicable or the CMC.⁶⁸⁹ Furthermore, if the limitation amount under the CMC is different from that available under the CLC it is manifestly unclear as to which one will apply.

6.10 Concluding Remarks

It is perhaps an understatement to say that the contemporary global society in which we live is heavily dependent on energy, and fossil fuel is the principal source of energy. Carriage of oil by sea which only started about a hundred years ago after oil was discovered, goes hand in hand with the potential risk of oil spills.⁶⁹⁰ China is increasingly exposed to the risk of ship-source pollution accidents. This is mainly due to the rapid development of China's industries requiring heavy importations of oil and its leading role in the world shipping industry.⁶⁹¹ However, a complete legal framework for a liability and compensation regime for oil pollution damage was not established until recently. This happened only at the end of 2012 following the effectuation of several laws and regulations.⁶⁹² Unfortunately, to date there has not been much research dedicated to this subject matter addressing the new regime of liability and compensation for ship-source oil pollution damage in China.

⁶⁸⁸ Kevin X. Li. "Development of Maritime Limitation of Liability in China (1993-2011)" (2012) 42 Hong Kong LJ 253.

⁶⁸⁹ *Ibid.*

⁶⁹⁰ Dan Liu And Ling Zhu. "Assessing China's Legislation on Compensation for Marine Ecological Damage: a Case Study of The Bohai Oil Spill" (2014) 50 Mar Policy 18

⁶⁹¹ See *supra* note 688.

⁶⁹² See *supra* note 656, p. 230

The motivation for this chapter partly stems from China's reluctance to fully accept the well-established international compensation regime of ship-source oil pollution damage. Not much effort has been expended to explain the different attitudes of states towards the international compensation regime, or to analyze the rationality of China's incomplete acceptance of it. Against this background, this chapter aspires to contribute to the existing literature in this field by investigating how China is enhancing its compensation capacity in moving closer to international standards established by international convention law. It is submitted that a combination of three factors have led to the high acceptance level of the international regime. They are - (a) economic development, (b) risk of exposure to tanker oil spills, and (c) the financial burden associated with compliance with the relevant international conventions relating to oil pollution compensation.⁶⁹³ Finally, based on an examination of the present compensation regime in China, it is proposed that China should join the IOPC Fund which will further increase the compensation limits and protection greater protection to victims of any future oil pollution incidents in China.⁶⁹⁴

⁶⁹³ Michael Faure and Wang Hui. 'The International Regimes for the Compensation of Oil - Pollution Damage: Are they Effective?' (2003) 12(3) REIEL. 242

⁶⁹⁴ Dong, Bingying. *Compensation for Vessel-Source Oil Pollution Damage in China*. (Diss. The Hong Kong Polytechnic University, 2014), 78-89.

CHAPTER 7 - CHINESE LAW AND PRACTICE IN RELATION TO SEA CARRIAGE OF DANGEROUS GOODS

7.1 Preliminary Remarks

This chapter is mainly about the Chinese law respecting damage caused by the carriage of dangerous, hazardous and noxious substances. It presents a critical review of the existing Chinese legislation embracing both liability issues in relation to the carrier-shipper contractual relationship as well as the legislation on tortious liability pertaining to third parties and its adequacy regarding liability and compensation issues. It probes into the Chinese practice with respect to the private commercial law domain under Chinese legislation, and also tort liability in respect of third parties and associated remedies. In that context, it extends to a review of the national Chinese position on the HNS Convention and the law and practice regarding marine environmental pollution. On this topic, as already mentioned in Chapter 5, the governing legislation includes the MEPL, the Regulations of the PRC on Administration of Prevention and Control of Pollution to the Marine Environment by Vessels and the Regulation Concerning the Prevention of Pollution of Sea Areas by Vessels. In the course of the discussion, some Chinese court decisions are presented with analytical comments to provide an insight into the law and its practice in China pertaining to the subject matters addressed in this chapter.

7.2 Dangerous Goods Law in China

As a starting point, it must be observed that the definition of "dangerous goods"

in the Chinese regime poses a dilemma. There is no doubt that the goods regulated through the IMDG Code and the corresponding Chinese domestic regulations giving effect to the Code are dangerous goods. However, in the CMC there are still problems with the definition of dangerous goods and what is harmful in legal terms in practice.

7.2.1 Issues Regarding Dangerous Goods

The first problematic question is whether dangerous goods not listed in these instruments should be categorized as dangerous goods; and if so, under what law and process? The main principle applicable to transportation of dangerous goods by sea in litigation is the strict liability of the defendant.⁶⁹⁵ This in turn raises the question whether the goods are "dangerous goods" under any regulations.

In a 2003 case, *American President Lines Ltd. v. China Jiangsu International Economic and Technological Cooperation Company*,⁶⁹⁶ the plaintiff carrier claimed for damage caused by the dangerous goods carried on his ship. The defendant did not give notice to the plaintiff prior to the start of the voyage to make him aware that the goods were dangerous.

The issue was whether the goods containing thichlornomethyl carbonate were "dangerous goods", even though it was not listed in any regulatory instrument in domestic legislation or the IMDG Code. The outcome of the decision made by

⁶⁹⁵ WANG Li-ming, "Certain Issues in Enacting Tort Law", *Contemporary Law Review* 5 (2008): 001.

⁶⁹⁶ *American President Lines Ltd. v. China Jiangsu International Economic and Technological Cooperation Company* reported by Shanghai Maritime Court

the Shanghai Maritime Court was in favour of the plaintiff holding that the goods in question were indeed "dangerous goods".⁶⁹⁷ The defendant shipper stated in defence that the goods were not explicitly listed in any regulations including the IMDG Code and denied liability. The court was of the opinion that in the context of international regulations, some goods carried by sea which are not listed in the IMDG code inherently bore the characteristics of hazardous and noxious substances. Therefore, such goods should not be excluded from the category of dangerous goods. In essence the court held that to identify dangerous goods and impose liability on parties, whether or not the goods are dangerous should not be determined only according to lists of substances appearing in regulatory legislation. If the goods in question have noxious and hazardous characteristics and are dangerous enough to become a potential risk for safety reasons, they are dangerous goods.

7.2.2 The Legal Harm Issue in Practice

Apart from the question of whether the dangerous goods should be considered as dangerous goods if they are not listed in any regulatory instrument in domestic legislation or the IMDG Code. Of course, the question will not be answered by applying any international convention law governing sea carriage contracts although important evolutionary changes have taken place regarding the provisions on dangerous goods. This is because none of them including the Rotterdam Rules provide a clear answer to this question.⁶⁹⁸

⁶⁹⁷ *Ibid*; see also Lixing Zhang. 'Shipping Law and Practice in China-Legal Analysis of the Draft Maritime Code and Maritime Jurisdiction' (1989) 14 Tul.Mar.LJ 209.

⁶⁹⁸ See details in *IMDG Code and International Carriage Conventions, Including Rotterdam Rules*

However, concerning the legal practice in China, it is crucial to define the scope of the concept of dangerous goods. As mentioned earlier in Chapter 3 whether in legal terms, dangerous goods fell within the scope of danger was a legal issue brought before the courts under the English jurisdiction.⁶⁹⁹ The notion of “danger” or “legal harm” in many circumstances is in relation to delay or seizure, which are through the operation of national law. Regarding the practice in China, it is not appropriate to address the issue of the duty to refrain from shipping dangerous goods. It is more practical to address the issue of goods that by their nature result in forfeiture or delay or monetary penalty under administrative regulations. Considering that the shipper’s liability for dangerous cargo falls within a non-fault liability regime, it deviates from the principle of fairness to widen the scope of the concept of dangerous goods.

7.3 Cargo Care and Seaworthiness

7.3.1 Cargo Care on Board and Seaworthiness

Under carriage conventions, the carrier has a duty to "properly and carefully load, handle, stow, carry, keep and care for, and discharge the goods carried".⁷⁰⁰ The duty of the carrier in this regard is not delegable which means the carrier is responsible for the acts of the master and the crew, as well as its agents such as stevedores. However, where a shipper has failed to take precautions in respect of dangerous cargo which he has placed on board the carrier's ship, and damage ensues, the carrier is not responsible. In relation to the carrier's duty referred to above, the carrier also has the dual duty relating to seaworthiness and

⁶⁹⁹ See the cases *Athanasia Cominos* [1990] 1 Lloyd's Rep 277 at pp.283-284 ; *Giannis NK* [1998] 1 Lloyd's Rep 337.

⁷⁰⁰ See Hague-Visby Rules, Article III(2)

cargoworthiness which applies to carriage of dangerous goods in the same way as it applies to other types of cargo from a legal point of view. But the threshold of care, expressed in carriage law as "due diligence" is obviously higher for dangerous goods.⁷⁰¹ The duties mentioned above are contained in the Hague-Visby Rules, the principles of which have been incorporated in the CMC even though China is not a party to that convention.⁷⁰² As such, it should not be out of order to contextually examine some of the case law, foreign and Chinese, associated with the relevant convention rules reflected in the Chinese legislation.

Seaworthiness is best described as the fitness of a ship to prosecute its intended voyage. The concept originates in the commercial interests of shipowners to ensure "fitness for the purpose" in respect of their ships without which they would not be able to obtain insurance.⁷⁰³ Classification societies were engaged to inspect a ship to determine its "fitness" from a safety viewpoint and issue a certificate of seaworthiness to that effect.⁷⁰⁴

A point of observation in this regard is that the carrier's duty of seaworthiness is not an absolute one. The duty is not to make the ship seaworthy but rather to "exercise due diligence to make the ship seaworthy" which is cast at a lower threshold than the absolute duty. Also, under the Hague-Visby Rules and the CMC, the duty operates only before and at the beginning of the voyage.⁷⁰⁵ By

⁷⁰¹ LIU Changbing, "On Carriage of Dangerous Goods under the Maritime Code of the People's Republic of China—Apprehension and Revising suggestions of Article 68 [J]" (1999) Annual f China Maritime Law 1999

⁷⁰² See *supra* note 515, pp56-57

⁷⁰³ *McFadden v. Blue Star Line* [1905] 1 K.B. 697 it was held that "[A] vessel must have the degree of fitness that an ordinarily careful and prudent shipowner would require his vessel to have at the commencement of a voyage having regard to all possible circumstances".

⁷⁰⁴ See *supra* note 108, p.35 at p. 43.

⁷⁰⁵ See *Moxine Footwear v. Canadian Government Merchant Marine* [1950] A.C. 580 (H.L.) for

contrast, under the Rotterdam Rules, the seaworthiness obligation is continuous similar to the Hague-Visby Rules' duty of the carrier to properly load, handle and care for the cargo which is also continuous. Another noteworthy point is that the cargo-worthiness obligation under the Hague-Visby Rules and presumably under the CMC extends to "mak[ing] the holds, refrigerating and cool chambers, and all other parts of the ship in which goods are carried, fit and safe for their reception, carriage and preservation."⁷⁰⁶ In this context it was held in *The Iron Gippsland*⁷⁰⁷ that the scheme of the Hague-Visby system is not simply for the carrier to manage the cargo to protect it, but also to protect the vessel from adverse consequences associated with that cargo.⁷⁰⁸

What is to be noted here is that there are two dimensions to the notion of "cargo safety". One relates to the safety of the cargo itself; the other relates to the safety threat that may arise from the nature of the cargo with respect to the rest of the ship including persons and property on board.⁷⁰⁹

7.3.2 Seaworthiness in Chinese Law

Articles 47 and 48 of the CMC govern carrier's duties, obligations and liability.⁷¹⁰ Most of the duties of the carrier are related to the seaworthiness of the vessel which is undoubtedly the most important obligation of the carrier. The two Articles also require the carrier to take reasonable care, referred to as "due diligence" in carriage law, when carrying cargo during the voyage. These duties

an explanation of what is meant by "before and at the beginning of the voyage".

⁷⁰⁶ Article III(1)(c)

⁷⁰⁷ [1994] 1 Lloyd's Rep. 335

⁷⁰⁸ *Ibid.*

⁷⁰⁹ See *supra* note 108, pp. 41-42.

⁷¹⁰ See Articles 47 and 48 of the CMC

are virtually identical to Article III of the Hague-Visby Rules. Indeed, the texts of Articles 47 and 48 appear to be direct translations of Article III of the Hague-Visby Rules.⁷¹¹

The scope of the duty of exercising due diligence depends on numerous factors associated with the tasks and functions of the vessel at sea and may vary according to its particular deployment in different circumstances. The factors include compliance with the manning scale of the ship as prescribed by the flag state authorities; in the case of China, the Maritime Safety Administration (MSA), the state of navigational and safety equipment and operational machinery on board, the types of cargoes carried their peculiarities and characteristics, stowage methodologies, ship stability conditions before sailing, and sufficiency of fuel, stores, fresh water and victuals on board. Ships at sea often have to operate under a hostile environment including adverse sea and weather conditions.⁷¹²

Recognizing that these are factors beyond the control of the shipboard personnel once the ship is at sea, the duty to exercise due diligence to make a ship seaworthy applies only "before and at the beginning of the voyage" under the Hague-Visby Rules reflected in the CMC. Needless to say, a ship must be prepared for such eventualities before proceeding to sea.

Under the CMC, the carrier's obligations include providing a ship that is

⁷¹¹ Article III of the Hague-Visby Rule

⁷¹² See detail, Maritime Safety Administration of PRC; see also Stefanie Beyer, "Environmental law and policy in the People's Republic of China" Vol 5 (Oxford University Press 2006) 185

cargoworthy if it is a cargo ship of any sort.⁷¹³ This means that the ship must be suitable for the reception and carriage of the cargo that it has contracted to carry. This is particularly relevant in the case of dangerous or hazardous goods. When the carrier is notified that the cargo to be loaded is dangerous goods and he has agreed to carry it, he must accordingly prepare the ship and make it fit for the intended purpose. Failure to do so will render the ship uncargoworthy making the carrier potentially liable under the CMC.⁷¹⁴ In addition, the vessel is likely to be penalized under the regulatory laws of China pertaining to carriage of dangerous goods.

For reasons of safety, seaworthiness and cargoworthiness, the ship may be required to proceed on its voyage taking a particular route which may be stipulated in the carriage contract.⁷¹⁵ This is often the case with charterparties. In the absence of any such stipulation, the master of the ship will be expected to take the most reasonable route dictated by safety and environmental concerns, a breach of which may render the shipowner or carrier liable in contract.⁷¹⁶

7.3.4 Chinese Case Study- Carrier's duty

In relation to the Chinese law on seaworthiness and the carrier's duty of care regarding cargo, two cases are presented below in synoptic form which provide insights into the case law jurisprudence in China on these matters. The

⁷¹³ ZHU, Zuoxian, and Yuzhuo SI. "On the Doctrine of Overriding Obligation Under Hague Rules—And Commentary on the Provision of the Basis of the Liability Under the UNCITRAL Draft Instrument on Transport Law." *Annual of China Maritime Law* (2002): 2002-00.

⁷¹⁴ Yan, Yue, and China Shipowners Mutual Assurance Association. "Legal Implication of the ISM Code on Seaworthiness [J]." *Annual of China Maritime Law* (1997): 1997-00.

⁷¹⁵ Xin, Wang. "On the Relationship between the Carrier's Obligations and Immunities in CMC [J]." *Annual of China Maritime Law* (1993): 1993-00.

⁷¹⁶ LIU, Xu, Chuanhong WU, and Yandong ZHU. "On the Burden of proof of Due Diligence Where the Carrier alleges Immunity ." *Annual of China Maritime Law* (1999): 1999-00.

judgments are primarily based on relevant provisions of the CMC.

7.3.4.1 Seaworthiness

In *The People's Insurance Company, Guangxi Nan'ning Branch v. Tianjin Navigation Co. Ltd (The Jin Han)*,⁷¹⁷ by a voyage charterparty dated 3 July 1995, the defendant shipowners agreed to provide the vessel “*Jin Han*” to the plaintiff charterers. The vessel was to carry 6,000 tonnes of zinc concentrates from China to Korea. During loading operations, in the Chinese port, the cargo became wet from rain while it was situated on the wharf.⁷¹⁸ The shipper had not produced a certificate to indicate that the moisture content of the cargo was in the order of 12.41%, either to the ship's agent or the carrier. Instead it presented a shipping order to the ship's agent showing a moisture content of 8.9 %. Upon sailing from the loading port, the cargo which had become heavily moisturized shifted during extremely adverse sea and weather conditions. Eventually the vessel sank with a total loss of all the cargo on board.

Two issues arose in dispute. The first was the legal consequences of the representations made by the shipper regarding the moisture content of the cargo; the second concerned the seaworthiness of the ship.⁷¹⁹ If the moisture content of the cargo exceeded 8% it could result in free surface effect that could seriously affect the stability of the ship. In such circumstances under the relevant Chinese regulations the shipowner could refuse to load or carry the cargo. If he did not

⁷¹⁷ *The People's Insurance Company, Guangxi Nan'ning Branch v. Tianjin Navigation Co. Ltd (The Jin Han)*, reported by Beihai Maritime Court, Guangxi in 1995

⁷¹⁸ Xin, Wang. “On the Relationship between the Carrier's Obligations and Immunities in CMC [J].” *Annual of China Maritime Law* (1993): 1993-00.

⁷¹⁹ *Ibid*, see also ZHU, Zuoxian, and Yuzhuo SI. “On the Doctrine of Overriding Obligation Under Hague Rules—And Commentary on the Provision of the Basis of the Liability Under the UNCTRAL Draft Instrument on Transport Law” *Annual of China Maritime Law* (2002): 2002-00

do so, the shipowner could be liable for shipping dangerous cargo unlawfully and penal sanctions could be imposed.

The Guangdong People's High Court found that the defendant shipowner failed to ensure that prior to loading the vessel was in compliance with the safety requirements for the shipment of zinc concentrates under the relevant Chinese regulations. The Court found that the cargo holds were not suitable for stowage of zinc concentrates with moisture content exceeding 8%. Thus, the ship was not seaworthy and the shipowner did not exercise due diligence to make the ship seaworthy before and at the beginning of the voyage.⁷²⁰ The master and chief officer should have refused to load the cargo in view of its moisture content being higher than 8%. The Court also found that the responsible members of the ship's crew were incompetent in that they did not carry out any sample testing prior to loading.

As a result of all of the above findings, the Court concluded that according to Article 47 of the CMC, the vessel was unseaworthy and held that the defendant shipowner was therefore liable for 70% of the loss. Under Article 113 of the General Principles of the Civil Code and Article 66 and 68 of the CMC, the plaintiff shipper was held liable for 30% of the loss of the cargo including liability for contributory negligence in respect of the misstatements made, and for shipment of the cargo with more than 8% moisture content.⁷²¹

⁷²⁰ *Ibid*; see also Shou-qin, L. I. "On seaworthiness responsibility." Annual of China Maritime Law 1 (1992): 193.

⁷²¹ *Ibid*

7.3.4.2 Carrier's Duty Relating to Cargo

Under Article 48 of the CMC, the carrier has responsibility for properly carrying and looking after the cargo during the course of the voyage. The obligation is quite onerous enumerating certain specific items of responsibility. The legislative provision is consonant with Article III (2) of the Hague-Visby Rules which itemize the responsibilities of the carrier to "load, handle, stow, carry, keep, care for and discharge the goods carried", and to "properly and carefully" discharge these responsibilities.⁷²²

As mentioned above, it is unmistakably apparent that the provisions of Article III (2) of the Hague-Visby Rules has been duly incorporated into Article 48 of the CMC.⁷²³ It is notable, however, that the opening words of Article III(2) in the Hague-Visby Rules do not appear correspondingly in the CMC. These words are - "[S]ubject to the provisions of Article IV" which necessitates a perusal of Article IV. This is one of the controversial Articles in the Rules which provides for some 17 exceptions to the carrier's liability in paragraph 2. At first glance it may appear that the omission of these words in Article 48 in the CMC means that under Chinese law there are no exceptions to carrier's liability. But if Article 51 of the CMC is examined it is found that there are 12 exceptions to carrier's liability provided for there; and in essence it is a more concise representation of the items listed in Article IV (2) of the Hague-Visby Rules.⁷²⁴

If loss or damage results entirely from the carrier's failure to load, stow or care

⁷²² Article III (2) of the Hague-Visby Rules; see also *supra* note 164. Yu-zhuo, S. I. "New Structure of the Basis of Liability for the Carrier—An Analysis on the Provisions under the Rotterdam Rules in respect of Basis of Liability for the Carrier." Annual Of China Maritime Law 3 (2009): 002.

⁷²³ *Ibid* Yu-zhuo, S. I

⁷²⁴ see *supra* note 164

for the cargo, it must be borne by the carrier unless there is fault or negligence on the part of the shipper or non-compliance of a statutory requirement by him in which case a part or all of the liability for the loss or damage will be imposed on the shipper.⁷²⁵ Thus where a shipper shipped flammable thiourea dioxide but gave full and complete notice of its danger to the carrier, he was held not liable when a fire broke out on board as a result of the chemical cargo being stowed too close to a heat source. This was what happened in *China National Chemical Construction Corp. Shenzhen Branch (CNCCC) v. Hyundai Merchant Marine Co., Ltd.*⁷²⁶

In this case, the claimant shipper (CNCCC) contracted with the defendant carrier to ship 720 casks of thiourea dioxide from Shenzhen to Rotterdam on the vessel MOL Promise. The carrier was given proper notice and the chemical cargo was properly packed and labeled as dangerous goods for export.⁷²⁷ At some point during the voyage, fumes were detected emanating from some containers which eventually led to a fire in which the whole cargo was destroyed. The casualty investigation which followed concluded that the fumes and the eventual fire were attributable to the spontaneous combustion of thiourea dioxide cargo. The damaged and polluted containers were examined which revealed that 8 freezers stowed in the vicinity of the cargo generated excessive heat around the thiourea dioxide cargo causing spontaneous combustion.

⁷²⁵ Yu-zhuo, S. I. “New Structure of the Basis of Liability for the Carrier—An Analysis on the Provisions under the Rotterdam Rules in respect of Basis of Liability for the Carrier.” *Annual of China Maritime Law* 3 (2009): 002.

⁷²⁶ *China National Chemical Construction Corp. Shenzhen Branch (CNCCC) v. Hyundai Merchant Marine Co., Ltd.* Reported by Guangzhou maritime court 1996

⁷²⁷ *Ibid.*

The court held by reference to Article 68 of the CMC, that the shipper was not liable because he had given proper and sufficient notice to the carrier and had packed and labeled the dangerous cargo in a proper manner. Contrary to Article 48 of the CMC, the carrier had negligently stowed the dangerous cargo close to the freezers.⁷²⁸ He was therefore held to be liable for the total loss of the cargo. The carrier pleaded the "fire exception" under the CMC provision in Article 51 corresponding to Article IV(2)(b) of the Hague-Visby Rules but it was rejected by the Court. It is well established in international carriage law where the Hague-Visby Rules are applicable that in order to successfully plead any exception under Article IV (2), the carrier must first show to the satisfaction of the court that he had complied with the seaworthiness obligation under Article III.⁷²⁹

Incidentally, there is no provision in the CMC dealing with liability emanating from two concurrent causes of loss or damage. If a cause falling individually under Article 48 is in combination with a cause that falls under Article 51 as an exception, there is no provision in the CMC to address such situation.⁷³⁰

Here there is an issue regarding burden of proof. In terms of the carrier's liability the burden rests on the claimant to prove that the carrier is liable for breach of contract or negligence, whatever may be the basis.⁷³¹ But when the carrier invokes the application of an exception, he must carry the burden of proving that

⁷²⁸ *Ibid*; see also Article 68 of the CMC

⁷²⁹ See *Maxine Footwear Co. v. Canadian Merchant Marine* [1959] A.C. 589 (HL)

⁷³⁰ See *supra* note 715.

⁷³¹ Hai-jun, D. I. N. G. "On the Relationship among the Civil Right, Duty and Liability [J]." *Hebei Law Science* 7 (2005): 033

he is entitled to it.⁷³² If there are two instances of loss or damage and one is attributable to the carrier whereas the other is attributable to the shipper, they can be dealt with separately. But if there is only one instance of loss or damage under Chinese law the notion of comparative negligence will apply to both carrier and shipper but it seems there is no provision in the CMC addressing this issue. However, the principle of contributory negligence can apply in such a situation. If a third party suffering loss or damage from dangerous goods brings action against both carrier and shipper, they may both be liable in proportion to the degree of fault of each under general principles of liability in the absence of any express provisions in the CMC. Previously at common law contributory negligence of the plaintiff was a complete defence for the defendant, which meant that a person who negligently caused harm to another could not be held liable if the injured party contributed to his own damage or injury. However, under the English Law Reform Act 1945, contributory negligence is only a partial defence. Thus, contributory negligence as it presently exists under English Law, operates like comparative negligence under Chinese Law whereas contributory negligence under Chinese law operates in the same manner as it used to be in English law previously.⁷³³

7.3.4.3 Obligations When Receiving Cargo

As a result of the danger and risk involved in the carriage of dangerous goods by sea, the carrier's obligation to properly and carefully take care of the goods after

⁷³² Liu, Xiaoxian, and Chang-Kyun Noh. "A Basic Study on the Maritime Performing Party System and the Difference between the Maritime System and China's System." *Journal of Korean Navigation and Port Research* 36.4 (2012): 299-303.

⁷³³ See *Nettleship v. Weston* [1971] 3 WLR 370; see also S .1(1) Law Reform Act 1945

receipt are crucial. In the event of default, the carrier's fault may give rise to damage arising from the dangerous goods during the voyage. However, there is a condition required for the shipper to properly fulfill its obligation and the condition should be provided by the shipper prior to the carriage. He is obliged to disclose the nature of the dangerous goods and provide the special instructions to the carrier. However, it is arguable that the negligence of the carrier may have given rise to the damage.⁷³⁴

7.4 Shipper's Obligation against Carrier's Seaworthiness

As mentioned above, contractual liability arising from the carriage of dangerous goods falls within Chapter IV "Contract of Carriage of Goods by Sea" of MOC which, to some extent, are adapted from the international legal regime.⁷³⁵ Similarly, the provisions specifically addressing carriage of dangerous goods also appear under the section which deals with "shippers' obligations". In Article 68, it is clearly expressed that two obligations are imposed on the shipper if the goods are dangerous; which are to notify the carrier of the character of the dangerous goods, and to comply with the regulations governing the carriage of such goods.

The law in relation to dangerous goods under the CMC stipulates as follows:

⁷³⁴ Bing, L. I. U. "Study on Carrier's Obligation To Give Notice of Arrival of Goods Under an Ocean Bill of Lading ." Annual of China Maritime Law (2005): 2005-00.

⁷³⁵ Chen, Xia. "Chinese Law on Carriage of Goods by Sea under Bills of Lading." Currents Int'l Trade L & (1000): 80-80. See also Article 68 of CMC.

“At the time of shipment of dangerous goods, the shipper shall, in compliance with the regulations governing the carriage of such goods, have them properly packed, distinctly marked and labelled and notify the carrier in writing of their proper description, nature and the precautions to be taken.

In case the shipper fails to notify the carrier or the information in the notification is inaccurate, the carrier may have such goods landed, destroyed or rendered innocuous when and where circumstances so require, without compensation. The shipper shall be liable to the carrier for any loss, damage or expense resulting from such shipment.

Notwithstanding the carrier's knowledge of the nature of the dangerous goods and his consent to carry, he may still have such goods landed, destroyed or rendered innocuous, without compensation, if they become an actual danger to the ship, the crew or other persons on board or to other goods. However, the provisions of this paragraph shall not prejudice contribution in general average, if any.”

The Articles in the CMC as special law adjusting the contractual relationship between the shipper and carrier, is supplemented by the general rules of contract law. Article 307 of the Contract Law provides that - "In consigning any dangerous articles which are inflammable, explosive, toxic, corrosive, or radioactive, the consignor shall, in accordance with the provisions of the statute on the carriage of dangerous articles, properly pack the dangerous articles and affix thereon signs and labels for dangerous articles, and shall submit the written

papers relating to the number and measures of precaution to the carrier".⁷³⁶

If the consignor violates the provisions of the preceding paragraph, the carrier may refuse to carry, and may also take corresponding action to avoid losses, and the expenses so caused shall be borne by the consignor.⁷³⁷

It is notable that under both the international and Chinese legal regimes, liability in relation to carriage of dangerous goods is explicitly imposed on the shipper. This is because the shipper is the only person who is able to be aware of the inherent nature of the dangerous goods prior to the shipment. Thus, the shipper is in the best position, by proper packing, marking and labelling of goods, to avoid any loss, damage or harm that may result from the carriage of dangerous goods.

Article 68 specifies that the shipper is responsible for packing, marking and labeling the goods as dangerous in a suitable manner. In *China Foreign Trade Transportation Corporation v. China International Petroleum and Chemicals (Qinu) Company and Petroleum and Chemicals Import and Export Company of Shanghai*, 1991 case,⁷³⁸ the defendants failed to pack the cargo of dangerous chemicals adequately and the plaintiff carrier had to sail from Singapore back to Qingdao Port, the original port of departure, to deal with a dangerous gas

⁷³⁶ Article 307 of the Contract Law PRC

⁷³⁷ *Ibid.*

⁷³⁸ *China Foreign Trade Transportation Corporation v. China International Petroleum and Chemicals (Qinu) Company and Petroleum and Chemicals Import and Export Company of Shanghai*, 1991, reported by Qingdao Maritime Court

leaking from the cargo. The Maritime Court of Qingdao held that the packaging of the chemicals did not meet the standards set in the Hamburg Rules.⁷³⁹

Considering which party should be liable for damage under a contract, the party who was in breach of the contract should be liable. Allocation of liability between the parties is in effect allocation of risk prior to the occurrence of loss, damage, or harm.

As far as the shipper's liability is concerned, Article 68 has the following meaning: First the shipper is obliged to follow the required standards for carrying dangerous goods goods *i.e.* packaging and labeling dangerous goods.⁷⁴⁰

The shipper has the obligation to notify the carrier in writing of the name and dangerous nature of the cargo and provide sufficient instructions for carrying them. If the shipper breaches this obligation, the carrier has the right to dispose of the dangerous goods by any measures deemed to be necessary by him after discovering the dangerous nature of the goods shipped.

On this point, Chinese Law follows the pattern of the Hamburg Rules as these two obligation are explicitly imposed on the shipper, although the nature of the core liability regime of the CMC governing the contractual relationships between shipper and carrier exemplifies the Hague/Visby Rules. In comparison

⁷³⁹ *Ibid.*

⁷⁴⁰ Article 68 of CMC

with the preceding international conventions, Chinese Law still confers on carrier certain rights and indemnities on the carrier in the shipment of dangerous goods though the rights vary depending on the whether he has the knowledge of the dangerous nature of goods. It is clear that the carrier is still given more interest and more protection in the shipment of dangerous goods. What is more important and notable, Chinese Maritime Law has not omitted one of the carrier's defences, that is, for nautical fault, in which case the carrier can be exempt from liability resulting from the negligence in the management of the ship. Also, the seaworthiness obligation of the carrier has not been extended to "during the voyage", which still follows the rules of Hague/Visby in respect of shipment of dangerous goods.⁷⁴¹

7.5 Documentary Shipper and Actual Shipper under Chinese Law

7.5.1 Definition of Shipper

Though many have opined that strict liability imposed on the shipper in certain circumstances is not sufficiently justified,⁷⁴² the statement that the shipper is "in the best position to know the nature of dangerous goods" is not easy to contest.⁷⁴³ However, there is a distinction between shipper and actual shipper under Chinese law.⁷⁴⁴ Thus, it gives rise to problematic issues regarding which

⁷⁴¹ See Article IV 6 of HV and Article 13 of Hamburg Rules; see also Article 32 and 15 of Rotterdam rules.

⁷⁴² Alan Khee-Jin. *Vessel-source Marine Pollution: the Law and Politics of International Regulation*. (Vol. 45. Cambridge University Press, 2005). P 55.

⁷⁴³ AFM de Bievre, Aline FM. "Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea." *J. Mar. L. & Com.* 17 (1986): 61.

⁷⁴⁴ See General Provision of CMC of PRC, the definition of Shipper

shipper is in the best position to know about the dangerous nature of the goods when they are shipped.

The “shipper” under Chinese law cannot be easily identified by contracts because who is the shipper is stipulated in statutory law as well as to the identification of the shipper of dangerous goods.

7.5.2 Definition of Shipper under Convention Law

The Hague/ Visby Rules do not provide any definition of "shipper". However, it can be presumed by reference to the definition of "carrier" provided therein that the shipper means the person who enters into a contract of carriage with a carrier. "Contract of carriage" means “contracts of carriage covered by a bill of lading or any similar document of title”.⁷⁴⁵ Therefore, shipper can be identified from the bill of lading as a document of title. It is not necessary to be concerned with whether the shipper delivers the cargo in his own name. In fact, this mode is still widely adopted.

Until the adoption of the Hamburg Rules, the definition of the second type of shipper is provided by Article 1. Paragraph 3⁷⁴⁶ as follows:

"Shipper" means any person by whom or in whose name or on whose behalf a contract of carriage of goods by sea has been

⁷⁴⁵ Berlingieri, Francesco. “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.

⁷⁴⁶ Article 1, Para. 3 of Hamburg Rules

concluded with a carrier, or any person by whom or in whose name or on whose behalf the goods are actually delivered to the carrier in relation to the contract of carriage by sea.

This article includes the shipper who has signed the sale contract incorporating the FOB terms, in which case the party entering into a contract with the carrier is the buyer. In practice, however, commonly the “shipper” is the seller on the document when the bill of lading is issued. Thus, the Hamburg Rules recognize the second type of shipper via the additional provision - “any person by whom or in whose name or on whose behalf the goods are actually delivered to the carrier in relation to the contract of carriage by sea”. The shipper signs the document with the carrier, and the shipper delivers the goods to the carrier. Both are recognized as shipper under the Hamburg Rules.⁷⁴⁷ The definition of "shipper" in the Hamburg Rules is in line with the practice.

7.5.3 Definition of Shipper under Chinese Law

The MOC transplanted the definition of “shipper” provided in the Hamburg Rules.⁷⁴⁸ The only distinction under the Chinese Law and the international convention is that word used to join the two categories of shippers is "or" in the Hamburg Rules whereas the MOC used “and ”- which is considered as a juxtaposed relationship.

⁷⁴⁷ See *supra* note 745.

⁷⁴⁸ See General Provision of CMC of PRC, the definition of Shipper

Following the discussion on the definitions provided by national law and the Hamburg Rules, the definition of "shipper of dangerous goods" can be found in Article 42 of the MOC. Regarding the statutory definition of "shipper", it is to be noted in this context, that in essence it is not different from the general definition of "shipper". Thus, there are two categories of shippers of dangerous goods: the person who concludes a contract with the carrier and the person who delivers the dangerous goods to the carrier.

7.5.3.1 Shipper Entering into Contract

As previously mentioned, in fact there are two types of shippers. While both may be the same person, they can be different persons depending on whether CIF or FOB terms are embraced in the sale contract. In terms of the principles regarding offer and acceptance detailed under the Contract Law, if the carrier accepts the shipper's offer to book shipping space, the contract of carriage is concluded. The shipper signing this contract is the "shipper" entering into the carriage contract and its legal status is thereby established in terms of the codified law.⁷⁴⁹ According to the Contract Law, issuing the bill of lading is one of the terms agreed under the carriage of contract,⁷⁵⁰ therefore it is just performance of the contract by the carrier. The party on record in the bill of lading will not be entitled to challenge the legal status of the shipper in the contract of carriage.

⁷⁴⁹ See *supra* note 505.

⁷⁵⁰ *Ibid*

7.5.3.2 Identification of Actual Shipper

The actual shipper is sometimes named as consignor.⁷⁵¹ In the CMI system of drafting, "consignor" means a person who delivers the goods to a carrier for carriage, instead of the party who agreed the contract of carriage. Here, the consignor s includes any person by whom or in whose name or on whose behalf the goods are delivered.⁷⁵² Under the MOC, the legal character of the actual shipper is the one who delivers the goods. Performance of delivering the goods can be completed by the actual shipper himself, the person named as the actual shipper or the person acting on the actual shipper's behalf.

7.5.4 Analysis

It has been argued whether the legal status of actual shipper should be identified in terms of the records on the bill of lading. One side holds that it is a positive move concerning the seller's legal status under an FOB sale. However, the other side is of the view that the bill of lading is not the only basis for establishment of the actual shipper's legal status.⁷⁵³

In practice, the actual shipper's recognition does not rely on the law instead of the contract of carriage under China's legal regime. One of the features of its

⁷⁵¹ Chunfeng, Guo. "On the Amendments to the Definition of the Shipper and Other Related Articles in the Chinese Maritime Code ." Annual of China Maritime Law (1998): 1998-00.

⁷⁵² *Ibid.* at pp5-7.

⁷⁵³ See *Ibid*; see also *supra* note 735, Xia.Chen; see also, Han, Lixin. "A Study on the Liability of the Carrier and the Actual Carrier for Delivery of Goods without a B/L in China." (2008) 39. *J. Mar. L. & Com.* 275

jurisdiction is the codified law. Therefore, the legal status of the actual shipper is based on the statutory law in China; as well, its obligations and liabilities are all stipulated therein.

Following the identification of the two types of shippers, the question in the specific case of dangerous goods is who should bear the strict liability for shipment of dangerous goods. Admittedly, both shippers according to the law in China have the legal status, which means strict liability should be imposed on both of them. However, it should be questioned whether both the actual shipper and shipper who agreed to contract with the carrier are in the best position to know of the danger, risk and harm of the cargo. The question is whether it is justified that this "best position" enables them to fulfill the obligation of notifying the carrier of the potential risk prior to imposition of strict liability. Furthermore, the issue of how to allocate the liability between the two types of shippers is problematic in juridical practice. There is no explicit expression in the MOC or Contract Law under the Chinese regime to answer the questions posed above.

7.6 Other Domestic Statutory Laws

Previously there was another piece of domestic legislation regulating maritime transportation of dangerous goods which has been discussed by scholars within this field. It was named the Regulations on Waterway Cargo Transportation, 2000 and was issued by the Ministry of Transportation. The provisions in

relation to dangerous cargo were stipulated in Articles 17 and 37.⁷⁵⁴ These two articles focused on the shipper's obligations and liabilities in situations where the cargoes are dangerous, if compared with the relevant Articles in the CMC no distinctions are apparent regarding the shippers' obligation in this regard. In other words, the obligations of shippers transporting dangerous goods by inland waterways are the same as the shippers' involved in sea carriage contracts.⁷⁵⁵

These regulations were recently repealed by an Order of the Ministry of Transportation of PRC (No.57.) dated 30th May 2016.⁷⁵⁶ So far no new regulations have been issued to replace the Regulations on Waterway Cargo Transportation, 2000. The question raised is - what laws are there to address the issues of waterways transportations in China? The only applicable law in this regard is the Contract Law as Chapter IV of Maritime Code applies only to contracts of international sea carriage. However, the problematic issue is that the relevant provisions are not sufficiently comprehensive to cover the gaps. Many of the specific parties' obligations are not stipulated clearly. The only chapter dealing with contracts of carriage is Chapter XVII in the Contract Law in which Section I contains "General Provisions". The second section is regarding "passenger contracts", which unfortunately does not apply to domestic waterway cargo transportation contracts. Section III - "freight contract " has only thirteen

⁷⁵⁴ Articles 17 and 37 of Regulations on Administration of Transportation of Cargoes by Waterway at Port of PRC,1996

⁷⁵⁶ Order of the Ministry of Transportation of P.R.C (No.57.) dated 30th May 2016. See on the official website of Ministry of Transport of PRC: <http://www.mot.gov.cn/> accessed on 17/09/2016

Articles.⁷⁵⁷

China has a continental civil law system. The courts rely heavily on codified law. In addressing the issues arising from the contracts of transportation of dangerous goods by waterway, courts will face the difficulty of no applicable law being available, because Article 307 of the Contract Law is insufficient and not comprehensive enough, thereby increasing uncertainty. At present there are no relevant laws for shippers, carriers and other interested parties to follow. In the writer's opinion, the CMC should be amended to extend the scope of application to waterway transportation.

However, this does not mean that the writer disagrees with the repeal of the regulations mentioned above. Many scholars in this field have discussed the contractual relationships between shippers and carriers based on the Regulations of Waterway Cargo Transportation, 2000.⁷⁵⁸ However, given that these regulations were issued by the Ministry of Transportation their effectiveness should be questioned first.

According to Article 71 of the Legislative Law,⁷⁵⁹ “[T]he various ministries, commissions, the People's Bank of China, the Auditing Agency, and a body directly under the State Council exercising regulatory function, may enact

⁷⁵⁷ See Articles under Chapter XVII in the Contract Law of PRC

⁷⁵⁸ For example, see *supra* note 735, Xia.Chen; see also Fang, C. H. E. N. “Comparative Study of Legal Nature of Bill of Lading and Negotiable Instruments.” (2005) *Journal of Dalian Maritime University (Social Science Edition)*2: 002.

⁷⁵⁹ Article 71 of the Legislative Law of PRC, adopted in March 15, 2000; effective: July 1, 2000.

administrative rules within the scope of its authority in accordance with national law, administrative regulations, as well as decisions and orders of the State Council. A matter on which an administrative rule is enacted shall be a matter which is within the scope of implementing national law, administrative regulations, and decisions or orders issued by the State Council.”

The Ministry of Transportation is under the State Council which has authority to promulgate administrative rules within the scope of its authority.⁷⁶⁰ However, it is obvious that the legal relationships governed by the regulations of waterway are in relation s to civil rights and obligations, which do not fall within its authority for the implementation of laws or administrative regulations of the State Council. Therefore, emphasizing the rule of law, whether the Regulations on Waterway Cargo Transportation, 2000 has legitimacy today should be questioned prior to the relevant research being carried out.

7.7 Tort Liability in Chinese Law

As discussed in Chapter 6, the legislation relating to tortious claims existed in the Civil Law before the adoption of the Torts Law of PRC in December of 2009. It is notable that legal scholars have referred to it by different names since its adoption. Some refer to it by its full name, namely, “Torts Liability Law”

⁷⁶⁰ Chen, Albert HY. “An Introduction to the Legal System of the People’s Republic of China.” Notes and Comments 95 (1992); see also Zou Keyuan. “China’s Marine Legal System and the Law of the Sea” (2005) 48 *Publications on Ocean Development* 306, 308, 309.

instead of “Torts Law”.⁷⁶¹ Admittedly, liability is a key word in this law and is emphasized by many in China.⁷⁶² However, the process of creating a tort law and separating the legislation and rules from the Civil Law under the Chinese regime has generated debate on “whether the tortious conduct prompts an obligation or a liability”.⁷⁶³ This question relates to the issues of establishment of tort liability and the coverage of liability. The debate centers on the distinction between conceptions of liability and obligation.

Zhang, Mo argued that a tort does not belong within the scope of *obligatio* as a result of which obligation indicates a legal bond, the necessity for which has been expressed by law as well as a property relationship, unlike the contractual relationship. Besides, *obligatio* implies right, which means obligations always terms of contracts or of legal provisions.⁷⁶⁴ This relationship contains rights and exist with rights. However, tort law is devised to provide remedies instead of protecting any rights. According to the Chinese Civil Code, *obligatio* is characterized by a relationship between parties based on either their agreed obligations.

It is believed in China that the legal basis of the *obligatio* contains the “agreed

⁷⁶¹ Zhang, Mo. “Tort Liabilities and Torts Law: The New Frontier of Chinese Legal Horizon.” (2011) 10 Rich. J. Global L. & Bus. 415.

⁷⁶² Zhi-qiang, Y. I. N. “On the Social Functions of Tort Law.” Tribune of Political Science and Law 5 (2007): 014.

⁷⁶³ Liming, Wang. “On the Construction of China’s Tort Liability Legal System.” China Legal Science 4 (2008): 003.

⁷⁶⁴ Gen, Xie. “On the Implication of Regulation in Tort Law Context [J].” China Legal Science 2 (2009): 008; see also supra note 761.

terms of a contract” and the “legal provisions”, which indicate contractual obligation and non-contractual obligations, respectively.⁷⁶⁵ According to the tradition in civil law jurisdictions, such as Germany and France, these non-contractual obligations result from torts, unjust enrichment and voluntary services.⁷⁶⁶ The concept of tort in China means “conduct amounting to a civil wrong”.⁷⁶⁷

As aforementioned, the torts law and rules were codified in the Civil Law, provisions of which were spread in customary law and some other special laws, such as the Environment Protection Law (enacted in 1989, revised in 2014).⁷⁶⁸ Although the 1982 Constitution contains an outline of basic rights and freedoms, these rights are broadly worded and offer little by the way of concrete legal protection. The Civil Law was adopted in part to clarify and systematise the principles of civil liability for torts.

There are two kinds of torts under the Chinese regime: general tortious action and special tortious action. The liability in the former is based on fault whereas in the latter liability is called special tortious action, which expressed in another

⁷⁶⁵ As to shipper’s obligation of shipment of dangerous goods, see Article 17: At the time of shipment of dangerous goods, the shipper shall, in compliance with the regulations governing the carriage of such goods, have them properly packed, distinctly marked and labelled and notify the carrier in writing of their proper description, nature and the precautions to be taken.

⁷⁶⁶ See *supra* note 762.

⁷⁶⁷ Christmann, Petra, and Glen Taylor. “Globalization and the Environment: Determinants of Firm Self-Regulation in China.” *Journal of International Business Studies* 32.3 (2001): 439-458.

⁷⁶⁸ Corne, Peter Howard. “Creation and Application of Law in the PRC.” *The American Journal of Comparative Law* 50.2 (2002): 369-443. See also Environment Protection Law of PRC, 1989.

way is strict tort liability.⁷⁶⁹

7.7.1 Tort liability based on “Someone’s Fault”

The principles and doctrines extracted from the Tort Law provide five elements of a general tortious action: i) actual loss, injury, or damage; ii) conduct causing harm iii) Fault and iiiii) causation.⁷⁷⁰ Though strict liability is applicable to address the issues in relation to carriage of dangerous goods, it is very common that the liabilities relate to some parties’ faults.⁷⁷¹

In practice, shippers are sometimes reluctant to declare the dangerous cargo due to carrying handling surcharges and other important/export tariff, even including the premium of insurance.⁷⁷² Consequently, the plaintiffs are entitled to sue the shipper in tort on the basis of shipper’s fault where the dangerous goods caused damage to other goods on the same vessel and/or personal injuries to a third party. It can also be applied on the basis of the carrier’s fault, for example, due to crew incompetence the dangerous cargo on board was not properly handled and appropriate care was not taken, according to the relevant instruction, where this failed to meet the standards of the IMDG Code or the national regulations in this regard. Therefore, the plaintiff can sue the carrier for compensation with respect to the damage incurred by reason of the defendant’s fault under the Tort

⁷⁷⁰ Article 6 of Tort Law of PRC; see also Yi, Jiang. “Causation in Tort.” *Presentday Law Science* 5 (2004): 006.

⁷⁷¹ Youjun, Wang Liming Zhou. “A Review of China's Civil Law Study.” *China Legal Science* 1 (2008): 013

⁷⁷² Article 84 of Civil Code; Yi, Jiang. “Causation in Tort.” *Presentday Law Science* 5 (2004): 006

Law.

7.7.2 Tort Liability without Fault

Prior to the adoption of the Tort Law liability in tort without fault fell within eleven Articles of the General Principles of Civil Law covered.⁷⁷³ Under the Tort Law, the principle of non-fault liability is stipulated in Article 7. To establish liability without fault, there must be four components: i) tortious conduct ii) damage iii) causation and iii) no applicable exemptions provided by law.⁷⁷⁴ Indeed, this principle in essence has no divergence from the principle of strict liability as provided in many common law systems and international conventional regimes.

In China, imposition of tort liability is based on statute instead of cases, which is different from the common law systems. Thus, only the liabilities, which have been explicitly stated in statutory provisions fall within the scope of non-fault liability among these liabilities, the ones in relation to maritime transportation of dangerous goods by sea are liability for environmental pollution and liability for ultra-hazardous activities.

The purpose of this principle is to provide the plaintiff with adequate remedies.⁷⁷⁵ Thus, under the non-fault liabilities the burden of proof for the

⁷⁷³ Article 106 of the Civil Law; Mingrui, "Several Thoughts on Legislation of Tort." *China Legal Science* 4 (2008): 004.

⁷⁷⁴ See details in Articles 43, 121-127, 130, 132, 133 of Tort Law of PRC

⁷⁷⁵ Epstein, Richard A. "A theory of strict liability." *J. Legal Stud.* 1 (1973): 151-204.

plaintiff is not to prove the tortfeasor's fault.⁷⁷⁶ As the plaintiff, he only needs to prove the damage has taken place and the causation between the tortfeasor's conduct and the damage. Of course, this principle has been criticized by scholars⁷⁷⁷ on the point of burden of proof. It is argued that non-fault liabilities means the liabilities are imposed in the absence of fault, which can be misunderstood as this principle applies only when the tortfeasor has no fault.

Indeed, this principle does not require the plaintiff to prove fault; however, it does not indicate that the tortfeasor has no fault. Therefore, it may be more sensible to adopt the terminology of strict liability. Under international convention law, "strict liability" principles are widely used in the regimes of contract and tort liability. It is clearly stated that this principle is to compensate the victims in a more accessible way as well as to provide sufficient compensation to them under the HNS and CLC conventions.⁷⁷⁸

At the present time, the HNS convention does not seem to be expressly incorporated into Chinese legislation.⁷⁷⁹ However, within the government preparations are underway to address this aspect of the law. It is recognized that in terms of third party liability, the HNS convention is indispensable. But the law and policy makers are not yet fully satisfied with the limits of liability in the convention. There are some possibilities that once the convention enters into

⁷⁷⁶ Zhenying, Wei. "The Relation of Types of Tort's, Attributable Causes and Criterion of Liability ." China Legal Science 2 (2011): 005.

⁷⁷⁷ Perry, Stephen R. "The Impossibility of General Strict Liability." The Canadian Journal of Law and Jurisprudence 1.02 (1988): 147-171.

⁷⁷⁸ See *supra* note 372.; see also Baatz, Yvonne. Maritime law. CRC Press, 2014. Pp 56-57

⁷⁷⁹ See *supra* note 656, pp 240-250

force internationally, it will be incorporated in Chinese legislation provided the limitation issue is sorted out. As mentioned in Chapter 4 it has been taking quite sometime for this to happen. Moreover, the term HNS is defined broadly and inclusively as packaged goods, bulk solids, liquids, liquefied gases including LNG and LPG. In the convention, the extended definition appears by references to lists of substances found in various IMO instruments dealing with maritime safety and pollution prevention, mainly IMDG Code and MARPOL.

The HNS convention applies only with respect to these substances carried as cargo or found on board as cargo residuals from previous voyage. This broad definition of hazardous and noxious substance will largely widen the scope of the compensable scheme, which is also one of the reasons that China has not clearly stated the position on HNS convention.

It is also that the principle of strict liability to address the issue of dangerous goods has appeared only since the adoption of the Hamburg Rules, and subsequently in the Rotterdam rules as well. The function of strict liability imposed on shipper dangerous goods is to allocate liability. In other words, the function of this principle under contract law is to allocate the risks between shipper and carrier.⁷⁸⁰ Considering the risk and damage potentially incurred by dangerous goods, the effective method to reduce the risk is to impose strict liability on the shipper who is in the best position to have knowledge of the

⁷⁸⁰ See *supra* note 163, pp 34-35.

nature of the goods and notify the carrier.

7.7.3 Dangerous Cargo

In China, there is no express legislative pronouncement on compensation for damage caused by dangerous cargo. In theory at least compensation for loss or damage direct or indirect, attributable to carriage of dangerous goods should be claimable in tort or contract.⁷⁸¹ Third party liability arising from carriage of dangerous goods in respect of *inter alia*, loss of life or personal injury, loss of or damage to property, and costs and expenses associated with deliberate jettisoning or destruction of dangerous cargo as general average sacrifices should be compensable under the general laws of China relating to civil liability and payment of compensation.⁷⁸²

Damage may be suffered by a public authority or other government entity in connection with carriage of dangerous goods or hazardous and noxious substances in addition to or independent of environmental damage.⁷⁸³ These will typically include cleanup costs and costs in removing the harmful effects of toxic and other noxious substances from property owned by the public authority or property for which the authority may have custodial rights and responsibilities.⁷⁸⁴ Costs incurred for taking preventive and mitigative measures in respect of dangerous goods whether for environmental protection or for public health and safety are compensable under international conventions and these are usually claims made by public authorities. These claims should also be

⁷⁸¹ See Article 68 of the Maritime Code

⁷⁸² Wei Zhenying, 'The Status of Tort Liability Law in Civil Law and Its Relation to other Parts [J]', vol 2 (2010) 004

⁷⁸³ see *supra* note 644.

⁷⁸⁴ L. Bergkamp, 'Liability And Environment: Private And Public Law Aspects of Civil Liability For Environmental Harm in an International Context' (Martinus Nijhoff Publishers, 2001) pp70

compensable under Chinese law. But that is only possible under Article 90(2) of the MEPL and only in respect of natural resources as pointed out in Chapter 5 of this thesis.

7.8 Issues of Chinese Tort and Contract Law

7.8.1 Causation and Remoteness in Chinese Tort and Contract law

As a general proposition it is stated that the functions of legal regimes are directed by principles and norms.⁷⁸⁵ In any discussion on the private law relating to liability and compensation whether in the context of damage from sea carriage of dangerous goods or pollution damage in relation to such carriage, causation and remoteness are significant legal issues. In Chinese legal practice in the subject area of law, these issues arise frequently in the context of disputes and associated litigation. It is therefore useful and expedient to address these issues in proper perspective.

Proximity and remoteness are two sides of the same coin. What is not proximate is remote.⁷⁸⁶ Proximity is related to causation, which in turn is a key factor in the law of negligence and generally in the law of torts in both common law and civil law traditions.⁷⁸⁷ Hence the legal term "proximate cause" meaning if the cause of the incident or occurrence leading to loss, damage or injury, which in turn leads to potential liability, is too remote then there is no liability and no remedy is available. Causation and proximity/remoteness are therefore

⁷⁸⁵ Aldo E. Chircop, "Marine Transportation of Hazardous and Dangerous Goods in the Law of the Sea - an Emerging Regime," *Dalhousie L.J.* (1987), p. 623.

⁷⁸⁶ Payne, Douglas. "Foresight and Remoteness of Damage in Negligence." *The Modern Law Review* 25.1 (1962): 1-24.

⁷⁸⁷ Harris, Max. "Fairness and Remoteness of Damage in Contract Law: A Lexical Ordering Approach." *Journal of Contract Law* (2010).

intimately linked in terms of legal precepts.⁷⁸⁸

The issue arises in both tort and contract cases; and in this context, it must be recognized that disputes regarding contracts often have a tortious dimension. Also, the common denominator in torts and contracts is that both involve civil liability. It is common ground that for a plaintiff to succeed in any action, whether in tort or contract, he needs to prove that the loss, damage or injury suffered was proximately caused by the fault of the defendant, whatever the nature of that fault might be.⁷⁸⁹

In terms of Chinese law, as in other jurisdictions whether in the civil or common law tradition, it is well established that the claimant or plaintiff must carry the burden of proof; and this he must do by showing causation, unless the law provides for a reversal of the burden as it does in certain cases.⁷⁹⁰

With regard to tort liability relating to carriage of dangerous goods, the principle of strict liability applies and the claimant carries no burden to prove the fault of the defendant. But in order to establish the alleged liability of the defendant, he must prove that he suffered the damage complained of, and that the defendant committed the act that caused the damage. In other words, he needs to prove causation which in effect is the link between the act and the damage in question. If the cause is too remote, the plaintiff will likely not succeed in the action. If the defendant invokes any statutory defence, as in the case of ship-source pollution

⁷⁸⁸ Cartwright, John. "Remoteness of Damage in Contract and Tort: A Reconsideration." Cambridge Law Journal 55 (1996): 488-514.

⁷⁸⁹ See *supra* note 784.

⁷⁹⁰ Article 6 Tort law of PRC Article 6 "One who is at fault for infringement upon a civil right or interest of another person shall be subject to the tort liability. One who is at fault as construed according to legal provisions and cannot prove otherwise shall be subject to the tort liability."

liability pursuant to the CLC, the burden lies on him to prove it.⁷⁹¹

In the realm of contract law, the plaintiff who alleges breach on the part of the defendant, apart from bearing the burden of proving the breach, he must prove the existence of the contract. In terms of carriage of goods by sea in general, it would be the bill of lading as evidence of such contract between the carrier and shipper, or in the case of a charterparty, it would be the contract between the shipowner and charterer. He must also prove the causal connection between the breach and the loss or damage. In a typical carrier-shipper contractual relationship involving carriage of dangerous goods or hazardous and noxious substances, the plaintiff will have to prove a variety of things in connection with the goods, including inadequate packing and labeling, failure to give proper notice of dangerous goods and inadequacy or lack of care on the part of the shipper.

Incidentally, under Chinese law there are no specific tests for proving causation. This is evident from a number of decided cases relating to personal injury claims. In *Gao Kequan v. Sheyang Ocean Fishery Company Ltd.*,⁷⁹² the plaintiff claimant, an employee of the defendant was injured on board the defendant's fishing vessel but recovered soon without going to hospital. After 40 days, he felt a pain in his left leg and went to see a doctor. It was found that his left artery near the abdomen was blocked and needed surgery. He spent RMB 12,000 on surgical treatment and claimed compensation from the defendant. The case was decided by the Shanghai Maritime Court as the court of first instance in 2001 in

⁷⁹¹ See *supra* note 2, pp 379-441

⁷⁹² *Gao Kequan v. Sheyang Ocean Fishery Company Ltd.*; reported in Zheng Zhaofang (editor), (2006) *Casebook on Maritime Tort Liability (in Chinese)*, Shanghai People's Press, at p. 95

which the claim failed because the claimant was unable to prove that the defendant's negligence was the proximate cause of his illness. The claimant then appealed to the Provincial Supreme Court of Shanghai which dismissed the appeal.⁷⁹³ In this case the court required the claimant to show that the defendant's conduct was both the proximate cause and the cause in fact, of the claimant's injuries. It is not clear from the judgment whether the court applied the "but-for" test.⁷⁹⁴

In this regard, the Supreme Court's Interpretations on Valid Evidence under Civil Procedure Law may be resorted to for assistance in understanding Chinese legislation. The "Interpretations" which are, strictly speaking, not binding, but are highly persuasive in terms of legal status. The Interpretations in question relate to the Regulations on Evidence under the Civil Procedure Law. The Regulations were issued by the Supreme Court's Adjudgment Committee at its meeting No. 1201 held on 6 December 2001 and became effective on 1 April 2002.⁷⁹⁵

The above-mentioned Regulations consist of 83 Articles. Under Article 4, there are eight types of specific cases, in which the claimant can be exempted from proving fault or causation. For example, Article 4(2) provides, with regard to ultra-hazardous activity, that the defendant must carry the burden to prove damage claimed by the claimant was caused by his own intentional

⁷⁹³ *Ibid*; See also Article 11(4) of "The Interpretation of Several Issues Relating to the Application of Law in Trials of Personal Injury Claim Cases", issued by the Supreme Court on May 1, 2004 which provides for the employee's burden of proof of causation.; also referred to Regulations on Evidence under the Civil Procedure Law

⁷⁹⁴ *Ibid*.

⁷⁹⁵ *Ibid*.

ultra-hazardous activity. Article 4(3) provides with regard to environmental liability, that the defendant has the burden of proving any statutory defence available to him, or that there is no causative link between his wrongful act and the damage suffered by the claimant.⁷⁹⁶ Regarding the causation issue, the *Gao Kequan* case discussed above is a case in point.⁷⁹⁷

In another case, *Yuan Caiyun etc v. Jiangsu Jingjiang Fishery Company Ltd*, incidental to a collision, the plaintiff fell overboard and drowned. It was claimed by the plaintiff that the collision was caused by the negligent dropping of anchor by the defendant's vessel which then resulted in the drowning death of the plaintiff. It was held by the Maritime Court of Shanghai that there was no "cause in fact" in this case. Due to the insufficiency of evidence, the plaintiff could not prove conclusively that the collision was caused by the defendant's negligence and was not due to heavy adverse weather (*force majeure*). Article 167 of the Maritime Code, provides that - "Neither of the parties shall be liable to the other if the collision is caused by *force majeure* or other causes not attributable to the fault of either party or if the cause thereof is left in doubt". The claim therefore failed.⁷⁹⁸

Interestingly enough, in Chinese law there is no specific rule relating to remoteness. Recoverability for loss or damage is generally governed by the rule of proximate cause. Not having a specific law on remoteness of damage is not necessarily a great disadvantage since, as stated earlier, remoteness is simply the

⁷⁹⁶ *Ibid.*

⁷⁹⁷ See *Gao Kequan v. Sheyang Ocean Fishery Company Ltd*; reported by This case was reported in Zheng Zhaofang (editor), (2006) Casebook on Maritime Tort Liability (in Chinese), Shanghai People's Press, at p. 95.

⁷⁹⁸ This case was reported in Zheng Zhaofang (editor), *op. cit.* p. 131.

other side of the causation coin. However, it may well be necessary for the sake of consistency in judgments, for the Supreme Court to issue an "Interpretation" to clarifying the correlation between proximity and remoteness and how they are both an integral part of the legal concept of causation which is germane to liability in the private law domain. Consideration may also be given to this matter when some relevant legislation such as the CMC or the Civil Code is up for review or revision.

7.8.2 Damage to Property, Consequential Damage and Economic Losses

The Civil Code contains general rules dealing with damaged property and their restoration as well as payment of compensation for the damage. It is obviously expected that the restoration will result in the property being put back into the same condition in which it was before the damage took place.⁷⁹⁹ It is also assumed that under the principle of *restitutio in integrum*, the compensation will be sufficient to put the plaintiff back into same position where he would have been had he not suffered the damage. Other kinds of losses and injuries are also addressed in the Civil Code such as personal injuries.⁸⁰⁰ Included in personal injury claims are medical expenses, lost earnings, and payments to next-of-kin survivors in the event of death.⁸⁰¹ Needless to say, these compensatory measures are not peculiar to damage suffered from carriage of dangerous goods by sea but are rather general but they can well apply to dangerous goods cases.

⁷⁹⁹ Article 117 of Civil Code: Anyone who encroaches on the property of the state, a collective or another person shall return the property; failing that, he shall reimburse its estimated price. Anyone who damages the property of the state, a collective or another person shall restore the property to its original condition or reimburse its estimated price. If the victim suffers other great losses from, the infringer shall compensate for those losses as well.

⁸⁰⁰ See Article 117.

⁸⁰¹ Article 119: "Anyone who infringes upon a citizen's person and causes him Physical injury shall pay his medical expenses and his loss in income due to missed working time and shall pay him living subsidies if he is disabled; if the victim dies, the infringer shall also pay the funeral expenses, the necessary living expenses of the deceased's dependents and other such expenses."

Another point of observation is that in Chinese law there is no particular provision for recourse in respect of consequential damage which in essence is indirect. In ship-source pollution cases, a fisherman's loss of earnings would be directly related to the loss of his fishing boat but would be indirectly related to the pollution itself whereas the physical loss of his boat would be a direct consequence of the pollution. In any event, consequential damage can also fall under the rubric of remoteness. In other words, compensation would only be available if the plaintiff can prove proximate cause in respect of his loss, damage or injury. Apparently, some Chinese scholars in the field are of the view that consequential damage of the kind described above can be accommodated within the relevant provisions in the Civil Code which are reasonably wide to include complete compensation of all losses. Arguably, the *restitutio in integrum* principle subsumes the notion of "complete compensation" and can quite conceivably include loss and damage that is direct and indirect alike.

Another related issue is the question of economic losses already discussed in Chapter 4 in the context of pollution damage cases in other jurisdictions, particularly in the United Kingdom. Economic losses in the English law of torts are generally not compensable but such losses consequential to a physical loss of property are compensable if the loss of the property itself is compensable. A striking example is the one of the fisherman's fishing boat and related loss of earnings mentioned above. Thus loss of earnings of subsistence fishermen are compensable even if they are consequential on the grounds of proximity. An economic loss that is not a consequential loss as described above is a pure

economic loss otherwise known as secondary or relational loss,⁸⁰² which is simply not compensable under any circumstances. It seems in China no economic losses are compensable regardless of whether they are consequential or pure. Some consideration should be given to looking at this issue in China in a more pragmatic and analytical way. Perhaps some varieties of economic losses should be compensable provided certain conditions and criteria are met.

7.8.3 The Issues of Compensation Defined in Tort Law

The principle of *restitutio in integrum* is widely accepted and employed to address the issues regarding the scheme of compensation under civil liability regimes. In tort law, a specific method defining the amount of loss to property caused by the tortfeasor is demonstrated in Article 19.⁸⁰³ This method contains two crucial elements: market price and time of occurrence of loss.⁸⁰⁴

However, it cannot be overlooked that market prices always fluctuate in terms of the circumstances of the market. In the event of a market price increase by the time when the compensation is completed, the remedy by way of compensation calculated on the basis of market price at the time of occurrence of loss will not be sufficient to put the plaintiff or the claimant back into same position where he would have been had he not suffered the damage. Thus, the outcome of application of this provision conflicts with the principle of *restitutio in integrum*. From the perspective of the plaintiff, it is an unfair remedy for him *vis*

⁸⁰² Gotthard Mark Gauci. "The UK Marine and Coastal Access Bill—A Missed Opportunity to Enhance Protection from Marine Environmental Pollution?" (2010) 34(3) Mar Policy 498

⁸⁰³ Article 19 "Where a tort causes any harm to the property of another person, the amount of loss to the property shall be calculated as per the market price at the time of occurrence of the loss or calculated otherwise."

⁸⁰⁴ Zhang Xinbao. "The Balancing of Interests in the Legislation of the Tort Liability Law [J]" (2009) 4 China Legal Science 016

a vis the view of the defendants where the market price decreases.

Therefore, this issue attributed to the conflict between a general principle and a specific provision gives rise to potential difficulties of implementation and application of torts law in cases of carriage of dangerous goods. This problematic issue should draw the legislators' attention s to provide further interpretations in this regard.

Another question raised here is whether the problematic issue mentioned above can be resolved by applying Article 10 of Tort Law. In this Article, the discretion for determining the amount of compensation is rests on the courts. However, the issue is not simply regarding the question of the amount of compensation. It is an issue of application of laws.

7.8.4 Merger of the Liabilities in Tort and Contract

Tort liability as a result of the tortfeasors' conduct is governed by the Tort Law. In the cases of maritime transportation of dangerous goods, the tortious conduct may also have been a breach of the contract between shipper and carrier. Furthermore, the tortious conduct may have also violated other regulations or administrative law, such as the Marine Environment Protection Law. In this case, the different liabilities will arise together, which is named "concurrent liabilities"⁸⁰⁵

⁸⁰⁵ LUO, Chun, and Qing CHEN. "A Difference Between Contract Law and Tort Law——Injurious Fulfillment: Within the Ambit of Contract Liabilities or Tort Liabilities?" *Journal of Suzhou U* (2005)

In respect of contractual and tortious issues, the question raised here is whether the liability in tort should be merged into contractual liability; additionally, whether tortious liability should possess superiority over contracts. Obviously, the merger of concurrent liabilities is not admitted in accordance with Article 4 of the Tort Law. It is observed from the statement of this Article that tortious liability possesses two characters of independence and superiority in this regard, which means that tort liabilities are not merged with other liabilities and the innocent parties suffer as a consequence.⁸⁰⁶ Tortious conduct should be compensated first where other liabilities compete with tort liabilities. Grounds for justification of these doctrines under the Chinese regime is that torts belong to the realm of civil liabilities, which should precede all other liabilities when compensation is in question. Protection of the private interests should come first and disputes involving civil liability should be addressed in priority.

However, the co-existing liabilities explicitly mentioned in this article are administrative liabilities or criminal liabilities. The contractual liabilities in question are not stipulated clearly. Contractual liability is governed by civil liability rules and compensation payable to innocent parties under contracts is categorized as private interests as well. Therefore, the independence and

⁸⁰⁶ See *supra* note 598.

⁸⁰⁶ Article 4 of Tort Law of PRC “Where a tortfeasor shall assume administrative liability or criminal liability for the same conduct, it shall not prejudice the tort liability that the tortfeasor shall legally assume. Where the assets of a tortfeasor are not adequate for payments for the tort liability and administrative liability or criminal liability for the same conduct, the tortfeasor shall first assume the tort liability.”

superiority of tort liability cannot stand because the doctrines discussed above are without ground where contractual and tortious liabilities are concurrent. The issue arising from this gap is whether tortious liabilities arising from the transportation of dangerous goods by sea or waterway can merge with contractual liabilities, given that mergers with administrative and criminal liabilities are allowed. Which liability should take priority will become the following issue.

7.9 Concluding Remarks

Legislation in relation to carriage of dangerous goods by sea falls within a special maritime legal regime. This special and distinctive area of law is independent of the civil law within the Chinese legal regime. The complexity of the law in the maritime field and its application in respect of the carriage of dangerous goods is undoubtedly of immense significance in the current and contemporary milieu of global shipping. It is particularly important from the Chinese perspective given China's enhanced role and position in the maritime world of today. This chapter has therefore focused on the Chinese law on the carriage of dangerous goods by sea within the wider framework of China's maritime aspirations and priorities and giving due regard to whether the applicable laws originate from general law or special law. Additionally, the MOC has transplanted relevant provisions from international conventions, which have enlarged the complexity of the law through numerous domestic rules

and regulations.

The judicial practices of China disappointingly reflect the insufficiency of the existing law. For example, there is no unified set of regulations providing a definition of what constitutes dangerous goods and what is its scope, which leads to the problematic issue of technical regulations governing the carriage of dangerous cargo with respect to safety. The issue of insufficiency further gives rise to the difficulties of dealing with liability in practice.

China has in recent times been ardently pursuing law reform in terms of promoting the rule of law. With a view to establishing a complete and rational legal system, many important laws have been enacted or revised. It is fair to say that legislative actions with respect to the MOC and the Tort Law are remarkable accomplishments. The international features of MOC have been greatly improved through the incorporation of several important legal concepts. Several crucial definitions have been clarified by embracing relevant international conventions. In terms of the a role of special law in the field of dangerous goods carriage by sea, adaptation of principles and rules from another regimes, such as, Contact Law and Tort law is inevitable and desirable. The subject of maritime transportation of dangerous goods is highly specialized, It is apparent that gaps and conflicts in the application of the law on issues of liability remain which need to be addressed.

The Tort Law as a new piece of legislation adopted in 2009 has wide coverage in terms of interests and rights. However, some difficult issues remain which have become barriers in judicial practice in relation to litigation involving claims for damage attributable to carriage of dangerous cargo, particularly with regard to the quantum of damages in tort. Moreover, there are still some conflicts between the Civil Code and the Tort Law resulting from the fact that tort legislation was a part of the Civil Code before the adoption of the Tort Law. It is obvious that in order to resolve these issues in practice, more corresponding legislative interpretations are required to effectively enforce the Tort Law. Additionally, the liability regimes should ensure that victims suffering damage arising from the carriage of dangerous goods are fairly and adequately compensated. Also, the interests and rights of carriers and shippers should be balanced in terms of fairness under the contract and tort liability regimes.

PART IV – CONCLUSION

CHAPTER 8 - SUMMARY AND CONCLUSIONS

8.1 General Summary

In this thesis an attempt has been made to grapple with a subject that is at once contemporary and challenging. The subject of dangerous goods as it pertains to carriage by sea is of growing importance and concern because it impacts on safety as well as environmental issues. Both these aspects of dangerous goods carried by sea are of major concern because regardless of the preventive and precautionary measures that are taken accidents are inevitable. While on the one hand, safety and environmental issues are recognized as paramount concerns, there are also private law implications which cannot be ignored. These involve the legal interrelationship regarding responsibilities and liabilities between the shipper and carrier of such goods. Equally significant are the issues of liability and compensation relating to third parties suffering loss or damage from the carriage of such goods. Both the public and private law dimensions have implications for international as well as domestic law, in the present case, the national legal regime of China.

Needless to say, in this thesis the main if not the only emphasis is on legal issues and implications. It is recognized that any comprehensive study of carriage of dangerous goods by sea has multi-disciplinary features, and therefore has

multi-disciplinary implications which are not always compatible in terms of their applications. Having said that, it must be emphasized that the present work is concerned with legal regimes, their usefulness and inadequacies, and as such, there is hardly any discussion on non-legal matters embracing other disciplines and areas of endeavour.

The thesis has been presented with two substantive parts, one looking at the international regimes primarily based on convention instruments, and the other dealing with the domestic legal regime in China which is the home jurisdiction of the writer. One reason for focusing on Chinese law is because the law in the maritime field in China is relatively less developed. Arguably, one disadvantage is that China is a new country in many ways but it holds the legacy of an ancient civilization. Be that as it may, Chinese maritime law is still in its infancy which has much to do with regime changes in its socio-political makeup in the Post-World II era. It has been through several ups and downs which have detrimentally affected its social fabric and stability. But in recent decades China has advanced dramatically in the field of shipping and maritime affairs. As a flag state it is among the top ten in the world in terms of registered tonnage. The four biggest ports in the world in terms of cargo throughput and shipping traffic are in China. It is the second biggest economy in the world and is on its way to becoming number one if all goes well with the social, political and economic reform agenda of the present government. Its economic strength is largely

attributable to its position as a trading nation in the world. It is said that trade is the lifeblood of a nation, but to ensure the steady flow of vitality and global influence, China invariably needs to advance further in the field of maritime law.

The subject of carriage of dangerous goods by sea in the international arena has matured considerably, yet what is probably the most important convention in this field, that is the HNS Convention, is yet to enter into force. By contrast, the ship source pollution conventions have proliferated and grown rapidly in terms of both the regulatory as well as the private law. When it comes to sea carriage of dangerous goods, or hazardous and noxious substances, it appears that the regulatory law has advanced much further. By coincidence, this seems to be reflected in the national legislation of China. The regulatory law has moved ahead at a faster pace than the private law. It is apparent that as a matter of public policy, more importance is given to prevention and control than to mitigation of damage and articulation of a rational liability and compensation regime. As a result, in China, much reliance is placed on the general legislation, such as the Civil Code and the administration, even though there is a Maritime Code in place, that is the CMC, whose role in the domestic legislative arena is hugely important.

As discussed in this thesis, in the context of maritime movement of dangerous goods in and out of China which is the subject matter of this research endeavour

China still has a long way to go. Granted that the subject is multi-faceted and complex, no stone must be left unturned nevertheless if national prosperity in the maritime field is to be retained. Attempting to raise the bar in both the public and private law legal regimes is by no means easy; indeed it is quite an uphill task. But the local legal fraternity inclusive of the bar and the bench as well as maritime law academia must vigorously strive to succeed. In the field of carriage of dangerous goods by sea, carriage in and out of such goods, whether they are hazardous and noxious substances or nuclear material, is already quite frequent, and is likely to increase in leaps and bounds as the country advances further in all directions of trade and commerce. China is already the biggest importer of crude oil in the world having overtaken the United States and Japan. For all of the above reasons, a sound legal regime is indispensable for its continued growth and advancement.

8.2 Summary Conclusions of Chapters

Following the introductory chapter, the second chapter addresses the international regulatory regime concerning dangerous goods carried on ships almost entirely reflected in various convention instruments. It appears that from all viewpoints and on all counts, regulation and control of such carriage, primarily through the adoption of preventive measures is considered to be more important than all other considerations. Obviously and admittedly, safety of lives and property and environmental protection must be given the highest

priority in terms of law-making. The writer is fully in agreement with this sentiment. As such, liability concerns in these matters have been relegated to second place in the scheme of things regarding the formulation of policy and articulation of legal regimes for global application.

In chapter 2, the principal regulatory convention instruments have been discussed in contextual detail starting with the IMDG Code and progressing on to an analytical review of relevant provisions of MARPOL and SOLAS. It is recognized that both SOLAS and MARPOL are voluminous in content and size and consist of numerous technical and navigational features germane to ship operations at sea and are particularly important in terms of the subject matter of this thesis, that is, shipboard carriage of dangerous goods. The point is made that these are all instruments generated by the IMO. By contrast, the Basel Convention which is also regulatory in scope and discussed in this chapter, is not an IMO but an UNEP instrument. Another important matter contextually important is the document known as the UN Recommendations on Transportation of Dangerous Goods, which as the title implies, is an instrument *para droit* and is therefore, strictly speaking, not binding.

In the third chapter, a detailed review is carried out on liability issues arising from the carrier-shipper interrelationship focusing on sea carriage of dangerous goods. This is, of course, pursuant to contract based on one of the international

sea carriage conventions. But as pointed out, all these conventions only apply to carriage under a bill of lading. In other words, none of them cover charterparty contracts which are contracts of carriage or affreightment but are manifestly different from carriage under bills of lading although in numerous instances, both instruments are used in practice for reasons which are beyond the scope of this work. Incidentally, under the Rotterdam Rules, the instrument evidencing the contract is not a bill of lading but is a transport document, as it is called. The reason is that the convention extends to multimodal transportation. The Rotterdam Rules is not in force, and it is not about to happen anytime soon anyway. Indeed, there is doubt as to whether it will ever actually see the light of day to replace the Hague-Visby and Hamburg Rules as originally intended.

The Hague-Visby, Hamburg and Rotterdam Rules are also discussed in contextual detail, but the concentration is on carriage of dangerous goods. The discussion is thus limited to the provisions relating to such carriage and the mutual responsibilities of carriers and shippers with attendant liabilities. Be that as it may, consideration of these conventions is important in view of the fact that China has, in its domestic legislation, adopted principles and concepts from both the Hague-Visby as well as the Hamburg Rules. These matters are addressed in contextual detail in the relevant chapter appearing later in the thesis focusing on the domestic Chinese legal regime concerning the contractual dimension of dangerous goods carriage by sea.

The next chapter delves into the issue of third party liability which is mainly tort-based law but also largely pursuant to convention law. Third party liability is at least equally important as the liabilities arising out of the carrier-shipper contractual relationship entrenched in carriage by sea conventions. There are three areas of concentration in this discussion. In the first instance, a detailed analytical discussion is presented on the environmental dimension of third party liability which is ship-source oil pollution damage. This is addressed mainly through a multiplicity of conventions. In some jurisdictions there are non-convention legal regimes. The case law relating to third party liability both within and outside conventions is examined. Secondly, carriage of hazardous and noxious substances covered by the HNS Convention is examined which incidentally is not yet in force. Regardless of that fact, the importance of that convention is emphasized as the substantive law of the convention is central to the theme of this thesis. It is thus crucial to the main flow of the discussion in this chapter.

It is anticipated that the HNS Convention will in due course enter into force and that it will happen in the near future without further impediment. Finally, there is the discussion on nuclear damage in relation to carriage of nuclear material on board ship or arising from a shipboard nuclear installation. The latter is essentially a reference to nuclear powered ships. Carriage of nuclear material by sea is on the rise which makes this aspect of third party liability at least as

equally important as the other aspects of dangerous goods carriage by sea. More nuclear powered ships are now traversing the seas.

In this thesis, no detailed analysis of the relevant convention clauses have been attempted in consecutive order but the salient features of each have been selectively addressed. The principles emanating from or embedded in the conventions have been examined with a view to highlighting the most important provisions and adopting a well-rounded functional approach. The evolutionary process involved in bringing these conventions to light is presented holistically to afford a clear understanding of the regimes. This chapter has brought to conclusion the examination of all the aspects of the international dimension of the subject of carriage of dangerous goods by sea. The focus, needless to say, has been on the relevant convention law, relating to the subject.

In the remaining chapters of the thesis, the Chinese perspective has been explored in contextual detail. These chapters have been packaged together in a separate Part except that chapter 5 is somewhat of a bridging chapter traversing into the domestic law domain through the channel of the public international law phenomenon of inter-state liability. It is recognized that this is an area of international law that is yet to be confirmed and consolidated through a convention-based mechanism. Much of the law is based on the customary international law exemplified through cases, albeit not great in number. The focus of the discussion has been on the question of whether the flag state of an

offending ship, that is, the ship carrying dangerous goods and causing damage to another state's territory, property and persons should be held liable under the doctrine of state responsibility. While it is conceded that such a doctrine does exist, what is uncertain is the legal basis of such liability, and if any, what is the difference between responsibility and liability in international law pertaining to states whose ships are effectively the instruments of pollution.

Chapters 6 and 7 are fully focused on the Chinese legal regime on the subject matter of the thesis, that is, carriage of dangerous goods by sea. It is observed that Chinese legislation is heavily concentrated on the regulatory law which is deemed to be of far more importance than the question of liability and provision of remedies for damage suffered whether in regard to the contractual relationship between carrier and shipper or third party liability for loss or damage caused by carriage of dangerous goods by sea. In this area of law, some Chinese case law is discussed and the respective roles of certain general legislative areas such as the Civil Code and the Administrative Law are highlighted in the discussion.

Chapter 6 provides an analytical discussion on the relevant features of the Chinese legal system in the context of the historical development of the Civil Law and the Tort Law, which has facilitated further consideration of the principles applicable to the general issues of contractual and tortious liability

particularly in light of how those branches of law are treated in other jurisdictions. It is a general observation that the public law, characterized mainly by regulatory regimes enjoys more attention from law makers in China. In the field of carriage of dangerous goods by sea it is perhaps to be anticipated that private law will take second place in the agendas of law and policy makers in China. That said, it must be realized that private law considerations in the subject field are equally important and should be given commensurate attention.

In Chapter 7 through Chinese case law analysis and exploratory inquiry into the existing domestic law, the various elements and legal principles in civil liability regimes are examined in contextual detail. In recent times China has been fervently pursuing law reform in its pursuit of promoting and consolidating the rule of law. In this vein, several new statutory and non-statutory instruments have been adopted and revisions of existing legislation have been initiated. Even so, insufficiency of existing law still remains. This inevitably leads to difficulties in dealing meaningfully with the crucial issue of liability in judicial practice.

In bringing to closure this synoptic rendering of the substantive chapters, it must be reiterated that the subject of maritime transportation of dangerous goods is a highly specialized area of regulatory and private law. It is evident that there are still many gaps, lacunae and conflicts in the substantive law as well as in the

application of the law relating to both civil and penal liability and the attendant remedies and sanctions which need to be addressed expeditiously.

It goes without saying that resolution of these matters are becoming increasingly urgent in the face of rapid advancements in transportation technology responding to the growing need for materials that are dangerous, hazardous or noxious from a safety point of view, and at the same time posing an environmental threat; and the corresponding increase in sea transportation of dangerous goods worldwide. Indeed all these developments are particularly relevant to China as an emerging economic powerhouse and its lead position in global shipping. China's meteoric rise in the maritime domain exemplified by the fact that the top four ports in the world are in China, requires commensurate enhancement and expansion of its capacity in the field of maritime law. Given the current deficiencies in legislation pertaining to this field, which have been pointed out and elaborated aptly in this thesis, it is no surprise that all the actors in the Chinese maritime milieu face difficulties when it comes to finding the relevant law and applying it. Shipping law not only has safety and environmental implications requiring regulatory action and intervention, but disputes among parties are plentiful as they are elsewhere in the maritime world. The concrete, statutory law being in short supply, more judicial interpretations of existing legislation are needed to effectively enforce the relevant laws, especially those contained in the Tort Law and the Contract Law, not to mention

the Civil Law which embraces a plethora of private law issues. Additionally, the liability regimes should ensure that victims suffering damage arising from the carriage of dangerous goods are fairly and adequately compensated. Also, the interests and rights of carriers and shippers should be balanced in terms of fairness under the contract and tort liability regimes. It seems in China no economic losses are compensable regardless of whether they are consequential or pure. In other words, the consequential loss must be the proximate cause of the physical damage to property or the marine environment. Apart from consequential losses which are compensable as economic losses, generally speaking a pure economic loss with few exceptions is not compensable.

8.3 Summary of the Comparison between International Law and Chinese Law

The international conventions in relation to contract of sea carriage have always drawn distinctions between dangerous goods and ordinary goods. The application of a strict liability regime to shipment of dangerous goods places additional responsibility and obligation on the shipper. By observation of the evolution and development from Hague/Visby to Hamburg Rules, and to Rotterdam Rules, it clearly shows that the liability regimes have significantly changed the allocation of liability and risk between carrier and shipper.

In comparison with the preceding international conventions, Chinese Law in

essence follows the Hague/Visby Rules but as indicated, also incorporates some elements of the Hamburg Rules. The nature of the core liability regime of the CMC governing the contractual relationships between shipper and carrier exemplifies the Hague/Visby Rules. However, the liability regime in respect of damage resulting from dangerous cargo follows the pattern of the Hamburg Rules. Therefore, the shipper is strictly liable for the damage arising from the shipment of dangerous goods where knowledge and consent are absent. Moreover, the obligations regarding the disclosure of dangerous goods are imposed on the shipper. However, to define “dangerous goods” under the CMC is only by reference to “regulations governing the carriage of such goods”⁸⁰⁷ instead of the meaning of “danger”⁸⁰⁸ provided by either the Hamburg Rules or the Rotterdam Rules. Thus, it will give rise to difficult policy issues in judicial practice as elaborated in Chapter 7.

Under Chinese Maritime Law, certain rights and indemnities are conferred on carrier in the shipment of dangerous goods and the rights vary depending on the whether he has the knowledge of the dangerous nature of goods. On this this point, there are no divergences in essence between Chinese Law and Hamburg and Rotterdam Rules. However, Chinese Maritime Law has not omitted one of the carrier’s defences for the nautical fault, in which case carrier can exempt from the liability resulting from the negligence in the management of shipping. Also, the

⁸⁰⁷ Article 68 of CMC

⁸⁰⁸ Article 32 of Rotterdam Rules

seaworthiness obligation of carrier has not extended to “during the voyage”. Therefore, the protections for the carrier’s interest are still being given under Chinese Law in this regard, which is the same to the Hague/ Visby Rules.

The third party liability regimes should ensure that victims suffering damage arising from the carriage of dangerous goods are fairly and adequately compensated. Therefore, strict liability regime is adopted both under Chinese law and international law. Although HNS convention has not come into force due to lack of ratification, the two-tier compensation system were modeled on the CLC convention due to the concern that the sufficient compensation can be provided. In respect of the issues of channeling of liability, Chinese law adopted the approach of “polluter pay” by reference of “ those who cause pollution damage pay”⁸⁰⁹ under Tort Law and MEPL whereas international law.

The basic premise of a civil remedy is the doctrine of *restitutio in integrum* under international third party liability regime. It is obviously expected that the restoration will result in the property being put back into the same condition in which it was before the damage took place. The generality of the proposition has been diluted by the making of exceptions in specific cases which adopted the principle of “special relationship of proximity”. Under Chinese legal regime, it is also assumed that under same principle the compensation will be sufficient to

⁸⁰⁹ Article 90 of China Marine Environmental Protection Law

put the plaintiff back into same position where he would have been had he not suffered the damage. Additionally, the recoverability for loss or damage is generally governed by the rule of proximate cause. However, there is no particular provision for recourse in respect of consequential damage which in essence is indirect. It is contemplated that in China no economic losses are compensable regardless of whether they are consequential or pure.

8.4 Concluding Remarks

The thesis presents a two-fold area of concentration, that is, the international regime and the domestic Chinese law, looking at the safety as well as the environmental dimensions of international carriage of dangerous goods by sea. It is the writer's considered opinion that fairly sound legal regimes are well in place internationally even though, as mentioned, the HNS Convention has not yet materialized as being universally effective binding law. In contrast, the Chinese law still has quite a distance to go in this field.

As mentioned in the relevant chapters of this thesis addressing the subject, it is proposed that more serious attention be given to improving and consolidating the laws in China in respect of carriage of dangerous goods by sea. In the further opinion of the writer, such initiative not only requires revisiting and revising existing law but also enacting and promulgating new legislation where it is needed. It is recognized that much effort will be needed to reaching and realizing this

objective; and in this vein, it is hoped that the research reflected in this thesis will contribute at least in some meaningful way towards reaching this perceived national goal. In this context, it is also hoped that other scholars and aspirants in the field of maritime law in China will be inspired to continue to focus their research efforts in the field of carriage of dangerous goods by sea which will not only inure to the benefit of the Chinese maritime industry, but also be viewed positively by shipping interests worldwide.

APPENDIX

APPENDIX I INTERNATIONAL CONVENTION ON LIABILITY AND COMPENSATION FOR DAMAGE IN CONNECTION WITH THE CARRIAGE OF HAZARDOUS AND NOXIOUS SUBSTANCES BY SEA, 2010 (2010 HNS CONVENTION)

CHAPTR I-CHAPTER IV

(Consolidated text of the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, 1996, and the Protocol of 2010 to the Convention)

Chapter I GENERAL PROVISIONS

Definitions Article 1

For the purposes of this Convention:

1 "Ship" means any seagoing vessel and seaborne craft, of any type whatsoever.

2 "Person" means any individual or partnership or any public or private body, whether corporate or not, including a State or any of its constituent subdivisions.

3 "Owner" means the person or persons registered as the owner of the ship or, in the absence of registration, the person or persons owning the ship. However, in the case of a ship owned by a State and operated by a company which in that State is registered as the ship's operator, "owner" shall mean such company.

4 "Receiver" means either:

(a) the person who physically receives contributing cargo discharged in the ports and terminals of a State Party; provided that if at the time of receipt the person who

physically receives the cargo acts as an agent for another who is subject to the jurisdiction of any State Party, then the principal shall be deemed to be the receiver, if the agent discloses the principal to the HNS Fund; or

(b) the person in the State Party who in accordance with the national law of that State Party is deemed to be the receiver of contributing cargo discharged in the ports and terminals of a State Party, provided that the total contributing cargo received according to such national law is substantially the same as that which would have been received under (a).

5 "Hazardous and noxious substances" (HNS) means:

(a) any substances, materials and articles carried on board a ship as cargo, referred to in (i) to (vii) below:

(i) oils, carried in bulk, as defined in regulation 1 of annex I to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, as amended;

(ii) noxious liquid substances, carried in bulk, as defined in regulation 1.10 of Annex II to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, as amended, and those substances and mixtures provisionally categorized as falling in pollution category X, Y or Z in accordance with regulation 6.3 of the said Annex II;

(iii) dangerous liquid substances carried in bulk listed in chapter 17 of the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk, as amended, and the dangerous products for which the preliminary suitable conditions for the carriage have been prescribed by the Administration and port administrations involved in accordance with paragraph 1.1.6 of the Code;

(iv) dangerous, hazardous and harmful substances, materials and articles in packaged form covered by the International Maritime Dangerous Goods Code, as amended;

(v) liquefied gases as listed in chapter 19 of the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk, as amended, and the products for which preliminary suitable conditions for the carriage have been prescribed by the Administration and port administrations involved in accordance with paragraph 1.1.6 of the Code;

(vi) liquid substances carried in bulk with a flashpoint not exceeding 60°C (measured by a closed-cup test);

(vii) solid bulk materials possessing chemical hazards covered by the International Maritime Solid Bulk Cargoes Code, as amended, to the extent that these substances are also subject to the provisions of the International Maritime Dangerous Goods Code in effect in 1996, when carried in packaged form; and

(b) residues from the previous carriage in bulk of substances referred to in (a)(i) to (iii) and (v) to (vii) above.

5bis "Bulk HNS" means any hazardous and noxious substances referred to in article 1, paragraph 5(a)(i) to (iii) and (v) to (vii) and paragraph 5(b).

5ter "Packaged HNS" means any hazardous and noxious substances referred to in article 1, paragraph 5(a)(iv).

6 "Damage" means:

(a) loss of life or personal injury on board or outside the ship carrying the hazardous and noxious substances caused by those substances;

(b) loss of or damage to property outside the ship carrying the hazardous and noxious substances caused by those substances;

(c) loss or damage by contamination of the environment caused by the hazardous and

noxious substances, provided that compensation for impairment of the environment other than loss of profit from such impairment shall be limited to costs of reasonable measures of reinstatement actually undertaken or to be undertaken; and

(d) the costs of preventive measures and further loss or damage caused by preventive measures.

Where it is not reasonably possible to separate damage caused by the hazardous and noxious substances from that caused by other factors, all such damage shall be deemed to be caused by the hazardous and noxious substances except if, and to the extent that, the damage caused by other factors is damage of a type referred to in article 4, paragraph 3.

In this paragraph, "caused by those substances" means caused by the hazardous or noxious nature of the substances.

7 "Preventive measures" means any reasonable measures taken by any person after an incident has occurred to prevent or minimize damage.

8 "Incident" means any occurrence or series of occurrences having the same origin, which causes damage or creates a grave and imminent threat of causing damage.

9 "Carriage by sea" means the period from the time when the hazardous and noxious substances enter any part of the ship's equipment, on loading, to the time they cease to be present in any part of the ship's equipment, on discharge. If no ship's equipment is used, the period begins and ends respectively when the hazardous and noxious substances cross the ship's rail.

10 "Contributing cargo" means any bulk HNS which is carried by sea as cargo to a port or terminal in the territory of a State Party and discharged in that State. Cargo in transit which is transferred directly, or through a port or terminal, from one ship to another, either wholly or in part, in the course of carriage from the port or terminal of original loading to the port or terminal of final destination shall be considered as

contributing cargo only in respect of receipt at the final destination.

11 The "HNS Fund" means the International Hazardous and Noxious Substances Fund established under article 13.

12 "Unit of account" means the Special Drawing Right as defined by the International Monetary Fund.

13 "State of the ship's registry" means in relation to a registered ship the State of registration of the ship, and in relation to an unregistered ship the State whose flag the ship is entitled to fly.

14 "Terminal" means any site for the storage of hazardous and noxious substances received from waterborne transportation, including any facility situated off-shore and linked by pipeline or otherwise to such site.

15 "Director" means the Director of the HNS Fund.

16 "Organization" means the International Maritime Organization.

17 "Secretary-General" means the Secretary-General of the Organization.

Annexes Article 2

The Annexes to this Convention shall constitute an integral part of this Convention.

Scope of application Article 3

This Convention shall apply exclusively:

(a) to any damage caused in the territory, including the territorial sea, of a State Party;

(b) to damage by contamination of the environment caused in the exclusive economic zone of a State Party, established in accordance with international law, or, if a State Party has not established such a zone, in an area beyond and adjacent to the territorial

sea of that State determined by that State in accordance with international law and extending not more than 200 nautical miles from the baselines from which the breadth of its territorial sea is measured;

(c) to damage, other than damage by contamination of the environment, caused outside the territory, including the territorial sea, of any State, if this damage has been caused by a substance carried on board a ship registered in a State Party or, in the case of an unregistered ship, on board a ship entitled to fly the flag of a State Party; and

(d) to preventive measures, wherever taken, to prevent or minimize such damage as referred to in (a), (b) and (c) above.

Article 4

1 This Convention shall apply to claims, other than claims arising out of any contract for the carriage of goods and passengers, for damage arising from the carriage of hazardous and noxious substances by sea.

2 This Convention shall not apply to the extent that its provisions are incompatible with those of the applicable law relating to workers' compensation or social security schemes.

3 This Convention shall not apply:

(a) to pollution damage as defined in the International Convention on Civil Liability for Oil Pollution Damage, 1969, as amended, whether or not compensation is payable in respect of it under that Convention; and

(b) to damage caused by a radioactive material of class 7 either in the International Maritime Dangerous Goods Code, as amended, or in the International Maritime Solid Bulk Cargoes Code, as amended.

4 Except as provided in paragraph 5, the provisions of this Convention shall not

apply to warships, naval auxiliary or other ships owned or operated by a State and used, for the time being, only on Government non-commercial service.

5 A State Party may decide to apply this Convention to its warships or other vessels described in paragraph 4, in which case it shall notify the Secretary-General thereof specifying the terms and conditions of such application.

6 With respect to ships owned by a State Party and used for commercial purposes, each State shall be subject to suit in the jurisdictions set forth in article 38 and shall waive all defences based on its status as a sovereign State.

Article 5

1 A State may, at the time of ratification, acceptance, approval of, or accession to, this Convention, or any time thereafter, declare that this Convention does not apply to ships:

- (a) which do not exceed 200 gross tonnage; and
- (b) which carry hazardous and noxious substances only in packaged form; and
- (c) while they are engaged on voyages between ports or facilities of that State.

2 Where two neighbouring States agree that this Convention does not apply also to ships which are covered by paragraph 1(a) and (b) while engaged on voyages between ports or facilities of those States, the States concerned may declare that the exclusion from the application of this Convention declared under paragraph 1 covers also ships referred to in this paragraph.

3 Any State which has made the declaration under paragraph 1 or 2 may withdraw such declaration at any time.

4 A declaration made under paragraph 1 or 2, and the withdrawal of the declaration made under paragraph 3, shall be deposited with the Secretary-General who shall, after the entry into force of this Convention, communicate it to the Director.

5 The HNS Fund is not liable to pay compensation for damage caused by substances carried by a ship to which the Convention does not apply pursuant to a declaration made under paragraph 1 or 2, to the extent that:

(a) the damage as defined in article 1, paragraph 6(a), (b) or (c) was caused in:

(i) the territory, including the territorial sea, of the State which has made the declaration, or in the case of neighbouring States which have made a declaration under paragraph 2, of either of them; or

(ii) the exclusive economic zone, or area mentioned in article 3(b), of the State or States referred to in (i);

(b) the damage includes measures taken to prevent or minimize such damage.

Duties of State Parties Article 6

Each State Party shall ensure that any obligation arising under this Convention is fulfilled and shall take appropriate measures under its law including the imposing of sanctions as it may deem necessary, with a view to the effective execution of any such obligation.

CHAPTER II LIABILITY

Liability of the owner Article 7

1 Except as provided in paragraphs 2 and 3, the owner at the time of an incident shall be liable for damage caused by any hazardous and noxious substances in connection with their carriage by sea on board the ship, provided that if an incident consists of a series of occurrences having the same origin the liability shall attach to the owner at the time of the first of such occurrences.

2 No liability shall attach to the owner if the owner proves that:

(a) the damage resulted from an act of war, hostilities, civil war, insurrection or a natural phenomenon of an exceptional, inevitable and irresistible character; or

(b) the damage was wholly caused by an act or omission done with the intent to cause damage by a third party; or

(c) the damage was wholly caused by the negligence or other wrongful act of any Government or other authority responsible for the maintenance of lights or other navigational aids in the exercise of that function; or

(d) the failure of the shipper or any other person to furnish information concerning the hazardous and noxious nature of the substances shipped either:

(i) has caused the damage, wholly or partly; or

(ii) has led the owner not to obtain insurance in accordance with article 12;

provided that neither the owner nor its servants or agents knew or ought reasonably to have known of the hazardous and noxious nature of the substances shipped.

3 If the owner proves that the damage resulted wholly or partly either from an act or omission done with intent to cause damage by the person who suffered the damage or from the negligence of that person, the owner may be exonerated wholly or partially from liability to such person.

4 No claim for compensation for damage shall be made against the owner otherwise than in accordance with this Convention.

5 Subject to paragraph 6, no claim for compensation for damage under this Convention or otherwise may be made against:

- (a) the servants or agents of the owner or the members of the crew;
- (b) the pilot or any other person who, without being a member of the crew, performs services for the ship;
- (c) any charterer (howsoever described, including a bareboat charterer), manager or operator of the ship;
- (d) any person performing salvage operations with the consent of the owner or on the instructions of a competent public authority;
- (e) any person taking preventive measures; and
- (f) the servants or agents of persons mentioned in (c), (d) and (e);

unless the damage resulted from their personal act or omission, committed with the intent to cause such damage, or recklessly and with knowledge that such damage would probably result.

6 Nothing in this Convention shall prejudice any existing right of recourse of the owner against any third party, including, but not limited to, the shipper or the receiver of the substance causing the damage, or the persons indicated in paragraph 5.

Incidents involving two or more ships Article 8

1 Whenever damage has resulted from an incident involving two or more ships each of which is carrying hazardous and noxious substances, each owner, unless exonerated under article 7, shall be liable for the damage. The owners shall be jointly and severally liable for all such damage which is not reasonably separable.

2 However, owners shall be entitled to the limits of liability applicable to each of them under article 9.

3 Nothing in this article shall prejudice any right of recourse of an owner against any other owner.

Limitation of liability Article 9

1 The owner of a ship shall be entitled to limit liability under this Convention in respect of any one incident to an aggregate amount calculated as follows:

(a) Where the damage has been caused by bulk HNS:

(i) 10 million units of account for a ship not exceeding 2,000 units of tonnage; and

(ii) for a ship with a tonnage in excess thereof, the following amount in addition to that mentioned in (i):

for each unit of tonnage from 2,001 to 50,000 units of tonnage, 1,500 units of account;

for each unit of tonnage in excess of 50,000 units of tonnage, 360 units of account;

provided, however, that this aggregate amount shall not in any event exceed 100 million units of account.

(b) Where the damage has been caused by packaged HNS, or where the damage has been caused by both bulk HNS and packaged HNS, or where it is not possible to determine whether the damage originating from that ship has been caused by bulk HNS or by packaged HNS:

(i) 11.5 million units of account for a ship not exceeding 2,000 units of tonnage; and

(ii) for a ship with a tonnage in excess thereof, the following amount in addition to that mentioned in (i):

for each unit of tonnage from 2,001 to 50,000 units of tonnage, 1,725 units of account;

for each unit of tonnage in excess of 50,000 units of tonnage, 414 units of account;

provided, however, that this aggregate amount shall not in any event exceed 115 million units of account.

2 The owner shall not be entitled to limit liability under this Convention if it is proved that the damage resulted from the personal act or omission of the owner, committed with the intent to cause such damage, or recklessly and with knowledge that such damage would probably result.

3 The owner shall, for the purpose of benefitting from the limitation provided for in paragraph 1, constitute a fund for the total sum representing the limit of liability established in accordance with paragraph 1 with the court or other competent authority of any one of the States Parties in which action is brought under article 38 or, if no action is brought, with any court or other competent authority in any one of the States Parties in which an action can be brought under article 38. The fund can be constituted either by depositing the sum or by producing a bank guarantee or other guarantee, acceptable under the law of the State Party where the fund is constituted, and considered to be adequate by the court or other competent authority.

4 Subject to the provisions of article 11, the fund shall be distributed among the claimants in proportion to the amounts of their established claims.

5 If before the fund is distributed the owner or any of the servants or agents of the owner or any person providing to the owner insurance or other financial security has as a result of the incident in question, paid compensation for damage, such person shall, up to the amount that person has paid, acquire by subrogation the rights which the person so compensated would have enjoyed under this Convention.

6 The right of subrogation provided for in paragraph 5 may also be exercised by a person other than those mentioned therein in respect of any amount of compensation for damage which such person may have paid but only to the extent that such subrogation is permitted under the applicable national law.

7 Where owners or other persons establish that they may be compelled to pay at a later date in whole or in part any such amount of compensation, with regard to which the right of subrogation would have been enjoyed under paragraphs 5 or 6 had the compensation been paid before the fund was distributed, the court or other competent authority of the State where the fund has been constituted may order that a sufficient sum shall be provisionally set aside to enable such person at such later date to enforce the claim against the fund.

8 Claims in respect of expenses reasonably incurred or sacrifices reasonably made by the owner voluntarily to prevent or minimize damage shall rank equally with other claims against the fund.

9 (a) The amounts mentioned in paragraph 1 shall be converted into national currency on the basis of the value of that currency by reference to the Special Drawing Right on the date of the constitution of the fund referred to in paragraph 3. The value of the national currency, in terms of the Special Drawing Right, of a State Party which is a member of the International Monetary Fund, shall be calculated in accordance with the method of valuation applied by the International Monetary Fund in effect on the date in question for its operations and transactions. The value of the national currency, in terms of the Special Drawing Right, of a State Party which is not a member of the International Monetary Fund, shall be calculated in a manner determined by that State.

(b) Nevertheless, a State Party which is not a member of the International Monetary Fund and whose law does not permit the application of the provisions of paragraph 9(a) may, at the time of ratification, acceptance, approval of or accession to this Convention or at any time thereafter, declare that the unit of account referred to in paragraph 9(a) shall be equal to 15 gold francs. The gold franc referred to in this paragraph corresponds to sixty-five-and-a-half milligrammes of gold of millesimal fineness nine hundred. The conversion of the gold franc into the national currency shall be made according to the law of the State concerned.

(c) The calculation mentioned in the last sentence of paragraph 9(a) and the conversion

mentioned in paragraph 9(b) shall be made in such manner as to express in the national currency of the State Party as far as possible the same real value for the amounts in paragraph 1 as would result from the application of the first two sentences of paragraph 9(a). States Parties shall communicate to the Secretary-General the manner of calculation pursuant to paragraph 9(a), or the result of the conversion in paragraph 9(b) as the case may be, when depositing an instrument of ratification, acceptance, approval or accession to this Convention and whenever there is a change in either.

10 For the purpose of this article the ship's tonnage shall be the gross tonnage calculated in accordance with the tonnage measurement regulations contained in Annex I of the International Convention on Tonnage Measurement of Ships, 1969.

11 The insurer or other person providing financial security shall be entitled to constitute a fund in accordance with this article on the same conditions and having the same effect as if it were constituted by the owner. Such a fund may be constituted even if, under the provisions of paragraph 2, the owner is not entitled to limitation of liability, but its constitution shall in that case not prejudice the rights of any claimant against the owner.

Article 10

1 Where the owner, after an incident, has constituted a fund in accordance with article 9 and is entitled to limit liability:

(a) no person having a claim for damage arising out of that incident shall be entitled to exercise any right against any other assets of the owner in respect of such claim; and

(b) the court or other competent authority of any State Party shall order the release of any ship or other property belonging to the owner which has been arrested in respect of a claim for damage arising out of that incident, and shall similarly release any bail or other security furnished to avoid such arrest.

2 The foregoing shall, however, only apply if the claimant has access to the court

administering the fund and the fund is actually available in respect of the claim.

Death and injury Article 11

Claims in respect of death or personal injury have priority over other claims save to the extent that the aggregate of such claims exceeds two-thirds of the total amount established in accordance with article 9, paragraph 1.

Compulsory insurance of the owner Article 12

1 The owner of a ship registered in a State Party and actually carrying hazardous and noxious substances shall be required to maintain insurance or other financial security, such as the guarantee of a bank or similar financial institution, in the sums fixed by applying the limits of liability prescribed in article 9, paragraph 1, to cover liability for damage under this Convention.

2 A compulsory insurance certificate attesting that insurance or other financial security is in force in accordance with the provisions of this Convention shall be issued to each ship after the appropriate authority of a State Party has determined that the requirements of paragraph 1 have been complied with. With respect to a ship registered in a State Party such compulsory insurance certificate shall be issued or certified by the appropriate authority of the State of the ship's registry; with respect to a ship not registered in a State Party it may be issued or certified by the appropriate authority of any State Party. This compulsory insurance certificate shall be in the form of the model set out in Annex I and shall contain the following particulars:

- (a) name of the ship, distinctive number or letters and port of registry;
- (b) name and principal place of business of the owner;
- (c) IMO ship identification number;
- (d) type and duration of security;
- (e) name and principal place of business of insurer or other person giving security and,

where appropriate, place of business where the insurance or security is established; and

(f) period of validity of certificate, which shall not be longer than the period of validity of the insurance or other security.

3 The compulsory insurance certificate shall be in the official language or languages of the issuing State. If the language used is neither English, nor French nor Spanish, the text shall include a translation into one of these languages.

4 The compulsory insurance certificate shall be carried on board the ship and a copy shall be deposited with the authorities who keep the record of the ship's registry or, if the ship is not registered in a State Party, with the authority of the State issuing or certifying the certificate.

5 An insurance or other financial security shall not satisfy the requirements of this article if it can cease, for reasons other than the expiry of the period of validity of the insurance or security specified in the certificate under paragraph 2, before three months have elapsed from the date on which notice of its termination is given to the authorities referred to in paragraph 4, unless the compulsory insurance certificate has been surrendered to these authorities or a new certificate has been issued within the said period. The foregoing provisions shall similarly apply to any modification which results in the insurance or security no longer satisfying the requirements of this article.

6 The State of the ship's registry shall, subject to the provisions of this article, determine the conditions of issue and validity of the compulsory insurance certificate.

7 Compulsory insurance certificates issued or certified under the authority of a State Party in accordance with paragraph 2 shall be accepted by other States Parties for the purposes of this Convention and shall be regarded by other States Parties as having the same force as compulsory insurance certificates issued or certified by them even if issued or certified in respect of a ship not registered in a State Party. A State Party may at any time request consultation with the issuing or certifying State should it believe that the insurer or guarantor named in the compulsory insurance certificate is not financially

capable of meeting the obligations imposed by this Convention.

8 Any claim for compensation for damage may be brought directly against the insurer or other person providing financial security for the owner's liability for damage. In such case the defendant may, even if the owner is not entitled to limitation of liability, benefit from the limit of liability prescribed in accordance with paragraph 1. The defendant may further invoke the defences (other than the bankruptcy or winding up of the owner) which the owner would have been entitled to invoke. Furthermore, the defendant may invoke the defence that the damage resulted from the wilful misconduct of the owner, but the defendant shall not invoke any other defence which the defendant might have been entitled to invoke in proceedings brought by the owner against the defendant. The defendant shall in any event have the right to require the owner to be joined in the proceedings.

9 Any sums provided by insurance or by other financial security maintained in accordance with paragraph 1 shall be available exclusively for the satisfaction of claims under this Convention.

10 A State Party shall not permit a ship under its flag to which this article applies to trade unless a certificate has been issued under paragraph 2 or 12.

11 Subject to the provisions of this article, each State Party shall ensure, under its national law, that insurance or other security in the sums specified in paragraph 1 is in force in respect of any ship, wherever registered, entering or leaving a port in its territory, or arriving at or leaving an offshore facility in its territorial sea.

12 If insurance or other financial security is not maintained in respect of a ship owned by a State Party, the provisions of this article relating thereto shall not be applicable to such ship, but the ship shall carry a compulsory insurance certificate issued by the appropriate authorities of the State of the ship's registry stating that the ship is owned by that State and that the ship's liability is covered within the limit prescribed in accordance with paragraph 1. Such a compulsory insurance certificate shall follow as

closely as possible the model prescribed by paragraph 2.

CHAPTER III COMPENSATION BY THE INTERNATIONAL HAZARDOUS AND NOXIOUS SUBSTANCES FUND (HNS FUND)

Establishment of the HNS Fund Article 13

1 The International Hazardous and Noxious Substances Fund (HNS Fund) is hereby established with the following aims:

(a) to provide compensation for damage in connection with the carriage of hazardous and noxious substances by sea, to the extent that the protection afforded by chapter II is inadequate or not available; and

(b) to give effect to the related tasks set out in article 15.

2 The HNS Fund shall in each State Party be recognized as a legal person capable under the laws of that State of assuming rights and obligations and of being a party in legal proceedings before the courts of that State. Each State Party shall recognize the Director as the legal representative of the HNS Fund.

Compensation Article 14

1 For the purpose of fulfilling its function under article 13, paragraph 1(a), the HNS Fund shall pay compensation to any person suffering damage if such person has been unable to obtain full and adequate compensation for the damage under the terms of chapter II:

(a) because no liability for the damage arises under chapter II;

(b) because the owner liable for the damage under chapter II is financially incapable of meeting the obligations under this Convention in full and any financial security that may be provided under chapter II does not cover or is insufficient to satisfy the claims for compensation for damage; an owner being treated as financially incapable of

meeting these obligations and a financial security being treated as insufficient if the person suffering the damage has been unable to obtain full satisfaction of the amount of compensation due under chapter II after having taken all reasonable steps to pursue the available legal remedies;

(c) because the damage exceeds the owner's liability under the terms of chapter II.

2 Expenses reasonably incurred or sacrifices reasonably made by the owner voluntarily to prevent or minimize damage shall be treated as damage for the purposes of this article.

3 The HNS Fund shall incur no obligation under the preceding paragraphs if:

(a) it proves that the damage resulted from an act of war, hostilities, civil war or insurrection or was caused by hazardous and noxious substances which had escaped or been discharged from a warship or other ship owned or operated by a State and used, at the time of the incident, only on Government non-commercial service; or

(b) the claimant cannot prove that there is a reasonable probability that the damage resulted from an incident involving one or more ships.

4 If the HNS Fund proves that the damage resulted wholly or partly either from an act or omission done with intent to cause damage by the person who suffered the damage or from the negligence of that person, the HNS Fund may be exonerated wholly or partially from its obligation to pay compensation to such person. The HNS Fund shall in any event be exonerated to the extent that the owner may have been exonerated under article 7, paragraph 3. However, there shall be no such exoneration of the HNS Fund with regard to preventive measures.

5 (a) Except as otherwise provided in subparagraph (b), the aggregate amount of compensation payable by the HNS Fund under this article shall in respect of any one incident be limited, so that the total sum of that amount and any amount of

compensation actually paid under chapter II for damage within the scope of application of this Convention as defined in article 3 shall not exceed 250 million units of account.

(b) The aggregate amount of compensation payable by the HNS Fund under this article for damage resulting from a natural phenomenon of an exceptional, inevitable and irresistible character shall not exceed 250 million units of account.

(c) Interest accrued on a fund constituted in accordance with article 9, paragraph 3, if any, shall not be taken into account for the computation of the maximum compensation payable by the HNS Fund under this article.

(d) The amounts mentioned in this article shall be converted into national currency on the basis of the value of that currency with reference to the Special Drawing Right on the date of the decision of the Assembly of the HNS Fund as to the first date of payment of compensation.

6 Where the amount of established claims against the HNS Fund exceeds the aggregate amount of compensation payable under paragraph 5, the amount available shall be distributed in such a manner that the proportion between any established claim and the amount of compensation actually recovered by the claimant under this Convention shall be the same for all claimants. Claims in respect of death or personal injury shall have priority over other claims, however, save to the extent that the aggregate of such claims exceeds two-thirds of the total amount established in accordance with paragraph 5.

7 The Assembly of the HNS Fund may decide that, in exceptional cases, compensation in accordance with this Convention can be paid even if the owner has not constituted a fund in accordance with chapter II. In such cases paragraph 5(d) applies accordingly.

Related tasks of the HNS Fund Article 15

For the purpose of fulfilling its function under article 13, paragraph 1(a), the HNS Fund shall have the following tasks:

- (a) to consider claims made against the HNS Fund;

- (b) to prepare an estimate in the form of a budget for each calendar year of:
Expenditure:
 - (i) costs and expenses of the administration of the HNS Fund in the relevant year and any deficit from operations in the preceding years; and

 - (ii) payments to be made by the HNS Fund in the relevant year; Income:
 - (iii) surplus funds from operations in preceding years, including any interest;

 - (iv) initial contributions to be paid in the course of the year;

 - (v) annual contributions if required to balance the budget; and

 - (vi) any other income;

- (c) to use at the request of a State Party its good offices as necessary to assist that State to secure promptly such personnel, material and services as are necessary to enable the State to take measures to prevent or mitigate damage arising from an incident in respect of which the HNS Fund may be called upon to pay compensation under this Convention; and

- (d) to provide, on conditions laid down in the internal regulations, credit facilities with a view to the taking of preventive measures against damage arising from a particular incident in respect of which the HNS Fund may be called upon to pay compensation under this Convention.

General provisions on contributions Article 16

- 1 The HNS Fund shall have a general account, which shall be divided into sectors.

- 2 The HNS Fund shall, subject to article 19, paragraphs 3 and 4, also have separate accounts in respect of:

(a) oil as defined in article 1, paragraph 5(a)(i) (oil account);

(b) liquefied natural gases of light hydrocarbons with methane as the main constituent (LNG) (LNG account); and

(c) liquefied petroleum gases of light hydrocarbons with propane and butane as the main constituents (LPG) (LPG account).

3 There shall be initial contributions and, as required, annual contributions to the HNS Fund.

4 Contributions to the HNS Fund shall be made into the general account in accordance with article 18, to separate accounts in accordance with article 19 and to either the general account or separate accounts in accordance with article 20 or article 21, paragraph 5. Subject to article 19, paragraph 6, the general account shall be available to compensate damage caused by hazardous and noxious substances covered by that account, and a separate account shall be available to compensate damage caused by a hazardous and noxious substance covered by that account.

5 For the purposes of article 18, article 19, paragraph 1(a)(i), paragraph 1(a)(ii) and paragraph 1(b), article 20 and article 21, paragraph 5, where the quantity of a given type of contributing cargo received in the territory of a State Party by any person in a calendar year when aggregated with the quantities of the same type of cargo received in the same State Party in that year by any associated person or persons exceeds the limit specified in the respective subparagraphs, such a person shall pay contributions in respect of the actual quantity received by that person notwithstanding that that quantity did not exceed the respective limit.

6 "Associated person" means any subsidiary or commonly controlled entity. The question whether a person comes within this definition shall be determined by the national law of the State concerned.

General provisions on annual contributions Article 17

1 Annual contributions to the general account and to each separate account shall be levied only as required to make payments by the account in question.

2 Annual contributions payable pursuant to articles 18, 19 and article 21, paragraph 5, shall be determined by the Assembly and shall be calculated in accordance with those articles on the basis of the units of contributing cargo received during the preceding calendar year or such other year as the Assembly may decide.

3 The Assembly shall decide the total amount of annual contributions to be levied to the general account and to each separate account. Following that decision the Director shall, in respect of each State Party, calculate for each person liable to pay contributions in accordance with article 18, article 19, paragraph 1 and paragraph 1bis, and article 21, paragraph 5, the amount of that person's annual contribution to each account, on the basis of a fixed sum for each unit of contributing cargo reported in respect of the person during the preceding calendar year or such other year as the Assembly may decide. For the general account, the above-mentioned fixed sum per unit of contributing cargo for each sector shall be calculated pursuant to the regulations contained in Annex II to this Convention. For each separate account, the fixed sum per unit of contributing cargo referred to above shall be calculated by dividing the total annual contribution to be levied to that account by the total quantity of cargo contributing to that account.

4 The Assembly may also levy annual contributions for administrative costs and decide on the distribution of such costs between the sectors of the general account and the separate accounts.

5 The Assembly shall also decide on the distribution between the relevant accounts and sectors of amounts paid in compensation for damage caused by two or more substances which fall within different accounts or sectors, on the basis of an estimate of the extent to which each of the substances involved contributed to the damage.

Annual contributions to the general account Article 18

1 Subject to article 16, paragraph 5, annual contributions to the general account shall be made in respect of each State Party by any person who was the receiver in that State in the preceding calendar year, or such other year as the Assembly may decide, of aggregate quantities exceeding 20,000 tonnes of contributing cargo, other than substances referred to in article 19, paragraph 1 and paragraph 1bis, which fall within the following sectors:

(a) solid bulk materials referred to in article 1, paragraph 5(a)(vii);

(b) substances referred to in paragraph 2; and

(c) other substances.

2 Annual contributions shall also be payable to the general account by persons who would have been liable to pay contributions to a separate account in accordance with article 19, paragraph 1 and paragraph 1bis, had its operation not been postponed or suspended in accordance with article 19. Each separate account the operation of which has been postponed or suspended under article 19 shall form a separate sector within the general account.

Annual contributions to separate accounts Article 19

1 Subject to article 16, paragraph 5, annual contributions to separate accounts shall be made in respect of each State Party:

(a) in the case of the oil account,

(i) by any person who has received in that State in the preceding calendar year, or such other year as the Assembly may decide, total quantities exceeding 150,000 tonnes of contributing oil as defined in article 1, paragraph 3 of the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1971, as amended, and who is or would be liable to pay contributions to the International Oil Pollution Compensation Fund in accordance with article 10 of that Convention; and

(ii) by any person who was the receiver in that State in the preceding calendar year, or such other year as the Assembly may decide, of total quantities exceeding 20,000 tonnes of other oils carried in bulk listed in appendix I of Annex I to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, as amended;

(b) in the case of the LPG account, by any person who in the preceding calendar year, or such other year as the Assembly may decide, was the receiver in that State of total quantities exceeding 20,000 tonnes of LPG.

1bis(a) In the case of the LNG account, subject to article 16, paragraph 5, annual contributions to the LNG account shall be made in respect of each State Party by any person who in the preceding calendar year, or such other year as the Assembly may decide, was the receiver in that State of any quantity of LNG.

(b) However, any contributions shall be made by the person who, immediately prior to its discharge, held title to an LNG cargo discharged in a port or terminal of that State (the titleholder) where:

(i) the titleholder has entered into an agreement with the receiver that the titleholder shall make such contributions; and

(ii) the receiver has informed the State Party that such an agreement exists.

(c) If the titleholder referred to in subparagraph (b) above does not make the contributions or any part thereof, the receiver shall make the remaining contributions. The Assembly shall determine in the internal regulations the circumstances under which the titleholder shall be considered as not having made the contributions and the arrangements in accordance with which the receiver shall make any remaining contributions.

(d) Nothing in this paragraph shall prejudice any rights of recourse or reimbursement of the receiver that may arise between the receiver and the titleholder under the applicable law.

2 Subject to paragraph 3, the separate accounts referred to in paragraph 1 and paragraph 1bis above shall become effective at the same time as the general account.

3 The initial operation of a separate account referred to in article 16, paragraph 2 shall be postponed until such time as the quantities of contributing cargo in respect of that account during the preceding calendar year, or such other year as the Assembly may decide, exceed the following levels:

(a) 350 million tonnes of contributing cargo in respect of the oil account;

(b) 20 million tonnes of contributing cargo in respect of the LNG account; and

(c) 15 million tonnes of contributing cargo in respect of the LPG account.

4 The Assembly may suspend the operation of a separate account if:

(a) the quantities of contributing cargo in respect of that account during the preceding calendar year fall below the respective level specified in paragraph 3; or

(b) when six months have elapsed from the date when the contributions were due, the total unpaid contributions to that account exceed ten per cent of the most recent levy to that account in accordance with paragraph 1.

5 The Assembly may reinstate the operation of a separate account which has been suspended in accordance with paragraph 4.

6 Any person who would be liable to pay contributions to a separate account the operation of which has been postponed in accordance with paragraph 3 or suspended in accordance with paragraph 4, shall pay into the general account the contributions due by that person in respect of that separate account. For the purpose of calculating future contributions, the postponed or suspended separate account shall form a new sector in the general account and shall be subject to the HNS points system defined in Annex II.

Initial contributions Article 20

1 In respect of each State Party, initial contributions shall be made of an amount which shall, for each person liable to pay contributions in accordance with article 16, paragraph 5, articles 18, 19 and article 21, paragraph 5, be calculated on the basis of a fixed sum, equal for the general account and each separate account, for each unit of contributing cargo received in that State during the calendar year preceding that in which this Convention enters into force for that State.

2 The fixed sum and the units for the different sectors within the general account as well as for each separate account referred to in paragraph 1 shall be determined by the Assembly.

3 Initial contributions shall be paid within three months following the date on which the HNS Fund issues invoices in respect of each State Party to persons liable to pay contributions in accordance with paragraph 1.

Reports Article 21

1 Each State Party shall ensure that any person liable to pay contributions in accordance with articles 18, 19 or paragraph 5 of this article appears on a list to be established and kept up to date by the Director in accordance with the provisions of this article.

2 For the purposes set out in paragraph 1, each State Party shall communicate to the Director, at a time and in the manner to be prescribed in the internal regulations of the HNS Fund, the name and address of any person who in respect of the State is liable to pay contributions in accordance with articles 18, 19 or paragraph 5 of this article, as well as data on the relevant quantities of contributing cargo for which such a person is liable to contribute in respect of the preceding calendar year.

3 For the purposes of ascertaining who are, at any given time, the persons liable to pay contributions in accordance with articles 18, 19 or paragraph 5 of this article and of establishing, where applicable, the quantities of cargo to be taken into account for any

such person when determining the amount of the contribution, the list shall be prima facie evidence of the facts stated therein.

4 If in a State Party there is no person liable to pay contributions in accordance with articles 18, 19 or paragraph 5 of this article, that State Party shall, for the purposes of this Convention, inform the Director of the HNS Fund thereof.

5 In respect of contributing cargo carried from one port or terminal of a State Party to another port or terminal located in the same State and discharged there, States Parties shall have the option of submitting to the HNS Fund a report with an annual aggregate quantity for each account covering all receipts of contributing cargo, including any quantities in respect of which contributions are payable pursuant to article 16, paragraph 5. The State Party shall, at the time of reporting, either:

(a) notify the HNS Fund that that State will pay the aggregate amount for each account in respect of the relevant year in one lump sum to the HNS Fund; or

(b) instruct the HNS Fund to levy the aggregate amount for each account by invoicing individual receivers, or, in the case of LNG, the titleholder if article 19, paragraph 1bis(b) is applicable, for the amount payable by each of them. If the titleholder does not make the contributions or any part thereof, the HNS Fund shall levy the remaining contributions by invoicing the receiver of the LNG cargo. These persons shall be identified in accordance with the national law of the State concerned.

Non-reporting Article 21bis

1 Where a State Party does not fulfil its obligations under article 21, paragraph 2, and this results in a financial loss for the HNS Fund, that State Party shall be liable to compensate the HNS Fund for such loss. The Assembly shall, upon recommendation of the Director, decide whether such compensation shall be payable by a State.

2 No compensation for any incident shall be paid by the HNS Fund for damage in the territory, including the territorial sea of a State Party in accordance with article 3(a), the exclusive economic zone or other area of a State Party in accordance with article 3(b),

or damage in accordance with article 3(c) in respect of a given incident or for preventive measures, wherever taken, in accordance with article 3(d), until the obligations under article 21, paragraphs 2 and 4, have been complied with in respect of that State Party for all years prior to the occurrence of an incident for which compensation is sought. The Assembly shall determine in the internal regulations of the HNS Fund the circumstances under which a State Party shall be considered as not having fulfilled these obligations.

3 Where compensation has been denied temporarily in accordance with paragraph 2, compensation shall be denied permanently if the obligations under article 21, paragraphs 2 and 4, have not been fulfilled within one year after the Director has notified the State Party of its failure to fulfil these obligations.

4 Any payments of contributions due to the HNS Fund shall be set off against compensation due to the debtor, or the debtor's agents.

5 Paragraphs 2 to 4 shall not apply to claims in respect of death or personal injury.

Non-payment of contributions Article 22

1 The amount of any contribution due under articles 18, 19, 20 or article 21, paragraph 5 and which is in arrears shall bear interest at a rate which shall be determined in accordance with the internal regulations of the HNS Fund, provided that different rates may be fixed for different circumstances.

2 Where a person who is liable to pay contributions in accordance with articles 18, 19, 20 or article 21, paragraph 5, does not fulfil the obligations in respect of any such contribution or any part thereof and is in arrears, the Director shall take all appropriate action, including court action, against such a person on behalf of the HNS Fund with a view to the recovery of the amount due. However, where the defaulting contributor is manifestly insolvent or the circumstances otherwise so warrant, the Assembly may, upon recommendation of the Director, decide that no action shall be taken or continued against the contributor.

Optional liability of States Parties for the payment of contributions Article 23

1 Without prejudice to article 21, paragraph 5, a State Party may, at the time when it signs without reservation as to ratification, acceptance or approval, or deposits its instrument of ratification, acceptance, approval or accession or at any time thereafter, declare that it assumes responsibility for obligations imposed by this Convention on any person liable to pay contributions in accordance with articles 18, 19, 20 or article 21, paragraph 5, in respect of hazardous and noxious substances received in the territory of that State. Such a declaration shall be made in writing and shall specify which obligations are assumed.

2 Where a declaration under paragraph 1 is made prior to the entry into force of this Convention in accordance with article 46, it shall be deposited with the Secretary-General who shall after the entry into force of this Convention communicate the declaration to the Director.

3 A declaration under paragraph 1 which is made after the entry into force of this Convention shall be deposited with the Director.

4 A declaration made in accordance with this article may be withdrawn by the relevant State giving notice thereof in writing to the Director. Such a notification shall take effect three months after the Director's receipt thereof.

5 Any State which is bound by a declaration made under this article shall, in any proceedings brought against it before a competent court in respect of any obligation specified in the declaration, waive any immunity that it would otherwise be entitled to invoke.

Organization and administration Article 24

The HNS Fund shall have an Assembly and a Secretariat headed by the Director.

Assembly Article 25

The Assembly shall consist of all States Parties to this Convention.

Article 26

The functions of the Assembly shall be:

- (a) to elect at each regular session its President and two Vice-Presidents who shall hold office until the next regular session;
- (b) to determine its own rules of procedure, subject to the provisions of this Convention;
- (c) to develop, apply and keep under review internal and financial regulations relating to the aim of the HNS Fund as described in article 13, paragraph 1(a), and the related tasks of the HNS Fund listed in article 15;
- (d) to appoint the Director and make provisions for the appointment of such other personnel as may be necessary and determine the terms and conditions of service of the Director and other personnel;
- (e) to adopt the annual budget prepared in accordance with article 15(b);
- (f) to consider and approve as necessary any recommendation of the Director regarding the scope of definition of contributing cargo;
- (g) to appoint auditors and approve the accounts of the HNS Fund;
- (h) to approve settlements of claims against the HNS Fund, to take decisions in respect of the distribution among claimants of the available amount of compensation in accordance with article 14 and to determine the terms and conditions according to which provisional payments in respect of claims shall be made with a view to ensuring that victims of damage are compensated as promptly as possible;
- (i) to establish a Committee on Claims for Compensation with at least 7 and not more

than 15 members and any temporary or permanent subsidiary body it may consider to be necessary, to define its terms of reference and to give it the authority needed to perform the functions entrusted to it; when appointing the members of such body, the Assembly shall endeavour to secure an equitable geographical distribution of members and to ensure that the States Parties are appropriately represented; the Rules of Procedure of the Assembly may be applied, mutatis mutandis, for the work of such subsidiary body;

(j) to determine which States not party to this Convention, which Associate Members of the Organization and which intergovernmental and international non-governmental organizations shall be admitted to take part, without voting rights, in meetings of the Assembly and subsidiary bodies;

(k) to give instructions concerning the administration of the HNS Fund to the Director and subsidiary bodies;

(l) to supervise the proper execution of this Convention and of its own decisions;

(m) to review every five years the implementation of this Convention with particular reference to the performance of the system for the calculation of levies and the contribution mechanism for domestic trade; and

(n) to perform such other functions as are allocated to it under this Convention or are otherwise necessary for the proper operation of the HNS Fund.

Article 27

1 Regular sessions of the Assembly shall take place once every calendar year upon convocation by the Director.

2 Extraordinary sessions of the Assembly shall be convened by the Director at the request of at least one-third of the members of the Assembly and may be convened on the Director's own initiative after consultation with the President of the Assembly. The

Director shall give members at least thirty days' notice of such sessions.

Article 28

A majority of the members of the Assembly shall constitute a quorum for its meetings.

Secretariat Article 29

1 The Secretariat shall comprise the Director and such staff as the administration of the HNS Fund may require.

2 The Director shall be the legal representative of the HNS Fund.

Article 30

1 The Director shall be the chief administrative officer of the HNS Fund. Subject to the instructions given by the Assembly, the Director shall perform those functions which are assigned to the Director by this Convention, the internal regulations of the HNS Fund and the Assembly.

2 The Director shall in particular:

- (a) appoint the personnel required for the administration of the HNS Fund;
- (b) take all appropriate measures with a view to the proper administration of the assets of the HNS Fund;
- (c) collect the contributions due under this Convention while observing in particular the provisions of article 22, paragraph 2;
- (d) to the extent necessary to deal with claims against the HNS Fund and to carry out the other functions of the HNS Fund, employ the services of legal, financial and other experts;

- (e) take all appropriate measures for dealing with claims against the HNS Fund, within the limits and on conditions to be laid down in the internal regulations of the HNS Fund, including the final settlement of claims without the prior approval of the Assembly where these regulations so provide;
- (f) prepare and submit to the Assembly the financial statements and budget estimates for each calendar year;
- (g) prepare, in consultation with the President of the Assembly, and publish a report on the activities of the HNS Fund during the previous calendar year; and
- (h) prepare, collect and circulate the documents and information which may be required for the work of the Assembly and subsidiary bodies.

Article 31

In the performance of their duties the Director and the staff and experts appointed by the Director shall not seek or receive instructions from any Government or from any authority external to the HNS Fund. They shall refrain from any action which might adversely reflect on their position as international officials. Each State Party on its part undertakes to respect the exclusively international character of the responsibilities of the Director and the staff and experts appointed by the Director, and not to seek to influence them in the discharge of their duties.

Finances Article 32

1 Each State Party shall bear the salary, travel and other expenses of its own delegation to the Assembly and of its representatives on subsidiary bodies.

2 Any other expenses incurred in the operation of the HNS Fund shall be borne by the HNS Fund.

Voting Article 33

The following provisions shall apply to voting in the Assembly:

- (a) each member shall have one vote;
- (b) except as otherwise provided in article 34, decisions of the Assembly shall be made by a majority vote of the members present and voting;
- (c) decisions where a two-thirds majority is required shall be a two-thirds majority vote of members present; and
- (d) for the purpose of this article the phrase "members present" means "members present at the meeting at the time of the vote", and the phrase "members present and voting" means "members present and casting an affirmative or negative vote". Members who abstain from voting shall be considered as not voting.

Article 34

The following decisions of the Assembly shall require a two-thirds majority:

- (a) a decision under article 19, paragraphs 4 or 5 to suspend or reinstate the operation of a separate account;
- (b) a decision under article 22, paragraph 2, not to take or continue action against a contributor;
- (c) the appointment of the Director under article 26(d);
- (d) the establishment of subsidiary bodies, under article 26(i), and matters relating to such establishment; and
- (e) a decision under article 51, paragraph 1, that this Convention shall continue to be in force.

Tax exemptions and currency regulations Article 35

1 The HNS Fund, its assets, income, including contributions, and other property necessary for the exercise of its functions as described in article 13, paragraph 1, shall enjoy in all States Parties exemption from all direct taxation.

2 When the HNS Fund makes substantial purchases of movable or immovable property, or of services which are necessary for the exercise of its official activities in order to achieve its aims as set out in article 13, paragraph 1, the cost of which include indirect taxes or sales taxes, the Governments of the States Parties shall take, whenever possible, appropriate measures for the remission or refund of the amount of such duties and taxes. Goods thus acquired shall not be sold against payment or given away free of charge unless it is done according to conditions approved by the Government of the State having granted or supported the remission or refund.

3 No exemption shall be accorded in the case of duties, taxes or dues which merely constitute payment for public utility services.

4 The HNS Fund shall enjoy exemption from all customs duties, taxes and other related taxes on articles imported or exported by it or on its behalf for its official use. Articles thus imported shall not be transferred either for consideration or gratis on the territory of the country into which they have been imported except on conditions agreed by the Government of that country.

5 Persons contributing to the HNS Fund as well as victims and owners receiving compensation from the HNS Fund shall be subject to the fiscal legislation of the State where they are taxable, no special exemption or other benefit being conferred on them in this respect.

6 Notwithstanding existing or future regulations concerning currency or transfers, States Parties shall authorize the transfer and payment of any contribution to the HNS Fund and of any compensation paid by the HNS Fund without any restriction.

Confidentiality of information Article 36

Information relating to individual contributors supplied for the purpose of this

Convention shall not be divulged outside the HNS Fund except in so far as it may be strictly necessary to enable the HNS Fund to carry out its functions including the bringing and defending of legal proceedings.

CHAPTER IV CLAIMS AND ACTIONS

Limitation of actions Article 37

1 Rights to compensation under chapter II shall be extinguished unless an action is brought thereunder within three years from the date when the person suffering the damage knew or ought reasonably to have known of the damage and of the identity of the owner.

2 Rights to compensation under chapter III shall be extinguished unless an action is brought thereunder or a notification has been made pursuant to article 39, paragraph 7, within three years from the date when the person suffering the damage knew or ought reasonably to have known of the damage.

3 In no case, however, shall an action be brought later than ten years from the date of the incident which caused the damage.

4 Where the incident consists of a series of occurrences, the ten-year period mentioned in paragraph 3 shall run from the date of the last of such occurrences.

Jurisdiction in respect of action against the owner Article 38

1 Where an incident has caused damage in the territory, including the territorial sea or in an area referred to in article 3(b), of one or more States Parties, or preventive measures have been taken to prevent or minimize damage in such territory including the territorial sea or in such area, actions for compensation may be brought against the owner or other person providing financial security for the owner's liability only in the courts of any such States Parties.

2 Where an incident has caused damage exclusively outside the territory, including the territorial sea, of any State and either the conditions for application of this

Convention set out in article 3(c) have been fulfilled or preventive measures to prevent or minimize such damage have been taken, actions for compensation may be brought against the owner or other person providing financial security for the owner's liability only in the courts of:

(a) the State Party where the ship is registered or, in the case of an unregistered ship, the State Party whose flag the ship is entitled to fly; or

(b) the State Party where the owner has habitual residence or where the principal place of business of the owner is established; or

(c) the State Party where a fund has been constituted in accordance with article 9, paragraph 3.

3 Reasonable notice of any action taken under paragraph 1 or 2 shall be given to the defendant.

4 Each State Party shall ensure that its courts have jurisdiction to entertain actions for compensation under this Convention.

5 After a fund under article 9 has been constituted by the owner or by the insurer or other person providing financial security in accordance with article 12, the courts of the State in which such fund is constituted shall have exclusive jurisdiction to determine all matters relating to the apportionment and distribution of the fund.

Jurisdiction in respect of action against the HNS Fund or taken by the HNS Fund
Article 39

1 Subject to the subsequent provisions of this article, any action against the HNS Fund for compensation under article 14 shall be brought only before a court having jurisdiction under article 38 in respect of actions against the owner who is liable for damage caused by the relevant incident or before a court in a State Party which would have been competent if an owner had been liable.

2 In the event that the ship carrying the hazardous or noxious substances which caused the damage has not been identified, the provisions of article 38, paragraph 1, shall apply mutatis mutandis to actions against the HNS Fund.

3 Each State Party shall ensure that its courts have jurisdiction to entertain such actions against the HNS Fund as are referred to in paragraph 1.

4 Where an action for compensation for damage has been brought before a court against the owner or the owner's guarantor, such court shall have exclusive jurisdiction over any action against the HNS Fund for compensation under the provisions of article 14 in respect of the same damage.

5 Each State Party shall ensure that the HNS Fund shall have the right to intervene as a party to any legal proceedings instituted in accordance with this Convention before a competent court of that State against the owner or the owner's guarantor.

6 Except as otherwise provided in paragraph 7, the HNS Fund shall not be bound by any judgement or decision in proceedings to which it has not been a party or by any settlement to which it is not a party.

7 Without prejudice to the provisions of paragraph 5, where an action under this Convention for compensation for damage has been brought against an owner or the owner's guarantor before a competent court in a State Party, each party to the proceedings shall be entitled under the national law of that State to notify the HNS Fund of the proceedings. Where such notification has been made in accordance with the formalities required by the law of the court seized and in such time and in such a manner that the HNS Fund has in fact been in a position effectively to intervene as a party to the proceedings, any judgement rendered by the court in such proceedings shall, after it has become final and enforceable in the State where the judgement was given, become binding upon the HNS Fund in the sense that the facts and findings in that judgement may not be disputed by the HNS Fund even if the HNS Fund has not actually intervened in the proceedings.

1 Any judgement given by a court with jurisdiction in accordance with article 38, which is enforceable in the State of origin where it is no longer subject to ordinary forms of review, shall be recognized in any State Party, except:

(a) where the judgement was obtained by fraud; or

(b) where the defendant was not given reasonable notice and a fair opportunity to present the case.

2 A judgement recognized under paragraph 1 shall be enforceable in each State Party as soon as the formalities required in that State have been complied with. The formalities shall not permit the merits of the case to be re-opened.

3 Subject to any decision concerning the distribution referred to in article 14, paragraph 6, any judgement given against the HNS Fund by a court having jurisdiction in accordance with article 39, paragraphs 1 and 3 shall, when it has become enforceable in the State of origin and is in that State no longer subject to ordinary forms of review, be recognized and enforceable in each State Party.

Subrogation and recourse Article 41

1 The HNS Fund shall, in respect of any amount of compensation for damage paid by the HNS Fund in accordance with article 14, paragraph 1, acquire by subrogation the rights that the person so compensated may enjoy against the owner or the owner's guarantor.

2 Nothing in this Convention shall prejudice any rights of recourse or subrogation of the HNS Fund against any person, including persons referred to in article 7, paragraph 2(d), other than those referred to in the previous paragraph, in so far as they can limit their liability. In any event the right of the HNS Fund to subrogation against such persons shall not be less favourable than that of an insurer of the person to whom compensation has been paid.

3 Without prejudice to any other rights of subrogation or recourse against the HNS Fund which may exist, a State Party or agency thereof which has paid

compensation for damage in accordance with provisions of national law shall acquire by subrogation the rights which the person so compensated would have enjoyed under this Convention.

Supersession clause Article 42

This Convention shall supersede any convention in force or open for signature, ratification or accession at the date on which this Convention is opened for signature, but only to the extent that such convention would be in conflict with it; however, nothing in this article shall affect the obligations of States Parties to States not party to this Convention arising under such convention.

**APPENDIX II MARITIME CODE OF THE PEOPLE'S PUBLIC OF
CHINA**

MARITIME CODE OF THE PEOPLE'S REPUBLIC OF CHINA

November 7, 1992 - 14:39 BJT (14:39 GMT)

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CHAPTER IV CONTRACT OF CARRIAGE OF GOODS BY SEA

Article 41 A contract of carriage of goods by sea is a contract under which the carrier, against payment of freight, undertakes to carry by sea the goods contracted for shipment by the shipper from one port to another.

Article 42 For the purposes of this Chapter:

(1) "Carrier" means the person by whom or in whose name a contract of carriage of goods by sea has been concluded with a shipper;

(2) "Actual carrier" means the person to whom the performance of carriage of goods, or of part of the carriage, has been entrusted by the carrier, and includes any other person to whom such performance has been entrusted under a sub-contract;

(3) "Shipper" means:

a) The person by whom or in whose name or on whose behalf a contract of carriage of goods by sea has been concluded with a carrier;

b) The person by whom or in whose name or on whose behalf the goods have been delivered to the carrier involved in the contract of carriage of goods by sea;

(4) "Consignee" means the person who is entitled to take delivery of the goods;

(5) "Goods" includes live animals and containers, pallets or similar articles of transport supplied by the shipper for consolidating the goods.

Article 43 The carrier or the shipper may demand confirmation of the contract of carriage of goods by sea in writing. However, voyage charter shall be done in writing. Telegrams, telexes and telefaxes have the effect of written documents.

Article 44 Any stipulation in a contract of carriage of goods by sea or a bill of lading or other similar documents evidencing such contract that derogates from the provisions of this Chapter shall be null and void. However, such nullity and voidness shall not affect the validity of other provisions of the contract or the bill of lading or other similar documents. A clause assigning the benefit of insurance of the goods in favour of the carrier or any similar clause shall be null and void.

Article 45 The provisions of Article 44 of this Code shall not prejudice the increase of duties and obligations by the carrier besides those set out in this Chapter.

Section 2 Carrier's Responsibilities

Article 46 The responsibilities of the carrier with regard to the goods carried in containers covers the entire period during which the carrier is in charge of the goods, starting from the time the carrier has taken over the goods at the port of loading, until the goods have been delivered at the port of discharge. The responsibility of the carrier with respect to non-containerized goods covers the period during which the carrier is in charge of the goods, starting from the time of loading of the goods onto the ship until the time the goods are discharged therefrom. During the period the carrier is in charge of the goods, the carrier shall be liable for the loss of or damage to the goods, except as otherwise provided for in this Section.

The provisions of the preceding paragraph shall not prevent the carrier from entering into any agreement concerning carrier's responsibilities with regard to non-containerized goods prior to loading onto and after discharging from the ship.

Article 47 The carrier shall, before and at the beginning of the voyage, exercise due diligence to make the ship seaworthy, properly man, equip and supply the ship and to make the holds, refrigerating and cool chambers and all other parts of the ship in which goods are carried, fit and safe for their reception, carriage and preservation.

Article 48 The carrier shall properly and carefully load, handle, stow, carry, keep, care for and discharge the goods carried.

Article 49 The carrier shall carry the goods to the port of discharge on the agreed or customary or geographically direct route.

Any deviation in saving or attempting to save life or property at sea or any reasonable deviation shall not be deemed to be an act deviating from the provisions of the preceding paragraph.

Article 50 Delay in delivery occurs when the goods have not been delivered at the designated port of discharge within the time expressly agreed upon.

The carrier shall be liable for the loss of or damage to the goods caused by delay in delivery due to the fault of the carrier, except those arising or resulting from causes for which the carrier is not liable as provided for in the relevant Articles of this Chapter.

The carrier shall be liable for the economic losses caused by delay in delivery of the goods due to the fault of the carrier, even if no loss of or damage to the goods had actually occurred, unless such economic losses had occurred from causes for which the carrier is not liable as provided for in the relevant Articles of this Chapter.

The person entitled to make a claim for the loss of goods may treat the goods as lost when the carrier has not delivered the goods within 60 days from the expiry of the time for delivery specified in paragraph 1 of this Article.

Article 51 The carrier shall not be liable for the loss of or damage to the goods occurred

during the period of carrier's responsibility arising or resulting from any of the following causes:

- (1) Fault of the Master, crew members, pilot or servant of the carrier in the navigation or management of the ship;
- (2) Fire, unless caused by the actual fault of the carrier;
- (3) Force majeure and perils, dangers and accidents of the sea or other navigable waters;
- (4) War or armed conflict;
- (5) Act of the government or competent authorities, quarantine restrictions or seizure under legal process;
- (6) Strikes, stoppages or restraint of labour;
- (7) Saving or attempting to save life or property at sea;
- (8) Act of the shipper, owner of the goods or their agents;
- (9) Nature or inherent vice of the goods;
- (10) Inadequacy of packing or insufficiency of illegibility of marks;
- (11) Latent defect of the ship not discoverable by due diligence;
- (12) Any other causes arising without the fault of the carrier or his servant or agent.

The carrier who is entitled to exoneration from the liability for compensation as provided for in the preceding paragraph shall, with the exception of the causes given in sub-paragraph (2), bear the burden of proof.

Article 52 The carrier shall not be liable for the loss of or damage to the live animals arising or resulting from the special risks inherent in the carriage thereof. However, the carrier shall be bound to prove that he has fulfilled the special requirements of the shipper with regard to the carriage of the live animals and that under the circumstances of the sea carriage, the loss or damage has occurred due to the special risks inherent therein.

Article 53 In case the carrier intends to ship the goods on deck, he shall come into an agreement with the shipper or comply with the custom of the trade or the relevant laws or administrative rules and regulations.

When the goods have been shipped on deck in accordance with the provisions of the preceding paragraph, the carrier shall not be liable for the loss of or damage to the goods caused by the special risks involved in such carriage.

If the carrier, in breach of the provisions of the first paragraph of this Article, has shipped the goods on deck and the goods have consequently suffered loss or damage, the carrier shall be liable therefor.

Article 54 Where loss or damage or delay in delivery has occurred from causes from which the carrier or his servant or agent is not entitled to exoneration from liability, together with another cause, the carrier shall be liable only to the extent that the loss, damage or delay in delivery is attributable to the causes from which the carrier is not entitled to exoneration from liability; however, the carrier shall bear the burden of proof with respect to the loss, damage or delay in delivery resulting from the other cause.

Article 55 The amount of indemnity for the loss of the goods shall be calculated on the basis of the actual value of the goods so lost, while that for the damage to the goods shall be calculated on the basis of the difference between the values of the goods before and after the damage, or on the basis of the expenses for the repair.

The actual value shall be the value of the goods at the time of shipment plus insurance and freight.

From the actual value referred to in the preceding paragraph, deduction shall be made, at the time of compensation, of the expenses that had been reduced or avoided as a result of the loss or damage occurred.

Article 56 The carrier's liability for the loss of or damage to the goods shall be limited to an amount equivalent to 666.67 Units of Account per package or other shipping unit, or 2 Units of Account per kilogramme of the gross weight of the goods lost or damaged, whichever is the higher, except where the nature and value of the goods had been declared by the shipper before shipment and inserted in the bill of lading, or where a higher amount than the amount of limitation of liability set out in this Article had been agreed upon between the carrier and the shipper.

Where a container, pallet or similar article of transport is used to consolidate goods, the number of packages or other shipping units enumerated in the bill of lading as packed in such article of transport shall be deemed to be the number of packages or shipping units. If not so enumerated, the goods in such article of transport shall be deemed to be one package or one shipping unit.

Where the article of transport is not owned or furnished by the carrier, such article of transport shall be deemed to be one package or one shipping unit.

Article 57 The liability of the carrier for the economic losses resulting from delay in delivery of the goods shall be limited to an amount equivalent to the freight payable for the goods so delayed. Where the loss of or damage to the goods has occurred concurrently with the delay in delivery thereof, the limitation of liability of the carrier shall be that as provided for in paragraph 1 of Article 56 of this Code.

Article 58 The defence and limitation of liability provided for in this Chapter shall apply to any legal action brought against the carrier with regard to the loss of or damage to or delay in delivery of the goods covered by the contract of carriage of goods by sea, whether the claimant is a party to the contract or whether the action is founded in contract or in tort.

The provisions of the preceding paragraph shall apply if the action referred to in the preceding paragraph is brought against the carrier's servant or agent, and the carrier's servant or agent proves that his action was within the scope of his employment or agency.

Article 59 The carrier shall not be entitled to the benefit of the limitation of liability provided for in Article 56 or 57 of this Code if it is proved that the loss, damage or delay in delivery of the goods resulted from an act or omission of the carrier done with the intent to cause such loss, damage or delay or recklessly and with knowledge that such loss, damage or delay would probably result.

The servant or agent of the carrier shall not be entitled to the benefit of limitation of liability provided for in Article 56 or 57 of this Code, if it is proved that the loss, damage or delay in delivery resulted from an act or omission of the servant or agent of the carrier done with the intent to cause such loss, damage or delay or recklessly and with knowledge that such loss, damage or delay would probably result.

Article 60 Where the performance of the carriage or part thereof has been entrusted to an actual carrier, the carrier shall nevertheless remain responsible for the entire carriage according to the provisions of this Chapter. The carrier shall be responsible, in relation to the carriage performed by the actual carrier, for the act or omission of the actual carrier and of his servant or agent acting within the scope of his employment or agency.

Notwithstanding the provisions of the preceding paragraph, where a contract of carriage by sea provides explicitly that a specified part of the carriage covered by the said contract is to be performed by a named actual carrier other than the carrier, the contract may nevertheless provide that the carrier shall not be liable for the loss, damage or delay in delivery arising from an occurrence which takes place while the goods are in the charge of the actual carrier during such part of the carriage.

Article 61 The provisions with respect to the responsibility of the carrier contained in this Chapter shall be applicable to the actual carrier. Where an action is brought against

the servant or agent of the actual carrier, the provisions contained in paragraph 2 of Article 58 and paragraph 2 of Article 59 of this Code shall apply.

Article 62 Any special agreement under which the carrier assumes obligations not provided for in this Chapter or waives rights conferred by this Chapter shall be binding upon the actual carrier when the actual carrier has agreed in writing to the contents thereof. The provisions of such special agreement shall be binding upon the carrier whether the actual carrier has agreed to the contents or not.

Article 63 Where both the carrier and the actual carrier are liable for compensation, they shall jointly be liable within the scope of such liability.

Article 64 If claims for compensation have been separately made against the carrier, the actual carrier and their servants or agents with regard to the loss of or damage to the goods, the aggregate amount of compensation shall not be in excess of the limitation provided for in Article 56 of this Code.

Article 65 The provisions of Article 60 through 64 of this Code shall not affect the recourse between the carrier and the actual carrier.

Section 3 Shipper's Responsibilities

Article 66 The shipper shall have the goods properly packed and shall guarantee the accuracy of the description, mark, number of packages or pieces, weight or quantity of the goods at the time of shipment and shall indemnify the carrier against any loss resulting from inadequacy of packing or inaccuracies in the above-mentioned information.

The carrier's right to indemnification as provided for in the preceding paragraph shall not affect the obligation of the carrier under the contract of carriage of goods towards those other than the shipper.

Article 67 The shipper shall perform all necessary procedures at the port, customs,

quarantine, inspection or other competent authorities with respect to the shipment of the goods and shall furnish to the carrier all relevant documents concerning the procedures the shipper has gone through. The shipper shall be liable for any damage to the interest of the carrier resulting from the inadequacy or inaccuracy or delay in delivery of such documents.

Article 68 At the time of shipment of dangerous goods, the shipper shall, in compliance with the regulations governing the carriage of such goods, have them properly packed, distinctly marked and labelled and notify the carrier in writing of their proper description, nature and the precautions to be taken. In case the shipper fails to notify the carrier or notified him inaccurately, the carrier may have such goods landed, destroyed or rendered innocuous when and where circumstances so require, without compensation. The shipper shall be liable to the carrier for any loss, damage or expense resulting from such shipment.

Notwithstanding the carrier's knowledge of the nature of the dangerous goods and his consent to carry, he may still have such goods landed, destroyed or rendered innocuous, without compensation, when they become an actual danger to the ship, the crew and other persons on board or to other goods. However, the provisions of this paragraph shall not prejudice the contribution in general average, if any.

Article 69 The shipper shall pay the freight to the carrier as agreed.

The shipper and the carrier may reach an agreement that the freight shall be paid by the consignee. However, such an agreement shall be noted in the transport documents.

Article 70 The shipper shall not be liable for the loss sustained by the carrier or the actual carrier, or for the damage sustained by the ship, unless such loss or damage was caused by the fault of the shipper, his servant or agent.

The servant or agent of the shipper shall not be liable for the loss sustained by the carrier or the actual carrier, or for the damage sustained by the ship, unless the loss or damage was caused by the fault of the servant or agent of the shipper.

Article 71 A bill of lading is a document which serves as an evidence of the contract of carriage of goods by sea and the taking over or loading of the goods by the carrier, and based on which the carrier undertakes to deliver the goods against surrendering the same. A provision in the document stating that the goods are to be delivered to the order of a named person, or to order, or to bearer, constitutes such an undertaking.

Article 72 When the goods have been taken over by the carrier or have been loaded on board, the carrier shall, on demand of the shipper, issue to the shipper a bill of lading.

The bill of lading may be signed by a person authorized by the carrier. A bill of lading signed by the Master of the ship carrying the goods is deemed to have been signed on behalf of the carrier.

Article 73 A bill of lading shall contain the following particulars: (1) Description of the goods, mark, number of packages or pieces, weight or quantity, and a statement, if applicable, as to the dangerous nature of the goods;

(2) Name and principal place of business of the carrier;

(3) Name of the ship;

(4) Name of the shipper;

(5) Name of the consignee;

(6) Port of loading and the date on which the goods were taken over by the carrier at the port of loading;

(7) Port of discharge;

(8) Place where the goods were taken over and the place where the goods are to be delivered in case of a multimodal transport bill of lading;

(9) Date and place of issue of the bill of lading and the number of originals issued;

(10) Payment of freight;

(11) Signature of the carrier or of a person acting on his behalf.

In a bill of lading, the lack of one or more particulars referred to in the preceding paragraph does not affect the function of the bill of lading as such, provided that it nevertheless meets the requirements set forth in Article 71 of this Code.

Article 74 If the carrier has issued, on demand of the shipper, a received-for-shipment bill of lading or other similar documents before the goods are loaded on board, the shipper may surrender the same to the carrier as against a shipped bill of lading when the goods have been loaded on board. The carrier may also note on the received-for-shipment bill of lading or other similar documents with the name of the carrying ship and the date of loading, and, when so noted, the received-for-shipment bill of lading or other similar documents shall be deemed to constitute a shipped bill of lading.

Article 75 If the bill of lading contains particulars concerning the description, mark, number of packages or pieces, weight or quantity of the goods with respect to which the carrier or the other person issuing the bill of lading on his behalf has the knowledge or reasonable grounds to suspect that such particulars do not accurately represent the goods actually received, or, where a shipped bill of lading is issued, loaded, or if he has had no reasonable means of checking, the carrier or such other person may make a note in the bill of lading specifying those inaccuracies, the grounds for suspicion or the lack of reasonable means of checking.

Article 76 If the carrier or the other person issuing the bill of lading on his behalf made no note in the bill of lading regarding the apparent order and condition of the goods, the

goods shall be deemed to be in apparent goods order and condition.

Article 77 Except for the note made in accordance with the provisions of Article 75 of this Code, the bill of lading issued by the carrier or the other person acting on his behalf is prima facie evidence of the taking over or loading by the carrier of the goods as described therein. Proof to the contrary by the carrier shall not be admissible if the bill of lading has been transferred to a third party, including a consignee, who has acted in good faith in reliance on the description of the goods contained therein.

Article 78 The relationship between the carrier and the holder of the bill of lading with respect to their rights and obligations shall be defined by the clauses of the bill of lading.

Neither the consignee nor the holder of the bill of lading shall be liable for the demurrage, dead freight and all other expenses in respect of loading occurred at the loading port unless the bill of lading clearly states that the aforesaid demurrage, dead freight and all other expenses shall be borne by the consignee and the holder of the bill of lading.

Article 79 The negotiability of a bill of lading shall be governed by the following provisions:

- (1) A straight bill of lading is not negotiable;
- (2) An order bill of lading may be negotiated with endorsement to order or endorsement in blank;
- (3) A bearer bill of lading is negotiable without endorsement.

Article 80 Where a carrier has issued a document other than a bill of lading as an evidence of the receipt of the goods to be carried, such a document is prima facie evidence of the conclusion of the contract of carriage of goods by sea and the taking over by the carrier of the goods as described therein.

Such documents that are issued by the carrier shall not be negotiable.

Article 81 Unless notice of loss or damage is given in writing by the consignee to the carrier at the time of delivery of the goods by the carrier to the consignee, such delivery shall be deemed to be prima facie evidence of the delivery of the goods by the carrier as described in the transport documents and of the apparent goods order and condition of such goods.

Where the loss of or damage to the goods is not apparent, the provisions of the preceding paragraph shall apply if the consignee has not given the notice in writing within seven consecutive days from the next day of the delivery of the goods, or, in the case of containerized goods, within 15 days from the next day of the delivery thereof.

The notice in writing regarding the loss or damage need not be given if the state of the goods has, at the time of delivery, been the subject of a joint survey or inspection by the carrier and the consignee.

Article 82 The carrier shall not be liable for compensation if no notice on the economic losses resulting from delay in delivery of the goods has been received from the consignee within 60 consecutive days from the next day on which the goods had been delivered by the carrier to the consignee.

Article 83 The consignee may, before taking delivery of the goods at the port of destination, and the carrier may, before delivering the goods at the port of destination, request the cargo inspection agency to have the goods inspected. The party requesting such inspection shall bear the cost thereof but is entitled to recover the same from the party causing the damage.

Article 84 The carrier and the consignee shall mutually provide reasonable facilities for the survey and inspection stipulated in Article 81 and 83 of this Code.

Article 85 Where the goods have been delivered by the actual carrier, the notice in writing given by the consignee to the actual carrier under Article 81 of this Code shall have the same effect as that given to the carrier, and that given to the carrier shall have the same effect as that given to the actual carrier,

Article 86 If the goods were not taken delivery of at the port of discharge or if the consignee has delayed or refused the taking delivery of the goods, the Master may discharge the goods into warehouses or other appropriate places, and any expenses or risks arising therefrom shall be borne by the consignee.

Article 87 If the freight, contribution in general average, demurrage to be paid to the carrier and other necessary charges paid by the carrier on behalf of the owner of the goods as well as other charges to be paid to the carrier have not been paid in full, nor has appropriate security been given, the carrier may have a lien, to a reasonable extent, on the goods.

Article 88 If the goods under lien in accordance with the provisions of Article 87 of this Code have not been taken delivery of within 60 days from the next day of the ship's arrival at the port of discharge, the carrier may apply to the court for an order on the selling the goods by auction; where the goods are perishable or the expenses for keeping such goods would exceed their value, the carrier may apply for an earlier sale by auction.

The proceeds from the auction sale shall be used to pay off the expenses for the storage and auction sale of the goods, the freight and other related charges to be paid to the carrier. If the proceeds fall short of such expenses, the carrier is entitled to claim the difference from the shipper, whereas any amount in surplus shall be refunded to the shipper. If there is no way to make the refund and such surplus amount has not been claimed at the end of one full year after the auction sale, it shall go to the State Treasury.

Section 6 Cancellation of Contract

Article 89 The shipper may request the cancellation of the contract of carriage of goods

by sea before the ship sails from the port of loading. However, except as otherwise provided for in the contract, the shipper shall in this case pay half of the agreed amount of freight; if the goods have already been loaded on board, the shipper shall bear the expenses for the loading and discharge and other related charges.

Article 90 Either the carrier or the shipper may request the cancellation of the contract and neither shall be liable to the other if, due to force majeure or other causes not attributable to the fault of the carrier or the shipper, the contract could not be performed prior to the ship's sailing from its port of loading. If the freight has already been paid, it shall be refunded to the shipper, and, if the goods have already been loaded on board, the loading/discharge expenses shall be borne by the shipper. If a bill of lading has already been issued, it shall be returned by the shipper to the carrier.

Article 91 If, due to force majeure or any other causes not attributable to the fault of the carrier or the shipper, the ship could not discharge its goods at the port of destination as provided for in the contract of carriage, unless the contract provides otherwise, the Master shall be entitled to discharge the goods at a safe port or place near the port of destination and the contract of carriage shall be deemed to have been fulfilled.

In deciding the discharge of the goods, the Master shall inform the shipper or the consignee and shall take the interests of the shipper or the consignee into consideration.

Section 7 Special Provisions Regarding Voyage Charter Party

Article 92 A voyage charter party is a charter party under which the shipowner chartered out and the charterer chartered in the whole or part of the ship's space for the carriage by sea of the intended goods from one port to another and the charterer pays the agreed amount of freight.

Article 93 A voyage charter party shall mainly contain, inter alia, name of the shipowner, name of the charterer, name and nationality of the ship, its bale or grain capacity, description of the goods to be loaded, port of loading, port of destination, laydays, time for loading and discharge, payment of freight, demurrage, dispatch and other relevant

matters.

Article 94 The provisions in Article 47 and Article 49 of this Code shall apply to the shipowner under voyage charter party.

The other provisions in this Chapter regarding the rights and obligations of the parties to the contract shall apply to the shipowner and the charterer under voyage charter only in the absence of relevant provisions or in the absence of provisions differing therefrom in the voyage charter.

Article 95 Where the holder of the bill of lading is not the charterer in the case of a bill of lading issued under a voyage charter, the rights and obligations of the carrier and the holder of the bill of lading shall be governed by the clauses of the bill of lading. However, if the clauses of the voyage charter party are incorporated into the bill of lading, the relevant clauses of the voyage charter party shall apply.

Article 96 The shipowner shall provide the intended ship. The intended ship may be substituted with the consent of the charterer. However, if the ship substituted does not meet the requirements of the charter party, the charterer may reject the ship or cancel the charter. Should any damage or loss occur to the charterer as a result of the shipowner's failure in providing the intended ship due to his fault, the shipowner shall be liable for compensation.

Article 97 If the shipowner has failed to provide the ship within the laydays fixed in the charter, the charterer is entitled to cancel the charter party. However, if the shipowner had notified the charterer of the delay of the ship and the expected date of its arrival at the port of loading, the charterer shall notify the shipowner whether to cancel the charter within 48 hours of the receipt of the shipowner's notification.

Where the charterer has suffered losses as a result of the delay in providing the ship due to the fault of the shipowner, the shipowner shall be liable for compensation.

Article 98 Under a voyage charter, the time for loading and discharge and the way of

calculation thereof, as well as the rate of demurrage that would incur after the expiration of the laytime and the rate of dispatch money to be paid as a result of the completion of loading or discharge ahead of schedule, shall be fixed by the shipowner and the charterer upon mutual agreement.

Article 99 The charterer may sublet the ship he chartered, but the rights and obligations under the head charter shall not be affected.

Article 100 The charterer shall provide the intended goods, but he may replace the goods with the consent of the shipowner. However, if the goods replaced is detrimental to the interests of the shipowner, the shipowner shall be entitled to reject such goods and cancel the charter.

Where the shipowner has suffered losses as a result of the failure of the charterer in providing the intended goods, the charterer shall be liable for compensation.

Article 101 The shipowner shall discharge the goods at the port of discharge specified in the charter party. Where the charter party contains a clause allowing the choice of the port of discharge by the charterer, the Master may choose one from among the agreed picked ports to discharge the goods, in case the charterer did not, as agreed in the charter, instruct in time as to the port chosen for discharging the goods. Where the charterer did not instruct in time as to the chosen port of discharge, as agreed in the charter, and the shipowner suffered losses thereby, the charterer shall be liable for compensation; where the charterer has suffered losses as a result of the shipowner's arbitrary choice of a port to discharge the goods, in disregard of the provisions in the relevant charter, the shipowner shall be liable for compensation.

Section 8 Special Provisions Regarding Multimodal Transport Contract

Article 102 A multimodal transport contract as referred to in this Code means a contract under which the multimodal transport operator undertakes to transport the goods, against the payment of freight for the entire transport, from the place where the goods were received in his charge to the destination and to deliver them to the consignee by

two or more different modes of transport, one of which being sea carriage.

The multimodal transport operator as referred to in the preceding paragraph means the person who has entered into a multimodal transport contract with the shipper either by himself or by another person acting on his behalf.

Article 103 The responsibility of the multimodal transport operator with respect to the goods under multimodal transport contract covers the period from the time he takes the goods in his charge to the time of their delivery.

Article 104 The multimodal transport operator shall be responsible for the performance of the multimodal transport contract or the procurement of the performance therefor, and shall be responsible for the entire transport.

The multimodal transport operator may enter into separate contracts with the carriers of the different modes defining their responsibilities with regard to the different sections of the transport under the multimodal transport contracts. However, such separate contracts shall not affect the responsibility of the multimodal transport operator with respect to the entire transport.

Article 105 If loss of or damage to the goods has occurred in a certain section of the transport, the provisions of the relevant laws and regulations governing that specific section of the multimodal transport shall be applicable to matters concerning the liability of the multimodal transport operator and the limitation thereof.

Article 106 If the section of transport in which the loss of or damage to the goods occurred could not be ascertained, the multimodal transport operator shall be liable for compensation in accordance with the stipulations regarding the carrier's liability and the limitation thereof as set out in this Chapter.

APPENDIX III TORT LAW OF THE PEOPLE'S REPUBLIC OF CHINA

Decree of the President of the People's Republic of China (No. 21)

The Tort Law of the People's Republic of China, which was adopted at the 12th session of the Standing Committee of the Eleventh National People's Congress on December 26, 2009, is hereby promulgated and shall come into force on July 1, 2010.

President of the People's Republic of China:

Hu Jintao December 26, 2009

Tort Law of the People's Republic of China

(Adopted at the 12th session of the Standing Committee of the Eleventh National People's Congress on December 26, 2009)

Chapter I General Provisions

Article 1 In order to protect the legitimate rights and interests of parties in civil law relationships, clarify the tort liability, prevent and punish tortious conduct, and promote the social harmony and stability, this Law is formulated.

Article 2 Those who infringe upon civil rights and interests shall be subject to the tort liability according to this Law.

“Civil rights and interests” used in this Law shall include the right to life, the right to health, the right to name, the right to reputation, the right to honor, right to self image, right of privacy, marital autonomy, guardianship, ownership, usufruct, security interest, copyright, patent right, exclusive right to use a trademark, right to discovery, equities, right of succession, and other personal and property rights and interests.

Article 3 The victim of a tort shall be entitled to require the tortfeasor to assume the tort liability

Article 4 Where a tortfeasor shall assume administrative liability or criminal liability for the same conduct, it shall not prejudice the tort liability that the tortfeasor shall legally assume.

Where the assets of a tortfeasor are not adequate for payments for the tort liability and administrative liability or criminal liability for the same conduct, the tortfeasor shall first assume the tort liability.

Article 5 Where any other law provides otherwise for any tort liability in particular, such special provisions shall prevail.

Chapter II Constituting Liability and Methods of Assuming Liability

Article 6 One who is at fault for infringement upon a civil right or interest of another person shall be subject to the tort liability.

One who is at fault as construed according to legal provisions and cannot prove otherwise shall be subject to the tort liability.

Article 7 One who shall assume the tort liability for infringing upon a civil right or interest of another person, whether at fault or not, as provided for by law, shall be subject to such legal provisions.

Article 8 Where two or more persons jointly commit a tort, causing harm to another person, they shall be liable jointly and severally.

Article 9 One who abets or assists another person in committing a tort shall be liable jointly and severally with the tortfeasor.

One who abets or assists a person who does not have civil conduct capacity or only has limited civil conduct capacity in committing a tort shall assume the tort liability;

the guardian of such a person without civil conduct capacity or with limited civil conduct capacity shall assume the relevant liability if failing to fulfill his guardian duties.

Article 10 Where two or more persons engage in a conduct that endangers the personal or property safety of another person, if only the conduct of one or several of them causes harm to another person and the specific tortfeasor can be determined, the tortfeasor shall be liable; or if the specific tortfeasor cannot be determined, all of them shall be liable jointly and severally.

Article 11 Where two or more persons commit torts respectively, causing the same harm, and each tort is sufficient to cause the entire harm, the tortfeasors shall be liable jointly and severally.

Article 12 Where two or more persons commit torts respectively, causing the same harm, if the seriousness of liability of each tortfeasor can be determined, the tortfeasors shall assume corresponding liabilities respectively; or if the seriousness of liability of each tortfeasor is hard to be determined, the tortfeasors shall evenly assume the compensatory liability.

Article 13 Where the joint and several liability shall be assumed by the tortfeasors according to law, the victim of torts shall be entitled to require some or all of the tortfeasors to assume the liability.

Article 14 The compensation amounts corresponding to the tortfeasors who are jointly and severally liable shall be determined according to the seriousness of each tortfeasor; and if the seriousness of each tortfeasor cannot be determined, the tortfeasors shall evenly assume the compensatory liability.

A tortfeasor who has paid an amount of compensation exceeding his contribution shall be entitled to be reimbursed by the other tortfeasors who are jointly and severally liable.

Article 15 The methods of assuming tort liabilities shall include:

1. cessation of infringement;
2. removal of obstruction;
3. elimination of danger;
4. return of property;
5. restoration to the original status;
6. compensation for losses;
7. apology; and
8. elimination of consequences and restoration of reputation.

The above methods of assuming the tort liability may be adopted individually or jointly.

Article 16 Where a tort causes any personal injury to another person, the tortfeasor shall compensate the victim for the reasonable costs and expenses for treatment and rehabilitation, such as medical treatment expenses, nursing fees and travel expenses, as well as the lost wages. If the victim suffers any disability, the tortfeasor shall also pay the costs of disability assistance equipment for the living of the victim and the disability indemnity. If it causes the death of the victim, the tortfeasor shall also pay the funeral service fees and the death compensation.

Article 17 Where the same tort causes the deaths of several persons, a uniform amount of death compensation may be determined.

Article 18 Where a tort causes the death to the victim, the close relative of the victim shall be entitled to require the tortfeasor to assume the tort liability. Where the victim of a tort, which is an entity, is split or merged, the entity succeeding to the rights of the victim shall be entitled to require the tortfeasor to assume the tort liability.

Where a tort causes the death to the victim, those who have paid the medical treatment expenses, funeral service fees and other reasonable costs and expenses for the victim shall be entitled to require the tortfeasor to compensate them for such costs

and expenses, except that the tortfeasor has already paid such costs and expenses.

Article 19 Where a tort causes any harm to the property of another person, the amount of loss to the property shall be calculated as per the market price at the time of occurrence of the loss or calculated otherwise.

Article 20 Where any harm caused by a tort to a personal right or interest of another person gives rise to any loss to the property of the victim of the tort, the tortfeasor shall make compensation as per the loss sustained by the victim as the result of the tort. If the loss sustained by the victim is hard to be determined and the tortfeasor obtains any benefit from the tort, the tortfeasor shall make compensation as per the benefit obtained by it. If the benefit obtained by the tortfeasor from the tort is hard to be determined, the victim and the tortfeasor disagree to the amount of compensation after consultation, and an action is brought to a people's court, the people's court shall determine the amount of compensation based on the actual situations.

Article 21 Where a tort endangers the personal or property safety of another person, the victim of the tort may require the tortfeasor to assume the tort liabilities including but not limited to cession of infringement, removal of obstruction and elimination of danger.

Article 22 Where any harm caused by a tort to a personal right or interest of another person inflicts a serious mental distress on the victim of the tort, the victim of the tort may require compensation for the infliction of mental distress.

Article 23 Where one sustains any harm as the result of preventing or stopping the infringement upon the civil right or interest of another person, the tortfeasor shall be liable for the harm. If the tortfeasor flees or is unable to assume the liability and the victim of the tort requires compensation, the beneficiary shall properly make compensation.

Article 24 Where neither the victim nor the actor is at fault for the occurrence of a damage, both of them may share the damage based on the actual situations.

Article 25 After the occurrence of any harm, the parties may consult each other about the methods to pay for compensations. If the consultation fails, the compensations shall be paid in a lump sum. If it is hard to make the payment in a lump sum, the payment may be made in installments but a corresponding security shall be provided.

Chapter VIII Liability for Environmental Pollution

Article 65 Where any harm is caused by environmental pollution, the polluter shall assume the tort liability.

Article 66 Where any dispute arises over an environmental pollution, the polluter shall assume the burden to prove that it should not be liable or its liability could be mitigated under certain circumstances as provided for by law or to prove that there is no causation between its conduct and the harm.

Article 67 Where the environmental pollution is caused by two or more polluters, the seriousness of liability of each polluter shall be determined according to the type of pollutant, volume of emission and other factors.

Article 68 Where any harm is caused by environmental pollution for the fault of a third party, the victim may require a compensation from either the polluter or the third party. After making compensation, the polluter shall be entitled to be reimbursed by the third party.

Chapter IX Liability for Ultrahazardous Activity

Article 69 One who causes any harm to another person while engaging in any ultrahazardous operation shall assume the tort liability.

Article 70 Where a nuclear accident occurs to a civil nuclear facility and causes any harm to another person, the operator of the civil nuclear facility shall assume the tort liability unless it can prove that the harm is caused by a situation such as war or by the victim intentionally.

Article 71 Where a civil aircraft causes any harm to another person, the operator of the civil aircraft shall assume the tort liability unless it can prove that the harm is caused by the victim intentionally.

Article 72 Where the possession or use of inflammable, explosive, acutely toxic, radioactive or any other ultrahazardous materials causes any harm to another person, the possessor or user shall assume the tort liability unless it can prove that the harm is caused by the victim intentionally or by a force majeure. If the victim is grossly negligent for the occurrence of the harm, the liability of the possessor or user may be mitigated.

Article 73 Where any harm is caused to another person by an aerial, high pressure or underground excavation activity or by the use of high speed rail transport vehicle, the operator shall assume the tort liability unless it can prove that the harm is caused by the victim intentionally or by a force majeure. If the victim is negligent for the occurrence of the harm, the liability of the operator may be mitigated.

Article 74 Where any harm is caused to another person by the loss or abandonment of ultrahazardous materials, the owner shall assume the tort liability. If the owner has delivered the ultrahazardous materials to another person for management, the person who manages the materials shall assume the tort liability; and if the owner is at fault, he shall be liable jointly and severally with the person who manages the materials.

Article 75 Where any harm to another person is caused by the illegal possession of ultrahazardous materials, the illegal possessor shall assume the tort liability. If the owner and the managing person cannot prove that it has fulfilled its duty of a high degree of care in preventing others from illegal possession, they shall be liable jointly and severally with the illegal possessor.

Article 76 Where any harm is caused by the entry into an area of ultrahazardous activities or an area of storing ultrahazardous materials, if the managing person has taken safety measures and fulfilled its duty of warning, its liability may be mitigated or

it may assume no liability.

Article 77 Where any legal provision prescribes a limit of compensation for liability for an ultrahazardous activity, such a provision shall apply.

BIBLIOGRAPHY

BOOKS

Baatz Y and others, *The Rotterdam Rules: a Practical Annotation* (CRC Press 2013).

Baatz Y, Debattista C and Lorenzon F, *The Rotterdam Rules: a Practical Annotation* (Informa 2009).

Baatz Y, *Maritime Law* (CRC Press 2014).

Baughen S, *Shipping law / Simon Baughen* (London : Routledge-Cavendish, 2009; 4th ed 2009).

Beaumont B and Yang P, *Chinese Maritime Law and Arbitration* (Simmonds & Hill Pub. 1994).

Bergkamp L, *Liability and Environment: Private and Public Law Aspects of Civil Liability For Environmental Harm in an International Context* (Martinus Nijhoff Publishers 2001).

Birnie PW, Boyle AE and Redgwell C, *International Law and the Environment*, vol 2 (Oxford University Press New York 2002).

Branch A and Stopford M, *Maritime economics* (Routledge 2013).

Brown RC, *Understanding Chinese Courts and Legal Process: Law with Chinese Characteristics* (Kluwer law international 1997).

Chen J, *Chinese Law: Context and Transformation*, vol 654 (Martinus Nijhoff Publishers Boston/Leiden 2008).

Cohen JA and Chiu H, *People's China and International Law: a Documentary Study*,
vol 1 (Princeton University Press Princeton, NJ 1974).

De Wit R, *Multimodal Transport: Carrier Liability and Documentation* (Lloyd's of
London Press 1995).

Dobbs DB, *The Law of Torts*, vol 2 (West Group 2001).

Eagleton C, *The Responsibility of States in International Law* (Kraus reprint 1970).

Faure MG, Han L and Shan H, *Maritime Pollution Liability and Policy. China, Europe
and the US* (2010).

Faure MG, *Prevention and Compensation of Marine Pollution Damage: Recent
Developments in Europe, China and the US*, vol 9 (Kluwer Law International
2006).

Frey RG and Morris CW, *Liability and Responsibility: Essays in Law and
Morals* (Cambridge University Press 1991).

Ghana Shippers' Council, *The Admiral: Papers Presented at the 1st Maritime Seminar
for Judges of the Superior Courts of Ghana* (Buck Press on behalf of Ghana
Shippers' Council 2005).

Girvin S, *Carriage of goods by sea* (Oxford University Press Oxford 2007) Gray
CD, *Judicial Remedies in International Law* (Oxford University Press 1990).

Gold E, *Maritime Transport: The Evolution of International Marine Policy and
Shipping Law* (DC Heath & Co 1981).

Harris D, Campbell D and Halson R, *Remedies in Contract and Tort* (Cambridge University Press 2002).

Henry CE, *The Carriage of Dangerous Goods by Sea: The Role of the International Maritime Organization in International Legislation* (Pinter 1985).

Heidenhain M, *European State Aid Law* (Beck 2010).

Hill CJS, *Maritime law* (Lloyd's of London Press Ltd. 1998).

Larsson M, *The Law of Environmental Damage: Liability and Reparation*, vol 1 (Martinus Nijhoff Publishers 1999).

Li S and Ingram C, *Maritime Law and Policy in China* (Routledge 2013).

Liu N, *Opinions of the Supreme People's Court: Judicial Interpretation in China* (Thomson Professional Pub Cn 1997).

Lubman SB, *China's Legal Reforms* (Oxford University Press 1996).

Lunney M and Oliphant K, *Tort Law: Text and Materials* (Oxford University Press 2008).

McConville M and Chui WHE, *Research Methods for Law* (Edinburgh University Press 2007).

Merryman JH and Pérez-Perdomo R, *The Civil Law Tradition: An Introduction to the Legal Systems of Europe and Latin America* (Stanford University Press 2007).

Mo J, *Shipping Law in China* (Sweet & Maxwell 1999).

Mukherjee PK and Brownrigg M, 'Nationality and Registration of Ships: Concept and Practice' in *Farthing on International Shipping* (Springer 2013).

Mukherjee PK, *Maritime Legislation* (WMU Publ. 2002).

Ndiaye TM and Wolfrum R, *Law of the Sea, Environmental Law and Settlement of Disputes: Liber Amicorum Judge Thomas A. Mensah* (Hotei Publishing 2007).

Potter PB, *The Chinese Legal System: Globalization and Local Legal Culture* (Routledge 2005).

Ready NP, *Ship Registration* (LLP 1994).

Rosen L, *The Anthropology of Justice* (Cambridge Univ Press 1990).

Sands P and Peel J, *Principles of International Environmental Law* (Cambridge University Press 2012).

Street TA, *The Foundations of Legal Liability: Theory and Principles of Tort*, vol 1 (Edward Thompson Company 1906).

Sturley MF, Fujita T and Van Der Ziel, Gertjan J, *The Rotterdam Rules: the UN Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea* (Sweet & Maxwell 2010).

Tan AK, *Vessel-Source Marine Pollution: The Law and Politics of International Regulation*, vol 45 (Cambridge University Press 2005).

Temple RK, *The Genius of China: 3,000 Years of Science, Discovery, and Invention* (Prion Books 1998).

Treitel GH, *The Law of Contract* (Sweet & Maxwell 2003).

Wilson JF, *Carriage of Goods by Sea* (Pearson Education 2008).

Wang H, *Civil Liability for Marine Oil Pollution Damage: a Comparative and Economic Study of the International, US and the Chinese Compensation Regime*, vol 19 (Kluwer Law International 2011).

Zhu L, 'International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001—Liability and Insurance Aspects' in *Pollution of the Sea—Prevention and Compensation* (Springer 2007).

ARTICLES

- AFM de Bievre AF, 'Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea' (1986) 17 J.Mar.L.& Com. 61.
- Ago R, 'Second Report on State Responsibility' (1970) 2 Yb.Intern.Law Commiss 177.
- Alcántara González JM, 'The Rotterdam Rules. Prelude or Premonition?' (2010) 2(1) Cuadernos de Derecho Transnacional 25.
- Ames JB, 'How Far an Act may be a Tort because of the Wrongful Motive of the Actor' (1905) 18(6) Harv Law Rev 411.
- Anderson Iii HE, 'Nationality of Ships and Flags of Convenience: Economics, Politics, and Alternatives, The' (1996) 21 Tul.Mar.LJ 139.
- Andreen WL, 'Environmental Law and International Assistance: The Challenge of Strengthening Environmental Law in the Developing World' (2000) 25 Columbia J Environ Law 17.
- Andrews MJ and others, 'International Transportation Law' (2011) The International Lawyer 313
- Atamer K and Süzcel C, 'Construction Problems in the Rotterdam Rules Regarding the Identity of the Carrier' (The United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea Springer, 2011) 155.

- Ayorinde AA, 'Inconsistencies between OPA'90 and MARPOL 73/78: What is the Effect on Legal Rights and Obligations of the United States and Other Parties to MARPOL 73/78' (1994) 25 J.Mar.L.& Com. 55.
- Basu Bal A, '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' (2009).
- Becker R, 'MARPOL 73/78: An Overview in International Environmental Enforcement' (1997) 10 Geo.Int'l Env'tl.L.Rev. 625.
- Benson P, 'The Problem with Pure Economic Loss' (2009) 60(4) South Carolina Law Review.
- Berlingieri F, 'A Comparative Analysis of the Hague-Visby Rules, the Hamburg rules and the Rotterdam Rules' (2009) Paper delivered at the General Assembly of the AMD, Marrakesh 5.
- Berman HJ, '- The Uniform Law on International Sale of Goods: A Constructive Critique Unification of Law'
- Bernstein A, 'Keep It Simple: An Explanation of the Rule of No Recovery for Pure Economic Loss' (2006) 48 Arizona Law Review 773.
- Beyer S, 'Environmental Law and Policy in the People's Republic of China' (2006) 5(1) Chinese Journal of International Law 185.
- Bilder RB, 'Overview of International Dispute Settlement, ' (1986) 1 Emory J.Int'l Disp.Resol. 1.

Bing L, 'On Carrier's Obligation to give Notice of Arrival of Goods under an Ocean Bill of Lading [J]' (2005) *Annual of China Maritime Law* 2005.

Blanco-Bazán A, 'IMO Interface with the Law of the Sea Convention' (1999) 4 *Current Maritime Issues and the International Maritime Organization* 269.

Bleyen L, 'Liability for Pollution from Hazardous and Noxious Substances: The revival of the 1996 HNS Convention' (2011).

Blume L and Rubinfeld DL, 'Compensation for Takings: An Economic Analysis' (1984) 72(4) *Calif Law Rev* 569.

Bosma S, 'Regulation of Marine Pollution Arising from Offshore Oil and Gas Facilities-An Evaluation of the Adequacy of Current Regulatory Regimes and the Responsibility of States to Implement a New Liability Regime, The' (2012) 26 *Austl.& NZ Mar.LJ* 89.

Bovio DM, 'Ocean Carriers' Duty of Care to Cargo in Port: The Rotterdam Rules of 2009' (2008) 32 *Fordham Int'l LJ* 1162.

Boyle AE, 'Marine Pollution Under the Law of the Sea Convention' (1985) 79(2) *The American Journal of International Law* 347.

Boyle AE, 'State Responsibility and International Liability for Injurious Consequences of Acts Not Prohibited by International Law: A Necessary Distinction?' (1990) 39 *Int'l & Comp.LQ* 1, 14.

Broedermann EJ, 'China and Admiralty-An Introduction to Chinese Maritime Law and US-Chinese Shipping Relations' (1984) 15 *J.Mar.L.& Com.* 539.

- Brunnée J, 'Of Sense and Sensibility: Reflections on International Liability Regimes as Tools for Environmental Protection' (2004) 53(02) International and Comparative Law Quarterly 351.
- Calabresi G and Hirschoff JT, 'Toward a Test for Strict Liability in Torts' (1972) 81(6) Yale Law J 1055.
- Chambliss WJ, 'Types of Deviance and the Effectiveness of Legal Sanctions' (1967) Wis.L.Rev. 703.
- Changbing L, 'On Carriage of Dangerous Goods under the Maritime Code of the People's Republic of China—Apprehension and Revising suggestions of Article 68' (1999) ANNUAL OF CHINA MARITIME LAW 1999.
- Chen AH, 'An Introduction to the Legal System of the People's Republic of China' (1992) 95 Notes and Comments.
- Chen T, 'Transplant of Civil Code in Japan, Taiwan, and China: With the Focus of Legal Evolution' (2011) 6 NTU L.Rev. 389.
- Chen X, 'Chinese Law on Carriage of Goods by Sea under Bills of Lading' (1999) 8 Currents Int'l Trade LJ 89.
- Chircop AE, 'Marine Transportation of Hazardous and Dangerous Goods in the Law of the Sea-An Emerging Regime' (1987) 11 Dalhousie LJ 612.
- Christmann P and Taylor G, 'Globalization and the Environment: Determinants of Firm Self-Regulation in China' (2001) 32(3) J Int Bus Stud 439.

Chunfeng G, 'On the Amendments to the Definition of the Shipper and Other Related Articles in the Chinese Maritime Code [J]' (1998) ANNUAL OF CHINA MARITIME LAW 1998.

Chutorian S, 'Tort Remedies for Breach of Contract: The Expansion of Tortious Breach of the Implied Covenant of Good Faith and Fair Dealing into the Commercial Realm' (1986) 86(2) Columbia Law Rev 377.

Conk GW, 'A New Tort Code Emerges in China: An Introduction to the Discussion and a Translation of Chapter 8-Tort Law of the Official Discussion Draft of the Proposed Revised Civil Code' (2007) 30(935-999) Fordham International Law Journal.

Corne PH, 'Creation and Application of Law in the PRC' (2002) 50(2) The American Journal of Comparative Law 369.

D. Rhidian Thomas., ',An Appraisal of the Liability Regime Established under the new UN Convention' ' (2008)(18) Journal of International Maritime Law 496.

Daniel A, 'Civil Liability Regimes as a Complement to Multilateral Environmental Agreements: Sound International Policy or False Comfort?' (2003) 12(3) Review of European Community & International Environmental Law 225.

Daniel P and others, 'Forecasting the Prestige Oil Spills' (Proceedings of the Interspill 2004 conference 2004) 14.

Deakin SF, Johnston A and Markesinis BS, *Markesinis and Deakin's Tort Law* (Oxford University Press 2012).

Department of the Environment, Transport and the Regions, *UKShipping:Charting a new Course* (, 1998)

Doeker G and Gehring T, 'Private or International Liability for Transnational Environmental Damage-The Precedent of Coventional Liability Regimes' (1990) 2 J.Envtl.L. 1.

Dong B, (2014) Compensation for Vessel-Source Oil Pollution Damage in China.

Donovan JJ, 'Origins and Development of Limitation of Shipowners' Liability' (1978) 53 Tul.L.Rev. 999.

Doud AL, 'Compensation for Oil Pollution Damage: Further Comment on the Civil Liability and Compensation Fund Conventions' (1972) 4 J.Mar.L.& Com. 525.

Duyvendak JJJ, 'The True Dates of the Chinese Maritime Expeditions in the Early Fifteenth Century' (1939) 34(Livr. 5) T'oung Pao 341.

Epstein RA, 'A Theory of Strict Liability' (1973) 2(1) The Journal of Legal Studies 151.

Eyer WW, 'Shipowners' Limitation of Liability. New Directions for an Old Doctrine' (1964) Stanford Law Rev 370.

Faure M and Hui W, 'The International Regimes for the Compensation of Oil-Pollution Damage: Are they Effective?' (2003) 12(3) Review of European Community & International Environmental Law 242.

Faure MG and Skogh G, 'Compensation for Damages Caused by Nuclear Accidents: A Convention as Insurance' (1992) Geneva Papers on Risk and Insurance. Issues and Practice 499.

Foot C, 'Tort Remedies for Police Violations of Individual Rights' (1954) 39 Minn.L.Rev. 493.

Force R, 'Regal-Beloit Decision: What, if Anything, Would Happen to the Legal Regime for Multimodal Transport in the United States if it Adopted the Rotterdam Rules, The' (2011) 36 Tul.Mar LJ 685.

Franckx E, 'Coastal State Jurisdiction with Respect to Marine Pollution-Some Recent Developments and Future Challenges' (1995) 10 Int'l J. Marine & Coastal L. 253.

Frederick DC, 'Political Participation and Legal Reform in the International Maritime Rulemaking Process: From the Hague Rules to the Hamburg Rules' (1991) 22 J.Mar.L.& Com. 81.

Frynas JG, 'Corporate Social Responsibility or Government Regulation? Evidence on Oil Spill Prevention' (2012) 17(4) Ecology and Society 4.

Fujita T, 'Shipper's Obligations and Liabilities under the Rotterdam Rules' (2011) 8 University of Tokyo Journal of Law and Politics P62.

Galligan TCJ, '- Contortions along the Boundary between Contracts and Torts'

Garza-Gil MD, Prada-Blanco A and Vázquez-Rodríguez MX, 'Estimating the Short-Term Economic Damages from the Prestige Oil Spill in the Galician Fisheries and Tourism' (2006) 58(4) Ecol Econ 842.

Gauci G, 'Limitation of Liability in Maritime Law: an Anachronism?' (1995) 19(1) Mar Policy 65.

Gauci GM, 'Protection of the Marine Environment through the International Ship-Source Oil Pollution Compensation Regimes' (1999) 8(1) Review of European Community & International Environmental Law 29.

Gauci GM, 'The UK Marine and Coastal Access Bill—A Missed Opportunity to Enhance Protection from Marine Environmental Pollution?' (2010) 34(3) Mar Policy 498.

Gehring T and Jachtenfuchs M, 'Liability for Transboundary Environmental Damage towards a General Liability Regime' (1993) 4 Eur.J.Int'l L. 92.

Gen X, 'On the Implication of Regulation in Tort Law Context [J]' (2009) 2 China Legal Science 008.

'Globalising Environmental Liability: The Interplay of National and International Law' (2005) 17(1) Journal of Environmental Law 3.

Goldberg VP, 'Recovery for Economic Loss following the Exxon" Valdez" Oil Spill' (1994) 23(1) The Journal of Legal Studies 1.

Goldie LF, 'Liability for Damage and the Progressive Development of International Law' (1965) 14(04) International and Comparative Law Quarterly 1189.

Goldsmith BJ, Waikem TK and Franey T, 'Environmental Damage Liability Regimes Concerning Oil Spills-A Global Review and Comparison' (International Oil Spill Conference Proceedings American Petroleum Institute, 2014) 2172.

- Goransson M, 'HNS Convention' (1997) 2 Unif.L.Rev. 249.
- Gormley WP, 'The Development of the Rhodian-Roman Maritime Law to 1681, with Special Emphasis on the Problem of Collision,' (1961) 3 Inter-Am.L.Rev. 317.
- Green AJ, 'Tort Reform with Chinese Characteristics: Towards a 'Harmonious Society' in the People's Republic of China' (2008) 10 San Diego International Law Journal 121.
- Gritsenko D and Vehkalahti K, 'Varying Patterns in Vessel Operation Quality and their Governance Implications' (International Forum on Shipping, Ports and Airports (IFSPA) 2013: Trade, Supply Chain Activities and Transport: Contemporary Logistics and Maritime Issues 2013).
- Guo p and Zhang w, 'Commentary on "Rotterdam Rules"' (2009)(3) Global Law Review 133.
- Guo-ping Y, 'Legal Issues Relative to Carriage of Dangerous Goods by Sea' (2008) 1 World Shipping 020.
- Guo-Qing S, 'The Danger Goods Safety Transportation Problems by Waterway in China' (2013).
- Gurumo TS and Han L, 'The Role and Challenge of International Oil Pollution Liability Legislations in the Protection of Marine Environment' .
- Hackett DP, '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.

Hamilton GG, 'The Organizational Foundations of Western and Chinese Commerce: A Historical and Comparative Analysis' (1996) DE GRUYTER STUDIES IN ORGANIZATION 43.

Hammitt J, 'Who's Afraid of the Supremacy Clause-State Regulation of Air Pollution from Offshore Ships is Upheld in Pacific Merchant Shipping Ass'n v. Goldstene' (2011) 66 U.Miami L.Rev. 53.

Handl G, 'State Liability for Accidental Transnational Environmental Damage by Private Persons' (1980) 74 Am.J.Int'l L. 525.

'International Convention on Civil Liability for Oil Pollution Damage, 1969, The' (1969) 1 J.Mar.L.& Com. 317.

'International Liability of State for Marine Pollution' (1983) 21 Can.YB Int'l L. 85.

Hardy M, 'Nuclear Liability: The General Principles of Law and Further Proposals' (1960) 36 Brit.YB Int'l L. 223.

Harris M, 'Fairness and Remoteness of Damage in Contract Law: A Lexical Ordering Approach' (2010) Journal of Contract Law, Forthcoming.

Hartje VJ, 'Oil Pollution Caused by Tanker Accidents: Liability *versus* Regulation' (1984) 24 Nat.Resources J. 41.

Hashmi S, 'The Rotterdam Rules: a Blessing?'' (2012) 10 Loy.Mar.LJ 227.

Healy NJ, 'CMI and IMCO Draft Conventions on Civil Liability for Oil Pollution, The' (1969) 1 J.Mar.L.& Com. 93.

Heine G, 'Marine (Oil) Pollution: Prevention and Protection by Criminal Law–

International Perspectives, Corporate and/or Individual Criminal Liability' (2006)

Hesse HG, 'Maritime Security in a Multilateral Context: IMO Activities to Enhance

Maritime Security' (2003) 18(3) *The International Journal of Marine and Coastal*

Law 327.

Hetherington C, Flin R and Mearns K, 'Safety in Shipping: The Human Element' (2006)

37(4) *J Saf Res* 401.

'Historical Overview of the Development of Uniformity in International Maritime Law'

(1982) 57 *Tul.L.Rev.* 1065.

Hongxiu Y and Hui L, 'On the Identity of " Shipper" Under the Chinese Maritime Code

[J]' (1996) *Annual of China Maritime Law* 1996.

Horwitz MJ, 'The History of the Public/Private Distinction' (1982) 130(6) *University of*

Pennsylvania Law Review 1423.

Huanning W, 'Maritime Legislation in China' (1988) 5 *Austl. & NZ Mar.LJ* 19.

Huanning W, 'The Evolution of Chinese Maritime Law' (2007) *SMU Law Review* 004.

Jacobsson M and Trotz N, 'Definition of Pollution Damages in the 1984 Protocols to the

1969 Civil Liability Convention and the 1971 Fund Convention, The' (1986) 17

J.Mar.L. & Com. 467.

- Jacobsson M, 'The International Oil Pollution Compensation Fund: Ten Years of Claims Settlement Experience' (International Oil Spill Conference American Petroleum Institute, 1989) 509.
- Jayasuriya H, Percy K and Oberlin M, 'Admiralty and Maritime Law Articles Published in Non-Maritime Law Journals (2009)' (2010) 41 J.Mar.L.& Com. 167.
- Jiang Zx and Tang B, 'Chinese Journal of Maritime' (2004).
- Jingwei L, 'Theoretical Transition of Civil Law since Reform and Opening-up: A Second Review on Century-old Chinese Civil Law ' (2010) 3 Journal of CUPL.
- Johnson VR, 'The Rule of Law and Enforcement of Chinese Tort Law' (2011) 34(1) Thomas Jefferson Law Review 43.
- Kadeer A, 'The Selection of the Shanghai Cooperation Organization's Legal Model for Regional Economic Cooperation [J]' (2010) 2 Journal of Qinghai Normal University (Philosophy and Social Sciences Edition) 012.
- Karan H, 'Any Need for a New International Instrument on the Carriage of Goods by Sea: The Rotterdam Rules' (2011) 42 J.Mar.L.& Com. 441.
- Kennedy D, 'Distributive and Paternalist Motives in Contract and Tort Law, with Special Reference to Compulsory Terms and Unequal Bargaining Power' (1981) 41 Md.L.Rev. 563.
- Keyuan Z, 'Implementing Marine Environmental Protection Law in China: Progress, Problems and Prospects' (1999) 23(3) Mar Policy 207.

- Kiern LI, 'Liability, Compensation, and Financial Responsibility Under the Oil Pollution Act of 1990: A Review of the First Decade' (1999) 24 Tul.Mar.LJ 481.
- Kiran R and Krishna B, 'Liability and Compensation for Oil Pollution Damage: An Examination of IMO Conventions' (2010) 3 NUJS L.Rev. 399.
- Kiss A and Shelton D, 'Strict Liability in International Environmental Law' in *Law of the Sea, Environmental Law and Settlement of Disputes* (Brill 2007).
- Konz P, (1963) *The 1962 Brussels Convention on the Liability of Operators of Nuclear Ships*.
- Kopacz Z, Morgas W and Urbanski J, 'The Maritime Safety System, its main Components and Elements' (2001) 54(02) *The Journal of Navigation* 199.
- Kopela S, 'Civil and Criminal Liability as Mechanisms for the Prevention of Oil Marine Pollution: The Erika case' (2011) 20(3) *Review of European Community & International Environmental Law* 313.
- Koziol H and Zhu Y, 'Background and Key Contents of the New Chinese Tort Liability Law' (2010) 1(3) *JETL—Journal of European Tort Law* 328.
- Kummer K, 'The International Regulation of Transboundary Traffic in Hazardous Wastes: The 1989 Basel Convention' (1992) 41(03) *International and Comparative Law Quarterly* 530.
- Lai K, 'The Liability Regime of Carriers in the Rotterdam Rules' .

'Legal Aspects of the Transportation of Dangerous Goods at Sea' (1986) 10(3) Mar Policy 185.

Levmore S, 'Rethinking Comparative Law: Variety and Uniformity in Ancient and Modern Tort Law' (1986) 61 Tul.L.Rev. 235.

Li KX, 'Review of Chinese Maritime Law: 2006' (2007) 38 J.Mar.L.& Com. 369.

Li L, 'The Application of the Rotterdam Rules in International Multimodal Transportations: The Conflicts of Liability Between the Rotterdam Rules and Other Relevant International Legal Regimes' (2011) 78(3) Journal of Transportation Law, Logistics & Policy 207.

LI Z, SI X and SUN X, 'Review on China's Maritime Law Research in 2005' (2005) Annual of China Maritime Law 025.

Lihong Z, 'Latest Developments in the Codification of Chinese Civil Law' (2008) 83 Tul.L.Rev. 999.

Liming W, 'A Study of Punitive Damage' (2000) 4 SOCIAL SCIENCES IN CHINA 010.

Li-ming W, 'Certain Issues in Enacting Tort Law' (2008) 5 Contemporary Law Review 001.

Liu D and Zhu L, 'Assessing China's Legislation on Compensation for Marine Ecological Damage: A Case Study of the Bohai Oil Spill' (2014) 50 Mar Policy 18.

- LIU X, WU C and ZHU Y, 'On the Burden of Proof of Due Diligence Where the Carrier alleges Immunity' (1999) ANNUAL OF CHINA MARITIME LAW 1999.
- Li-xin H, 'Study on the Scope of Compensation for Marine Environmental Damage caused by Ships' Pollution ' (2005) Annual of China Maritime Law 2005.
- Mason M, 'Civil Liability for Oil Pollution Damage: Examining the Evolving Scope for Environmental Compensation in the International Regime' (2003) 27(1) Mar Policy 1.
- McConnell ML and Gold E, 'Modern Law of the Sea: Framework for the Protection and Preservation of the Marine Environment, The' (1991) 23 Case W.Res.J.Int'l L. 83.
- McConnell ML, 'Darkening Confusion Mounted upon Darkening Confusion: The Search for the Elusive Genuine Link' (1985) 16 J.Mar.L.& Com. 365.
- Mensah TA, 'Legal Problems Relating to Marine Pollution by Oil.' (1971) Water Pollution by Oil.London, The Institute of Petroleum.P.Hepple (Ed.). 293
- Mingrui G, 'Several Thoughts on Legislation of Tort' (2008) 4 China Legal Science 004.
- Moore JC, 'Hamburg Rules, The' (1978) 10 J.Mar.L.& Com. 1.
- Mukherjee PK, 'Liability and Compensation for Environmental Damage Caused by Ship-Source Oil Pollution: Actionability of Claims' (2010) 13 Maritime Pollution Liability and Policy: China, Europe, and the US 75.
- Mullai A, 'A Risk Analysis Framework for Marine Transport of Packaged Dangerous Goods' (2004) Supply Chain Risk, Großbritannien 130.

- Murphy SD, 'Prospective Liability Regimes for the Transboundary Movement of Hazardous Wastes' (1994) 88(1) *The American Journal of International Law* 24.
- Nafziger JA and Jiafang R, 'Chinese Methods of Resolving International Trade, Investment, and Maritime Disputes' (1987) 23 *Willamette L.Rev.* 619.
- Nanda VP, 'Torrey Canyon Disaster: Some Legal Aspects, The' (1967) 44 *Denv.LJ* 400.
- Nikaki T, 'UNCITRAL Draft Instrument on the Carriage of Goods Wholly or Partly By Sea]: The Treatment of Through Transport Contracts, The' (2003) 31 *Transp.LJ* 193.
- Noyes JE and Smith BD, 'State Responsibility and the Principle of Joint and Several Liability' (1988) 13 *Yale J.Int'l L.* 225.
- O de La Fayette L, 'The Marine Environment Protection Committee: the Conjunction of the Law of the Sea and International Environmental Law' (2001) 16(2) *The International Journal of Marine and Coastal Law* 155.
- O von Busekist O, 'A Bridge between Two Conventions on Civil Liability for Nuclear Damage: the Joint Protocol Relating to the Application of the Vienna Convention and the Paris Convention' (2006) 1(989) *Nucl Law Bull* 1.
- Ortiz RI, 'What Changes in International Transport Law After the Rotterdam Rules' (2009) 14 *Unif.L.Rev.* 893.
- Pallarés LS, 'A Brief Approach to The Rotterdam Rules: Between Hope and Disappointment' (2011) 42(3) *Journal of Maritime Law & Commerce* 453.

- Palmer M, 'Environmental Regulation in the People's Republic of China: The Face of Domestic Law' (1998) 156 *The China Quarterly* 788.
- Paulsen GW, 'Historical Overview of the Development of Uniformity in International Maritime Law' (1982) 57 *Tul.L.Rev.* 1065.
- Pawlow JR, 'Liability for Shipments by Sea of Hazardous and Noxious Substances' (1985) 17 *Law & Pol'y Int'l Bus.* 455.
- Payne D, 'Foresight and Remoteness of Damage in Negligence' (1962) 25(1) *The Modern Law Review* 1.
- Percy HK, 'Admiralty and Maritime Law Articles Published in Non-Maritime Law Journals (2003)' (2004) 35 *J.Mar.L.& Com.* 405.
- Pew CE, Jarvis RM and Sidel M, 'Maritime Courts in the Middle Kingdom: China's Great Leap Seaward' (1986) 11 *Mar.Law.* 237.
- Reichenbach F, 'Legislative Developments Concerning Oil Pollution of the Seas' (1980) 8 *Int'l Bus.Law.* 9.
- Relave EKC, 'The International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, 1996: Study of the HNS Convention 1996' (2007).
- Rendleman D, 'Inadequate Remedy at Law Prerequisite for an Injunction' (1980) 33 *U.Fla.L.Rev.* 346.

Rengifo A, 'The International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances at Sea, 1996' (1997) 6(2) Review of European Community & International Environmental Law 191.

Roark H, 'Explosion on the High Seas-The Second Circuit Promotes International Uniformity with Strict Liability for the Shipment of Dangerous Goods: Senator v. Sunway' (2003) 33 Sw.UL Rev. 139.

Rodriguez AJ and Jaffe PA, 'Oil Pollution Act of 1990, The' (1990) 15 Tul.Mar.LJ 1.

Rosas A, 'Issues of State Liability for Transboundary Environmental Damage' (1991) 60 Nordic J.Int'l L. 29.

Sassoon DM, 'Liability for the International Carriage of Goods by Sea, Land and Air: Some Comparisons' (1971) 3 J.Mar.L.& Com. 759.

Schoenbaum TJ, 'Liability for Damages in Oil Spill Accidents: Evaluating the USA and International Law Regimes in the Light of Deepwater Horizon' (2012) Journal of Environmental Law.

Schuda RS, 'International Maritime Organization and the Draft Convention on Liability and Compensation in Connection with the Carriage of Hazardous and Noxious Substances by Sea: An Update on Recent Activity, The' (1991) 46 U.Miami L.Rev. 1009.

Shavell S, 'Strict Liability *versus* Negligence' (1980) 9(1) The Journal of Legal Studies 1.

- Shearer IA, 'Problems of Jurisdiction and Law Enforcement Against Delinquent Vessels' (1986) 35(02) *International and Comparative Law Quarterly* 320.
- Shou-qin L, 'On Seaworthiness Responsibility' (1992) 1 *Annual of China Maritime Law* 193.
- Sik KT and Jimmy JM, 'Chinese Maritime Law Update -- 2013' (2013) 44(3) *Journal of Maritime Law & Commerce* 379.
- Silverstein E, 'On Recovery in Tort for Pure Economic Loss' (1998) 32 *U.Mich.JL Reform* 403.
- Smith BD, 'State Responsibility and the Marine Environment: The Rules of Decision.' (1988) Clarendon Press, Oxford(UK).1988.
- Spies EG and McCoid JC, 'Recovery of Consequential Damages in Eminent Domain' (1962) *Va Law Rev* 437.
- Sturley MF, 'Uniformity in the Law Governing the Carriage of Goods by Sea' (1995) 26 *J.Mar.L.& Com.* 553.
- Sucharitkul S, 'State Responsibility and International Liability Under International Law' (1995) 18 *Loy.LA Int'l & Comp.LJ* 821.
- Tetley W and Wilkins RC, *International Conflict of Laws: Common, Civil, and Maritime* (Intl Shipping Pubns 1994).
- Tetley W, 'Mixed Jurisdictions: Common Law v. Civil Law (Codified and Uncodified)' (1999) 60 *La.L.Rev.* 677.

- Tetley W, 'Some General Criticisms of the Rotterdam Rules' (2008) 14 JIML 626.
- Thomas DR, 'Special Liability Regimes under the International Conventions for the Carriage of Goods by Sea–Dangerous Cargo and Deck Cargo' (2010) 5 *Nederlands Tijdschrift voor Handelsrecht* 198.
- Tomotaka Fujita, 'The Comprehensive Coverage of the New Convention: Performing Parties and Multimodal Implications' (2009) 44 *Texas International L J* 39.
- Van Dunné JM, 'Liability for Pure Economic Loss: Rule or Exception? A Comparatist's View of the Civil Law-Common Law Split on Compensation of Non-physical Damage in Tort Law' (1999) 7(4) *European Review of Private Law* 397.
- Van Hanswyk B, 'The 1984 Protocols to the International Convention on Civil Liability for Oil Pollution Damages and the International Fund for Compensation for Oil Pollution Damages: An Option for Needed Reform in United States Law' (1988) *The International Lawyer* 319.
- Verlaan P, 'Selected Summary Highlights from the 55th Meeting of the Intergovernmental Marine Environment Protection Committee (MEPC 55) of the International Maritime Organisation (IMO), 9–13 October 2006, held at Central Hall, Westminster, London' (2007) 27(2) *Underwat Technol* 67.
- Wang A and Gao J, 'Environmental Courts and the Development of Environmental Public Interest Litigation in China' (2010) 3 *Journal of Court Innovation* 37.
- Wenguang Z, 'The Evaluation of China Maritime Law Studies' (2015) 4 *Chinese Review of International Law* 007.

- Wetterstein P, 'Carriage of Hazardous Cargoes by Sea-The HNS Convention' (1996) 26 Ga.J.Int'l & Comp.L. 595.
- Woo M, 'Law and Discretion in the Contemporary Chinese Courts' (1999) 8(3) Pacific Rim Law & Policy Journal 581.
- Wood LD, 'Integrated International and Domestic Approach to Civil Liability for Vessel-Source Oil Pollution, An' (1975) 7 J.Mar.L.& Com. 1.
- Wren J, 'Overview of the Compensation and Liability Regimes under the International Oil Pollution Compensation Fund (IOPC)' (2000) 6(1) Spill Sci Technol Bull 45.
- Xianwei Z, 'Comment on the Legal Regime of Limitation of Actions Regarding Carriage of Cargo by Sea in China' (2006) 37 J.Mar.L.& Com. 261.
- Xin W, 'On the Relationship between the Carrier's Obligations and Immunities in CMC' (1993) Annual of China Maritime Law 1993.
- Xinbao Z, 'The Balancing of Interests in the Legislation of the Tort Liability Law ' (2009) 4 China Legal Science 016.
- Yan Z, 'On the System Transformation of the Tort Law Based on Mass Tort' (2009) 3 Journal of Renmin University of China 006.
- Yan Z, 'Risk Society and Basic Structure of Tort Law System' (2009) 5 Chinese Journal of Law 003.
- Yi J, 'Causation in Tort' (2004) 5 Presentday Law Science 006.

Yi W, 'Substantive Rules of Reasoning for Value Judgment in Civil Law: In the Context of Academic Practice of Civil Law in China [J]' (2004) 6 Social Sciences in China 008.

Yiannopoulos AN, '- The Unification of Private Maritime Law by International Conventions Unification of Law' - Law & Contemp Probs - 370.

Youjun WLZ, 'A Review of China's Civil Law Study' (2008) 1 China Legal Science 013.

Yunsong G, 'On the Civil Interests Protected by Tort Liability Law' (2010) 3 China Legal Science 004.

Yuzhuo S (ed), *Maritime Law Monograph* (Remin University of China Press 2007).

Yu-zhuo S, 'New Structure of the Basis of Liability for the Carrier——an Analysis on the Provisions under the Rotterdam Rules in Respect of Basis of Liability for the Carrier' (2009) 3 Annual of China Maritime Law 002.

Zamora S, 'Carrier Liability for Damage or Loss to Cargo in International Transport' (1975) The American Journal of Comparative Law 391.

Zeng-jie Z, 'Evaluation on the Rotterdam Rules' (2009) 1(2) Annual of China Maritime Law 9.

Zhang L, 'Shipping Law and Practice in China-Legal Analysis of the Draft Maritime Code and Maritime Jurisdiction' (1989) 14 Tul.Mar.LJ 209.

Zhang M, 'Tort Liabilities and Torts Law: The New Frontier of Chinese Legal Horizon'
(2011) 10(4) Richmond Journal of Global Law and Business.

Zheng HR, 'China's New Civil Law' (1986) The American Journal of Comparative Law
669.

Zhenying W, 'The Status of Tort Liability Law in Civil Law and Its Relation to other
Parts' (2010) 2 China Legal Science 004.

Zhi-qiang Y, 'On the Social Functions of Tort Law' (2007) 5 Tribune of Political
Science and Law 014.

Zhu L and Zhao YC, 'A Feasibility Assessment of the Application of the Polluter-Pays
Principle to Ship-Source Pollution in Hong Kong' (2015) 57 Mar Policy 36.

ZHU Z and SI Y, 'On the Doctrine of Overriding Obligation Under Hague
Rules—And Commentary on the Provision of the Basis of the Liability Under
the UNCITRAL Draft Instrument on Transport Law' (2002) Annual of China
Maritime Law 2002.

Ziwen L, 'Review on China's Maritime Law Research in 1999' (1999) ANNUAL OF
CHINA MARITIME LAW 1999.

WEBSITES

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, see details on

[http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/Convention-relating-to-Civil-Liability-in-the-Field-of-Maritime-Carriage-of-Nuclear-Material-\(NUCLEAR\).aspx](http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/Convention-relating-to-Civil-Liability-in-the-Field-of-Maritime-Carriage-of-Nuclear-Material-(NUCLEAR).aspx)

Hague Rules available

<http://www.informare.it/dbase/convuk.htm>

International Convention for the Safety of Life at Sea (SOLAS), 1974, Adoption: 1 November 1974; Entry into force: 25 May 1980.

[http://www.imo.org/en/About/conventions/listofconventions/pages/international-convention-for-the-safety-of-life-at-sea-\(solas\),-1974.aspx](http://www.imo.org/en/About/conventions/listofconventions/pages/international-convention-for-the-safety-of-life-at-sea-(solas),-1974.aspx)

International Maritime Dangerous Goods (IMDG) Code” – “What is in it?”http://www.imo.org/blast/mainframe.asp?topic_id=158#1

International Maritime Dangerous Goods (IMDG) Code” – “Development of the IMDG Code” http://www.imo.org/blast/mainframe.asp?topic_id=158#1 ;

International Gas-Fuelled Ships Code, 2015. More details see

<http://www.imo.org/en/MediaCentre/PressBriefings/Pages/26-MSC-95-ENDS.aspx>

Part B of SOLAS Convention

[http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-for-the-Safety-of-Life-at-Sea-\(SOLAS\),-1974.aspx](http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-for-the-Safety-of-Life-at-Sea-(SOLAS),-1974.aspx)

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>

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>

Statement by Mr. MA Xinmin, Chinese Delegate, at the Sixth Committee of the 62nd Session of the UN General Assembly, on Item 78 "Responsibility of States for Internationally Wrongful Acts" New York, 23 October 2007;

<http://www.china-un.org/eng/lhghyywj/ldhy/ld62/t375208.htm>

The Tort Law of PRC Entered into force in 2010;

http://www.gov.cn/flfg/2009-12/26/content_1497435.htm accessed on 18/09/2016