

A Comparative Study of Liability arising from the Carriage of Dangerous Goods between Chinese and English Law

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Abstract

This thesis is about the rights and liabilities arising under English and Chinese law in respect of the carriage of dangerous cargo. It is noted that the danger in dangerous cargoes was not necessarily something in the goods themselves, but might well lie in the way they were packaged, looked after or transported. Accordingly, the responsibilities and liabilities of the various parties with regards to the carriage of dangerous cargoes are usually intertwined and complex.

The purpose of this thesis is to analyse and evaluate the dangerous cargoes liabilities in English and Chinese law, by providing suggestions for existing problems in each country based on three sources: contract, tort and statute. Moreover, the chain of causation and concept of remoteness has particular importance in order to establish liability and decide which type and what amount of damage is recoverable.

This thesis compares both countries' liability regimes and how to secure compensation for its victims, and the restoration of the environment, with reference to the EU Environmental Liability Directive and relevant international conventions. The author draws her final conclusions from four important issues: (1) the meaning of dangerous cargo, the packing and handling; (2) the scheme of liability; (3) the channelling of liability; and (4) the type of recoverable damage.

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Abbreviations

Legislation and legal terms:

ARPMPV	Administrative Rules of the PRC for Preventing Marine Pollution caused by Vessels
ARSSDCV	Administrative Regulations of the PRC on the Safety Supervision of Dangerous Cargo on Vessels
BCH Code	Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk
CLC	International Convention on Civil Liability for Oil Pollution Damage
COGSA	Carriage of Goods by Sea Act
FUND	International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage
HNS Convention	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 Code	International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk
IGC Code	International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk
IMDG Code	International Maritime Dangerous Goods Code
IOPC Fund	International Oil Pollution Compensation Fund
ISM Code	International Management Code for the Safe Operation of Ships and for Pollution Prevention (“International Safety Management Code”)
LOT	Load on Top
MARPOL	The International Convention for the Prevention of Pollution from Ships
MEPL	Marine Environmental Protection Law of the PRC
MSA	Merchant Shipping Act
MSR	Merchant Shipping Regulations
MTSL	Maritime Traffic Safety Law of the PRC
NYPE	New York Product Exchange Time Charter
ORPC	International Convention on Oil Pollution Preparedness, Response and Co-operation
RADCP	Regulations of the PRC on Administration of Dangerous Cargo at Port
Ro-Ro	Roll on, Roll off
RR	United Nations Convention on the Contracts for the International Carriage of Goods Wholly or Partly by Sea (The Rotterdam Rules 2009)
SDR	Special Drawing Right
SMPEP	Shipboard Marine Pollution plan for Noxious Liquid Substances

SOLAS	Convention for the Safety of Life at Sea
SOPEP	Ship or Oil Pollution Emergency Plan

Organizations

CMI	Comité Maritime International
IMO	International Maritime Organization
ITOPF	The International Tanker Owners Pollution Federation Limited
MOC	The Ministry of Communications of PRC
MSC	Maritime Safety Committee of IMO
UN/ECE	UN Economic Commission for Europe
UNCITRAL	United Nations Commission on International Trade Law

Courts

C.A.	Court of Appeal
C.A. (9 th Cir.)	US Court of Appeals (9 th Circuit)
H.C	High Court
H.L.	House of Lords
P.C.	Privy Council
Sup. Ct	Supreme Court

Journals

All E.R.Rev.	All England Law Reports Annual Review
C.L.J.	Cambridge Law Journal
E.L.M.	Environmental Law and Management
Env.L.Rev.	Environmental Law Review
Env. Liability	Environmental Liability
I.B.L.	International Business Lawyer
IJMCL	International Journal of Marine and Coastal Law
IJSL	The International Journal of Shipping Law
J.B.L.	Journal of Business Law
JEEPL	Journal for European Environmental & Planning Law
J.Mar.L.&Com	Journal of Maritime Law and Commerce
J.I.M.L.	Journal of International Maritime Law
Ll. 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
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

Chapter 1 Meaning of Dangerous Cargoes

1.1 Introduction

This thesis is about the rights and liabilities arising under English and Chinese law in respect of the carriage of dangerous cargoes. In the past, much research was undertaken on the public law aspect of how to prevent, reduce and control marine pollution.¹ However, preventing dangerous cargo from causing harm is only the first step. If such cargo does cause harm, a more challenging question is how to allocate risks (civil liability) and provide adequate compensation (private law). Hence this thesis will focus on the private law aspect for the carriage of dangerous cargo by sea.

During hundreds of years, the transportation of dangerous cargo (e.g. gun powder) has always been a problem: after all, most of the seminal English cases² on the subject come from the nineteenth century. Since World War II the carriage of oil, chemicals and other hazardous products has increased significantly. This has created a new and ever greater risk of injury to persons and damage to property, but in particular of damage to the maritime environment. According to IMO criteria, more than 50% of packaged goods and bulk cargoes transported by sea today can be regarded as dangerous, hazardous or harmful to the environment in at least some way.³ There are several factors that have led to a substantial increase in the carriage of dangerous cargo.

One factor is that some commodities are no longer available in sufficient quantities and have been replaced by synthetic equivalents. The production of synthetic materials often necessitates the use of dangerous substances.

¹ See Appendix II. For example, MARPOL 1973/78, ISM Code, Intervention Convention 1969, OPRC Convention.

² For example, *Brass v Maitland* [1856] 6 E & B 470; *Mitchell Cotts & Co v Steel Bros & Co Ltd* [1916] 2 K.B. 610; *Ingram & Royle Ltd v. Service Maritimes du Treport* [1913] 1 K.B. 538; *Ministry of Food v Lamport & Holt* [1952] 2 Lloyd's Rep 371; *General Feeds Inc. v. Burnham Shipping Corporation (The Amphion)* [1991] 2 Lloyd's Rep. 101; *The Athanasia Comninos* [1990] 1 Lloyd's Rep. p277; *The Fiona* [1993] 1 Lloyd's Rep. 257, QB; [1994] 2 Lloyd's Rep. 506, CA; *Losinjska Plovidba v. Transco Overseas Ltd. (The Orjula)* [1995] 2 Lloyd's Rep. 395 and *The Giannis NK* [1998] 1 Lloyd's Rep. 337

³ See "IMO and dangerous goods at sea", May 1996, p1, http://www.imo.org/includes/blastDataOnly.asp/data_id%3D7999/IMDGdangerousgoodsfocus1997.pdf

The second related factor is the development of new technologies. This has led to an increase in the production of dangerous goods that are transported by sea, which in turn has led to the development of new types of packaging,⁴ e.g. anti-oxidant treated fishmeal.

The third factor is a tendency towards the specialisation of ships and their consequent growth in size. For example, a few years ago the main bulk of chemical products were carried in packaged form or in general cargo ships. Today there are a multitude of cargo ships in operation: chemical product carriers, container ships, vessels carrying bank containers, ro-ro vessels loading tank vehicles, lash ships, and bulk carriers. As a result, there are many problems related to both of safety and pollution. These problems take on new dimensions with the specialisation of ships, their growth in size, and the rapid rise in the use of dangerous cargoes.⁵

The responsibilities and liabilities of the various parties with regard to the carriage of dangerous cargoes are complex. There is no all-embracing solution to the legal problems in this area, therefore this thesis will present and analyse different solutions to dangerous cargo liabilities. First, since the definition of dangerous cargo is not straightforward, the following three examples of different substances will be categorised to determine its dangerousness.

- (i) Nuclear materials are very dangerous and they can be categorised as ultra-hazardous. As a result they are always kept and handled under the strictest and tightest controls that for all practical purposes they do not pose much danger. The owners and users of these substances are singled out as those liable for what may happen (i.e. the operator).

- (ii) Crude oil is not an especially dangerous substance. However when it escapes from its containers the oil may well create an environmental disaster. The

⁴ Cleopatra Elmira Henry, *The Carriage of Dangerous Goods by Sea—The role of the International Maritime Organization in International Legislation*, (1985) Frances Printer, London, at 93.

⁵ See Buschmann, C.H., *The Carriage of Dangerous Goods by Sea: A Review*, in “Proceedings of the 6th International Symposium on the Transport of Dangerous Goods by Sea and Inland Waterways”, 13 to 17 October 1980, Tokyo, Japan, pp1-9

very fact that the oil is carried by ships threatens the marine environment. The carrier rather than the owner of the cargo suddenly is brought into focus and is strict liable for damages caused, e.g. under 1969 CLC or 1992 CLC.

- (iii) Certain chemicals can normally be innocuous, but may become dangerous under special circumstances. For example, when stowed together with some other chemicals in the same container or at a certain temperature, a chemical reaction will be initiated causing an explosion or fire. Here the sensitive issue is how to pack the chemicals and how to stow them

From this short list, the cases of nuclear materials have been well covered by international regime and stringent precautions are always in place, therefore the possibility of incidents is very low.⁶ For the cases involving crude oil, the very successful and widely accepted oil pollution conventions solve most of the problems in claims of damage from oil pollution. The most interesting and important issues are related to the type of dangerous substances. Hence special attention will be given to the miscellaneous category (iii) in this thesis.

Once oil and nuclear cargoes are discounted, the first major difficulty consists in saying what is meant by “dangerous cargoes” and how they differ from other. Therefore, chapter 1 will focus on the definition of dangerous cargo.

Chapter 2 is a brief introduction to contract, tort and statute law as three sources of liability in China and England.

Chapter 3 demonstrates tort liability in respect of the carriage of dangerous cargoes in China and England. The former is based on statute law relating to tort liability. The latter is focused on the tort of negligence. Also the strict product liability in both

⁶ See discussion in section 5.2.2.1. For example, Convention relating to Civil Liability in the Field of Maritime Carriage of Nuclear Material (NUCLEAR) 1971, <http://www.imo.org/home.asp> The 1971 Convention provides that a person otherwise liable for damage caused in a nuclear incident shall be exonerated for liability if the operator of the nuclear installation is also liable for such damage by virtue of the Paris Convention of 29 July 1960 on Third Party Liability in the Field of Nuclear Energy; or the Vienna Convention of 21 May 1963 on Civil Liability for Nuclear Damage; or national law which is similar in the scope of protection given to the persons who suffer damage.

countries and the strict liability under the rule of *Rylands v. Fletcher*⁷ are examined. A comparative analysis on the difference of tort liability in respect of dangerous cargo in China and England is emphasized.

Chapter 4 addresses the contractual liability arising from the carriage of dangerous cargo. A comparative analysis is undertaken between Chinese and English law with regard to the shipper's liability to the carrier, the carrier's liability to the shipper and whether third party B/L holders can incur liability in respect of the shipment of dangerous cargo. Furthermore, a critical analysis is undertaken on the topic of whether the joint causation between the carrier's liability and the shipper's liability bars the carrier's claim.

Chapter 5 gives an overview of the international liability conventions, such as the CLC, the Fund Conventions and the HNS Convention 1996. Also a detailed comparative analysis is undertaken on the difficulties of ratifying the HNS Convention and why neither China nor the UK has yet to ratify it. Moreover a penetrating analysis is given on why China has not ratified the Fund Convention/ Protocol. Finally, the EU Environmental Liability Directive 2004/35 is discussed and evaluated; and a case law analysis is undertaken in respect of the decision of the ECJ on the *Erika* spill.

Chapter 6 is devoted to the central issue of liability - causation and remoteness. In the UK these two issues are frequently dealt with together when deciding upon the types of damage and the amount of damages that are recoverable. In contrast, China does not have the rule of remoteness, but theoretically the recoverable damages under the rule of "proximate cause" are just as extensive as those applied in the U.K.

Chapter 7 is focused on the shipper's liability under the new Rotterdam Rules 2009 in relation to the carriage of dangerous cargo, as well as dealing with the mechanism for proportionate allocation of liability between the shipper and the carrier. Also whether the transfer of obligations from shipper to third parties is possible under the Convention

⁷ (1868) L.R. 3 H.L. 330.

is discussed. Moreover, effort is particularly spent on comparing the shipper's obligations under the Rotterdam Rules with existing English and Chinese law.

Chapter 8 is the final conclusion. It takes an overview of the different approaches to allocate risks arising from the carriage of dangerous cargo and demonstrates solutions to the complex liability issues regarding the following four issues: (1) the substance, the packing and handling; (2) the scheme of liability; (3) the channelling of liability; and (4) the type of recoverable damage.

In addition, there is the importance of geographical considerations when determining issues of civil liability. For example, where a ship explodes and kills the crew on the High Seas, the law of flag⁸ is the decisive factor.⁹ If the explosion of dangerous cargo occurs on board an English vessel,¹⁰ the crew members' families will be able to take proceedings before the English Courts¹¹ and their tort claims will be subject to English Law. In this case, the various Conventions adopted by the U.K. will be applicable to that case, such as the Law of Sea 1982.¹² However, the CLC/Fund and HNS will not apply since their geographic scope is limited to territorial waters and EEZ.¹³ Considering the word limit and the scope of the thesis, procedural laws¹⁴ will not be discussed in detail. Instead, the focus will be on the substantial laws relating to dangerous cargo liability.

⁸ Law of flag means the law of the port at which the ship is registered.

⁹ North and Fawcett (editors), *Cheshire and North's Private international law*, (13th ed. 2004), Oxford University Press, p. 662

¹⁰ There is a more complicated situation, and a detailed analysis is clearly beyond the scope of this thesis, for example the plaintiff brought an action in England, but the law of flag is in a foreign country. For specific discussion on this issue, see *Cheshire and North's Private international law*, op. cit p. 663.

¹¹ The High Court has jurisdiction to entertain an action in respect of injurious acts done on the High Seas, even though both the litigants are foreigners. See *The Tubantia* [1924] p.78

¹² United Nations Convention on the Law of the Sea (LOS) 1982, see full text at <http://www.globelaw.com/LawSea/lscnts.htm> For jurisdictional rights of a coastal state in terms of control of vessel-source pollution in EEZ, see Art. 56 of LOS Convention. Regardless of the practical rationale for restricting liability for high seas pollution damage to its impact on national interests, the LOS Convention affords states on the right of intervention on the high seas in the case of maritime casualties threatening harmful pollution (Art. 221(1)). More radically, the right of port states to take legal proceedings against visiting vessels alleged to have illegally discharged oil outside the states's own maritime zones, including the high seas (Art. 218(1)). See Michael Mason, *Civil liability for oil pollution: examining the evolving scope for environmental compensation in the international regime*, Marine Policy 27 (2003) 1-12, p.7. Farkhanda Zia-Mansoor, *International Regime and the EU developments for preventing and controlling vessel-source oil pollution*, (2005) European Environmental Law Review, p.169

¹³ See discussions in section 5.2.1.3

¹⁴ For those interested in Private international law, see Morris, *The conflict of laws* (6th ed. 2005) London: Sweet & Maxwell; *Smith's Conflict of laws*, (2nd ed. 1999), Cavendish Publishing. For interests particularly relating to maritime torts, see *Cheshire and North's Private international law*, pp661-664; for the traditional English jurisdiction rules relating to maritime claims see pp 325-332

1.1.1 An Introduction to the Approach of Chinese Law

China's shipping capacity developed significantly in last two decades, going from 995 ships totalling 6 million gross tons in 1980 to 3,175 (16 millions tons) in 1998.¹⁵ The annual growth rate is about 13% in number of ships and 7.7% in tonnage, which is much higher than the world average of 1.1% and 1.3% respectively.¹⁶ With 18,000 km of coast¹⁷ and 85% to 90% of its foreign trade carried by sea, according to a survey of the major ports¹⁸ of China in 1996, the total export and import volume in these ports amounts to 851.52 million tonnes.¹⁹ The significance of shipping to the Chinese economy is thus obvious, as it has been for thousands of years.²⁰

With the increase of international trade and commerce in China and more and more ships calling at Chinese ports, the number of maritime dispute continues to increase. Nowadays, although a few are settled by way of mediation or arbitration, litigation is still the prevailing method of maritime disputes resolution in China. To cope with increasing pressure from shipping and trade, China has passed more than 20 maritime-related laws, the most significant being the Maritime Code 1992 and the Maritime Procedure Law (MPL) 1999. Chinese legislation on dangerous cargo liability includes laws, regulations and rules,²¹ such as MEPL 1982, ARPMPV 1983, MTSL 1983; the Civil Law 1986, Maritime Code 1992; PQL 1993, RADCP 2003; ARSSDCV 2003 and Port Law 2003.²²

China has also recently ratified many international maritime conventions and some are

¹⁵ Lloyd's Register: World Fleet Statistics and Statistical Table (annum). Ships referred to are those being more than 100gt and registered outside the countries are not included. China had 378 ships (above 1,000 gt) registered under open registry (UNCTAD: Review of Maritime Transport, 1997).

¹⁶ Li, KX and Wonham, J., *Who is safe and who is at risk: a study of 20-year-record on total accident loss in different flags* (1999) 26(2) Maritime Policy & Management, 137, at 139.

¹⁷ China faces the Pacific, the Buo Sea, the Yellow Sea, East China Sea and the South China Sea, through which China is linked with the Japanese Sea and Indian Ocean.

¹⁸ China is blessed with many natural harbors and ports. There are 700 ports along the Chinese coast, of which at least 50 are of international standard.

¹⁹ Beijing Asia-Pacific Economic Research Centre (ed.), *Ocean China* (in Chinese), China International Broadcasting Press, Beijing 1997, p.114.

²⁰ See generally, Mo, *Shipping Law in China*, (1999) Hong Kong: Sweet & Maxwell Asia, p.2.

²¹ In China, only the National People's Congress (NPC) and its Standing Committee have the competence to make laws. Regulations are made by the State Council, and measures and rules by ministries. That means "law" is the first level legislation, "regulations" second level and "measures / rules" third level.

²² See details in section 3.2, sections 4.2.2; 4.3.2

relevant to dangerous cargo liability, such as the Law of Sea Convention 1982,²³ MARPOL 73/78 (Annex I/II/III/V), the London Convention 1972, the Intervention on High Seas Convention 1969 (73 Protocol), the CLC 1969 (1992 Protocol),²⁴ ISM Code, IMDG Code, the Convention on Limitation of Liability for Maritime Claims (LLMC) 1976,²⁵ and the International Convention on Oil Pollution Preparedness, Response and Co-operation (ORPC) 1990.²⁶ According to Chinese law, international conventions joined by China operate as part of Chinese law. That means Chinese registered vessels are expected to comply with not only domestic laws and regulations, but also the international conventions that China has signed.

However there were no specialised maritime courts in China until 1984. Having realised that maritime cases involved lots of foreign-related issues and should be dealt with by judges familiar with relevant laws and with the practice of international shipping, on 14th November 1984, the Standing Committee of the National People's Congress authorised the Supreme People's Court of the PRC to establish some specialised maritime courts in certain coastal cities dealing purely with first instance maritime cases.²⁷ Courts were duly established in Guangzhou, Dalian, Shanghai, Qingdao and Tianjing and later in addition at Wuhan on the Yangtze River, Haikou, Xiamen, Ningbo, and Beihai. Thus today there are 10 maritime courts in China, each having a designated geographic jurisdiction.²⁸ Appeal lies to the relevant provincial high court; and because under the PRC law only one appeal is allowed, this appeal is final. In recent few years, there has indeed been a dramatic increase in maritime cases.²⁹

China is not a common law country. PRC courts, including the maritime courts do not

²³ In May 1996 China ratified the LOS Convention. See also Chapter 9 *Marine Jurisdiction over Vessel-source Pollution in the EEZ*, in Zou Keyuan, *China's Marine Legal System and the Law of the Sea*, Martinus Nijhoff Publishing, Leiden/ Boston, pp 224-241

²⁴ See details in sections 5.2.1.2 and 5.2.1.3

²⁵ See section 5.2.3.2

²⁶ See Appendix II

²⁷ Li, Henry, *The Maritime Courts of the PRC and the Roles of the Maritime Lawyers* at <http://www.hkmla.org/events/Henry%20Li.pdf>

²⁸ See general information about ten maritime courts and their relevant provincial high courts (in Chinese) at <http://www.ccmt.org.cn/hs/intro/indexall.php>

²⁹ In 1998, there were 5,166 maritime related cases filed with maritime courts (compared with that in 1990, total 951 cases. See (in Chinese) National Bureau of Statistics of China, the PRC: China Statistic Yearbook (1999). During the last 20 years, 50,000 cases were filed with the 10 maritime courts, 12% of them involved foreign elements. See Li, "The Maritime Courts of the PRC and the Roles of the Maritime Lawyers" at <http://www.hkmla.org/events/Henry%20Li.pdf>

recognise *stare decisis*³⁰ and as befits a civil jurisdiction, rely heavily on codified laws. As a result the most significant source of maritime rights and liabilities in the PRC is the Maritime Code 1992.

Theoretically judges must always draw their decisions from codified law, though they may of course have some latitude in interpreting it, thus giving rise on occasion to differing decision on issues of the same kind from court to court, or even from case to case in the same court. Subject to this, however, judges have no authority to make law as a matter of constitutional principle. If an issue does arise as to the correct application of law or statute in a trial, a decision was made by the Standing Committee of the National People's Congress in 1981 that the Supreme Court should make the interpretation.³¹ Following this decision, the Supreme Court has made a lot of replies to its lower courts at their request and in addition issued a number of circulars or notices on particular issues. These replies, circulars and notices, although not technically binding law, are in practice respected by all judges in the country and applied in trials.

1.1.2 The Approach of English Law

The English common law is a system whereby judges have a large influence in making law, by referring to past judicial decisions (*stare decisis*), where legislation does not provide an answer to the legal question at hand. By expanding upon and reinterpreting old decisions, judges develop the Common law gradually. A decision of the highest appeal court in England and Wales, the House of Lords, is binding on every other court in the hierarchy, and they will follow its directions.

In England, claims for compensation for pollution will either be based on the common law or on relevant legislation. In practice, legislation is far more important in this area, as it is in China. The English common law has difficulty fitting marine pollution into its traditional categories of torts. For example, Lord Denning in *Southport Corp. v. Esso*

³⁰ [Latin: to stand by things decided]; A maxim expressing the underlying basis of the doctrine of precedent, i.e. that it is necessary to abide by former procedures when the same points arise again in litigation.

³¹ Li, *The Maritime Courts of the PRC and the Roles of the Maritime Lawyers*, at <http://www.hkmla.org/events/Henry%20Li.pdf>

Petroleum,³² after rejecting both trespass and private nuisance as potential bases for liability, settled on public nuisance as the most appropriate ground. However, public nuisance required the claimant to show that he had suffered some “greater damage or inconvenience from the oil than the generality of the public”,³³ which often proved impossible.³⁴ Consequently, the tort of negligence³⁵ gradually emerged as the usual ground of liability for marine pollution in the common law.

In U.K., the legal regime, both in civil and criminal cases, has been developed by this country and the international community to deal with marine pollution in details, both to prevent pollution and to secure compensation for its victims and the restoration of the environment. The U.K. marine oil pollution legislation closely follows international developments.

With regard to pollution liability and compensation, the Merchant Shipping Act 1995 gives the force of law in the UK to the CLC 1992³⁶ and the Fund Convention 1992.³⁷ Oil pollution from ships other than those contemplated by CLC 1992 is also covered.³⁸ The same statute, as amended in 1997, also provides for statutory effect to be given to the HNS Convention 1996 in the UK.³⁹ In respect of environmental damage, the cost of any reasonable measures of reinstatement actually taken or to be taken is compensable.⁴⁰ Limited recovery for loss of profits is also possible.⁴¹ Penal sanctions

³² [1954] 2 Q.B. 182 at pp. 195-202, [1954] 1 Lloyd’s Rep. 446 at pp. 455-458 (C.A.), reversed on other grounds, [1956] A.C. 218, [1955] 2 Lloyd’s Rep. 655 (H.L.).

³³ *Ibid.*, Q.B. at p. 197.

³⁴ See *Marsdon on Collisions at Sea*, 13th ed., § 10-79, §10-83

³⁵ See discussion in section 3.1.2.

³⁶ *Merchant Shipping Act 1995*, U.K. 1995, c.21, Part VI (Prevention of Pollution), Chapter III (Liability for Oil Pollution), comprising sects. 152-171 of the statute. Originally, the CLC 1969 was given force of law in UK by the Merchant Shipping Act 1974, U.K. 1974, c. 43. See the text of the 1992 CLC in Tetley, *International Maritime and Admiralty Law*, 2002, op. cit., Appendix “K”, p. 757.

³⁷ *Merchant Shipping Act 1995*, Part VI (International Oil Pollution Compensation Fund), comprising sects. 172-182 of the statute. Originally, the Fund Convention 1971 was given effect in the UK by the Merchant Shipping Act 1974, UK 1974, c. 43. See the text of the 1992 Fund in Tetley, *International Maritime and Admiralty Law*, 2002, op. cit., Appendix “L”, p. 775.

³⁸ *Merchant Shipping Act 1995*, sect. 154, See particularly sect. 154(5), defining “ship” for purpose of that section as including a vessel which is not seagoing. Under Article I, 1 of the 1992 CLC, “Ships” means any sea-going vessel and any seaborne craft of any type whatsoever constructed or adopted for the carriage of oil in bulk as cargo, provided that a ship capable of carrying oil and other cargoes shall be regarded as a ship only when it is actually carrying oil in bulk as cargo and during any voyage following such carriage unless it is proved that it has no residues of such carriage of oil in bulk aboard.

³⁹ See the Merchant Shipping and Maritime security Act 1997, U.K. 1997, c. 28, sect. 14 and Schedule 3, adding to Part IV of the Merchant Shipping Act 1995, Chapter 5 (Carriage of Hazardous and Noxious Substances), and comprising sect. 182A-182C, and Schedule 5A.

⁴⁰ *Merchant Shipping Act 1995*, sect. 156(3)(b).

for pollution are also provided for, include fines, costs and expenses which, if unpaid, can result in the levying of discharge on the ship and its equipment.⁴²

U.K. legislation dealing with the prevention of marine pollution from ships is contained in Chapters I and II of Part VI of the Merchant Shipping Act 1995.⁴³ Dangerous goods and marine pollutants are stipulated by the Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations 1997.⁴⁴ English statute law on dangerous cargo liability is discussed in Chapter 1.

In respect of the marine environment protection from ship-source pollution, the Merchant Shipping Act 1995 empowers the U.K. Government to enforce MARPOL 1973/1978,⁴⁵ the 1973 Protocol to the Intervention Convention,⁴⁶ as well as the OPRC Convention 1990⁴⁷, and the Law of the Sea Convention 1982.⁴⁸ However, by August 2009,⁴⁹ the ORPC-HNS Protocol 2000⁵⁰ has not been given the force of law in UK.

⁴¹ *Merchant Shipping Act 1995*, sect. 156(3)(a)(b). Note that Scottish courts have held that marine oil pollution claims for economic loss are not per se inadmissible, provided that the damage is not too remote from the cause. But where the loss is a contractual, relational loss only and the claimant has no proprietary or possessory interest in the damaged property, such recovery is not normally granted in the UK. See *Landcatch Ltd. v. International Oil Pollution Compensation Fund*, [1999] 2 Lloyd's Rep. 316 (Ct. of Sess); *P. and O. Scottish Ferries Ltd. v. The Braer Corporation and others*, [1999] 2 Lloyd's Rep. 535 (Ct. of Sess).

⁴² *Merchant Shipping Act 1995*, sect. 131 (3), providing for fines of up to £250,000 on summary conviction and other fines for conviction on incident.

⁴³ The current Regulations relating to the prevention of oil pollution are the Merchant Shipping (Prevention of Oil Pollution) Regulations 1996, SI 1996/2154. These regulations came into force on 17 Sep. 1996. These Regulations were amended by the Merchant Shipping (Prevention of Oil Pollution) (Amendment) Regulations 2004, SI 2004/303, which effect from 8 March 2004.

⁴⁴ SI 1997/ 2367. These Regulations, which came into force on 1 November 1997, refer to the 1994 Edition of the IMDG Code. This Code contains requirements to be satisfied for the carriage of dangerous goods and marine pollutants. By virtue of the amendment to Chapter VII of the SOLAS 1974 Convention adopted on 24 May 2002, the IMDG Code became mandatory for ships of states party to the Convention which effect as from 1 January 2004.

⁴⁵ International Convention for the Prevention of Pollution from Ships 1973, adopted at London, November 1973 and its 1978 Protocol, adopted at London, February 17, 1978 (together known as "MARPOL 1973/1978"), Annex I of which (Prevention of Pollution by Oil) came into force October 2, 1983, with other Annexes and Protocols coming into force at later dates. See details in Chapter 8.

⁴⁶ The Protocol relating to the High Sea in Cases of Marine Pollution by substances other than Oil, adopted at London on November 2, 1973 and in force March 30, 1983.

⁴⁷ International Convention on Oil Pollution Preparedness, Responses and Cooperation (the OPRC Convention), adopted at London, November 30, 1990 and in force May 13, 1995.

⁴⁸ Adopted at Montego Bay, Jamaica, December 10, 1982 and in force November 16, 1994. See particularly arts.194 (duty to prevent, reduce and control pollution of marine environment), and the specific provisions on pollution from land-based sources (art. 207), seabed activities (art. 208), dumping (art. 210), vessels (art. 211), the atmosphere (art. 212) and enforcement measures (art. 213-222).

⁴⁹ See the specific information at http://www.imo.org/includes/blastDataOnly.asp/data_id%3D26103/status-x.xls

⁵⁰ Protocol on Preparedness, Response and Co-operation to pollution Incidents by Hazardous and Noxious Substances, 2000 (OPRC-HNS Protocol), adopted at London, on March 15, 2000 and in force on June 14, 2007. Up to July 31, 2009, there are 24 contracting states. <http://www.imo.org/home.asp>.

1.2 What Makes a Cargo Dangerous?

The definition of dangerous cargo is very important not only in the context of international safety regimes like SOLAS,⁵¹ but also in the interpretation of contracts and in setting liability in tort. This section deals with the development of the concept of dangerous cargo in the context of international safety regimes like SOLAS and the IMDG Code. It also deals with statutory definition in the United Kingdom and China. Further more, the common law definition, i.e. case law, includes the interpretation of carriage contracts. We will point out the differences between statutory definition and common law definition. But what is “dangerous”?

Danger is a difficult concept because goods may be dangerous even if they do not look it or the problem may lie not in the nature of the goods themselves but in the surrounding environment. The definition of dangerous cargo is not as straightforward as one would think. For instance, it may be thought inaccurate to categorise grain as a dangerous cargo; nevertheless, a hazardous situation might well arise if grain shipped in bulk is allowed to overheat in transit. Similarly, liquids which are otherwise safe may nevertheless create problems if permitted to leak from their containers and damage other cargo.⁵²

In addition, certain chemicals under normal conditions can be innocent, but may change to be hazardous under certain circumstances, e.g. where residues of oil-yielding pulses and seeds are exposed to heat or damp, they are apt to detonate or combust. Again, gorgonzola cheese is not dangerous in itself, but would no doubt damage chocolate if stowed next to it.⁵³ LNG,⁵⁴ conversely, is flammable but can be carried safely in suitable facilities, where the necessary skills and level of care are employed.

Cargo can be politically or hygienically dangerous if the political or local factors which,

⁵¹ Numerous provisions regarding safety of ships carrying dangerous goods are contained in Chapter VII of SOLAS 1974. These safety provisions are clearly relevant to issue of marine pollution prevention from these dangerous substances.

⁵² See Seller J in *Ministry of Food v. Lamport & Holt* [1952] 2 Lloyd’s Rep. 371 at p382.

⁵³ *The Thorsa* [1916] p. 257, 1916 WL19134 (CA), where chocolate was tainted by the later loading of a cargo cheese and it was held that the ship was not unseaworthy when the chocolate was loaded.

⁵⁴ Liquefied natural gas

when combined with the characteristics of the goods, caused their seizure, delay or expense, e.g. contraband, and smuggled or black-listed goods.⁵⁵ In *The Giannis NK*,⁵⁶ a cargo of ground-nut became dangerous since it was infested with the Khapra beetle and the public authority required that all the cargo be dumped at sea. Other cargoes can be handed to the carrier for transportation but they are politically dangerous, such as in *The Domald*⁵⁷ and *Mitchell Cotts & Co v Steel Bros & Co Ltd*.⁵⁸ Indeed, it may be argued that it is not goods as such that are dangerous or not dangerous, but rather the hazards that their carriage may cause during the voyage.⁵⁹

And it may be further argued that we should move from the idea of “dangerous” to “hazardous” substances. The phrase “hazardous and noxious” has been used in the 1996 HNS Convention.⁶⁰ The label “dangerous” implies perhaps the idea that the substance itself has an inherently dangerous characteristic such as, for example, nuclear material or nitroglycerine. And it may exclude a substance the danger in regard to which lies in its escape (such as oil).⁶¹ “Hazardous” is therefore to be preferred in the convention.

In addition, the substance of the hazard may simply be the likelihood of economic loss through delay or property loss through damage to the ship or other cargo. The idea of “dangerous” may impart the thought of damage to property or more seriously, personal injury or at the most serious damage to property, but the category has been extended in English law even to include “unlawful merchandise”—the only defect in which was the lack of a license to land.⁶²

It has been said that “less dangerous goods are more dangerous than the very dangerous

⁵⁵ See Mustill, *Carrier's Liability and Insurance*, in Grönfors, Kurt (ed.), *Damage from Goods*, (1978) at 76

⁵⁶ [1998] 1 Lloyd's Rep. 337.

⁵⁷ [1919] 1 Ll. L. Rep. 621, by reason of the seizure in prize of various parcels of fruit and sulphur laden on board the Swedish steamship *Domald*, the vessel was detained at Kirkwall and Liverpool, and she incurred in addition various expenses. The said cargo was ordered to be discharged because of some suspicion attaching to the shippers or consignees by the British Authorities

⁵⁸ [1916] 2 K.B. 610, The shippers of a cargo of rice upon a vessel they had chartered for a voyage to Piraeus knew that the rice could not be discharged there without the permission of the British Government, unfortunately without the permission the vessel was delayed.

⁵⁹ Wilson, John F. *Carriage of Goods by Sea*, (2004: 5th ed.), Harlow: Pearson/Longman, p. 33.

⁶⁰ International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, 1996, which was adopted by the IMO on 3 May 1996.

⁶¹ Jackson, D.C. *Dangerous cargo: a legal overview* in “Maritime Movement of Dangerous Cargoes—Public Regulation and Private Liability”, Papers of a one day seminar, Southampton University 11th September 1981.

⁶² E.g. *Mitchell Cotts v. Steel* [1916] 2 K.B. 610

goods”⁶³ simply because in the case of very dangerous goods, everyone appreciates the danger and special precautions are taken. As with the grain, therefore, it is the situation in which the goods are placed rather than the inherent nature of themselves.

Considering the scopes of definition, what is chosen to be used in my thesis is a wide one. So far as the following reasons are concerned, I use “dangerous cargo” rather than “hazardous substances” and “unlawful merchandise”.

First, “dangerous cargo” not only includes “physically dangerous” but also the cargo which is unlawful or likely to subject the ship to delay, detention or seizure.⁶⁴ So the scope of “dangerous cargo” is much broader than “unlawful merchandise”.

Secondly, “dangerous cargo” is relating to a category of goods rather than a factor involved in the “hazard”. My thesis focuses on a category which will cause potential scale of damage and need special rules to liability as between carrier and shipper or as regards either and third parties. That category is different from normal goods. On the other hand, the “hazard” is an element extraneous to the goods and the consequences of the hazard little removed from the normal run, therefore the “hazard” becomes a factor rather than a category attracting special rules.⁶⁵

Nonetheless, the definition of dangerous cargo is a very important issue at common law, particularly in the context where a duty of the shipper arises in contract and tort not to ship dangerous cargo without notifying the carrier in advance. It also arises when interpreting the bill of lading and charterparty clauses referring to dangerous cargoes. As statutory regulation increased, cargoes regulated might well come to be regarded as dangerous at common law.

However, no definition of dangerous cargo is provided by the common law and two

⁶³ See Mustill, Michael J. *Carrier's Liabilities and Insurance*, in Kurt Gronfors (editor), *Damage from Goods* (1978) Gothenburg: Esselte stadium, 75-77

⁶⁴ Cooke, J, Kimball, J, Young, T, *Voyage Charters* 2nd ed. (1993) LLP, at 113.

⁶⁵ See Jackson, D.C., *Dangerous cargo: a legal overview* in “Maritime Movement of Dangerous Cargoes—Public Regulation and Private Liability”, Papers of a one day seminar, Southampton University 11th September 1981.

alternative approaches to the concept are possible. One is the traditional view that dangerous cargoes are regarded as a category, the extent of which is developed by precedent or statutory regulation. Certainly lots of substances such as explosives and radioactive materials are inherently unsafe, and it is easy to compile a substantial list on this basis. Then the statutory regulation defines “dangerous cargo” by reference which is classified in the list such as the IMDG Code, the Blue Book⁶⁶ and the National Standard GB12268—A List of Dangerous Goods.⁶⁷

On the other hand, the courts have defined the concept in far wider terms to embrace cases in which the danger is to be found in the surrounding circumstances rather than in the inherent nature of the goods themselves.⁶⁸ That is the amazing part of the case law. As a civil law background student, while reading the cases about dangerous cargo and seeing the development of judgments in United Kingdom, I for the first time recognised how important case law is.

1.2.1 Statutory Regulation

Statutes have from time to time been framed to control the shipment of certain classes of goods. Statutory obligations may be imposed on shippers and carriers in regard to “dangerous goods”. It should be noted that the provisions must be viewed in the context of their purpose. What is “dangerous” in one context may not be so in another.

Before the analysis of the different statutes and regulations concerning dangerous goods, it is important to give a historical background, concerning the development of the different regulations related to how the definition of dangerous goods has changed.

⁶⁶ The United Kingdom Department of Transport publishes its recommendations for the transportation of dangerous cargoes in its “Blue Book” i.e. the 1978 Report of the Department of Trade’s Standing Advisory Committee on the Carriage of Dangerous Goods in Ships, which was published by HMSO (“Code for portable tanks and road tank vehicles for the carriage of liquid dangerous goods in ships”).

⁶⁷ A substantial list of dangerous cargo promulgated by Ministry of Communications of P.R.C., it is in conformity with “Recommendation on the transport of dangerous goods 1988” 5th ed., by United Nations Committee of Experts on the Transport of Dangerous Goods.

⁶⁸ Wilson, John F, *Carriage of goods by sea*, 5th ed., p. 33.

1.2.1.1 The Evolution of Dangerous Goods Regulation

Statutory regulation starts with ideas largely of prevention, though it may then go on to create civil liability as well, either directly, or through extending the category of cargoes regarded as dangerous at common law. The history of the carriage of dangerous goods by sea is as old as mankind itself. But because so few dangerous goods were carried by sea until the latter part of the nineteenth century, special regulations had not been considered necessarily.⁶⁹ Chinese law did not have specific legislation on dangerous cargo until 1980s.⁷⁰

In the U.K., the first traceable reference to regulations dealing with dangerous goods in maritime law was the British Merchant Shipping Act 1854.⁷¹ The new provision in MSA1894 was s.301.⁷² Section 301 was entitled “Dangerous Goods and Carriage of Cattle”. Under this section, an emigrant ship was prevented from going to sea if she carried “an explosive or any vitriol, lucifer matches, guano or green hides or any article which, by reason of the nature, quality and mode of stowage is likely to endanger the health or lives of the passengers or the safe of the ship”.⁷³

Sections 446-450 of the MSA 1894⁷⁴ were focused on the shipper’s obligations to notify the shipowner of dangerous goods. The provision imposed direct criminal and civil sanctions on the shipper for breach.⁷⁵ Section 446 provided that every shipper is bound to mark the nature of the goods distinctly on the outside of the package and to give the master or owner of the vessel notice.⁷⁶ This provision was based on “aquafortis, vitriol, naphtha, benzene, gunpowder, lucifer-matches, nitro-glycerine, petroleum, any

⁶⁹ Cleopatra Elmira Henry, op. cit. p93

⁷⁰ The relevant legislations include MEPL 1982, ARPMPV 1983, MTSL 1983; Maritime Code 1992; RADCP 2003; ARSSDCV 2003 and Port Law 2003. For the whole names of these legislations, see Abbreviations.

⁷¹ See s.329 of the MSA 1854, which was the predecessor of 446-450 of the MSA 1894. Section 329 of MSA 1854: Provisions to prevent the taking dangerous goods on board without due notice.

⁷² Cleopatra Elmira Henry, op. cit. p93. See also *Carver’s Carriage by Sea*, 13th ed., Vol. 2 (1982) London (Stevens & Sons), at 1114.

⁷³ Wilson, John F., *Carriage of Goods by Sea*, 5th ed., p. 32.

⁷⁴ S.446: Restrictions on carriage of dangerous goods. S.447: Penalty for misdescription of dangerous goods. S.448: Power to deal with goods suspected of being dangerous. S.449: Forfeiture of dangerous goods improperly sent or carried. S.450: Saving for other enactments relating to dangerous goods.

⁷⁵ D.C. Jackson, *Dangerous cargo: a legal overview* op. cit. at A7

⁷⁶ Colinvaux, Raoul (editor), *Carver’s Carriage by Sea*, 13th ed. 1982, Volume 2, at 846

explosives within the meaning of the Explosives Act 1875, and any other goods which are a dangerous nature.”⁷⁷

On its own, the provision presented the classic issue of whether the general catch-all phrase at its end is governed by the goods specifically listed. If those can be said to form a group of common definition it may be argued that the generality might be limited by the common denomination.⁷⁸ But we are saved from such a task by a later statutory provision, such as in the Merchant Shipping Act (dangerous goods) 1995⁷⁹ and the Merchant Shipping Regulations (dangerous goods and marine pollutants) 1997,⁸⁰ as a result all the substances listed in the rules applying the IMDG Code are “dangerous goods” within this definition.

On 15 April 1912, the *Titanic*, on her maiden voyage to the United States, after a collision with an iceberg, sank in the North Atlantic and more than 1500 lives were lost. Although that did not raise issues of dangerous cargo directly (the *Titanic* is a passenger ship), governments agreed that a conference should be convened in 1914 to consider safety of life as regards sea matters.

In the first Convention for the Safety of Life at Sea (SOLAS 1914), “the carriage of goods which by reason of their nature, quality and mode of stowage” were likely to endanger the lives of the passengers or the safety of the ship, was in principle forbidden. However, the decisions as to which goods were “dangerous” were left to the Contracting Governments.⁸¹

Although SOLAS 1914 never entered into force, the principle of relying on national administrations and competent authorities to decide on the definition and treatment of dangerous goods was established and, unfortunately, resulted in the development of

⁷⁷ Ibid, p846

⁷⁸ Jackson, D.C., *Dangerous cargo: a legal overview*, op. cit. at A9

⁷⁹ Merchant Shipping Act (C.21), Part IV, section 85 Safety and health on ships and section 87 Provisions supplementary to section 85: dangerous goods. See the text of MSA at http://www.opsi.gov.uk/acts/acts1995/Ukpga_19950021_en_1.htm

⁸⁰ SI 1997 No. 2367

⁸¹ See “IMO and dangerous goods at sea”, May 1996, p1, http://www.imo.org/includes/blastDataOnly.asp/data_id%3D7999/IMDGdangerousgoodsfocus1997.pdf

many diversified regulations and practices which are still in force in some countries. They are, in particular, embedded in national, regional or individual out-of-date port regulations.⁸²

The same approach was taken at the SOLAS Conference of 1929, in article 24 of which “Dangerous Goods” are mentioned together with “Life-Saving Appliances”.⁸³ The carriage of goods liable to endanger the safety of the ship was still forbidden, but it was still left to individual administrations to consider the dangers and take appropriate precautions.⁸⁴ The 1929 Convention entered into force in 1933.

In 1914 and even in 1929, the types and amounts of dangerous cargoes transported by sea were comparatively small. But by 1948, when the third SOLAS Conference was held, the traffic had grown considerably and more and more cargoes were being transported which could be considered dangerous. This led to a radical rethinking, and as a result, a new chapter VI was added to the 1948 SOLAS Convention, dealing with the “Carriage of Grain and Dangerous Goods”.⁸⁵ However, the conference did not come into force until 1958. In the United Kingdom, Merchant Shipping (Safety Conventions) Act 1949, s.23⁸⁶ gave effect to matters relating to dangerous goods agreed at the SOLAS Convention 1948.

From the evolution of the statutes, we can see, the early laws and conventions actually forbade the carriage of dangerous goods as a matter of principle. The dangerous character of a cargo was made to depend upon its nature, quantity or mode of stowage. Owing to these criteria, the definition of dangerous goods was a broad one.

Further, considering the first two SOLAS conferences, because each Administration was

⁸² Ibid, p2

⁸³ Cleopatra Elmira Henry, *The Carriage of Dangerous Goods by Sea*, op. cit. p.94

⁸⁴ “Report on Legally Binding and Non-Binding International Instruments and Regulations Concerning the Safe Transport of Radioactive Materials and Their Implementation”. This report was prepared by the Secretariat International Atomic Energy Agency on 16 April 1998. See details at http://www-ns.iaea.org/downloads/rw/radiation-safety/gov98_17.pdf

⁸⁵ See “IMO and dangerous goods at sea”, May 1996, http://www.imo.org/includes/blastDataOnly.asp/data_id%3D7999/IMDGdangerousgoodsfocus1997.pdf

⁸⁶ This section supersedes s.28 of the Merchant Shipping (Safety and Load Line Conventions) Act 1932. See also *Carver’s Carriage by Sea*, 13th ed. (1982), Volume 2, §1116.

invited to determine its own list of dangerous goods and the precautions to be taken in packing and stowage, the consequence could only be a myriad of different rules and practices.⁸⁷

Thirdly, the early versions of SOLAS probably did not foresee the rapid increase in the production and transport of chemicals. The development of new technologies has increased the production of new chemicals. These chemicals, rather than presenting a threat by their nature, quantity or mode of stowage, are dangerous by virtue of their properties. This introduces a new criterion for the evaluation of dangerous goods.⁸⁸

Finally, the increase in the production of chemicals resulted in an expansion, not only of carriage by sea, but of transport by all modes, requiring some degree of collaboration and harmonisation of the rules and standards governing these modes.

1.2.1.2 Safety Conventions—SOLAS 1960 and the IMDG Code

The International Maritime Dangerous Goods (IMDG) Code was worked out by the International Maritime Organisation (IMO) at the request of the 1960 SOLAS conference.⁸⁹ A resolution adopted by the 1960 Conference said the proposed code should cover such matters as packing, container traffic and stowage, with particular reference to the segregation of incompatible substances.

Chapter VII of the revised 1960 SOLAS Convention, which entered into force on 26 May 1965, dealt exclusively with the carriage of dangerous goods. Chapter VII of SOLAS 1960 was replaced by Chapter VII of SOLAS 1974.⁹⁰ Revised chapter VII of the 1974 SOLAS Convention, as amended in 1994, applies now to all ships to which the

⁸⁷ Cleopatra Elmira Henry, *The Carriage of Dangerous Goods by Sea*, op. cit. p94

⁸⁸ Ibid, p95

⁸⁹ Resolution 56, adopted at the 1960 SOLAS Conference, recommended that the Governments should adopt a uniform international code for the carriage of dangerous goods by sea which should supplement the SOLAS regulations and cover such matters as packing, container traffic and stowage, with particular reference to the segregation of incompatible substances.

⁹⁰ The substance of its provisions has remained unchanged.

SOLAS regulations generally apply and, in addition, to cargo ships of less than 500 tons gross tonnage. The 1974 SOLAS Convention⁹¹ came into force on 25 May 1980.

Regulation 1 of part A⁹² of chapter VII prohibits the carriage of dangerous goods by sea except when they are carried in accordance with the provisions of the SOLAS Convention. It requires each Contracting Government to issue, or cause to be issued, detailed instructions on safe packing and stowage of dangerous goods which shall include the precautions necessary in relation to other cargo.⁹³ In a footnote, reference is made to the more detailed provisions of the IMDG Code.

Resolution 56, adopted at the 1960 SOLAS Conference, recommended that Governments should adopt a uniform international code for the carriage of dangerous goods by sea which should supplement the SOLAS regulations. In response to this request, the Maritime Safety Committee (MSC) established a Working Group on the Carriage of Dangerous Goods (CDG) to prepare such a code.⁹⁴ By November 1965, good progress had been made in preparing such a code and the resulting document became known as the International Maritime Dangerous Goods (IMDG) Code. While the Code is closely linked to the provisions of Chapter VII of SOLAS, it is a separate instrument.⁹⁵ It was adopted by the fourth IMO Assembly in 1965.⁹⁶

A list of dangerous goods is contained in the IMDG Code. If the carriage involves a sea carriage then the IMDG Code applies. The provisions of the IMDG Code are organised in five volumes devoted to the description of over a thousand substances classified as

⁹¹ It has been ratified by 158 States, representing 98.8% of world merchant shipping (by 30 Sep. 2007). It applies to China and United Kingdom with effect from 25 May 1980. See details at http://www.imo.org/includes/blastDataOnly.asp/data_id%3D20098/status.xls

⁹² The other six regulations in Part A of Chapter VII of the SOLAS Convention 1974 cover in general terms the packaging, marking, labelling and placarding of dangerous goods, the documents to be provided, stowage and segregation, and the reporting of incidents.

⁹³ Ibid.

⁹⁴ Cleopatra Elmira Henry, *The Carriage of Dangerous Goods by Sea*, op. cit., p. 100.

⁹⁵ As to the relationship between the IMDG Code and SOLAS Convention, although IMDG Code supplements the SOLAS Convention, the Code adopted by IMO Assembly does not form part of the SOLAS Convention and consequently, does not possess the legal force of the latter. Each country remains free to adopt the Code or refuse to do so. The actual Code itself is an act of IMO. While closely linked to the provisions of Chapter VII of SOLAS, it is a separate instrument. It is an act of the Organization, not of the Contracting Parties to SOLAS. Its validity and legal force are to be determined by the law relating to acts of international organizations.

⁹⁶ See "IMO and dangerous goods at sea", May 1996, p3, http://www.imo.org/includes/blastDataOnly.asp/data_id%3D7999/IMDGdangerousgoodsfocus1997.pdf

dangerous. Volume I contains a general introduction to the Code while volume II, III and IV contain detailed technical information on specific dangerous goods which are divided up into nine different classes. Volume V is a Supplement to the Code.

Each class is preceded by an introduction which describes the properties, characteristics and definitions of the goods and gives detailed advice on handling and transport, e.g. stowage and segregation. That is the degree to which such goods should be kept separated from other dangerous cargoes, or other goods, transportation by ship, including separation from special spaces or areas in ship. The class introduction also gives information concerning procedures which should be followed during loading and unloading.⁹⁷

Since its adoption by the fourth IMO Assembly in 1965, the IMDG Code has undergone many changes, both in appearance and content to keep pace with the ever-changing needs of industry. Amendments to the IMDG Code originate from two sources; proposals submitted directly to IMO by Member States and amendments required to take account of changes to the United Nations Recommendations on the Transport of Dangerous Goods⁹⁸ which sets the basic requirements for all the transport modes.⁹⁹ From 1 January 2001 the Code followed the form of the UN Model Regulations (“the Orange Book”).¹⁰⁰ The UN Model Regulations are currently in their fifteenth edition¹⁰¹ and the basis of specific modal regulations for air, sea, rail, inland waterway and road.

The current version of the IMDG Code is Amendment 33 which came into force on 1

⁹⁷ Ibid. p5

⁹⁸ The United Nations Recommendations on the Transport of Dangerous Goods are called as “the Model Regulations” adopted by the UN Committee of Experts on the Transport of Dangerous Goods. Amendments to the provisions of the United Nations Recommendations are made by the Committee of Experts on a two-yearly cycle and approximately two years after their adoption, they are adopted by the authorities responsible for regulating the various transport modes.

⁹⁹ “International Maritime Dangerous Goods (IMDG) Code”, see details at <http://www.imo.org/home.asp>

¹⁰⁰ In 1956, the United Nations Committee of Experts on the Transport of Dangerous Goods, established by UN’s Economic and Social Council (ECOSOC), completed a report which established the minimum requirements applicable for the transport of dangerous goods by all modes. This report, the United Nations *Recommendations on the Transport of dangerous Goods* (Orange Book), offered the general framework within which existing regulations could be adapted and developed, the ultimate aim being world-wide uniformity across all modes of transport. It was considered by ECOSOC in April 1957. The United Nations Recommendations have been amended and updated by succeeding sessions of the Committee of Experts and published in accordance with subsequent resolutions of the ECOSOC.

¹⁰¹ It is revised every two years. The 15th edition was published in 2007.

January 2008 on a mandatory basis.¹⁰² The Code, as it now stands, forms an increasingly complete and valuable source of information on all aspects related to the transport of dangerous goods. It enacts regulations relating to the carriage of such goods on board container ships, ro-ro vessels, lash carriers and portable tanks. In addition, it contains separate recommendations for medical first aid on board as well as for the safe handling of dangerous goods in ports and harbours. Also, there is a recommendation on emergency procedures to be carried out in case of an accident on board involving a particular dangerous commodity.¹⁰³

Although it is mainly designed for mariners, the Code affects industries and services from the manufacturer to the consumer. It provides manufactures, shippers and packers with advice on terminology, packing and labelling. The Code is therefore a practical and readily accessible source of information.¹⁰⁴ From the development and the practical value of the IMDG Code, we can see the Code has provided an international “public law” framework of some details, linking precautions to various particular substances. That development may form not only the basis for “public” liability but a guide to civil liability.

Other than SOLAS, there is another international convention adopted by IMO with reference to the carriage of dangerous cargo, i.e. MARPOL 1973/78.¹⁰⁵ Annexe III to the MARPOL Convention contains general requirements relating to the prevention of

¹⁰² See the 2006 edition of IMDG Code at https://www2.imo.org/b2c_imo/b2c/init.do?areaID=C30A85D3E4E18646988BEF7D4EBCEBC3&productID=C30A85D3E4E18646988BEF7D4EBCEBC356D514D33B77454481B4BE2B27746B93. Also The provisions of the 2004 edition (mandatory) may no longer be applied after 1 January 2008. See also *Transport of dangerous goods by sea—the P & I respective*, Shipping & Transport Lawyer International Vol.3 Number 2, p15

¹⁰³ For example, Volume I contains the Alphabetical General Index of dangerous substances, materials and articles, and harmful substances (marine pollutants). This index is followed by the Number Index (the table of UN numbers with corresponding IMDG Code-Page numbers, Emergency Schedule Number, Medical First Aid Guide Table number) and a list of definitions. See Cleopatra, *The Carriage of Dangerous Goods by Sea*, op. cit. p110; see also “IMO and dangerous goods at sea”, May 1996, p4, http://www.imo.org/includes/blastDataOnly.asp/data_id%3D7999/IMDGdangerousgoodsfocus1997.pdf

¹⁰⁴ See “A summary of IMO Conventions” February 2005, at http://www.imo.org/includes/blastDataOnly.asp/data_id%3D11171/SUMMARYJANUARY2005shortversion2.pdf

¹⁰⁵ The International Convention for the Prevention of Pollution from Ships (MARPOL) was adopted on 2 November 1973 at IMO and covered pollution by oil, chemicals, harmful substances in packaged form, sewage and garbage. The Protocol of 1978 relating to the 1973 International Convention for the Prevention of Pollution from Ships (1978 MARPOL Protocol) was adopted at a Conference on Tanker Safety and Pollution Prevention in February 1978 held in response to a spate of tanker accidents in 1976-1977. The MARPOL Convention is the main international convention covering prevention of pollution of the marine environment by ships from operational or accidental causes. It is a combination of two treaties adopted in 1973 and 1978 respectively and updated by amendments through the years.

pollution by harmful substances carried at sea in packaged form or in freight containers, portable tanks or road and rail tank wagons. The basic requirements set by the Annexes are to be supplemented by governments which, by virtue of wording similar to Chapter VII of SOLAS, must issue or cause to be issued detailed requirements on packing, marking and labelling, documentation, stowage, quantity limitations, exceptions and notifications. Further, Resolution 19 of the 1973 MARPOL Conference recommends that IMO adopt more detailed recommendations on the subject.¹⁰⁶ Basic principles are also formulated for packaged substances which are considered to present a serious hazard to the marine environment.¹⁰⁷

The intention of MARPOL is to provide a uniform basis for national regulations which Annex III of MARPOL requires to be developed. Meanwhile, the provisions of MARPOL reflect the fact that the IMDG Code was not formulated to take account of pollution of the marine environment as such. On the other hand, the HNS Convention 1996¹⁰⁸ is intended to deal with liability and compensation for massive or catastrophic damages caused by dangerous cargo concerned.

Except for the IMDG Code, as to the technical standards to be complied with by ships carrying dangerous substances: see the International Bulk Chemical Code (IBC Code) which is mandatory under both MARPOL 73/78 and SOLAS,¹⁰⁹ the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (BCH Code)—the predecessor of the IBC Code,¹¹⁰ and the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code).¹¹¹

Insofar as these codes are adopted by national legislation, they will create a liability

¹⁰⁶ The IMO Assembly subsequently issued a Resolution recommending that the method of marking the label and of placing the correct technical name on packages and receptacles containing dangerous goods should allow this information to remain identifiable on packages surviving at least three-month immersion in the sea. See Resolution A.345 (IX), of 12 November 1975.

¹⁰⁷ IMO *Official Records*, Doc. ECE/Trans/ 55—Inland Transport Committee. The Convention was adopted on 21 October 1982.

¹⁰⁸ International Convention on Liability and Compensation for Damage in Connection with the Carriage of Noxious and Hazardous Substances by Sea (HNS) 1996; See details in section 5.2.2

¹⁰⁹ See IMO website, MARPOL 73/78, The 1989 amendments- Annex II, at <http://www.imo.org/home.asp>

¹¹⁰ See IMO website, *ibid.*

¹¹¹ Fogarty, Angus R.M. (editor), *Merchant Shipping Legislation*, 2nd ed. (2004) Richmond: LLP, at 3.18

framework based on the duties of shipper and carrier. The authority of the IMDG Code is chapter VII SOLAS 1960 which simply prohibits the carriage of dangerous goods except in accordance with the rules of the convention. Such a prohibition may be translated into national law in various ways. It appears in English law¹¹² as a declaration that the carriage of such goods is “unlawful” unless it complies with the rules as adopted in the United Kingdom.¹¹³

In the U.K. the statutory definition of “dangerous goods” has been originated in the implementation of the international conventions such as SOLAS 1960 and the IMDG Code. Currently, this definition is given by the Merchant Shipping Act (dangerous goods) 1995¹¹⁴ and the Merchant Shipping Regulations (dangerous goods and marine pollutants) 1997.¹¹⁵

1.2.1.3 National Laws—United Kingdom

“Dangerous goods” are defined under S. 87 (5) of the Merchant Shipping Act 1995 are those designated as such by safety regulations.¹¹⁶ The current safety regulations are the Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations 1997.¹¹⁷ The Regulations apply to ships carrying dangerous goods in bulk or packaged form and marine pollutants in packaged form.¹¹⁸

●The Merchant Shipping Act (MSA) 1995, s.85¹¹⁹

S. 85 empowers the Secretary of State to make such safety regulations as he considers appropriate for the security and the safety of United Kingdom ships and the safety and health of persons on board them and for giving provisions to international agreement to that end.¹²⁰ *Inter alia*, he may in particular provide for: the packing, marking, loading,

¹¹² In the U.K. Merchant Shipping (Dangerous Goods) Rules 1978.

¹¹³ See D.C. Jackson, *Dangerous cargo: a legal overview*, op. cit. at A5

¹¹⁴ Merchant Shipping Act 1995 (C. 21), Part IV Safety, sections 85, 87.

¹¹⁵ SI 1997 No. 2367

¹¹⁶ M.S.A. 1995, ss. 85(1), 87(5), 313(1). See also section 86.

¹¹⁷ Statutory Instrument 1997 No. 2367

¹¹⁸ Reg. 5(1)

¹¹⁹ Merchant Shipping Act 1995, section 85

http://www.opsi.gov.uk/acts/acts1995/Ukpga_19950021_en_5.htm#mdiv87

¹²⁰ M.S.A. 1995, Section 85(1). See also Rose, F. D., *Cargo Risks: Dangerous Goods*, (1996) 55 C.L.J. 601, at 613

placing, moving, inspection, testing and measuring of cargo.¹²¹

Section 87 contains supplementary provisions as to dangerous goods concerned in section 85. S. 87 (1) states that: where dangerous goods have been sent or carried on board of a ship, then any court that have admiralty jurisdiction may declare the goods to be forfeited. The circumstances in which the court may do so include:

- Where the goods are not marked as required by safety regulation,
- Where no notice has been given as required by safety regulation
- Where goods are falsely described, or
- Where there is a false description of their sender or carrier.

●The Merchant Shipping Regulations (MSR) 1997¹²²

The extant safety regulations are the Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations 1997, which came into force on 1 November 1997. These Regulations apply to United Kingdom ships wherever they may be and to other ships while they are within the United Kingdom waters.¹²³ “Dangerous goods” are defined here as:¹²⁴

...goods classified in the IMDG Code or in any other IMO publication referred to in these Regulations as dangerous for carriage by sea, and any other substance or article that the shipper has reasonable cause to believe might meet the criteria for such classification...

It should be noted that MSR 1997 has changed its definition of “dangerous goods”, and the shipper’s liability is heavier compared with the revoked clause in MSR 1990 which provided “any other substance or goods the properties of which might be dangerous if that substance or those goods were carried by sea” instead of the above underlined clause in MSR 1997.

After defining “dangerous goods” as those classified in the IMDG Code and other

¹²¹ Section 85(3)(b)

¹²² Statutory Instrument 1997 No. 2367, <http://www.opsi.gov.uk/si/si1997/19972367.htm>

¹²³ Reg. 5(2)

¹²⁴ Reg. 2(1)

specified IMO publications, the regulations proceed to formulate a detailed code for their documentation,¹²⁵ marking,¹²⁶ packing¹²⁷ and stowing.¹²⁸

On the other hand, some legislation, unlike that based on SOLAS and the IMDG Code, is entirely nationally based. For example, in the United Kingdom, the control of dangerous goods carried by ships within harbour areas is governed by the Dangerous Substances in Harbour Areas Regulations 1987.¹²⁹ The Merchant Shipping (Control of Pollution by Noxious Liquid Substances in Bulk) Regulations 1996,¹³⁰ apply to ships carrying in bulk dangerous or noxious liquid substances. They apply to United Kingdom ships wherever they may be and to other ships when in United Kingdom waters.¹³¹

1.2.1.4 National Laws—P.R.C.

Chinese legislation on dangerous cargo includes national laws, regulations adopted by the Ministry of Communications of PRC (hereafter MOC) and some specific rules. Some of them are general legislations on safety of transport or the prevention of pollution and it is rare to see any specific definition of dangerous cargoes. Others focus on the carriage of dangerous cargoes where the definition of dangerous cargo is described in a particular clause. Since 1982, more than twenty national laws and regulations relating to dangerous cargoes which are promulgated by Chinese government,¹³² but only two of them gave a specific definition and both of them were promulgated by MOC. They are the most popular references used by Chinese maritime courts for disputes involving the concept of dangerous cargo.

¹²⁵ Reg. 12-13.

¹²⁶ Reg. 15: Marking and labeling.

¹²⁷ Reg. 12: Container or Vehicle Packing Certificates.

¹²⁸ Reg. 14: List, Manifest or Stowage Plan. See also Aengus R.M. Fogarty (editor), *Merchant Shipping Legislation*, 2nd ed. (2004) Richmond: LLP, at 3.18

¹²⁹ SI 1987/37 as amended by SI 1990/2605 and SI 1997/2367. See *Merchant Shipping Legislation*, op. cit. at 3.18

¹³⁰ SI 1996/3010

¹³¹ In addition, the prohibition of discharges of noxious liquid substances or pollution hazard substances and tank washing applies to such other ships when beyond United Kingdom waters (if in waters which are sea), subject to certain limitations on bringing proceedings, or requirements for suspending proceedings, required by the United Nations Law of the Sea Convention (Cmnd 8941).

¹³² See MOC (ed.) “*Legislation on Carriage of Dangerous Goods and Prevention of Pollution*” (in Chinese), (1998), Da Lian Maritime University Press, Part I, Part II.

●Regulations on Dangerous Goods in Waterway Transportation (1996)¹³³

It was promulgated by MOC on November 4, 1996, in conformity with “Recommendation on the transport of dangerous goods” (Orange Book).¹³⁴ The structure and contents of the regulations are similar to the IMDG Code. But it only applies to domestic transport. It covers the transport of dangerous goods 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. It also includes “emergency procedures for ships carrying dangerous goods” and “the medical first aid guide for use in accidents involving dangerous goods”. Dangerous cargoes are defined in Article 3:¹³⁵

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.

The above definition is very similar to that in the following regulations.

●Regulations on Administration of Dangerous Cargoes at Port (RADCP) 2003¹³⁶

The RADCP was promulgated by MOC, effective on 1 January 2004, and by Articles 15-17 are related to the supervision and controlling the transport of dangerous cargoes in harbour. At the same time, it replaces “1984 Interim Regulations Administration of

¹³³ MOC (1996)-Order (No.10), it came into force on 1 December 1996.

¹³⁴ *Recommendation on the transport of dangerous goods*, 5th ed.(1988). It was issued by United Nations Committee of Experts on the Transport of Dangerous Goods.

¹³⁵ Article 3 is translated by the author from Chinese.

¹³⁶ MOC (2003)-Order (No. 9), http://www.moc.gov.cn/zhengwu/jiaotongbl/t20031118_1838.htm

Dangerous Cargoes at Port”¹³⁷ and regulates the loading and discharging, barge, storage, package and consolidation of dangerous cargoes. Dangerous cargoes are defined as:¹³⁸

...cargoes classified in the National Standard GB12268—A List of the Names of Dangerous Goods¹³⁹ or the IMDG Code, and replaces of an inflammable, explosive, corrosive, noxious, hazardous or radioactive nature, as dangerous in water transportation or are likely to injure people or damage property during the loading and discharging or storage, and need special safety rules (translated by author from Chinese).

From the way of definition of dangerous cargo given by national statutes, we can see in both China and U.K., dangerous cargoes are regarded as a category, the extent of which is developed by statutory regulation based on a substantial list. Then the statutory regulation defines “dangerous cargo” by reference as which is classified in the list such as the IMDG Code or relevant national standards. There is no substantial difference of the statutory definition in P.R.C. and that in the U.K.

1.2.2 The Meaning of Dangerous Cargo Developed in English Case Law

Following the idea that the dangerousness is not necessarily a quality inherent in goods themselves but rather in the circumstances of their transportation,¹⁴⁰ the English courts,¹⁴¹ found inadequacies in the statutory definition, which would lead to a single classification based on the goods themselves rather than a more flexible one based on all the surrounding circumstances. In particular they have broadened it so as to cover two new situations.

There is no separate discussion on Chinese cases, since Chinese maritime courts do not recognise *stare decisis*, but rely heavily on codified law, i.e. Maritime Code 1992. Indeed, under a civil jurisdiction, judges have no authority to make law or give a

¹³⁷ (84) IS No. 1181.

¹³⁸ Article 3 of the RADCP.

¹³⁹ A substantial list of dangerous cargo promulgated by Ministry of Communications of P.R.C., it is in conformity with “Recommendation on the transport of dangerous goods 1988” 5th ed., by United Nations Committee of Experts on the Transport of Dangerous Goods.

¹⁴⁰ See the discussion near footnote 59.

¹⁴¹ See the discussion in section 1.2.1.3

broader interpretation of the meaning of dangerous cargo than the statutory definition.

Firstly we will discuss the situation where the danger is to be found in the surrounding circumstances. Considering the nature of dangerous cargo, certainly a number of substances such as explosives, corrosive substances and radioactive materials are inherently unsafe, and it would not be difficult to compile a substantial list including petrol, caustic, soda, arsenic and other obviously dangerous cargoes on this basis. On the other hand, there is no doubt that many substances are obviously safe without needing special stowage, packaging and precautions during the voyage. For example, a huge volume of textiles are transported by surface from China to all over the world and millions of hi-tech electronic products are transported from west to east. It is not very common to find dangerous cargo cases in these areas.

However, between these two categories, a number of substances, although without inherent dangerous nature, they are relatively dangerous in certain circumstances, such as the cargoes need special marking and stowage requirements or particular precaution by the carrier.

In *Micada Compania Naviera S.A. v. Texim (The Agios Nicolas)*,¹⁴² a clause of the charter of the Agios Nicolas provided that “no live stock nor injurious, inflammable or dangerous goods (such as acids, explosives, calcium carbide, ferro silicon, naphtha, motor spirit, tar, or any of their products) to be shipped”.¹⁴³ Although the vessel was chartered for the carriage of iron ore, iron ore concentrate was loaded, the moisture content of which was such that it required the fitting of shifting boards. These were not fitted.¹⁴⁴

Donaldson, J., finding that the charterers were liable, held that the iron concentrate was dangerous. Donaldson J. stated that the cargo loaded in the vessel was, by reason of this moisture content, a dangerous cargo and that the carrier was not aware, and could not

¹⁴² [1968] 2 Lloyd's Rep. 57

¹⁴³ Ibid.

¹⁴⁴ Girvin, Stephen D., *Shipper's liability for the carriage of dangerous cargo by sea*, [1996] L.M.C.L.Q. 494

reasonably be aware, of the dangerous nature of the cargo at the time of loading.¹⁴⁵ The danger consisted in the fact that the cargo was not what it seemed to be, it was “a wet wolf in a dry sheep’s clothing”. And there was nothing to put the carrier on notice that the cargo was something radically different from that which it appeared to be. Again, Donaldson J. stated that in those circumstances it seems that the cargo was dangerous beyond all arguments.¹⁴⁶

In the “*Athanasia Comminos*”,¹⁴⁷ two vessels were damaged by an explosion caused by the ignition of methane emitted from cargoes of coal.¹⁴⁸ The emission of methane is a well known hazard of the carriage of coal and explosions can generally be avoided if the carrier takes suitable precautions. The question was there to determine whether the cargo was in fact dangerous as coal is not classified by the regulations as a dangerous cargo in itself. Mustill J. reviewed that, in approaching such cases it was important to remember, when trying to find a test which identify those cargoes, without specific warning as to their characteristics, whose shipment would be a breach of contract, that “we are here concerned, not with the labelling in the abstract of the goods as “dangerous” or “safe”, but with the distribution of risk for the consequences of a dangerous situation arising during the voyage”.¹⁴⁹

In the circumstances he held the cargo was dangerous. “While it is impossible to categorise coal as either inherently safe or dangerous, the carrier was liable for the damage because in contracting to carry goods which possessed the attributes of the goods as described including the capacity to create danger”.¹⁵⁰

In *General Feeds Inc. v. Burnham Shipping Corporation (The Amphion)*,¹⁵¹ *The Amphion* was chartered to General Feeds on the Gencon form for the carriage of bagged fishmeal to China. This cargo ignited during unloading. Bagged fishmeal is known to be

¹⁴⁵ [1968] 2 Lloyd’s Rep. p62

¹⁴⁶ Ibid.

¹⁴⁷ [1990] 1 Lloyd’s Rep. p277

¹⁴⁸ *Risks in shipping dangerous cargo*, P & I International, (2003) 17(9), at p18

¹⁴⁹ [1990] 1 Lloyd’s Rep. p277

¹⁵⁰ Ibid

¹⁵¹ [1991] 2 Lloyd’s Rep. p101

hazardous because of the potential for heat build-up and is listed as such under Class 9 of the IMDG Code. The hazard could be reduced, though not eliminated, by anti-oxidant treatment and the cargo was expressly described in the charterparty as “anti-oxidant treated bagged fishmeal”.

Evans, J., confirmed the finding of the arbitrators that, while the shipowners might have accepted the risk of overheating occurring in “properly treated cargo”, properly handled, they had not accepted the risk from fishmeal “not properly treated.”¹⁵² The charterers were therefore held to be in breach of contract.

In *Ministry of Food v Lamport & Holt*,¹⁵³ the plaintiffs were the owners of a consignment of maize shipped in the lower hold of the defendants' vessel; they were also the owners of a cargo of tallow shipped in the tween deck, over the maize in the same vessel; on arrival it was found that some of the maize had been contaminated by a leakage of tallow.

Sellers, J. held that the defendants had not, knowing the nature of the tallow, taken adequate steps to protect the maize, that the tallow, which was in casks, was not improperly or insufficiently packed and that the exemption clause in the bill of lading of the maize, exempting the defendants for loss incurred owing to leakage or breakage, did not protect the defendants from liability for damage caused by the leakage of tallow. He also dismissed the defendant's counterclaim against the plaintiffs as owners of the tallow, holding that the defendants had full knowledge of everything material regarding the tallow, and therefore needed no warning of its possibly dangerous nature.

From what has been discussed above, we can see that although some substances (e.g. tallow) do not have an inherently dangerous nature, they may create problems if permitted to leak from their containers and damage other cargo.¹⁵⁴ Therefore, goods may be qualified as dangerous if they have the capacity to create danger by interaction

¹⁵² Ibid.

¹⁵³ [1952] 2 Lloyd's Rep 371

¹⁵⁴ Ibid. at 382.

with their environment during their carriage. In addition, the distinction between the cargo and the situation also emphasises the differing responsibilities among the owner of cargoes, shippers, consignees, carriers and operators of facilities used in the carriage of cargo. If the danger of a substance lies in its inherent nature or packing, the responsibility is linked to its manufacturer, shipper and user. If the danger lies in its escape, must be at least linked to the carrier or the operator of facilities, because it is the carriage that lies at the root of the dangers.¹⁵⁵ This is even more so when a substance becomes “hazardous” only if certain conditions exist, e.g. a particular temperature or method of stowage.

There should be a distinction between the shipments of goods which are physically dangerous and that which are only “legally” dangerous, i.e. give rise to delay, detention or seizure. At the first sight, it seems to be an artificial limitation of the types of situations, in which the class of cargo requires disclosure of its “dangerous” qualities. However, if “legally dangerous” is accounted, the concept of dangerous cargo is potentially wider. For further discussion relating to “legally” dangerous cargo, please see Chapter 4.¹⁵⁶

1.3 Concluding Remarks

In the U.K., restrictions on the goods which a charterer or cargo-owner may ship are imposed by the common law, the terms of contract and statute. The common law principle that a term will be implied into the contract of carriage that the shipper will not ship dangerous cargo, unless the shipowner knew or should have known of the danger was established in *Brass v Maitland*.¹⁵⁷ However, common law or contractual provisions must obviously give way to overlapping statutory provisions and in any event it may well be preferable in practice to base a claim on a statutory ground, whether it is brought by a carrier suing under the Hague-Visby Rules¹⁵⁸ or a third party suing for breach of statutory duty. However, where the statutory provision is

¹⁵⁵ See Jackson, D.C., *Dangerous cargo: a legal overview*, op. cit. at A3

¹⁵⁶ See detailed discussion of “legally” dangerous cargo in section 4.2.1.1

¹⁵⁷ [1856] 6 E & B 470.

¹⁵⁸ Considering the liability issues between carrier and shipper, it is necessary for us to have a look of the relevant provisions under the Hague, Hague-Visby and Hamburg Rules.

inapplicable, the common law will continue to make a shipper liable, such as with “legally” dangerous cargo which is not dangerous under a statute (e.g. Art. IV r6 of the Hague-Visby Rules), but the shipper will still be liable at common law.

In the P.R.C., dangerous cargoes are regarded as a category, the extent of which is developed by statutory regulation based on a substantial list, such as national standards under *GB 6944/GB12268*. Considering the “statutory definition” which is relating to “physically” dangerous cargoes, there is no substantial difference between China and UK. However, regards to the “legally” dangerous cargo, there is a big difference. In England, it is covered by the common law. In China, there is no relevant definition of “legally” dangerous cargo. As a civil law country, China relies heavily on codified law and does not recognise *stare decisis*.

What is covered in my thesis is a wide definition of dangerous cargo with a focus on the area of carriage by sea. For further research study, I define dangerous cargo as:¹⁵⁹

Merchandise classified as dangerous for which stringent regulations exist regarding its acceptance procedure, packaging, stowage, documentation, and conveyance for both local and international transits by sea, including “physically dangerous” and “legally dangerous”. There are some nine classifications of dangerous goods for international transit in IMDG Code. The regulations documentation, acceptance procedures, packaging, and stowage arrangement are laid down by IMO instruments.

After discussing the meaning of dangerous cargo, we need to come back to the international conventions. In the words of Tetley, “if the elusive dream of safer ships and cleaner seas is to come true on all the oceans of the planet in the twenty-first century, in the field of marine pollution control, as in other areas of contemporary maritime law, *international* thinking and solutions remain of paramount importance”.¹⁶⁰ This must also include carriage of dangerous cargoes.

¹⁵⁹ For other authorities’ definitions, see Branch, Alan E. *Dictionary of Shipping/ International Business/ Trade Terms/ Abbreviations*, 5th ed. (2005). See also *Carver’s Carriage by Sea*, op. cit., Vol.2, §1117.

¹⁶⁰ Tetley, *International Maritime and Admiralty Law*, (2002) International Shipping Publications, p467

Chapter 2 A Brief Introduction—Tort, Contract and Statute Law as Three Sources of Liability

2.1 Introduction

The responsibilities and liabilities of the various parties with regard to “dangerous” cargoes are usually intertwined and complex. Although vessel owners, time charterers and charterers are usually the primary parties in disputes concerning “dangerous” cargoes, many others may also be involved, such as suppliers, shippers, manufacturers of a product shipped, barge owners, surveyors, stevedores and of course their insurers.

Most dangerous cargo disputes involve a contractual background. They may, for example, consist of a claim by a vessel owner against a shipper for damage to his vessel by dangerous cargo, or a claim for cargo damage which is lodged by the charterer and/or cargo interests against the vessel. For example, if cargo overheats, the other cargo interests will no doubt claim for delay (such as demurrage or hire payments) and the extra expenses in cooling the cargo, seeking a port of refuge, discharging the hot cargo and contributing to general average.

However there are also vital questions of extra-contractual responsibility that arise here: What is the direct obligation in tort of the shipper to third parties, such as seamen, stevedores and owners of other cargo? In addition, manufacturers or sellers may be liable, either on a strict product liability theory or for negligence in not supplying correct handling procedures in respect of chemicals or other potential harmful cargoes. This is particularly relevant where there is a danger of interaction between such cargoes and other materials also being carried.

Clearly, a bare statement as to a shipper’s rights and liabilities in respect of the shipment of dangerous goods would be patently simplistic and inaccurate, especially since

different legal regimes, with different provisions, apply to such shipments. Particular issues may, of course, be determined by specific statutory or contractual provision.¹ Before discussing statutory provisions and relevant tort law principles, it is appropriate to cover the general contractual and tortious liability.

2.2 The Relation between Contractual and Tortious Liability

Liability in contract is usually strict² and covers nonfeasance and misfeasance.³ Generally, both shipper and carrier's liabilities are specified in the contract of affreightment and the HR, HVR or Hamburg Rules are incorporated into that contract. Under these rules, the shipper's liability is strict for shipment of dangerous cargo without notifying the carrier in advance.

Considering the carrier's liability to the shipper, under Art III of HR and HVR, the carrier has a stringent obligation to provide a seaworthy ship and properly carry, keep and care its cargo. If the carrier fails to use ordinary skill and care, and to provide the special facilities ordinarily required for the cargo, he will be liable for the resulting damage. The courts, therefore, in the final analysis must decide whether the cargo loss or damage results from: (a) a lack of due diligence to make the vessel seaworthy; (b) improper care of the cargo or (c) one of the exculpatory exceptions protecting the carrier, e.g. inherent defect of the cargo under Art. IV r.2 (m) of HVR.

If there is no contract between the victim and the defendant, there can of course still be a liability in the tort of negligence. But such a liability, even if established,⁴ is often less claimant-friendly than an action in contract. Most liability in tort depends on proof of a failure to take reasonable care; tort generally only covers misfeasance; and, at least as far as negligence is concerned, recovery for pure economic loss is awkward.⁵ A good

¹ Rose, F. D., *Cargo risks: "dangerous" goods*, (1996) C.L.J.613

² However, that it is not uncommon to have contractual duties of care. Perhaps more accurate to say it is a peculiar mix between strict and fault liability.

³ Reynolds, F. M.B., *The significance of tort in claims in respect of carriage of goods by sea*, [1986] LMCLQ 97.

⁴ Leaving aside special torts such as deceit and *Rylands v. Fletcher*, tort liability is in general for negligence only.

⁵ Baughen, *Shipping Law*, 2nd ed., p52.

example is provided by *The Gudermes*,⁶ where, *obiter*, Hirst J was of the view that transshipment costs incurred as a result of the shipowner's failure to heat a cargo of oil so that it was in a condition in which it could be discharged into the receiver's pipeline were not recoverable in tort, but could be recovered in contract.

2.3 Tortious Liability in English Law and Chinese Law

In England, under tort law, the basis of liability for damages caused by the carriage of dangerous cargo, most commonly lies in the tort of negligence. Examples include cargoes that are incorrectly manufactured, labelled, packaged, handled, inspected or stowed. If in the case of manufacturers or importers, issues may also arise of strict products liability. Also the strict liability under the rule of *Rylands v. Fletcher*⁷ can not be ruled out.

Chinese tort law was codified in the Civil Law,⁸ including fault-based liability and strict liability. Generally, the dangerous cargo liability involves someone's fault, but considering dangerous cargo incidents, strict liability can be imposed on those who engage in extra hazardous activities,⁹ and those who violate environmental protection legislation,¹⁰ even though who do so without fault. In addition, strict product liability is set out in the Product Quality Law¹¹ under which a producer shall be liable for personal injury or property damage caused by a defect in its product. Furthermore, Chapter VIII of the Maritime Code covers collision of ships which relates to fault-based liability in tort.¹² Chapter VIII, however, neither covers the liability of cargo-owners nor anyone other than those in charge of the ship itself.

⁶ [1991] 1 Lloyd's Rep., p 456.

⁷ (1868) L.R. 3 H.L. 330.

⁸ General Principles of The Civil Law of People's Republic of China, adopted by the sixth National People's Congress on 12 April 1986 and came into force on 1 January 1987.

⁹ Article 123 of the Civil Law

¹⁰ Article 124 of the Civil Law

¹¹ The PRC Product Liability Law was adopted at the 30th Session of the Standing Committee of the seventh National People's Congress on February 22 1993 and effective as of September 1, 1993, and revised at the 16th Session of the Standing Committee of the Ninth National People's Congress on July 8, 2000.

¹² It may be applicable to dangerous cargo incidents if the damage to a ship is caused by a combination of collision and un-notified dangerous cargo.

2.4 Contractual Liability in English law and Chinese

Law

In England, at common law, the shipper has an impliedly contractual obligation not to ship dangerous goods without first notifying the carrier of their particular characteristics so as to give the latter a chance to refuse the cargo or to undertake sufficient precautions to carry them. A particular cargo may be dangerous, despite the fact that cargoes of its type are not usually so regarded. If its own particular characteristics, including where relevant its own packaging, endanger the ship or other cargoes on board, the cargo can be regarded as dangerous under the English common law.

China is officially not a member of the Hague, Hague-Visby or Hamburg Rules communities; nevertheless much of the Chinese law consists mainly of international conventions and international shipping practices. The shipper's liability in respect of carriage of dangerous cargo is covered by Chinese Maritime Code, Article 68, which is effectively Article 13 of Hamburg Rules. Accordingly, a shipper is under a duty to ensure dangerous cargoes are properly packed, distinctly marked and labelled. He must also notify the carrier in writing of the cargo's proper description, nature and any precautions that must be taken. The shipper is strictly liable to the carrier for any loss, damage or expense resulting from such shipment.

2.5 Liability under Statute Law

Under English statute law, The Merchant Shipping Act 1995 gives the force of law in the UK to the CLC 1992¹³ and the Fund Convention 1992.¹⁴ Oil pollution from ships other than those examined by CLC 1992 is also covered.¹⁵ The same statute, as amended in 1997, also provides for statutory effect to be given to the HNS Convention

¹³ *Merchant Shipping Act 1995*, U.K. 1995, c.21, Part VI (Prevention of Pollution), Chapter III (Liability for Oil Pollution), comprising sects. 152-171 of the statute. Originally, the CLC 1969 was given force of law in UK by the Merchant Shipping Act 1974, U.K. 1974, c. 43.

¹⁴ *Merchant Shipping Act 1995*, Part VI (International Oil Pollution Compensation Fund), comprising sects. 172-182 of the statute. Originally, the Fund Convention 1971 was given effect in the UK by the Merchant Shipping Act 1974, UK 1974, c. 43.

¹⁵ *Merchant Shipping Act 1995*, sect. 154, See particularly sect. 154(5), defining "ship" for purpose of that section as including a vessel which is not seagoing.

1996,¹⁶ if and when it should be ratified by the UK.

In addition, regarding the EU Environmental Liability Directive 2004/35, England has complied by issuing the Environmental Damage (Prevention and Remediation) Regulations 2009 (EDPR England)¹⁷ which came into force on 1 March 2009. In Wales the EDPR Regulations 2009 (Wales)¹⁸ came into force on 6th May 2009. There are separate regulations for Scotland¹⁹ and Northern Ireland,²⁰ which entered into force in June 2009 and July 2009.²¹

Chinese legislation on dangerous cargo includes international conventions, national laws, regulations adopted by MOC²² and some specific rules. According to Chinese law, any international conventions it has joined operate as part of Chinese law.²³ China adopted CLC 1992 on 5th January 1999 and it came into force in China on 5th January 2000.²⁴ China does not adopt Fund 1971 (nor 1992 Protocols), but both Hongkong and Macau are parties to CLC 1992 and Fund 1992. In addition, some national laws are

¹⁶ See the Merchant Shipping and Maritime security Act 1997, U.K. 1997, c. 28, sect. 14 and Schedule 3, adding to Part IV of the Merchant Shipping Act 1995, Chapter 5 (Carriage of Hazardous and Noxious Substances), and comprising sect. 182A-182C, and Schedule 5A.

¹⁷ SI 2009/153. The Regulations were made on January 29, 2009 and came into force on March 1, 2009. See the full text at http://www.opsi.gov.uk/si/si2009/uksi_20090153_en_1

¹⁸ SI 2009 No 995 (W. 81), see the full text at http://www.opsi.gov.uk/legislation/wales/wsi2009/wsi_20090995_en_1

¹⁹ The Environmental Liability (Scotland) Regulations 2009 (SSI 266) came into form on 24th June 2009. See the full text at http://www.opsi.gov.uk/legislation/scotland/ssi2009/ssi_20090266_en_1 (accessed on 02/07/2010). In respect of the Executive note regarding the Regulatory Impact Assessment of Regulations 2009 (SSI 266), which was given by Scottish Government Environmental Quality Directorate on 12th May 2009, see http://www.opsi.gov.uk/legislation/scotland/ssi2009/en/ssien_20090266_en.pdf (assessed on 02/07/2010).

²⁰ The Environmental Damage (Prevention and Remediation) Regulations (Northern Ireland) 2009 (SR 252) came into operation on 24th July 2009. See the full text at http://www.opsi.gov.uk/sr/sr2009/nisr_20090252_en_1 (accessed on 02/07/2010).

²¹ However, some legislation is entirely nationally based. For example, the control of dangerous goods carried by ships within harbour areas is governed by the Dangerous Substances in Harbour Areas Regulations 1987. SI 1987/37 as amended by SI 1990/2605 and SI 1997/2367. The Merchant Shipping (Control of Pollution by Noxious Liquid Substances in Bulk) Regulations 1996 (SI 1996/3010) apply to ships that carry in bulk dangerous or noxious liquid substances. They apply to United Kingdom ships wherever they may be and to other ships when in United Kingdom waters. In addition, the prohibition of discharges of noxious liquid substances or pollution hazard substances and tank washing applies to such other ships when beyond United Kingdom waters (if in waters which are sea), subject to certain limitations on bringing proceedings, or requirements for suspending proceedings, required by the United Nations Law of the Sea Convention (Cmnd 8941). Considering criminal liability, the Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations 1997 are the most important and impose a number of duties on shipowners, employers, employees and others (Regs 6-7). I will not discuss these national laws in detail since this thesis will focus on civil liability, not criminal liability. For details about the national legislation, please see Fogarty (editor), *Merchant Shipping Legislation*, op. cit. at 3.18.

²² The Ministry of Communications of PRC

²³ For example, the International Convention for Safety of Life at Sea, 1974 (1978, 1988 Protocols), MARPOL 73/78 (Annex I/II/III/V), the London Convention 1972, the Intervention on High Seas Convention 1969 (73 Protocol), the CLC 1969 (1992 Protocol) and so on

²⁴ It should be noted that in mainland China CLC 1992 is only applicable in the litigation involving foreign elements.

general legislation on safety of transport or the prevention of pollution, e.g. MTSL²⁵ and MEPL,²⁶ and others focus on the carriage of dangerous cargoes, e.g. RADCP²⁷ and ARSSDCV.²⁸ Most of these national laws are about criminal liability and administrative penalties. Strictly speaking they only indirectly impacts on dangerous cargo liability, thus only a fraction of this legislation which relating to civil liability will be discussed in this thesis e.g. MEPL 1982 (revised 1999). But the shipper or carrier's civil liability is mainly stipulated in Maritime Code 1992 which will be discussed in detail in Chapter 4.²⁹

²⁵ The Maritime Safety Law of PRC 1983

²⁶ The Marine Environment Protection Law 1982 (revised in 1999)

²⁷ Regulations on Administration of Dangerous Cargoes at Port 2003

²⁸ Administrative Regulations on the Safety of Supervision of Dangerous Cargoes on Vessels 2003

²⁹ See section 4.2.2

Chapter 3 Liability in Tort in England and P.R.C.

Actions in tort in respect of the carriage of goods by sea have always been possible with regard to the law as we know it now. But, most of the early cases concern claims by cargo owners rather than against shippers of dangerous cargoes.¹ The first editions of both *Carver* and *Scrutton*, dated 1885 and 1886 respectively make it clear that carriers may be liable in tort as well as in contract.²

In addition, the Hague-Visby Rules,³ the Hamburg Rules⁴ and the Multimodal Conventions,⁵ apply when there is a contract of carriage and responsibility is normally decided on the basis of breach of that contract. However, they do not exclude the action in tort. Suit has been permitted in both contract and tort and in many jurisdictions these two claims may be asserted in the same action.⁶

Compared with English tort law, the discussion of Chinese tort law is very brief in this chapter, because Chinese maritime courts do not regularly admit claims on the basis of tort or contract, but prefer—as befits a civil law jurisdiction—to rely on particular legislative provisions.

3.1 Tort Liability in English Law

Tort actions are of course particularly relevant where the claim is by the carrier but the defendant is not a party to the contract of carriage, or alternatively where the claimant is someone other than the carrier. As to the former, for example, a claim may be made by the carrier (whose vessel has been damaged) against a third party other than the shipper,

¹ Classic English common law theory is that only the owner of the goods may sue in tort or in delict. *The Wear Breeze (Margarine Union G.m.b.H. v. Cambay Princes S.S. Co.)*, [1967] 2 Lloyd's Rep. 315, at 329; *The Aliakmon*, [1986] 2 W.L.R. 902, at 908. See discussions in section 3.1.2.5

² The subsequent editions have said the same in very limited wording, though with very little explanation. See Reynolds, *The significance of tort in claims in respect of carriage by sea*, [1986] L.M. C.L.Q. 97.

³ Art. 4 bis(1)

⁴ Art. 7. The Hague-Visby Rules and the Hamburg Rules have both recognized the right to take suit in tort and contract by making the same defences available to the carrier (and his servants, agents) against suits arising in tort or contract, or one presumes, both at the same time.

⁵ Art. 20(1).

⁶ Tetley, *Marine Cargo Claims*, 1988, 3rd Ed., International Shipping Publications, p. 230.

such as a manufacturer, packer or handler of goods. Conversely the shipper may be sued by a third party other than the carrier with whom he is in contractual privity, such as a person on board the carrying vessel or a stevedore, longshoreman or owner of other property damaged. Normally liability here can only be in delict or tort,⁷ although some third party might be able to sue as a third party beneficiary of the contract of carriage.⁸

If cargoes are incorrectly manufactured, labelled, packaged, handled, inspected or stowed, it may give rise to negligence liability; if in the case of manufacturers or sellers, issues may arise about strict products liability. Also the strict liability under the rule of *Rylands v. Fletcher*⁹ can not be ruled out (for the modern view, refer to *Cambridge Water*).¹⁰ All these may apply to the case of dangerous cargo.

3.1.1 How Far Can Tort Liability Be Negated by Contract?

In England, a tort duty can always be negated by contract. In certain circumstances, cargo claimants might ignore the provisions of a contract and instead sue a carrier's employee or sub-contractor directly in tort where loss or damage to cargo resulted from their negligence. Under the doctrine of privity of contract, the latter are not parties to that contract, so they cannot rely on the protection afforded by the terms of the contract such as exceptions and limitation of liability provisions.¹¹ Such result is undesirable and there is the danger that the carrier's employee or subcontractor would lose the protection afforded by the terms of that contract and the relevant provisions of the HR and HVR.¹²

⁷ Tetley, *op. cit.*, p. 230. The Hague Rules apply when there is a contract of carriage and responsibility is normally decided on the basis of breach of that contract. The Rules, however, do not exclude the action in tort against the carrier or against the master, servant and agents of the carrier. Occasionally an action in tort was used to avoid the prescribed limit of responsibility of the carrier. For this reason the Visby Rules (Art. 4 (1)) and the Hamburg Rules (Art. 7) and the Multimodal Convention (Art. 20(1)) attempted to encompass actions in tort as well as actions in contract.

⁸ See discussions on the Contract (Rights of Third Parties) Act 1999 in section 4.6.2

⁹ (1868) L.R. 3 H.L. 330. See discussions in section 3.1.3

¹⁰ *Cambridge Water Co v Eastern Counties Leather plc* [1994] 2 AC 264, [1994] 2 WLR 53

¹¹ However, they can rely on the protection in English law today—the 1999 Act. See discussion (the 1999 Act) in section 4.6.2

¹² Generally, the obligations arising from the carriage contract will rarely be performed personally by the contractual carrier but will be delegated to employees of the carrier or independent contractors engaged to carry out a particular function, such as stevedore engaged to load or discharge the cargo.

When faced with the dilemma, the courts have used considerable ingenuity in devising a variety of strategies to extend the protection afforded by the terms of the contract of carriage to litigants who were clearly not parties to it. These include bailment on terms, the Himalaya clause,¹³ and most important—the 1999 Act where the defendant can be regarded as a third party beneficiary of the contract under the Act.

3.1.2 Negligence

Most commonly, the basis of liability in tort for damages from the carriage of dangerous cargo lies in the tort of negligence. The elements of a maritime negligence cause of action are essentially the same as land-based negligence under the common law. In summary they are these:

- (1) A duty, recognised by law, requiring conformity to a certain standard of conduct for the protection of others against unreasonable risks. This is commonly known as the “duty issue”.¹⁴
- (2) Failure to conform to the required standard of care or, briefly, breach of that duty. This element usually passes under the name of “negligence”.¹⁵ This judgment is made by reference to the conduct of the reasonable man. This test is naturally an objective one and consequently is not affected by the individual characteristics of the personalities.¹⁶
- (3) A reasonably close causal connection between the offending conduct and the resulting injury; this element is called “proximate cause” or “remoteness of damage”.¹⁷ It is based on the principle that no liability attaches in respect of consequences of the action that could not have been foreseen by a reasonable man.¹⁸
- (4) Actual loss, injury, or damage suffered by the plaintiff. The burden of proof of these elements is on the plaintiff.¹⁹ It is essential for the plaintiff to show that the damage was caused by the action of defendant.
- (5) The absence of any conduct by the injured party prejudicial to his recovering in full

¹³ Wilson, *Carriage of Goods by Sea*, 5th ed., 2004, at pp.145-154.

¹⁴ Fleming, *The Law of Torts*, (1998: 9th ed.), LBC Information Services, p.115

¹⁵ Ibid.

¹⁶ M. Forster, *The Law relating to Transport of Dangerous Wastes—United Kingdom, European Foundation for the Improvement of Living and Working Conditions*, Loughlinstown House, Shankill, Co. Dublin, Ireland.

¹⁷ Schoenbaum, Thomas J., *Admiralty and Maritime Law*, (2001: 3rd ed.), St. Paul, Minn., p. 109.

¹⁸ *Overseas Tankship (U.K.) Ltd. v. Morts Dock & Engineering Co. Ltd.* (The Wagon Mound) 1961 A.C. 837.

¹⁹ Schoenbaum, op. cit., p109.

for the loss he has suffered. This involves a consideration of two specific defences: contributory negligence and voluntary assumption of risk.²⁰

Where a claim for damages is made based on the negligence of the carrier or his servants, it might be advantageous to sue an agent or servant of the carrier who was personally responsible for the loss and the tortious action might provide an effective remedy, considering a right of recovery in tort free from the exceptions and limitations of liability provisions contained in the bill of lading or other contracts.²¹ Again, many bill of lading contracts include an express provision entitling the contractual carrier to sub-contract the whole or part of the carriage. Where the goods are damaged or lost while in the possession of the sub-contractor, the bill of lading holder may prefer to sue such sub-contractor in tort rather than to rely on his remedies against the contractual carrier if the latter results in a worse financial situation. Nonetheless, the carriage contract can prevent this today if the defendant can be regarded as a third party beneficiary of the contract under the 1999 Act.

Sometimes, there is no negligence on the ship's part and therefore no basis for holding the shipowner liable. Here injured third parties may have to pursue their remedies elsewhere. For example, an explosion on board a ship damages buildings and harbour installations, and if the explosion was caused by the spontaneous heating of dangerous cargo not duly disclosed by the shipper, there arises the question whether injured parties can raise claims directly against the shipper? According to the general rules of tort, the third party must prove the fault of the shipper but he has also to establish the chain of causation.

In the situation that a casualty²² has occurred without the carrying ship's fault, the results of which would be aggravated by the presence of undeclared dangerous cargo. When damages or costs are caused partly or totally by the carriage of dangerous cargo,

²⁰ Fleming, *op. cit.* p116.

²¹ Wilson, *Carriage of Goods by Sea*, (2004: 5th ed.), p.143

²² When two ships are involved in a collision and the HNS Convention applies, the vessel owners are held jointly and severally liable for the damages resulting from the release of the hazardous substance and such damage is not reasonably separable. Nothing in this article shall prejudice any right of recourse of an owner against any other owner; see HNS Convention, Article 8, para1& para3.

is it possible for the victims to raise claims in tort against the owner of dangerous cargo? To answer this question, we need to discuss the liability in “negligence”, particularly, two elements involved in this matter: the chain of causation and the concept of foreseeable damage.

As a feature of both tortious and contractual liability, causation and remoteness can be vital in claims of damages from the shipment of dangerous cargoes. We will discuss them in a separate chapter,²³ as an important approach of establishing liability.

As we know, “the three questions, duty, causation and remoteness, run continually into one another” and “are all devices by which the courts limit the range of liability for negligence”.²⁴ Generally, “duty” is unlikely to be a problem: anyone owes a duty to prevent physical damage to property that may be foreseeably damaged by his carelessness. Remoteness and causation may be an issue.²⁵ On causation, the only problem is that the defendant’s negligence combines with a non-cautious event to cause the damage. But provided the negligence is a substantial cause, that is never presented a difficulty: the defendant is liable in full. Before going into any further discussion, we shall take a look at the duty issue involved in the carriage of dangerous cargoes.

3.1.2.1 Duty Issue

This section considers the defendant’s duty to exercise care in respect of the carriage of dangerous cargo. There are three related issues will be analysed separately with regard to the shipper’s or the carrier’s duty of care. First, the existence of a duty: whether the defendant owes any duty of care?²⁶ Secondly, the extent of the duty: to whom and for what loss does that duty extend?²⁷ Thirdly, the standard of duty: what specific

²³ See 0 Causation and remoteness of damages

²⁴ *Lamb v. Camden LBC*, [1981] QB 625, 636, it was observed by Lord Denning.

²⁵ I will deal with them separately in Chapter 8

²⁶ Negligence does not entail liability unless the law exacts a “duty” in the circumstances to observe care. “A man is entitled to be as negligent as he pleases towards the whole world if he owes no duty to them” (*Le Lievre v. Gould* [1893] 1 QB 491 at 497 per Lord Esher MR)

²⁷ A duty of care exists when injury is foreseeable or when contractual or other relations of the parties imposed it. See Schoenbaum, *Admiralty and Maritime Law*, 3rd ed. (2001), St. Paul, Minn., p. 111.

obligations are imposed?²⁸

Regards to carriage of dangerous cargo, both under common law and statutory provision,²⁹ the shipper (or manufacturer, packer, handler) must correctly mark and pack hazardous materials and provide warnings about the hazardous characteristics. Breach of that duty, e.g. failed to provide notification (or warning) to the carrier and other persons involved in the transportation, or violated any laws or regulations applicable to the transportation, would result in the shipper or third party being held liable for damages caused to a carrier (he is not in contractual privity with), given that failure to observe the relevant code, or violation of the relevant rules and regulations, would be powerful evidence of fault at common law.

On the other hand, carriers also have a duty to exercise ordinary care to ensure the safety of hazardous materials during transportation. Where some third parties suffer loss or damage caused by the carriage of dangerous cargo, the carrier could be liable in tort of negligence for lack of due care of the goods by himself, his agents or his servants.³⁰

3.1.2.2 Duties Owed by Shipper and Others

The notion of duty can be used in a specific sense that there is a duty of care in a particular care the harm in question must have been foreseeable to the individual claimant.³¹ In the words of Lord Oliver: “it is not a duty to take care in the abstract but a duty to avoid causing to the particular plaintiff damage of the particular kind which he has in fact sustained.”³² Considering dangerous cargo claims, the duty of care of a shipper (or packer, seller, manufacturer) can only be owed to foreseeable claimants.³³ In addition, the damage must be the foreseeable consequence of the negligent act and

²⁸ Negligence may be established by showing that the defendant breached a standard of care established by statute or regulation.

²⁹ Hague/ Hague-Visby Rules, Article IV rule 6.

³⁰ *Carver's Carriage by Sea*, 13th ed., Vol. 1 p. 421.

³¹ Jones, Michael A., *Textbook on Torts*, 8th ed., 2002, Oxford University Press, p.31. Duty determines whether the type of loss suffered by the claimant in the particular way in which it occurred can ever be actionable.

³² Per Lord Oliver in *Caparo Industries plc v. Dickman* [1990] 1 ALL ER 568, 599.

³³ See, for example, *Hay or Bourhill v Yong* [1943] AC 92. The duty is owed not to the world at large (as a duty in criminal law would be), but only to an individual within the scope of the risk created, that is, to a foreseeable victim. See Lunney and Oliphant, *Tort Law- Text and Materials*, (2007: 3rd ed.), Oxford University Press, p. 129.

the burden of proof falls on the claimant.³⁴ This section is mainly about shipper's duty of care under English law, but some American cases will be referred to while under the same rule³⁵ of English law.

Considering the carriage of dangerous cargo, the initial heavy burden falls on shippers to properly prepare hazardous materials for transport and to warn of any unforeseeable consequences to all those who assist in the transportation. It is the shipper that knows the most about the material being shipped and, therefore should have the initial and higher burden to provide the information relevant to any hazardous materials.³⁶ The shipper must use reasonable care to warn of the dangerous characteristics of the cargo to all those who assist in their transportation.

Where the damage caused by dangerous cargo is capable of giving rise to a shipper's (or manufacturer, distributor, seller etc) liability in negligence, the defendant may be held not liable by convincing he does not owe a duty of care to the particular claimant, if the claimant is unforeseeable. This leads to a question: to whom the duty of care is owed? Who can be regarded as a foreseeable claimant?

Practically, there is no doubt that the people who work with dangerous cargo during the transportation can be foreseeable claimants, such as a carrier and his crew, stevedores and longshoremen. Or there is a sufficiently proximate relationship between the defendant and the claimant, such as other cargo owners on the same ship claimed for their cargo damages caused by undisclosed dangerous cargo.

Nonetheless, some claimants may be regarded as unforeseeable by the negligent defendant. Suppose, after an explosion on board caused by defective package of dangerous cargo, the contaminated vessel berthed in a port far away from business areas. However, even after seeing the obvious notice board to stop people entering into that

³⁴ This requires the existence of a link of causation between the breach of duty and the damage.

³⁵ So far as "shipper's duty of care" is concerned, the American tort rule is pretty same as English rule. So I refer to some American cases here.

³⁶ See Hazardous Materials Regulations, 49 C.F.R. §§171-180 (1994), at §176.24

area, a stranger was still curious to know what happened and walked very close to the vessel. Consequently, he was injured by the noxious materials around the vessel. In the author's opinion, the defendant shipper could not reasonably foresee the stranger's injury. Accordingly, he should not be responsible for that.

Or suppose, the explosion occurred off shore and the claimant was on another ship 10 km away from the explosion. He claimed to be injured by the noises from explosion. Obviously, the claimant was a long way away and was not within the area of potential danger arising as the result of the explosion. Therefore the claimant was unforeseeable and the defendant owned no duty to him.³⁷

In addition, an essential requirement of negligence is the "foreseeability of the damage". Damage of an unforeseeable kind will be regarded as "too remote" and therefore not actionable.³⁸ Suppose, during the discharge, acid leaked out from a container with hazardous chemicals inside. The carrying vessel and some nearby containers were contaminated. During the investigation, it was found that the leaking acid from container was due to the negligent package by the shipper. The port authority stopped the process of discharge. The vessel and contaminated containers had to be cleaned up first. The carrier must submit all relevant documents to the customs again and wait for a permission of re-entry to port. After all the documentary work, the delivery of cargo was seriously delayed. Some cargo owners on the same ship, claimed for loss and damage of their cargoes; others claimed for economic loss through delay of their cargoes due to the contamination caused by dangerous cargoes.

A question arises here: will the negligent shipper be responsible for the cargo damage and consequential loss resulting from delay? There is no doubt that the cargo damage and other physical loss to be compensated, including physical damage caused by delay, e.g. when food produce deteriorates. The difficult question is the indirect or

³⁷ Regarding the unforeseeable claimant who was a long way away from the defendant's motor cycle incident, therefore the defendant owned no duty and was not guilty of negligence in relation to the claimant's injury, see *Hay or Bourhill Appellant; v Young Respondent*, [1943] A.C. 92

³⁸ Jones, *Textbook on Torts*, (2002: 8th ed.), Oxford University Press, p.37.

consequential loss or damage (e.g. loss of market) caused through “delay”.

At common law, damage has not ordinarily been awarded for economic loss without physical damage except in rare cases of reliance,³⁹ and in cases of fishermen claiming for pollution of public fishing waters.⁴⁰ In English law no duty of care is owed to those who are exposed to pure economic loss (as distinct from consequential economic loss resulting from damage to personal property).

In the author’s opinion, the shipper’s responsibility should be limited to the consequential loss or damage which must be “reasonably” foreseeable, e.g. liability in respect of cargo delayed because of the presence of dangerous cargo on board. If timely delivery is relevant to the value of cargo on board, during the period of delay, the average price of the claimant’s products dropped 50% on the local market of destination, this damage is foreseeable. Nonetheless, no liability should be held for the pure economic loss caused through delay.

In addition, breach of shipper’s duty is concerned with the standard of care that ought to have been adopted in the circumstances.⁴¹ In the American case of *Borgships*,⁴² the court concluded that the shipper’s compliance with the Hazardous Materials Regulations (HMR)⁴³ still did not meet the shipper’s duty to warn as a matter of law. In *Borgships, Inc. v. Olin Chems, Group*,⁴⁴ the defendant shipper delivered to the plaintiff carrier a quantity of SDIC⁴⁵ for shipment to Spain. The description of the SDIC contained in the bill of lading stated it was "non hazardous." During the voyage, some of the containers fell overboard in rough seas and the remaining containers were welded to the deck. They caught fire while being detached from the deck in port and the carrier

³⁹ See for example, *Hedley Byrne & Co. v. Heller & Partners Ltd.*, [1964] A.C. 465, [1963] 1 Lloyd’s Rep. 485 (H.L.).

⁴⁰ See, for example, *Union Oil Co. v. Oppen*, 501 F. 2d 558, 579, 1975 AMC 413, 435 (9 Cir. 1974). This case is discussed in the following subsection.

⁴¹ Jones, *Textbook on Tort*, (2002: 8th ed.), Oxford University Press, p. 31.

⁴² *Borgships, Inc. v. Olin Chems, Group*, 1997 U.S. Dist. LEXIS 3065, at 11 (S.D.N.Y. Mar. 19, 1997)

⁴³ Hazardous Materials Regulations (HMR), 49 C.F.R. §§171-180 (1994). The HMR specify requirements for the safe transport of hazardous materials in commerce by rail car, aircraft, vessel, and motor vehicle.

⁴⁴ *Borgships, Inc. v. Olin Chems, Group*, 1997 U.S. Dist. LEXIS 3065, (S.D.N.Y. Mar. 19, 1997), at 9-10

⁴⁵ Sodium dichloroisocyanuric acid salts dihydrate (“SDIC”)

was heavily fined.⁴⁶

The plaintiff carrier brought its claims based on the defendant shipper's failure to warn of the hazardous natures of SDIC.⁴⁷ The court held⁴⁸ that because the shipper's compliance with Department of Transportation regulations did not satisfy, as matter of law, its duty to warn, the carrier stated a claim under COGSA, 46 U.S.C.S. § 1304(6). The court found that shipper had a duty to warn the carrier of the foreseeable hazards inherent in the cargo of which the carrier could not reasonably have been expected to be aware.⁴⁹ That means the shipper owned a duty to warn the carrier as a matter of law.

When analysing the shipper's obligation to third parties that cause the action of negligence, we can start first with an examination of the standard of care or what conduct amounts to negligence. On principle, the level of care required limited to failure to avoid foreseeable dangers, e.g. shipper's failure to warn of harm that is reasonably foreseeable. But, it can be demanding in practice. For instance, to the shipper, only observing relevant regulations is not enough. Moreover, the shipper and others (e.g. the distributor or manufacturer) must use reasonable care to warn of the dangerous propensities of his goods to all those who assist in their transportation.⁵⁰ Indeed, compliance with one specific regulation does not mean as a matter of law that shippers have met their entire pre-shipment duties. Especially if the cargo has dangerous characteristics with potential serious consequences that are not likely foreseeable by

⁴⁶ As a result of the fire and the emission of noxious fumes, the local fire brigade, the Port Authority for the Port of Barcelona, as well as the shipyard authorities and owners and operators of nearby restaurants fined plaintiff in the amount of approximately \$ 180,000.00. The carrier alleged damages in the amount of \$ 180,000.00 as a result of defendants' negligence

⁴⁷ Specifically based on tort of negligence that the shipper "was careless, negligent, and reckless by failing to warn" the carrier of the dangerous qualities of the SDIC. Pursuant to the Hazardous Material Transportation Authorization Act ("HMTAA"), the Department of Transportation ("DOT") has promulgated regulations listing those materials deemed hazardous for purposes of the HMTAA and thus subject to the HMTAA labelling requirements. 49 U.S.C. §§ 1501 *et seq.*; 49 C.F.R. §§ 171.1 *et seq.*. Although the regulations list "dichloroisocyanuric acid salts" as hazardous, the regulations specifically exclude SDIC from the list of hazardous materials: "The dihydrated sodium salt of dichloroisocyanuric acid is not subject to the requirements of this subchapter." 49 C.F.R. § 172.102. The International Maritime Dangerous Goods [*3] Code also excludes SDIC from its requirements for the regulation of hazardous materials. IMDG, p. 5147, Amdt. 25-89

⁴⁸ 1997 U.S. Dist. LEXIS 3065, at 7-9

⁴⁹ The court so held despite the fact that Department of Transportation regulations and the IMDG Code specifically excluded the substance from the list of hazardous chemicals and despite the fact that the bill of lading did not define the scope of the shipper's duty to warn the carrier. The court concluded that the shipper's negligence needed to be ascertained before a finding of contractual liability could be made. The plaintiff has properly alleged a claim of negligence based on a failure to warn theory. Therefore, defendants' motion with respect to plaintiff's second cause of action is denied

⁵⁰ Tetley, *Marine Cargo Claims*, (1988: 3rd ed.), International Shipping Publications, p. 468.

carriers and any third parties who assist in its transportation, shippers were in breach of their duties to warn of the dangerous propensities and would be held liable either in contract or in tort of negligence.

In an American case of *Inomar Compania Naviera, S.A., v. Olin Corp.*,⁵¹ defendant Olin shipped Chlorine, a highly flammable substance.⁵² Olin met those requirements e.g. Hazardous Materials Regulations (HMR),⁵³ and the shipowner duly noted the presence of the chlorine on its required hazardous manifest.⁵⁴ When a fire erupted in the area where the chlorine was stored, causing substantial damage to the vessel and other cargo, the shipowner sued Olin for failure to properly warn it of all of the dangers of chlorine.⁵⁵

An investigation determined that a reaction between the chlorine and sawdust left in the area by longshoremen caused the fire.⁵⁶ The District Court found that, despite its compliance with the HMR, Olin was 85% responsible for the damages due to its negligence in failing to give the stevedore adequate warning. The stevedore was assigned the other 15% of liability.⁵⁷ Olin appealed.

The Fifth Circuit reversed and remanded the case, providing the district court with the following guidance on the “sufficiency of warning” issue: “Olin, as the manufacturer of [the chlorine], had a duty to warn [the stevedore] and the [shipowner] of the foreseeable hazards inherent in the HTH shipment⁵⁸ of which the stevedore and the ship’s master could not reasonably have been expected to be aware.”⁵⁹

⁵¹ *Inomar Compania Naviera, S.A., v. Olin Corp.*, 666 F.2d 897, 900, 1982 AMC 1489 (5th Cir. 1982)

⁵² Chlorine is subject to extensive regulation by the Hazardous Materials Regulations (HMR), 49 C.F.R. §§171-180 (1994). The HMR specify requirements for the safe transport of hazardous materials in commerce by rail car, aircraft, vessel, and motor vehicle.

⁵³ It included properly marking and labelling the chlorine drums, packing the chlorine in approved steel drums, and providing a written description of the chlorine’s characteristics to the shipowner.

⁵⁴ *Inomar Compania Naviera, S.A., v. Olin Corp.*, 666 F.2d 897, 900, at 901, 1982 AMC 1489 (5th Cir. 1982).

⁵⁵ *Ibid.*, p. 904.

⁵⁶ *Ibid.*, p. 902.

⁵⁷ *Ibid.*, pp. 901-902.

⁵⁸ HTH is an unstable white granular substance. It is an oxidizing material that "yields oxygen readily to stimulate the combustion of organic matter" (46 C.F.R. § 146.22-1) and contains 70% Chlorine and 30% Inert ingredients. HTH is capable of producing very high temperatures by coming into contact with organic material.

⁵⁹ *Ibid.* at 904. See also *Harrison v. Flota Mercante Gran Colombiana, S.A.*, 577 F.2d 968, 977, 1979 AMC 824 (5th Cir. 1978); Restatement (Second) of Torts, § 388 (1996).

The Appellate court agreed that Olin had complied with the HMR⁶⁰ and gave the stevedore and shipowner some warning, but it was not necessarily enough.⁶¹ The Court reminded the District Court that “the sufficiency of Olin’s warning can only be assessed in the light of the knowledge and expertise of the ship’s master, its first mate⁶² and the stevedore.”

In certain circumstances, third parties’ duty (e.g. distributor, seller or manufacturer), may have a duty to warn of danger same as that of the shipper. For example, The seller or supplier has a duty to warn of dangers of the product and he must exercise reasonable care to inform those who may use or come into contact with the product.⁶³ We will discuss it in a separate section:⁶⁴ a manufacturer’s (or seller’s) duty to warn of danger may relate to strict product liability.

However, they may negligently pack, label or produce dangerous cargo. It is not obvious that a person who negligently labels a noxious substance as “safe” should be in any different position from the person who negligently manufactured and put into circulation a noxious substance, when the consequences of the negligence may be identical.⁶⁵ Therefore, in many situations, what has been discussed about the shipper’s duty is applicable to the manufacturer or seller.

3.1.2.3 Carrier’s Duty of Care in Relation to Cargo

A carrier has a duty to ensure the safety of carrying dangerous cargo during the voyage. A foreseeable claimant includes a third party who suffered personal injury from the release of dangerous cargo, such as a person passed by the carrying vessel or a stevedore, or longshoreman working on board. They might choose to sue the carrier

⁶⁰ Olin placed cautionary yellow labels on each drum and making the required statements on the bills of lading describing the chlorine as an oxidising agent (highly flammable).

⁶¹ *Inomar Compania Naviera, S.A., v. Olin Corp.*, 666 F.2d 897, 900, 904. Based on its conclusion that “the findings do not indicate what [the stevedore] knew or should have known about stowing this particular cargo”. It directed the District Court to inquire as to “what knowledge, aside from that disclosed by the labels and the bill of lading, the [vessel] actually had about the cargo... prior to approving its stowage.”

⁶² To the first mate, the master delegated the responsibility of supervising the stowage.

⁶³ *Harrison v. Flota Mercante Grancolombiana, S.A.*, 577 F.2d 968, at 977 (5th Cir.)

⁶⁴ Strict product liability will be discussed in English law and Chinese law separately, see sections 0 and 3.2.5

⁶⁵ Tan Keng Feng (1996) 112 LQR 209

who has breached its duty of care in negligence.

If shipper fails to provide any notice, a carrier's breach of its duty to exercise ordinary care may constitute a superseding cause (e.g. unseaworthiness) or a contributing cause (e.g. negligent care of cargo) to any damages resulting from its acceptance of the hazardous material cargo.⁶⁶ If the damage to the third party is caused partly by the negligence of the carrier in failing to take proper precautions and partly by the negligence of the shipper, both are liable in full, with contribution between them.

Generally, English and American tort law regarding the carrier's duty of care on cargo have similar rules. There is no "duty of care" in Chinese tort law. In this section, the discussion may mention US case, but only on the question whether it might inform English Law.

Assuming a shipper provides appropriate notice and warnings, the carrier has a duty to exercise a much higher degree of care in loading, stowing and caring for dangerous cargo. Without notice, the level of duty for cargo is much lower. For example, considering a modern containership, without notice from the shipper, it is unrealistic to expect containership operators to know or to "ascertain" knowledge of the characteristics of the hazardous cargo they are asked to carry. Hence, a carrier is less likely to be held at fault if the undisclosed dangerous cargo is carried in an opaque container. However, there may be plenty of other situations where the paperwork tells the carrier that something might be wrong, for example by looking through relevant documents provided by the shipper including (1) a full and complete set of dangerous cargo manifests for dangerous goods to be loaded with the shipper's declaration and container packing certificate (multimodal dangerous goods form) attached, and/or (2) a Material Safety Data Sheet (MSDS),⁶⁷ together with a certificate of Inspection of Packing for Dangerous Export Goods.

⁶⁶ Edgcomb, John D., *The Trojan Horse Sets Sail: Carrier Defenses Against HAZMAT Cargoes*, (2000-2001) 13 U.S.F.Mar.L.J. 31, at 43.

⁶⁷ Most commonly, the MSDS is used in the shipment of dangerous cargo. Also the Intertanko has taken the initiative and submitted to IMO a paper requiring that SOLAS have a mandatory requirement that proper information be provided to ships through a standard MSDS.

Surely, the duty of care and potential liability increases once the carrier has some knowledge regarding the hazardous materials in its possession. In *Colormaster Printing Ink Co.*,⁶⁸ a freight consolidator failed to placard the shipping container holding poisonous gas or provide the required written notification to the carrier. However, employees of the freight consolidator and the carrier did discuss, via telephone, the fact that the tow gas cylinders were going to be placed in a shipping container and loaded aboard the vessel.⁶⁹ The court concluded the carrier had a duty to take measures that would safeguard against [the shipper's] negligence in light of the appreciable risk of harm arising from failure to adhere to the federal regulations... The fact that the carrier knew that the shipper would be delivering hazardous cargo for shipment gave rise to a duty to guard against foreseeable risk that shipper would deliver hazardous cargo unlabeled.⁷⁰ The court, however, assigned only 5% of liability to the carrier and 85% to the freight consolidator.⁷¹

In summary, carriers need only exercise ordinary care for cargo as required by regulations (e.g. HR/HVR) until the carrier either receives actual notice of hazardous material or until the carrier should have known about hazardous materials, such as through leaking barrels. At that point, the carrier owes a higher duty of care given the foreseeable damages that could result from a breach of that duty. For example, if a shipper complies fully with the notice provision under HR/HVR, then the carrier will have a very high duty of care towards that cargo and will be held liable for any resulting damages, unless that damage was deemed unforeseeable even with proper notice and warnings. Accordingly, the carrier will be liable for third parties' property damage, including another ship damaged in an explosion, or damaged cargoes in another ship (in dangerous cargo incident).

⁶⁸ *Colormaster Printing Ink Co. v. S.S. Asiafreighter*, 1991 U.S. Dist. Lexis 4644, at 17 (S.D.N.Y. Apr. 9, 1991).

⁶⁹ *Ibid.*, at 21-22

⁷⁰ *Ibid.* at 22

⁷¹ *Ibid.*, at 24. At page 20, the court noted that the freight consolidator's negligence is the most egregious of all the parties. It virtually ignored federal regulations unquestionably pertaining to it, thereby evidencing a lack of concern for the foreseeable consequences resulting from failure to properly stow poisonous gas aboard the vessel. In light of the likelihood of extreme harm that could arise as a direct consequence of improper loading of poisonous gas, the freight consolidator's conduct borders on reckless and deserves the greatest assessment of liability.

In addition, the same burden shifting applies to the relationship between a shipper and its freight forwarder. The freight forwarder does not have an affirmative duty to discover dangerous cargo, if he is unaware the need for special handling of the cargo and the shipper is aware of: (1) the unusually sensitive nature of the cargo and (2) the foreseeable damages to it. Instead in *Tenneco Resins, Inc. v. Atl. Cargo Servs.*,⁷² the duty was held on the shipper itself to ensure that appropriate labelling and handling instructions are given to the carrier.⁷³ *Tenneco*, of course, was 20 years ago: today one perhaps wonders whether a forwarder could escape liability for simply forwarding a cargo whose characteristics it knew nothing about without making any checks at all. In the author's view, regards to shipper's liability, if a pack, seller or manufacturer can have the same duty of care as the shipper, why not the forwarder? Consequently, if third parties (stevedores, longshoremen) claim for damage caused by undisclosed dangerous cargoes, they may sue the forwarder in negligence instead of the shipper.

3.1.2.4 Extent of Duty—Recovery of Economic Loss

In the law of negligence the courts have generally held the wrongdoer liable for all foreseeable physical injury or damage caused by his fault, but it has long been thought unacceptable, for policy reason, to treat foreseeability as a sufficient ground for extending his liability to all economic consequences which might flow from his action. Some form of limitation has been thought necessary in order to avoid "opening the floodgates" to a deluge of potential claims.⁷⁴ For reasons of legal certainty the courts have tended to favour an arbitrary but tolerably clear distinction between economic loss flowing from physical damage to the claimant's property, which in general has been held recoverable, and on the other hand pure economic loss, which in general has been treated as too remote.

In respect of claims from dangerous cargo, the type of economic loss involved

⁷² 1989 AMC 133 (S.D. Tex. 1988). Despite its fiduciary relationship to its shipper-client, a freight forwarder has no duty to discover the need for special handling of shipper's cargo based on the cargo's inherent characteristics, at least where shipper failed to provide appropriate labelling and handling instructions (dismissing shipper's claim for water damage to chemical cargo packed in non-watertight drums).

⁷³ Edgcomb, John D., *The Trojan Horse Sets Sail: Carrier Defenses against Hazmat Cargoes*, (2000-2001)13 U.S.F. Mar. L.J. 31, p. 47.

⁷⁴ De La Rue & Anderson, *Shipping and the Environment—Law and Practice*, (1998), LLP, p. 441.

reductions in profits or earnings sustained by claimant. These have taken many forms, including pollution-related losses and delay the carrying vessel, and various parties who may suffer delay or other forms of loss when a port area is affected by dangerous cargo casualty; or reduced catches of wild fish by fishery as well as when a whole business is affected, e.g. by oil/chemical pollutions caused to a seaside resort, where tourists stay away for a whole season, including those by the owners of hotels, restaurants, shops, and other tourist establishments for loss of bookings and trade.

In England, in *The Orjula*,⁷⁵ the plaintiff claimed as bareboat charterers of the vessel Orjula, operating a liner service, carrying drums of chemicals in containers. The shippers packed the drums of acid on defective staging. Consequently, the staging collapsed, the drums were punctured and leaked, damaging the containers in which they had been placed. When *The Orjula* called at Rotterdam, two containers were found to be leaking acid. The first defendant appears as named shipper in the bill of lading. The second defendant is the supplier the drums of chemicals to the first defendant.

It was held by Mance J. that a duty of care was owed by the defendants in respect to the damage to the containers, but not to the damage to the drums themselves as the staging and the drums counted as a single item for product liability purposes. The alleged contamination from the chemicals contained in the drums constituted physical damage to the vessel so the plaintiff would be entitled to claim in tort against the second defendant for the alleged negligence in the stowage of the containers.⁷⁶ As a result, the cost of the clean-up operation, which would otherwise have been considered as pure economic loss, was recoverable, either as consequent upon physical loss, or as incurred in mitigating loss. However, for pure economic loss not connected to physical damage was irrecoverable, such as the costs of transshipment to the destination of Benghazi were treated as pure economic loss unrelated to the leaking acid.

⁷⁵ *Losinjska Plovidba v. Transco Overseas Ltd. (The Orjula)* [1995] 2 Lloyd's Rep. 395

⁷⁶ *Ibid.*, at 403, see also Tettenborn, *Tort liability and environmental responsibility*, [1996] L.M.C.L.Q. 8. The contamination of the containers might also have constituted damage sufficient to enable the plaintiff to claim in tort against the second defendant for these losses and mitigation costs.

Most interestingly, in respect of decontaminating the containers and drums, Mance J. thought it arguably in law that the plaintiff could claim for his loss even if it was regarded as entirely economic loss. The imposition of a duty of care in respect of economic loss in *The Orjula* was effectively not governed by the principles laid down in *Murphy v Brentwood D.C.*⁷⁷ Indeed, *The Orjula* may well fall into a different factual category, which was outside the scope of *Murphy*.

In *Murphy*, the House of Lords concerned with a claim by a subsequent purchaser of a house against a consulting engineer, who was engaged by a local authority pursuant to its statutory duties and whose carelessness had led to the house being constructed with defective foundations. It was concluded that neither the builder nor the consulting engineer or local authority would, absent special circumstances, own any duty of care to a purchaser in respect of any defect which was discovered before the stage when it caused any actual injury to person or damage to property, other than the defective house itself. Any diminution in value of the property in consequence of the defect, and any expense incurred in putting the defect right so that the property could be safely used, constituted pure economic loss not recoverable in tort. The House of Lords concerned a fact of matter was that the defects in the property, once detected, could no longer cause damage. Also the purchaser had a choice either to repair the property or to abandon or discard it as useless. Accordingly, his claim was regarded as being for pure economic loss and was irrecoverable in tort.

However, Mance J. pointed out what made *The Orjula* different from *Murphy* was that there was no choice for the plaintiff (bareboat charterer) to abandon the containers at sea or on land.⁷⁸ Moreover, the containers and drums would remain positively dangerous unless preventive measures were taken to neutralise the danger by the plaintiff. Indeed, on arrival at Rotterdam the Dutch authorities had understandably insisted that the plaintiff bore the expense of dealing with operations of decontamination, recontaining and restowing effected in Rotterdam. That means the plaintiff was forced to take

⁷⁷ [1991] 1 A.C. 398 (HL)

⁷⁸ [1995] C.L.C. 1333

positive step to alleviate the danger. Therefore the plaintiff may arguably have a claim in tort against the second defendant who negligently stowed them on the vessel, even if the loss was regarded as entirely economic. It should be noted that Mance J. decided merely that the imposition of a duty of care (owed the second defendant to the plaintiff) in respect of economic loss was arguable in law, and it had not been established.⁷⁹ Thus it remains to be seen whether it will be accepted by other courts.

Here a question arises: does a shipper owe a duty in tort to a charterer to take care not to expose the charterer to liability? In the following case, the court thought arguably the answer was “Yes”. In *Virgo Steamship Co SA v Skaarup Shipping Corp (The Kapetan Georgis)*,⁸⁰ a shipment of coal was loaded onto a vessel, which was owned by Virgo. An explosion occurred and caused damage and loss of life. The explosion was caused by the ignition of an explosive mixture of gases emanating from the coal and air.

The vessel was under time charter to S, which in turn had entered into a voyage charter with B which in turn had entered into a sub-voyage charter with O. Devco, a Canadian company, was the shipper of the coal. Virgo brought an action against S and B for damages for loading dangerous cargo. S issued a third party notice against Devco alleging that the cargo was shipped pursuant to a contract between them containing a Canadian statutory clause that the shipper of dangerous goods should be liable for damages arising out of the shipment, so that S was entitled to a contribution from Devco under the Civil Liability (Contribution) Act 1978 . Alternatively, Devco, as shippers of the cargo, owed S a duty of care in common law to take reasonable care that the cargo shipped aboard was not dangerous, and that in breach of the above duty Devco negligently shipped an excessively gaseous cargo, thus giving rise to a liability in tort. Devco submitted that the claim in tort was for pure economic loss since S had no proprietary interest in the vessel as a time charterer. It was held that S had a good arguable case in tort both in law and in fact where the claim was part of a chain originating from a claim for physical damage. As we can see, damages to compensate

⁷⁹ [1995] C.L.C. 1333-1334; see also Tettenborn, *Tort liability and environmental responsibility*, [1996] L.M.C.L.Q. p.9.

⁸⁰ [1988]1 Lloyd's Rep. 352.

for pure economic loss can be claimed, despite the general rule to the contrary, where it is claimed as part of a chain which originates from a claim for physical damage.

In addition, if the claimant has a claim for property damage, he automatically gets consequential loss flowing from that property damage. Suppose, the shipper did not notify the carrier and the carrier was unaware of the dangerous nature of cargo as compared to regular cargo. During the loading of cargo, the dangerous cargo started a fire and an explosion followed on board, causing damages not only to the carrier's ship but also including the delay to next voyage, as well as cost resulting from cleaning, repairing and charges of custom documents. From the economic loss rule discussed above, we can see that the carrier has suffered physical damage which could entitle it to claim in respect of the vessel. Based on this, the carrier could recover other economic loss as part of a chain which originates from a claim for physical damage.

3.1.2.5 Generalities Affecting the Duty of Care

In the case of either of loss of, or damage to goods, an action of tort can be brought only by the owner of those goods,⁸¹ including a pledge of the bill of lading,⁸² or by a bailee, in or entitled to possession of them.⁸³ In the case of *Margarine Union v. Cambay Prince*,⁸⁴ Roskill J held that an action in negligence would not succeed unless the plaintiff was, at the time of the commission of the tort, the owner of the goods in question or the person entitled to immediate possession of them. This approach was confirmed again by House of Lords in *The Aliakmon*⁸⁵ who restored the full vigour of the principle laid down in the former case. In the latter case a cargo of steel suffered damage in transit due inter alia to negligent stowage at a time when the risk but not the property in the goods had passed to a c. & f. buyer. Lord Brandon denied the buyer any

⁸¹ *Carver's Carriage by Sea*, 13th ed. (1982), volume 1, London: Stevens & Sons, p.98.

⁸² *Bristol Bank v. Midland Ry.* [1891] 2 Q.B. 653, even though he only acquired property in the goods from the previous owner after the conversion. This really an aspect of the rule that a possessor can sue: see the next footnote.

⁸³ *The Winkfield* [1902] p. 42; *The Joannis Vatis* [1922] p.92.

⁸⁴ [1969] 1 KB 219. The facts of the case were that a cargo of copra, shipped in bulk, had been seriously damaged by giant cockroaches as the result of the negligence of the shipowner in failing to have the holds of his ship fumigated before the commencement of the voyage. The plaintiff was the holder of a delivery order for part of the cargo issued by the seller under a c.i.f. contract. As the plaintiff did not become owner of the goods in question until they had been ascertained on discharge, Roskill J held that an action in negligence would not lie.

⁸⁵ [1986] 2 Lloyd's Rep. 1. Followed in New Zealand case of *The Seven Pioneer* [2001] 2 Lloyd's Rep. 57. See also *The Starsin* [2003] 1 Lloyd's Rep. 571; Gaskell 8.73 ff; Carver 5.111ff.

remedy in the tort of negligence on the ground that he was not the owner of the steel at the time the damage was inflicted.⁸⁶

Accordingly, the duty of care owed in tort to the buyers could not be equated to the contractual duty of care owed to the shipper; and to impose on a shipowner a duty of care to others than the owners of cargo would deprive him of the protection of the Hague Rules.⁸⁷ The identity of carrier issue is of particular importance to the combined transport operator who assumes responsibility for the actions of all sub-contractors and will wish to ensure that the cargo owner cannot avoid the web of contractual provisions by suing outside of the bill.⁸⁸

3.1.3 Strict Liability under *Rylands v. Fletcher*

The carriage of explosives, radioactive materials and certain dangerous chemicals can be categorised as “ultra-hazardous” or “extra-dangerous” activities. In England, this area of law is governed by the rule established in *Rylands v. Fletcher*,⁸⁹ for the modern view, refer to *Cambridge Water*.⁹⁰

The rule under *Rylands v. Fletcher*⁹¹ is the most-often quoted example of strict liability. It states that an occupier of land who brings onto it anything likely to do damage if it escapes, and keeps that thing on the land, will be liable for any damage caused by an escape.⁹² For the purpose of applying this rule, “escape” means escape from a place where the defendant has occupation of or control over as opposed to a place which is outside his occupation or control.⁹³ Although the strict liability rule in *Rylands* was rejected by the High Court in Australia in *Burnie Port Authority v General Jones Pty*

⁸⁶ On the other hand, *The Aliakmon* has always been viewed as a somewhat restrictive authority. The restriction caused problems generally for buyers of bulk undivided cargoes until the passing of the Carriage of Goods by Sea Act 1924. Note that the Sale of Goods (Amendment) Act 1995 now allows such buyers to become owners in common of the bulk at a stage earlier than ascertainment.

⁸⁷ *The Aliakmon*, [1985] 1 Lloyd’s Rep. 199, at 200.

⁸⁸ Nicholas Gaskell, *Bills of Lading: Law and Contracts*, op. cit., 285.

⁸⁹ (1868) L.R. 3 H.L. 330.

⁹⁰ *Cambridge Water Co v Eastern Counties Leather plc* [1994] 2 AC 264, [1994] 2 WLR 53

⁹¹ (1868) L.R. 3 H.L. 330

⁹² Liability under this rule is strict and it is no defence that the thing escaped without the defendant’s willful act, default or neglect or even that he had no knowledge of its existence.

⁹³ See *Read v J Lyons & Company Ltd* [1947] AC 156, 168.

Co,⁹⁴ in England the House of Lords re-assured the rule after the *Transco* case⁹⁵ in 2003.

The author in favour of the “escape” is interpreted under the wider rule in *Rylands*. It is concerned with the escape of dangerous things from the defendant’s land or control rather than restricted to the escape from the defendant’s land and the adverse effects on the claimant’s land.⁹⁶ As we can see, this rule might be applicable to cases where dangerous cargo is released from a vessel or has escaped from a place controlled or occupied by a shipper, forwarder, seller or manufacturer. Here a question arises: is there any fundamental difference between the dangerous cargo that escaped from the ship and those that escaped from land under the rule of the *Rylands*?

In *Rylands v. Fletcher*, the defendant occupied land near to where the plaintiff operated a coal mine.⁹⁷ The defendant employed an engineer and a contractor to construct a reservoir on his land.⁹⁸ The water from this reservoir permeated the old coal shafts beneath and flooded the plaintiff’s mine.⁹⁹ Nevertheless, in spite of the fact that he had employed apparently competent persons and had taken no part in the work himself, the defendant was held responsible for all direct consequences from the escaping water regardless of whether he was negligent or not.

As the author understands, this case refers to dangerous things escaping from land (or “non-natural use” of land¹⁰⁰), but it is not necessary to restrict the rule to the limitation that both the plaintiff and the defendant must have an interest in the land. The real

⁹⁴ [1994] 68 A.L.J. 331; [1994] 120 A.L.R. 42

⁹⁵ *Transco plc (formerly BG plc and BG Transco plc) v Stockport Metropolitan Borough Council*, [2004] 1 All England Law Report 589; [2003] UKHL 61

⁹⁶ The narrow rule in *Rylands* is restricted to liability for the escape of dangerous things from the defendant’s land which adversely affect the claimant’s land.

⁹⁷ The coal seams extended under the defendant’s land. These had been previously worked but the tunnels and shafts had been cut off and forgotten about. The defendant obtained approval to construct a reservoir to provide water for his mill.

⁹⁸ The defendant obtained approval to construct a reservoir to provide water for his mill.

⁹⁹ It was the engineer and the contractor’s negligence in performing the work that caused damage to the plaintiff’s property.

¹⁰⁰ Lord Goff in *Cambridge Water* turns to Lord Moulton’s definition in *Rickard v Lothian*, whereby “non-natural use” involves “some special use bringing with it increased danger to others, and must not merely be the ordinary use of the land or such a use as is proper for general benefit of the community”. For details see *Cambridge Water Co v Eastern Counties Leather plc* [1994] 2 AC 264, at 299. See also, Maria Lee, *What is private nuisance*, [2003] Law Quarterly Review 298, at 312.

meaning of this rule relates to the “escape from the defendant’s control”.¹⁰¹ It could also be the control of a ship rather than land. Put another way, we can regard a ship e.g. a giant modern container ship, as a big piece of floating land. If the water is polluted by leaking dangerous cargoes, it should not be treated differently between chemicals that leaked from a container on board a ship which is near the harbour and the same chemicals that leaked from a warehouse in the harbour. Accordingly, it is possible to apply the rule of *Rylands* to dangerous cargo incidents that occurred off land.

In addition, to succeed in finding someone strictly liable under the rules in *Rylands v Fletcher*¹⁰² in the context of dangerous cargo incidents, it would be necessary to establish that the carriage of dangerous cargoes was an unnatural or exceptionally hazardous activity. The ultra-hazardous activity is possible to be established, if carriage of cargo which is ultra-dangerous, such as dynamite (or other explosives), or extra-hazardous chemicals, then the cargo escaped from the vessel in heavy seas and resulted in pollution of the environment, starting fire and explosion on board, and noxious fumes which injured persons nearby.

However, as regards the application of this rule to dangerous cargo incidents, the real problem is how to deal with the apparent requirement in *Rylands*: there must be an escape from the defendant’s property? Suppose, for example, a shipper puts dangerous cargoes on ship, then the cargoes escape from the ship and result into pollution. One interesting point is the ship is neither owned nor possessed by the shipper, therefore any escape will be from the shipowner’s property, not the shipper’s. We can see in practice the shipowner is likely to be the only *Rylands* defendant.¹⁰³ Then the question is: will he be liable under the rule of *Rylands*? As the author understands, it will depend on whether the shipowner knows the danger. If he does, surely he will be liable under the

¹⁰¹ The rule in *Rylands v Fletcher* has over the years been taken to apply to damages caused by escape of a wide range of substances, including “gas” (see *Northwestern Utilities Ltd v. London Guarantee Co.* [1936] A.C. 108), “sewage” (see *Humphries v. Cousins* (1877) 2 C.P.D. 239), explosives (*Rainham Chemical Works Ltd v. Belvedere FishGuano Co. Ltd* [1921] 2 AC 465). They are not necessary to escape from land, but they are likely to do mischief if escape from the defendant’s control. For example, in the above case the gas escaped because of the breaking of welded joint in the defendant’s mains (the defendants empowered to distribute natural gas within a city in Canada). The defendant was held strict liable for it based on the rule in *Rylands*.

¹⁰² (1868) LR 3 HL 330.

¹⁰³ The only exceptions would be where the shipper is a bareboat charterer (unlikely in practice) or where the escape occurs during loading from a terminal under the control of the shipper (as with oil and gas).

Rylands rule. If he does not (e.g. undisclosed dangerous cargo shipped by the shipper), as discussed in the following case, it is unlikely for him to be held liable, since there is no foreseeable damage as required in the *Rylands* rule.

In *Cambridge Water*,¹⁰⁴ the House of Lords held that liability under *Rylands v. Fletcher* only arises where the damage suffered by the claimant was foreseeable.¹⁰⁵ However, it does not mean that the manner of the escape must be foreseeable.¹⁰⁶ Since the defendant could not at the relevant time have reasonably foreseen the damage in question might occur, the plaintiff's claim for damages under the rule in *Rylands v. Fletcher* must fail.¹⁰⁷

Here a question arises: will the requirement of foreseeability prevent a claimant from succeeding in a dangerous cargo incident? In the author's opinion, if the dangerous cargo has been noticed to the shipowner, the requirement of foreseeability would be unlikely to prevent claims for property damage and personal injury caused by dangerous cargoes,¹⁰⁸ because such incidents normally involve fire, explosion, serious contaminations and the resulting damages are very obvious. In any event, pure economic loss is not recoverable under the rule of *Rylands*. However, if the shipowner does not know about the dangerous cargo on board, the requirement of "foreseeability" will be a trouble. For instance, the shipper shipped dangerous cargo without disclosure and the shipowner does not know the dangerous cargo exist on board at all. Surely, the shipowner can not foresee any damage may be caused by dangerous cargo. In practice, the majority cases relating to "undisclosed" dangerous cargoes, therefore it is rarely to see the rule in *Rylands* to be applied to dangerous cargo cases.

¹⁰⁴ *Cambridge Water Co v Eastern Counties Leather plc* [1994] 2 AC 264, [1994] 2 WLR 53

¹⁰⁵ The issue of foreseeability in *Cambridge Water* has been discussed by many academic commenters. For details see Richard Mullender & Lesley Dolding, *Environmental Law: notions of strict liability*, (1995) *Journal of Business Law* 93, at 97; A.J.Waite, *Deconstructing the rule in Rylands v Fletcher*, (2006) *Journal of Environmental Law*, 423, at 435; Elspeth Reid, *Liability for dangerous activities: a comparative analysis*, (1999) *International & Comparative Law Quarterly*, 731, at 740; Mark Lunney & Ken Oliphant, *Tort Law: Text and Materials* (2008: 3rd ed.) Oxford University Press, p. 684.

¹⁰⁶ Lunney and Oliphant, *Tort Law-Text and Materials*, (2003: 2nd ed.), Oxford, p. 641.

¹⁰⁷ The plaintiff argued that, even if the damage was unforeseeable at the time of the spillage, it was clearly foreseeable at the date of the trial. Hence it sought to make the defendant liable in nuisance or *Rylands* for the continuing escapes. This was rejected by Lord Goff. As the defendant could not foresee the damage at the date of the spillage it should not be strictly liable for damage which became foreseeable at a later date when it could do nothing to prevent the damage from continuing to occur. For criticism of this aspect of the decision, see Wilkinson (1994) 57 *MLR* 799.

¹⁰⁸ Of course, the causation and remoteness of damage need to be established here.

In *Cambridge Water*,¹⁰⁹ it was argued before the House of Lords, even if foreseeability of damage was required by the authorities, their Lordships should extend *Rylands* so as to make it a tort of strict liability for ultra-hazardous activities. This was rejected by Lord Goff for a number of reasons, perhaps the most telling being the failure of the Law Commission to recommend any proposals to implement strict liability for ultra-hazardous or especially dangerous activities.¹¹⁰ The Law Commission had expressed doubt on the desirability of adopting a strict liability rule for ultra-dangerous activities.¹¹¹

As the author understands, the major concerns are the uncertainties inherent in the concept of “ultra-hazardous activity” which would make such a rule too difficult to apply. For example, how is it possible to distinguish between dangerous/extra-dangerous activities (which may cause harm even if carefully conducted) and ordinary activities (which are safe if carefully carried out)? Indeed, it is not easy to draw the line. Accordingly, Lord Goff considered that judges should not proceed down a path where the Law Commission had feared to tread.¹¹²

The author would argue that as a matter of justice, those who undertake dangerous activities (rather than the victim), should bear the risk of resulting damages, irrespective of whether negligence can be established.¹¹³ Furthermore, strict liability is consistent with the “polluter pays” principle in the area of environmental liability. Most of the case law on *Rylands v Fletcher* deals with environmental questions. It is obvious that strict liability may provide a better incentive for avoiding environmental harm from

¹⁰⁹ *Cambridge Water Co v Eastern Counties Leather plc* [1994] 2 AC 264, [1994] 2 WLR 53

¹¹⁰ See Report of the Law Commission, *Civil Liability for Dangerous Things and Activities* (1970) (Law Com No. 32)

¹¹¹ *Ibid.*, para14-6

¹¹² *Cambridge Water Co v Eastern Counties Leather plc* [[1994] 2 *Weekly Law Reports* 53, 79. For a very narrow view of the meaning of extra-hazardous activities, see *Biffa Waste Services Ltd v Maschinenfabrik Ernst Hese GmbH*, [2008] EWCA Civ 1257; [2009] B.L.R. 1; [2009] P.N.L.R. 12. In this case, “welding operations” were not regarded as extra-hazardous activities and the doctrine enunciated in *Honeywill & Stein Ltd v Larkin Bro (London’s Commercial Photographers) Ltd* [1934] 1 K.B. 191 was so unsatisfactory that its application should be kept as narrow as possible. It should be applied only to activities that were exceptionally dangerous whatever precautions were taken.

¹¹³ See also *Fleming on the Law of Torts* (LBC, 1997, 9th ed.), pp 368-71. The cost of damage from such dangerous operations would have to be absorbed as part of the overheads of the business rather than borne, in the absence of negligence, by the victim.

dangerous activities than a fault-based liability regime. Particularly in the case of dangerous cargo pollution, strict liability may help to ensure prompt and sufficient controls of pollution. Considering the damages and costs from dangerous cargo incidents may be enormous, internalising the costs of dangerous activities promotes economic efficiency by encouraging the operator to minimize those costs.

Another reason given by Lord Goff is in respect of damages caused to the environment, the increasing recognition of environmental problems together with national and international legislation made the extension of a common law remedy to cover this kind of damage less impressive.¹¹⁴ In view of the volume and quality of legislation being put in place in relation to the environment, he considered that developments in this area should be left to Parliament rather than the common law.¹¹⁵

However, the author believes that before the environmental legislation is integrated and sufficient, *Rylands v Fletcher* is still significant to dangerous cargo incidents where strict liability would play an important role in the sphere of “dangerous activities”.¹¹⁶ For example, on an international scale, both the HNS Convention 1996¹¹⁷ and the Basel Protocol 1999¹¹⁸ on Liability and Compensation have not come into force. In Europe, the Lugano Convention¹¹⁹ was thought to be too wide and some provisions too general to ensure legal certainty, therefore it is not yet in force. The Directive on Environmental Liability (2004/35/EC) seems to be successful, but it is a Directive on public liability and does not really cover civil liability. In the UK, strict liabilities have been created by statute against a backdrop of the existing common law. Examples are section 209 of the Water Industry Act 1991, which imposes strict liability on water undertakers, and

¹¹⁴ Lunney and Oliphant, *Tort Law-Text and Materials*, 2nd ed., 2003, Oxford, p. 642.

¹¹⁵ Some support for Lord Goff’s approach comes from Markesinis and Deakin, *Tort Law*, 2003 5th ed., Oxford University Press, at 56.

¹¹⁶ This view has been espoused by several academic writers as well as the Pearson Commission. For example, *Fleming on the Law of Torts* (LBC, 1997, 9th edn), at 368-71; Markesinis and Deakin, *Tort Law*, 2003 5th ed., Oxford University Press, at 544-7; Waite, “The Question for Environmental Law Equilibrium” 7 *Environmental Law Review* [2005] 34-62, p. 60

¹¹⁷ International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea (HNS Convention) 1996

¹¹⁸ The Protocol on Liability and Compensation was adopted at Basel on 10 December 1999 by Decision V/29 and opened for signature in Bern from 6-17 March 2000, as well as at United Nations Headquarters from 1 April-10 December 2000. The text is on the website of the Basel Convention Secretariat at www.basel.int

¹¹⁹ The Convention on Civil Liability for Damage resulting from Activities Dangerous to the Environment (the Lugano Convention) was adopted by the Council of Europe on 21 June 1993

schedule 2 of the Reservoirs Act 1975, which assumes strict liability in the circumstances of *Rylands*.¹²⁰ As we can see, the strict liability rule in *Rylands* still has a role to play in dealing with environmental problems, particularly before the relevant international and national legislations can be developed into a consummate scheme.

However, an important and surprising decision given by the High Court of Australia in *Burnie Port Authority v General Jones Pty Co*¹²¹ rejected the rule in *Rylands*, in favour of fault-based liability.¹²² A question arising here: will the House of Lords follow the Australian example and abolish the rule in *Rylands*; or retain the rule while giving it as much certainty as possible? The answer can be found in the *Transco* case 2003.¹²³ It was not surprising to see that the House of Lords chose the latter. There were a few reasons for not abolishing the rule given by Lord Bingham in *Transco*. The most convincing one probably is “there is a category of case, however small, in which it is just to impose liability without fault. An example is *Cambridge Water* if the damage had been foreseeable”.¹²⁴ Another reason is “stop-go” and is generally a bad approach to legal development.¹²⁵ The House of Lords, therefore, preferred to follow the lead taken in *Cambridge Water*.

We can see the re-assurance of strict liability rule in *Rylands* has vital meaning to dangerous cargo cases. That means if the shipowner engaged in “ultra-hazardous” activities with proper notice about dangerous cargo, he may be held liable for resulting damages, even if he took every reasonable precaution to prevent damages or environmental pollution from occurring. Furthermore, in the author’s view, it is a reasonable step to extend the rule in *Rylands* so as to make it a tort of strict liability for

¹²⁰ A.J.Waite, *Deconstructing the rule in Rylands v Fletcher*, (2006) *Journal of Environmental Law*, 423, at 428.

¹²¹ [1994] 68 A.L.J. 331; [1994] 120 A.L.R. 42

¹²² This case was concerned with liability for fire damage caused by contractors working with chemicals on the Authority’s land. A five to two majority of the Court held that for the purpose of Australian common law the rule in *Rylands* should now be seen as absorbed by the principles of ordinary negligence. Their conclusion was based on three reasons: (1) the uncertainties as to the content and application of the rule; (2) its progressive weakening by restricting its scope largely by means of the non-natural user requirement and (3) that the law of negligence had developed since *Rylands* and largely supplanted it. See R.F.V. Heuston and R.A. Buckley, *Law Quarterly Review* (1994) 506; S. Dziobon and R. Mullender, *Cambridge Law Journal* (1995) 23; E. Fisher, *Journal of Environmental Law* (1995) 216; K.A. Warner, *Judicial Review* (1998) 201; and R. Mullender and L. Dolding, *Environmental law: notions of strict liability*, *Journal of Business Law* (1995) 110

¹²³ [2004] 1 All England Law Report 589.

¹²⁴ [2004] 1 All ER 589 at 595. See also A.J.Waite, *Deconstructing the rule in Rylands v Fletcher*, (2006) *Journal of Environmental Law*, 423, at 438.

¹²⁵ [2004] 1 All ER 589 at 595

ultra-hazardous activities such as that in the U.S.,¹²⁶ particularly considering the environmental legislation is not yet integrated and sufficient in this area. Moreover, in comparison with Chinese law, under Article 123 of the Civil Law 1986, it is possible for the carrier to be strictly liable for carriage of ultra dangerous cargoes. I will discuss it in detail in sections 3.2.1 and 3.2.2.

3.1.4 Strict Product Liability

Liability for defective products (“product liability”) is shared by contract and tort law.¹²⁷

Strict product liability is the norm and does not require privity of contract between the manufacturer (or seller) and the injured party because the manufacturer (or seller) has a duty to supply to the public at large, a product that is safe and free of defects.¹²⁸

Until the European Community Directive 83/374/EEC was implemented, it would be possible to say with a certain degree of jurisdiction that England had no “product liability law”, but only laws relating to liability for defective products.¹²⁹ The shortcoming of the traditional *Donoghue v. Stevenson*¹³⁰ cause of action is the need to prove fault.¹³¹ Contemporary demands for stronger consumer protection have now promoted a new model of strict tort liability for injury from defective products.¹³² The

¹²⁶ As Fleming notes, “after an at first cool reception, strict liability is now generally applied to abnormally dangerous activities; that is those with inherent risks that cannot be eliminated by the exercise of reasonable care. See *Fleming on the law of torts*, op. cit, p 530. Under the American Restatement of the Law of Torts, Second, s. 409, p. 370, a person engaged in such an activity can be held strictly liable for injuries caused to another person, even if the person engaged in the activity took every reasonable precaution to prevent others from being injured.

¹²⁷ John G Fleming, *The Law of Torts*, 9th ed., p. 530.

¹²⁸ Tetley, op. cit. p470.

¹²⁹ “The term “product liability” is an American invention. It does not designate a distinct category of law in the United Kingdom”. 1 Royal Commission on Civil Liability and Compensation for Personal Injury, Report, Vol. 1 1978, CMND. No. 7054-I, p 1216. In England, the law on product liability had not developed in the same way or to the same extent as it had done in the United States: essentially the non-contractual liability for defective products in England was still an aspect of the general law of negligence. See the Lord Criffiths, M. C. and Peter De Val and R. J. Dormer, *Developments in English Product Liability Law: A Comparison with the American System*, presented at Admiralty Law Institutes Symposium: Product Liability in Admiralty, (1988) 62 Tul. L. Rev. 353.

¹³⁰ [1932] A.C. 562 (H.L.). In this case, a woman consumed ginger beer which contained the decomposed remains of a snail, and brought suit against the manufacturer. The Court ruled that a manufacturer owes a duty of care to the ultimate consumer of his product where the product reaches the consumer in the same form in which it left the manufacturer, and is sold with the knowledge that the absence of care in the production of the product will result in an injury to the consumer’s life or property.

¹³¹ The injured consumer is in a singularly disadvantageous position in carrying the burden of proof. See Fleming, *The Law of Torts*, 9th ed., p. 551.

¹³² Strict products liability is a relatively new doctrine in the law. It developed out of a series of law review articles in the 1950s in the United States, and rapidly gained currency in many state courts around the country in the 1960s and 1970s. In 1965, the American Law Institute adopted the Restatement (second) of Torts. Section 402a of the Restatement (second) of Torts (1965); Rest Torts: Product Liability (third) was promulgated in 1997. The evolution of American doctrine is described by Stapleton, *Product Liability* (1994) chapter 2. The strict product liability rule is spreading to other countries For example, China, Israel, Japan and Australia. See Trade Practice Act Part VA (1992). For its history see Harland, 17 Syd L Rev 336 (1995). It is not, however, to New Zealand or Canada: Bovin, 33 Osg

strict product liability has been adopted by statute in the EC,¹³³ consequently the UK has a strict product liability regime.

With regard to the carriage of dangerous cargo, most commonly the product liability relating to the responsibility of the manufacturers and of various sellers in the chain of sale to third parties with whom they have not necessarily contracted,¹³⁴ e.g., a duty is imposed on manufacturers or importers¹³⁵ to correctly label and packing hazardous cargoes and to assist masters with proper notification of the dangerous properties. However, with all best intentions, mistakes will occur and cargoes are often incorrectly labelled or packaged, and manufacturers or importers are liable for damages caused by the inherent nature of dangerous cargoes.

In practice, uncertainties may arise where, contrary to IMDG requirement,¹³⁶ manufacturers provide trade names and formulations of the product on a Material Safety Data Sheet (MSDS). Whenever possible in these circumstances, manufacturers should be contacted for supplying the correct UN number and their assistance and guidance on the correct handling procedures and any hazards which may arise that are not otherwise clearly identified.¹³⁷ Accordingly, they could be responsible for the personal injury and certain damages¹³⁸ caused by the dangerous characteristics of their products.

In England, strict product liability is implemented by Part I of the Consumer Protection Act 1987. Section 2(1) states that when any damage is caused wholly or partly by a defect in a product, every producer of the product “shall be liable for the damage” and section 2(2) and 2(3) make four categories of person liable: producers, those who hold

H L J 487 (1995).

¹³³ Product Liability Directive 1985. As implemented in the UK by the Consumer Protection Act 1987. See Howells, *Comparative Product Liability* (1993); Waddams, *Products Liability* (3rd ed. 1993).

¹³⁴ Tetley, *Marine Cargo Claims*, (3rd ed. 1988), International Shipping Publications, p. 469.

¹³⁵ It should be noted that the sellers are not liable under strict product liability: only the manufacturers and importers are. The seller’s duty to label, etc. is an aspect of negligence, not strict liability.

¹³⁶ An IMDG Code listing will be the first indication of the general nature of dangerous substances being carried on the vessel. The surest way of obtaining reliable information about a relatively pure material is to identify its UN number. Full details of its hazards can then be obtained by seeking advice from experts or by reference to databases and technical literature.

¹³⁷ Foster, Chris, *Understanding the Danger*, The Maritime Advocate, Issue 17, pp38-40.

¹³⁸ In England, damage to other goods of a kind ordinarily acquired for personal, domestic or household use. See also Section 5(3) of 1987 Act.

themselves out as producers, importers and suppliers.¹³⁹ The persons entitled to be claimants are not specified in the Act, and consequently, it seems that anyone suffering damage of the kind covered by the Act, as a result of a defect in a product.¹⁴⁰

In England, the 1987 Act only covers losses for which protection is personal injury (or death) and damage to other goods of a kind ordinarily acquired for personal, domestic or household use.¹⁴¹ It does not cover damage to or loss of the defective product itself. Suppose flammable chemicals are insufficiently packaged by the manufacturer, during loading the chemicals, a few packages broke and started a fire on board, as a result some stevedores and longshoremen were injured. Or a private beachfront house was damaged by an explosion caused by these chemicals. The manufacturer could be held liable for any personal injuries and damages to the beachfront house.

It should be noted that there is a big difference between English and Chinese law as to which kind of property damage is compensable. Under section 5(3) of 1987 Act, commercial entities cannot sue at all. If “other property” is in a commercial use, then the damage cannot be indemnified, such as the seismic equipment installed on a chartered vessel¹⁴² was not for private use and the damage could not be indemnified by the manufacturer of the defective vessel and equipment under 1987 Act. This excludes damage to business property such as a vessel. However, the property in commercial use is compensable under Chinese Property Quality Law 1993.¹⁴³

Suppose, in England if a defective dangerous cargo started an explosion and the carrying vessel was damaged,¹⁴⁴ the shipowner would not have a right to sue the defective product manufacturer based on strict product liability, but can choose tort of negligence and prove the fault of manufacturer. However, if the dangerous cargo

¹³⁹ Generally, the suppliers are not liable at all unless they fail to say where they got the goods from. This is same as that under Chinese Law.

¹⁴⁰ *Clerk and Lindsell on Torts*, (18th ed., 2000), London: Sweet & Maxwell, p553.

¹⁴¹ Section 5(3) of 1987 Act states that there is no liability if the property lost or damaged is not: “(a) of a description of property ordinarily intended for private use, occupation or consumption; and (b) intended by the person suffering the loss or damage mainly for his own private use, occupation or consumption.”

¹⁴² In the case *Nico Supply Ships Associates v. General Motors Corp.*, 876 F.2d 501, 1989 AMC 2358 (5th Cir. 1989), the property in a commercial use can sue under the American law.

¹⁴³ For detail, see section 3.2.5

¹⁴⁴ No doubt the vessel (carrying cargoes) is regarded as a business property

exploded in a harbour and some private houses on land (e.g. beachfront houses) were damaged, the house owners could claim for indemnity from the dangerous cargo manufacturer under 1987 Act. We must admit that the scope of compensable damage under American law¹⁴⁵ is much broader than that under English law. In other words, except for personal injury or property for private use, the 1987 Act is a dead letter.

In summary, with regard to a strict product liability in the case of dangerous cargo, it covers the responsibility of manufacturers, importers, wholesale or otherwise, to third parties' damage and personal injury in the chain of sale. Reviewing relevant legislation, government regulations and judicial decision, there is a tendency of strict liability since contemporary demands for stronger consumer protection have promoted to a new model of strict tort liability for injury from defective products. Nonetheless, it is not yet clear what impact the theory of strict product liability will have on shipboard claims of dangerous cargo casualties in English jurisdiction.¹⁴⁶

Surely, for a vessel in commercial use, a shipowner can sue under Chinese law (or American law) for his vessel damaged by dangerous cargo, but cannot under English law. The author thinks the difference reflects the direction of the development of strict product liability. In England, the scope of recoverable damage under the 1987 Act should be revised and extended to properties in commercial use. Obviously, insurance companies would benefit from it since most claims for damage to commercial property are brought by them.

3.1.5 Joint and Several Liability

Tort liability may be relevant in other situations where two or more people are liable to

¹⁴⁵ Commercial entities can sue under American law. See *East River Steamship Corp. v. Transamerica Delaval, Inc.*, 476 U.S.858, 106 S. Ct.2295, 90 L.Ed. 2d 865, 1986 AMC 2027 (1986), where (USA) the Supreme Court recognised that the law of product liability, including negligence and strict liability, is a part of the general maritime law. The policy judgment underlying strict liability, that liability should be imposed on those parties who are best able to protect people from hazardous products and equipment, applies in admiralty. In order to succeed in a claim for strict product liability, a plaintiff must prove that the defective or dangerous product caused the injury. Proximate causation will be determined by a finding of whether or not the defect or dangerous condition was a substantial factor in the resulting harm. With regard to damages in products liability, it is settled that a plaintiff may recover personal injury and property damages against a manufacturer or seller in strict product liability claims.

¹⁴⁶ It has shown a possibility for victims to claim for indemnity on strict product liability in some reported maritime cases in the US

the same person for the same damage. Joint liability¹⁴⁷ covers a variety of situations, including agency,¹⁴⁸ vicarious liability,¹⁴⁹ and concerned action,¹⁵⁰ in which several persons are imputed by a tort as joint tortfeasors. Such concurrent tortfeasors are regarded as “joint” when there is concurrence not only in the casual sequence leading to the single damage, but also in some common enterprise; they are “several” or “independent” when the concurrent is exclusively in the realm of causation.¹⁵¹

It is a general principle of English law that any person whose tortious conduct causes damage to another may be held liable for the full loss incurred by the injured party. This remains the case even though a particular defendant’s contribution to the damage was manifestly smaller than that made by others.¹⁵² Where this occurs, there is provision for the defendants to contribute among themselves to ensure that each bears the appropriate part of the cost of compensating the plaintiff. The two related topics of joint liability and contribution in tort are governed by the Civil Liability (Contribution) Act 1978.

The Civil Liability (Contribution) Act 1978 allows tortfeasors who are jointly liable for tortiously caused damage to a particular victim to seek a contribution that will apportion the liability between themselves. The result of the two rules of joint liability and contribution is that the law does not compel a plaintiff to collect his damages from different defendants according to their share of responsibility for the damage, but it allows the liability of one defendant to be redistributed to others who are jointly responsible for the damage.¹⁵³ Under section 2(1) of the Act the amount of contribution to be made by one tortfeasor to another is “such as may be found to be just and equitable”.

According to the agreement or legal provisions between the parties, the defendants

¹⁴⁷ For a discussion of the distinction between joint and several tortfeasors see *Clerk & Lindsell on Torts* (18th ed.), para. 2-53 *et seq.*

¹⁴⁸ Eg *Palmer v Blowers* (1987) 75 ALR 509.

¹⁴⁹ *The Kourask* [1924] P 140 at 155.

¹⁵⁰ Another used to be the joint liability of husband and wife for the wife’s torts.

¹⁵¹ The former are responsible for the same tort, the latter only for the same damage. In the first case, there is but one cause of action in contemplation of law; while in the second, there are many separate causes of action as there are tortfeasors. See details at Fleming, *The Law of Torts*, 9th ed., p. 288.

¹⁵² Stanton, K. M., *The Modern Law of Tort*, (1994) Sweet & Maxwell, p. 140.

¹⁵³ *Ibid.*, p141.

redistributed the compensation among themselves to ensure that each bears the appropriate part of the costs. Generally the relevant provisions in the Civil Liability (Contribution) Act 1978 come into effect when parties to an action settle it prior to the trial. Joint liability is a fundamental rule of English law that is firmly based on the full compensation theory, although the rule has vocal critics.¹⁵⁴

In this section we will briefly discuss “several tortfeasors” where tortfeasors have many separate causes of action but they are liable for same damage. Then focus on the vicarious liability with regard to the carriage of dangerous cargoes.

3.1.5.1 Several (or “Independent”) Liability

Where several persons are liable in tort for the same damage, the general rule is that they are liable in solido. That is, each can be sued for the full amount of the claimant’s loss and it is not open to any individual defendant to negative or reduce his liability on the basis that there were others whose fault also contributed to the damage. In so far as the burden of liability is to be apportioned, this is done by reference to the principles of contribution.

Due to several defendants’ negligence, cargoes became dangerous in the surrounding circumstances, and the claimant was working in that dangerous situation, accordingly was injured. Those careless tortfeasors would be held several liable for the victim’s injury. In *Beazley v D. McCarthy & Sons and Vokins & Co., Ltd.*,¹⁵⁵ a barge was loaded with timber from a steamship. Stevedores were engaged in stacking timber on the barge in charge of lighterman. Loading continued under instructions of lighterman despite protests by stevedores that further cargo would make the barge unstable. The victim stevedore was employed by the first defendants and lost his life by drowning when he

¹⁵⁴ Bodies representing professional persons, particularly those in the construction industry, have argued that it is unfair that their indemnity policies should underwrite the liabilities of those with whom they are involved. It is argued that, in relation to non-personal injury cases in excess of a certain value, a successful plaintiff should only be able to collect from each defendant the proportion of the loss which it is just and equitable for that person to pay. See details at D.T.I., *Professional Liability, Report of the Study Team (1989) Construction Industry Team*, para. 10.2.2. The financial limit was designed to exclude claims brought on behalf of domestic clients.

¹⁵⁵ (1947-1948) 81 Ll. L. Rep. 404

fell from the top of a load of timber.¹⁵⁶

It was held that the accident was due to the overloading of the barge (stacked too high¹⁵⁷); both the stevedores and the lightermen were responsible, the stevedores for their failure to provide a safe system of working, and the lightermen for their failure, as inviters, to see that the barge was reasonably safe for the work to be done upon it. Two defendants, as several tortfeasors, found equally to blame.¹⁵⁸

A straightforward example of the application of joint liability in the context of dangerous cargo is the American decision in *Harrison v. Flota Mercante*.¹⁵⁹ In this case, a shipper was aware of the danger from inhaling industrial chemicals, but failed to put adequate printed warnings on the containers. Some of the containers ruptured during loading. The stevedore's supervisors read the warning label, but failed to provide protective equipment to the persons cleaning up the spill. The shipper, carrier and the stevedore's supervisors were all held liable when those persons were injured, subject to contribution inter se.¹⁶⁰

3.1.5.2 Vicarious Liability

There may be vicarious liability, when a party's negligence is based on the negligence of his employees who are actually dealing with the cargo,¹⁶¹ so far as acting in the course of their employment. There is normally no liability for independent contractors, except for undertaking dangerous activities.¹⁶² If no contract was involved or the

¹⁵⁶ A Dispute arose as to the cause of the fall and an action was brought by the victim's wife against the stevedores and lightermen (with respective duties).

¹⁵⁷ It was causing a sudden movement throwing the deceased man off his balance

¹⁵⁸ *Ibid.*, at 408.

¹⁵⁹ *Harrison v. Flota Mercante Grancolombiana, S.A.*, 577 F.2d 968, (5th Cir.1978); 1979 AMC 824 (5 Cir.1978).

¹⁶⁰ *Harrison v. Flota Mercante Grancolombiana, S.A.*, *op. cit.*, 981-82. This principle of fault allocation means the allocation of liability for damages in proportion to the relative fault of each party, see details in *United States v. Reliable Transfer Co.*, 421 U.S. 397, 95 S. Ct. 1708, 44 L. Ed. 2d 251 (1975), the Supreme Court held that another liability-shifting rule, the admiralty rule of divided damages in collision cases should be replaced by a rule requiring, when possible, the allocation of liability for damages in proportion to the relative fault of each party. This principle of fault allocation is not limited to maritime collision cases. Thus, in *Gator Marine Serv. Towing, Inc. v. J. Ray McDermott & Co.*, 651 F.2d 1096, 1100 (5th Cir. 1981), we held that Ryan indemnity principles should not be extended to "disputes between a vessel and her stevedore over vessel and cargo damage" because such disputes "are best accommodated by a straightforward application of the usual maritime comparative fault system."

¹⁶¹ For example negligence in labelling, packing, handling, carrying or discharging dangerous cargo.

¹⁶² For example, a person who undertakes dangerous activities is under a non-delegable duty such as *Rylands v. Fletcher*. There was possible liability for independent contractors and this was assumed to be the law regarding

existing contract no longer precludes an action in tort, the responsible person will be liable for the loss or damage in an action in tort by the owner of the goods.¹⁶³

Tort liability is relevant in claims for damage caused by dangerous cargo, where some third parties outside the ship, suffer loss or damage caused by the dangerous cargo where the shipowner itself is not negligent, but there is fault on its employees.¹⁶⁴ The shipowner may be vicariously liable for the fault of his employees. For example, a shipowner may be jointly responsible with his master for an act of carelessness committed by the master, e.g. flammable materials exploded by reason of lack of reasonable care by the master; or the master failed to devise a proper stowage plan for dangerous cargo in a hold.¹⁶⁵

Supposing there was a vessel with hazardous chemicals on board, one seafarer, without proper training, negligently doing ventilation and starting a fire in hold, consequently the ship was badly damaged. The vessel encountered heavy weather at sea and a number of containers were lost overboard including several containers with hazardous chemicals inside. Owners of an adjacent fishery suffer loss and damage as a result of this contamination. In this case, the shipowner should be vicariously liable for damages caused by his incompetent crew.

The employers may, in certain circumstances, be liable for the fault of their employees, but only if the tort is committed during the course of their employment. This condition will be satisfied if the tortious act is authorised by the employer and falls within the “course of his employment”.¹⁶⁶ Thus liability will arise if the employee is performing duties authorised by his employer, even if it is carried out in a manner which the

independent contractors in *Midland Silicones v. Scruttons* [1962] A.C. 446.

¹⁶³ *Carver's Carriage by Sea*, (1982: 13th ed.) Vol.1, §125.

¹⁶⁴ There is no direct English authority as to the liability in tort for negligence of the master or crew in respect of their failure to care for goods carried on ship. Thus it is necessary to rely on general principles to ascertain the tortious liability of master, crew or independent contractors with regard to carriage of goods. See *Carver's Carriage by Sea*, Vol. 1, 13th ed., 1982, para.124.

¹⁶⁵ Or other servant of the carrier: *Yuille v. B. Fisheries* [1958] 2 Lloyd's Rep. 596. But see per Willmer L.J. in *The Anonity* [1961] 1 Lloyd's Rep. 117, 126.

¹⁶⁶ In general terms, the “course of employment” is said to encompass such unauthorized acts by the servant as can be regarded wrongful and unauthorized acts by the servants as can be regarded wrongful and unauthorized modes of performing an authorized task.

employer would never have approved,¹⁶⁷ or the employee does his job in a prohibited fashion.¹⁶⁸ For example, an employer may be liable for damage inflicted by a fire started by a match thrown on the floor by an employee who was smoking while unloading a cargo of petroleum spirit.¹⁶⁹ As another example, even though an employer may have given written safety instructions for handling dangerous cargo to his employees, if the seafarers made mistakes on ventilation that resulted in very high temperatures in the hold, the employer is still liable for his employees' action.

In some circumstances, however, the employer can escape liability if the negligence or carelessness of the employee amounts to a separate act or the purpose of the employee's activities at the relevant time was unconnected with his employer's business, the employer would not be liable.¹⁷⁰

Suppose, a ship was chartered under NYPE 1993, but the charterer devised an improper stowage plan for dangerous cargo. The master was negligent in relying on that plan to stow dangerous cargo. Consequently, damages were caused by the improper stowage. In assessing the master's negligence of control or supervision of the stowage of dangerous cargo in tort, it might be thought that a court would take account of the obligations under the relevant provisions of the contract, e.g. Cl.8 of the NYPE which gave the charterers power to give stowage orders. As we know, most time charters provide that the master shall be under the orders and directions of charterers as regards employment of the vessel, agency and other arrangements; and the charterers shall indemnify the owners against any consequences or liabilities that might arise from complying with such orders and directions.¹⁷¹ Hence, no vicarious liability of the shipowner for the

¹⁶⁷ Forster, M., (1987) *The Law relating to Transport of Dangerous Wastes—United Kingdom, European Foundation for the Improvement of Living and Working Conditions*, Loughlinstown House, Shankill, Co. Dublin, Ireland, p. 75.

¹⁶⁸ Such as in the case of *Rose v. Plenty*, [1976] 1 W.L.R. 141, this case concerned a milkman who disobeyed instructions not to have children assist him in delivering the milk and not to carry passengers on his milk float. The plaintiff, a boy aged 13, was injured by the milkman's negligence whilst riding on the float in the course of helping on the round. The majority of the Court of Appeal clearly appreciated that the child's rights could only be secured by making the employer's insurance available to meet the claim. They held that the milkman was doing his job and he was delivering the milk, albeit that he was acting in a prohibited fashion.

¹⁶⁹ *Century Insurance Co. Ltd. v. Northam Ireland Road Transport Board* [1942] A.C. 509.

¹⁷⁰ See also the details of "Course of Employment" in Stanton, *The Modern Law of Tort*, (1994) Sweet & Maxwell, p. 131.

¹⁷¹ See generally Wilford et al., *Time Charters*, 5th ed., 2003, p. 315.

master's negligence,¹⁷² instead the charterer should be responsible for it.

As a general rule, an employer bears no liability for the negligence of his independent contractor. Persons damaged by such work must seek redress directly from the contractor¹⁷³ and the employer is not liable for the negligence or other faults of that contractor. However, this principle is subject to modification when a duty is laid upon the employer by legislation that to achieve a certain level of safety or to ensure certain things are done.¹⁷⁴ In some cases, courts have held these duties to be absolute and therefore non-delegable.¹⁷⁵ Although the duty is described as “non-delegable”, this does not entail that the duty “is incapable of being the subject of delegation, but only that the employer cannot escape liability if the duty has been delegated and then not properly performed”.¹⁷⁶ But the result is that a person subject to a non-delegable duty, will be liable for a narrow range of conduct of his independent contractors than would be the case in relation to vicarious liability for the acts of an employee.¹⁷⁷

From the very origin, in *Rylands v. Fletcher*,¹⁷⁸ vicarious liability was imposed for independent contractors.¹⁷⁹ Subsequently this was extended to all projected work involving high risk calling for special precautions.¹⁸⁰ A number of cases have developed from this result by saying that a person who undertakes dangerous activities is under a non-delegable duty.¹⁸¹

So far as dangerous cargo liability is concerned, the general principle in tort is that the shipowner is liable for the acts of its own employees (e.g. the crew), but not for those of

¹⁷² It should be noted that an agreement in a charterparty can not take away the rights of third parties. This only affects the position as between owner and charterer.

¹⁷³ Stanton, *The Modern Law of Tort*, (1994) Sweet & Maxwell, p. 134.

¹⁷⁴ Various statutory duties are pursuant to the Health and Safety at Work Act 1974.

¹⁷⁵ Forster, *The Law relating to Transport of Dangerous Wastes—United Kingdom, European Foundation for the Improvement of Living and Working Conditions*, (1987) Loughlinstown House, Shankill, Co. Dublin, Ireland, p. 77.

¹⁷⁶ *McDermid v. Nash Dredging & Reclamation Co Ltd.*, [1987] A.C. 906 at 910, per Lord Hailsham.

¹⁷⁷ Stanton, *The Modern Law of Tort*, (1994) Sweet & Maxwell, p. 134.

¹⁷⁸ (1868) L.R. 3 H.L. 330.

¹⁷⁹ In this case, a landowner employed an engineer and a contractor to construct a reservoir on his land. It was their negligence in performing the work that caused damage to the plaintiff's property. Nevertheless, in spite of the fact that he had employed apparently competent persons and had taken no part in the work himself, the landowner was held responsible for the damage. See also John, Fleming, op. cit., p435.

¹⁸⁰ “Intrinsically dangerous” work (*Martin v. Sunlight Mining* (1896) 17 LR (NSW) 364 at 367) or “acts which, in their very nature, involve special danger to others”: *Honeywill & Stein Ltd. v. Larkin Bros.* [1934] 1 KB 191 at 197.

¹⁸¹ *Honeywill & Stein Ltd. v. Larkin Bros.* [1934] 1 K.B. 191.

independent contractors. However, there would be liability of the shipowner in tort to a third party, e.g. a cargo owner whose cargo was damaged by the independent contractor, if the shipowner had the right to control the manner of the work, as opposed to being able to give general directions. For example, the master may give general directions to a crane driver (employed by the stevedore) where cargo is to be deposited in a hold, this does not necessarily mean that the shipowner is vicariously liable if the crane driver drops the cargo too quickly.¹⁸² The situation will be different if the shipowner had the right to control the manner of the work of the stevedores, e.g. the master has the right to order the stevedores not to use hooks which were damaging bagged chemicals.

Alternatively, supposing it is the shipper's responsibility to up-load cargoes and he has the right to control the manner of the stevedore's work. Due to the negligence of some stevedores, a package of chemicals was broken which subsequently started a fire. Even though these stevedores were employed by company A, and company A was an independent contractor of the shipper, the shipper should not escape from liability. Both the shipper and company A should be held liable for all damages and personal injury as a result of the fire.

Finally, the employer may incur liability for personal negligence in connection with the employment itself; for instance, if he carelessly entrusts the work to an incompetent;¹⁸³ or if he, unlike the contractor, knows that there is risk of harm unless special precautions are taken and fails to give instructions accordingly;¹⁸⁴ or if he either authorises the commission of an unlawful act or employs a contractor to do something which necessarily involves violation of another's rights.¹⁸⁵ In all these cases, of course, the

¹⁸² Cf. *Mersey Docks and Harbour Board v. Coggins & Griffiths (Liverpool) Ltd* [1947] A.C. 1; *Murray v. Currie* (1870) L.R. 6 C.P. 24.

¹⁸³ In the case *Pinn v. Rew* (1916) 32T.L.R. 451, The employer has not taken adequate precautions to ensure that the contractor to discharge a particular responsibility since the contractor is not adequately qualified and properly equipped to do it safely; also in the case *Salsbury v. Woodland*, 1970 Q.B. 324, The court takes the view that the failure to select a proper contractor amounts to a breach of the duty of care on the part, not of the contractor, but of the person engaging that contractor.

¹⁸⁴ For example, a carrier who had responsibility to unload cargoes from his ship in the destination harbor, but he did not notice the stevedores properly of the specific nature of the dangerous cargo. Without special equipment to do the unloading, the stevedores and some other workmen suffered benzene poisoning escaped from the casks of dangerous cargo. The shipper was liable for their injury.

¹⁸⁵ See *Torette House v. Berkman* (1940) 62 CLR 637 at 645; *The Pass of Ballater* [1942] 112, at 118.

employer's liability rests on his own default, not the contractors.¹⁸⁶

3.1.6 Defences and Relief from Liability

A number of defences which are generally available to answer tort claims such as contributory negligence, consent of the plaintiff to the act complained of, exclusion of liability by contract, notice, etc and intervening acts of third parties.¹⁸⁷ Contributory negligence is a partial defence and the others provide a tortfeasor with a complete defence.¹⁸⁸

3.1.6.1 Contributory Negligence

“Contributory negligence” can be defined as “the plaintiff’s failure to meet the standard of care to which he is required to conform for his own protection and which is a legally contributing cause, together with the defendant’s default, in bringing about his injury”.¹⁸⁹ Here “negligence” is used in a sense different from what it bears in relation to a defendant’s conduct. It does not mean conduct fraught with undue risks to others, but rather failure on the claimant to take reasonable care of himself in his own interests.¹⁹⁰

Suppose, during the discharging of dangerous goods, a stevedore refuses to wear the protective clothing provided and recommended for use by the shipowner. The stevedore would be likely to be found to have contributed to any injury he suffers as a result of physical contact or contamination with the undisclosed dangerous goods.¹⁹¹ The failure of the stevedore to take care of himself negated the liability of the shipper had fault on providing sufficient information about the dangerous nature to persons involved in the transportation. Another example, the defendant shipper X’s dangerous cargoes are shipped on board, consequently result in explosions. The carrier who has reason to

¹⁸⁶ Fleming, op. cit., p433.

¹⁸⁷ See details in section 6.1.4.2

¹⁸⁸ Fleming, op. cit., p 302.

¹⁸⁹ Rest 2d §463

¹⁹⁰ Fleming, op. cit., p 302. Also “contributory” means nothing more than the claimant’s failure to avoid getting hurt by the defendant.

¹⁹¹ A similar example, in the carriage of dangerous cargo by road, a driver refuses to wear the protective clothing, see details in *O Connell v. Jackson* 1972 1 Q.B. 270.

know of the danger but nevertheless carries the goods: the other cargo owner who knows that X's cargo is dangerous but say nothing to the carrier etc. Both carrier and the other cargo owner have contributory negligence to their own loss.

In such a case the damages recoverable by the plaintiff will be reduced under the provisions of the Law Reform (Contributory Negligence) Act 1945.¹⁹² Section 1 (1) of the Act provides that, where a person suffers damage as the result partly of his own fault and partly as a result of the fault of another, that person may still recover damages, but the award shall be reduced by such amount as the court thinks is just and equitable having regard to his responsibility for the damages.¹⁹³

Here a question arises: whether “contributory negligence” applies to all tort liability? Certainly it operates as a defence to the tort of negligence, but its application to other torts and to other forms of civil liability is not always so clear.¹⁹⁴ According to Prof. Tettenborn, as regards torts, there is no doubt that contributory negligence applies to all torts—strict liability or otherwise—except for those involving knowing wrongdoing such as deceit or trespass.¹⁹⁵ Briefly, contributory negligence applies to all the torts that are likely to be involved in dangerous cargo cases. Regarding contractual liability (not tort), in the author's opinion, contributory negligence does not apply to strict liability.¹⁹⁶

Broadly speaking, the law relating to contributory negligence is similar to that relating to negligence simpliciter.¹⁹⁷ For instance, the standard of care to be applied to claimants is objective,¹⁹⁸ so “a person is guilty of contributory negligence if he ought reasonably to have foreseen that, if he did not act as a reasonable, prudent man, he might hurt himself; and in his reckonings he must take into account the possibility of others being

¹⁹² It should be noted that the words in S.1(1) of 1945 were repeated in the Civil Liability (contribution) Act 1978, ss.1(1) and 2(1). See relevant discussion in section 4.2.1.5

¹⁹³ Section 1(1) of 1945 Act. Note that this formula was repeated in the Civil Liability (Contribution) Act 1978, ss.1(1) and 2(1).

¹⁹⁴ Deakin, Johnston and Markesinis, *Markesinis and Deakin's Tort Law*, 6th ed., 2007, OUP Clarendon Press, p. 902.

¹⁹⁵ See Clerk & Lindsell, *op. cit.*, 14-132

¹⁹⁶ See section 4.2.1.5

¹⁹⁷ Forster, *The Law relating to Transport of Dangerous Wastes—United Kingdom, European Foundation for the Improvement of Living and Working Conditions*, Loughlinstown House, Shankill, Co. Dublin, Ireland, p. 82.

¹⁹⁸ Jones, *Textbook on Torts*, Oxford University Press, 2002, p625.

careless”.¹⁹⁹ In addition, Contributory negligence is a partial defence: it reduces the value of, but does not extinguish, the plaintiff’s claim.²⁰⁰

Suppose, for example, at collision, vessel A with dangerous cargo on board is damaged as a result of the negligent navigation of vessel B. If the master of vessel A takes an unreasonable measure to plug up a small hole on the hull (e.g., by using a nearby package of chemicals likely to catch fire in contact with water), any resulting explosion is likely to be regarded as partly the fault of the owners of vessel A.

If the claimant’s contributory negligence is going to increase the loss caused by defendant, it will be treated the same way as negligence contributing to the accident. Imagine, for example, a container of dangerous cargo on deck, misdescribed by the shipper A, explodes and sets fire to a container containing paper materials under deck, incorrectly packaged by the shipper B. Although shipper B’s incorrect package did not help to cause the accident, it increased the consequence of an accident caused wholly by the dangerous cargo misdescribed by shipper A, so shipper B’s negligence amounted to contributory negligence and the award of damages to shipper B should be reduced.

In addition, a manufacturer or seller may be able to reduce damages by establishing that the claimant was guilty of contributory negligence.²⁰¹ For instance, the negligence of stevedores who failing to use proper equipment to load cargoes in the hold, injured by the leaking chemicals insufficiently packed by the manufacturer. Since, the substandard packing did not conform to the relevant provisions of the IMDG Code, the manufacturer should be held liable, but only for those damages that were not caused by the fault of the stevedore himself. Another example, a manufacturer (or seller) did not label his dangerously explosive cargo properly on the containers, and a careless carrier stowed the containers very close to a hot bulkhead resulting in enormous explosions and the vessel was damaged seriously. The carrier’s negligent stowage was contributing to the accident and his award of damages should be reduced.

¹⁹⁹ *Jones v. Livox Quarries Ltd* [1952] 2 QB 608, 615 per Denning LJ.

²⁰⁰ Stanton, *The Modern Law of Tort* (1994) Sweet & Maxwell, p. 102.

²⁰¹ Tetley, *op. cit.* p474.

3.1.6.2 The Consent of the Plaintiff

Consent, or as it is sometimes known, “assumption of risk” or “*volenti non fit injuria*”,²⁰² provides a complete defence to a tort action in respect of all forms of tort liability.²⁰³ A defence of consent may result from an express agreement to run a risk or be implied²⁰⁴ from the plaintiff’s conduct.²⁰⁵

In a civil action, the defendant may set up the defence that the plaintiff voluntarily assumed the risk of, e.g. discharging dangerous goods in a manner less safe than recommended by the relevant code of practice. If such a consent is valid, it may have the effect of entirely relieving the defendant from liability.²⁰⁶ In practice, however, this result may be difficult to achieve. In order to establish this defence, the defendant must show that the plaintiff, who had freedom of choice in the matter and knowledge of the risk, not only consented to run the risk of the tort²⁰⁷ but also by accepted doing so he was waiving his rights to bring an action.²⁰⁸ Thus, merely because the plaintiff allows a carrier to discharge dangerous cargo on his premises, he does not thereby agree to deprive himself of a remedy should any damage arise from the shipowner’s carelessness. Hence this is likely to be regarded as a contributory negligence case.

In a more pertinent case, if the carrier is not told about the dangerous nature of a cargo but takes it on board knowing what it is, here a question arises: has the carrier consented to any subsequent risks arising from the carriage of dangerous cargo? Assuming that the carrier knew of the existence of dangerous cargo, the mere fact of his agreement on

²⁰² [Latin: no wrong is done to one who consents] The defence that the claimant consented to the injury or (more usually) to the risk of being injured. Knowledge of the risk of injury is not sufficient; there must also be (even if only by implication) full and free consent to bear the risk. A claimant who has assumed the risk of injury has no action if the injury occurs. The scope of the defence is limited by statute in cases involving business liability and public and private transport.

²⁰³ *Markesinis and Deakin’s Tort Law*, 6th ed., Clarendon Press, p. 905.

²⁰⁴ The implied consent defence is commonly referred to by the Latin name of *volenti non fit injuria*.

²⁰⁵ Stanton, *The Modern Law of Tort*, Sweet & Maxwell, 1994, p. 109.

²⁰⁶ Consent in the sense of a general assumption of risk can still prevent liability arising. See *Dann v. Hamilton* [1939] 1 KB 509, 514. See also *Morris v. Murray* [1991] 2 QB 6, 14-15 (Fox LJ), 19-20 (Stocker LJ).

²⁰⁷ *Ibid.*

²⁰⁸ See *Nettleship v. Weston* [1971] 2 QB 691, 701 (Denning LJ). See also Forster, *The Law relating to Transport of Dangerous Wastes—United Kingdom, European Foundation for the Improvement of Living and Working Conditions*, (1987) Loughlinstown House, Shankill, Co. Dublin, Ireland, p. 80.

carrying it will not necessarily imply his acceptance of all subsequent risks.²⁰⁹ The mere knowledge of danger is not enough, and the claimant's consent will not be inferred from his knowledge alone.²¹⁰ In addition, there is no express or specific implied waiver of claim from the carrier in respect of damages caused by dangerous cargo.²¹¹ The author, therefore, is unable to accede to a suggestion that the carrier's conduct of carrying the dangerous cargo is necessarily to be taken as to consent to waive any claim in advance insofar as any compensation relating to dangerous cargo.²¹²

A second form of defence based on express consent is the exclusion of liability by contract, notice, etc. At common law, it is possible for liability in tort to be excluded by contract, notice or otherwise. In the term of contract, theoretically a shipper might persuade a carrier to waive, e.g. shipper's duty not to ship dangerous cargo, but the author suspects it is very unlikely as a matter of business practice.

Nonetheless a cargo owner's duty of warning can be discharged by notice. For instance a barge carries hazardous petrochemical mixtures which has permanent placards placed on the vessel's main deck and hold stating the hazardous nature of the cargo. A worker had read the notice and enters the hold without adequate breathing apparatus. Thus the cargo owner's duty of warning had been discharged and was not liable for the death of the worker caused by the fumes of the petrochemical mixture.²¹³

A point which must be appreciated is that notices may be drafted to perform a variety of different functions. Some will purport to exclude liability or to deny the existence of a duty of care. Others may merely warn of risks, in which case they will not provide a

²⁰⁹ Whether the "consent" from the carrier is effective, to a considerable extent, is depending on the nature of the risks involved in the carriage of dangerous cargo and the carrier's connection with the risks.

²¹⁰ Hence it is said the plaintiff must be *volens* and not merely *sciens* as to the risk: *Thomas v. Quartermaine* (1887) 18 QBD 685, 696 (Bowen LJ), *Nettleship v. Weston* [1971] 2 QB 691, 701.

²¹¹ The courts normally insist on finding an express waiver, based on an exclusion or limitation clause contained in a specific contract or notice, although it is possible for the consent defence to arise in a case of implied waiver of claim. See also *Markesinis and Deakin's Tort Law*, 6th ed., Clarendon Press, p. 906.

²¹² In *Dann v. Hamilton*, [1939] 1 KB 509, 516-517, Asquith J distinguished two situations: one is the defendant by his negligence creates a risk of physical danger which the plaintiff, in full knowledge of the risk, chooses to accept; the other is the plaintiff, by his words or conduct, is taken to consent to subsequent act of negligence. It is more difficult to establish "consent" in the second situation since it is less plausible that the plaintiff would have given his consent to negligence in advance of it occurring.

²¹³ *Martinez v. Dixie Carriers Inc.*, 529 F.2d 457 (5th Cir. 1976)

complete defence but may mean that the defendant's duty has been discharged, or if less effective, give grounds for a plea of contributory negligence.²¹⁴ That is to say, in the absence of an express exclusion of liability through contract or notice it is much more likely that the courts will use contributory negligence to apportion the loss.²¹⁵

However, in a commercial context the exclusion clauses have become more unusual since the passing of the Unfair Contract Terms Act 1977. The Act provides that a person cannot by reference to any contractual provision or to a notice (whether general or specific) exclude or restrict his liability for death or personal injuries resulting from negligence.²¹⁶ Even in respect of other forms of loss (such as property damage or pure economic loss), such exclusions will only take effect insofar as they are reasonable.²¹⁷ Furthermore, the Act reproduces in statutory form the principle that the awareness of the defendant that such a term or notice exists is not to be interpreted as a voluntary acceptance of any risk.²¹⁸ Also the Act only imposes these restraints in respect of business liability.²¹⁹

In the author's view, however, the exclusion of risks arising from the carriage of dangerous cargo will be regarded as unreasonable. As a result, it is unlikely to see any party to exclude their liabilities by contract or notice. Nonetheless, the ability to use exclusion clauses and notices can obviously produce unfair results. Certain statutory controls therefore exist in order to redress the balance between the parties. However, the controls are not comprehensive and, as a result the common law rules may still operate occasionally.²²⁰

3.1.6.3 Defences in Products Liability

Last but not least, there is one defence effectively peculiar to product liability. A seller

²¹⁴ Stanton, *The Modern Law of Tort*, (1994) Sweet & Maxwell, p. 115.

²¹⁵ See *Slater v. Clay Cross Co. Ltd.* [1956] 2 QB 264, 271 (Denning LJ); cf. *McGinlay v. British Railways Board* [1983] 1 WLR 1427. See also *Markesinis and Deakin's Tort Law*, 6th ed., Oxford Press, p. 912.

²¹⁶ Section 2(1) of the 1977 Act

²¹⁷ Section 2(2) of the 1977 Act

²¹⁸ Section 2(3) of the Act.

²¹⁹ Section 2(1). Under section 2(3), "business liability" is defined as liability arising from breaches of obligations arising from things done or to be done by a person in the course of business.

²²⁰ Stanton, *The Modern Law of Tort*, (1994) Sweet & Maxwell, p. 117.

or manufacturer of a product may avoid liability by giving a sufficient warning to alert the user of a foreseeable peril and enable him to avoid it. This principle is especially applicable to certain products, which, by their nature, cannot be made safe for their ordinary and intended use, and as such, the inherent nature of the product is unsafe. The adequacy of the warnings is tested on grounds of reasonableness in view of the danger created, and in this respect, the liability of the manufacturer or distributor may be said to rest on negligence.²²¹ There would appear to be no duty to warn a person who has actual knowledge of the danger.

For example, in the American case of *Martinez v. Dixie Carriers, Inc.*²²² a manufacturer was exonerated from liability for the death of a worker caused by the fumes of a petrochemical mixture that had been carried by a barge, because the hazardous nature of the cargo was stated on permanent placards placed on the vessel's main deck and on a warning card in the vessel's tube. The adequacy of these warnings was bolstered by a finding that the hazards associated with the chemical were within the crew's knowledge and professional expertise. In addition, the manufacturer's duty to give warning is limited; it must be given to persons whose injury is foreseeable.²²³ However, when warning is given only to some but not all of the dangers of a product, the requirement of adequate warning is not satisfied.

Where a manufacturer gives adequate warning to the injured party about the dangerous nature of the product prior to the accident, and provided there are no defects in design or manufacture, an action in strict products liability will not be held, because the manufacturer or seller will have discharged his duty to the public to provide a safe product.²²⁴ Where the product is particularly dangerous, the mere attachment of yellow hazardous material labels may be insufficient warning; the adequacy of the warning is dependant on the injured parties' knowledge of the hazardous product.²²⁵

²²¹ Schoenbaum, *Admiralty and Maritime Law*, 3rd Ed.(2001), ST. Paul, Minn., p. 131.

²²² 529 F.2d 457 (5th Cir. 1976)

²²³ Schoenbaum, op. cit., p. 132.

²²⁴ Tetley, op. cit. p472.

²²⁵ *Ionmar Comania Naviera, S.A. v. Central of Ga. R.Co.*, 471 F. Supp. 942, 1979 AMC 1747 (D. Ga. 1979) vacated and remanded, 666 F. 2d 897, 1982 AMC 1489 (11 Cir.1982).

3.2 Tort Liability in Chinese Law

The section dealing with Chinese tort law is brief, because Chinese maritime courts do not regularly admit claims on the basis of tort or contract, but prefer to rely on particular provisions of a statute law, such as the Maritime Code 1992.²²⁶

Chinese tort law was codified in the Civil Law²²⁷ effective January 1, 1987. Prior to its adoption, provisions on tort law could be found in customary law and various selected statutes, such as the Patent Law and — more significantly, in the context of this thesis—the Environment Protection Law. 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.

Under Chinese law, tortious actions are divided into two types. One is the general tortious action (fault-based tort liability); the other is the special tortious action (strict tort liability).²²⁸ Based on civil law theories and the General Principles of Civil Law,²²⁹ the five elements of a general tortious action are summarised as:²³⁰ (1) actual loss, injury, or damage; (2) a reasonable close causal connection between the offending conduct and the resulting injury; (3) breach of a statutory duty; (4) fault and (5) the liability of persons with capacity (either naturally or legally competent). A dangerous cargo claim may therefore be brought in tort if packing, labelling or carrying of dangerous cargo constitute fault and contributed to injury or damage.

²²⁶ Chapter VIII of the Maritime Code covers collision of ships which is relating to tort liability. For example, under Article 169 of Maritime Code, “If the colliding ships are all in fault, each ship shall be liable in proportion to the extent of its fault; if the respective faults are equal in proportion or it is impossible to determine the extent of the proportion of the respective faults, the liability of the colliding ships shall be apportioned equally”. In addition Article 273 in Chapter XIV provides choice of law rule in relation to collision. Under Article 273 (1), the law of the place of tort is generally applicable to claims arising out of collisions except for two situations.²²⁶ One is when collisions occur on the high sea, in which case, the law of the forum is applicable (Article 273 (2)). The other is when the vessels involved in the collision belong to the same country, in which case, the law of ship’s flag shall apply (Article 273 (3)). We will not discuss Article 273 in details in this section.

²²⁷ General Principles of The Civil Law of People’s Republic of China, adopted by the sixth National People’s Congress on 12 April 1986 and came into force on 1 January 1987.

²²⁸ Article 106 of the Civil Law

²²⁹ Article 106

²³⁰ Zhang Junhao (editor), *Civil Law Principles* (in Chinese), 3rd ed., 2000, China University of Political Science and Law Publishing, p. 908

Most commonly, the dangerous cargo liability is involving someone's fault. For example, in order to avoid any carrying/ handling surcharges and other important/ export tariffs, the shipper purposely does not declare dangerous cargo. Or if the incompetent crew handling dangerous cargo on board, contributing to stowage and segregation of dangerous goods are failing to satisfy IMDG standards. Or lack of IMDG knowledge leading to deficient labelling, marking and placarding of freight containers. Consequently, if dangerous cargo incidents result in damage to cargoes on the same vessel or personal injury to a third party, the claimant will be able to sue in tort in respect of "someone's fault". In contrast to English law, there is no such thing as "the tort of negligence" in Chinese Law.

In China, the special tortious actions defined and affirmed by law are all based on strict liability. They are covered by eleven Articles of the General Principles of Civil Law,²³¹ e.g. motor vehicle accident liability, environmental pollution liability, product liability, liability for ultra-hazardous activity, liability for damage caused by animals, or by objects.

3.2.1 Tort Liability under the Civil Law 1986

In 1986 the 6th National People's Congress enacted the General Principles of Civil Law of the People's Republic of China (hereafter Civil Law). It contains 156 articles and the objective is to protect the lawful civil rights and interest of citizens, legal entities, and to regulate civil relations.²³²

Article 106 of the Civil Law identifies two types of tort liability, one based on fault and the other on strict liability. Paragraph two provides: "Citizens and legal persons who through their fault encroach upon state or collective property or the property or person of other people shall bear civil liability". Although this provision does not distinguish between intentional and negligent conduct, it does emphasize the concept of fault. The Civil Law does not, however, define fault. Therefore we must look to Chinese

²³¹ Articles 43, 121-127, 130, 132, 133

²³² Article 1.

jurisprudence to fill in this gap. Traditionally, fault has been defined by reference to a person's state of mind²³³ and generally includes both intentional and negligent behaviour.²³⁴ Practically, breach of statutory obligations and failure to act in accordance with an accepted industry practice or profession can be considered negligent.

Paragraph three of Article 106 contains the provisions on strict liability: "Civil liability shall still be borne even in the absence of fault, if the law so stipulates." There are at least seven Articles in the Civil Law that trigger strict liability.²³⁵ The Law does not clearly indicate all the circumstances under which the principles of strict liability apply, however, liability without fault is imposed, for example, on those who engage in extra hazardous activities,²³⁶ those who violate environmental protection legislation,²³⁷ and those who furnish substandard products.²³⁸ The Civil Law contains no definition of substandard product, although presumably one would have to show a defect, injury, and a causal connection in order to establish strict liability.

The Civil Law addresses the joint liability of tort-feasors.²³⁹ If an infringement of an individual's rights occurs as a result of the actions of more than one person, joint liability is imposed.²⁴⁰ If a person without capacity or with a limited capacity causes the injury, his or her guardian is legally responsible. This civil liability may be reduced, however, if the guardian has done his or her duty under the guardianship.

As regards contributory negligence, Chinese tort law, like English law, adopts comparative negligence principles.²⁴¹ Article 131 states: "If a victim is also at fault for causing the damage, the civil liability of the infringer may be reduced." The reduction of liability in this manner is a characteristic feature of comparative negligence. For

²³³ He is able to and should foresee the danger of his action to other persons. See Zhang Junhao (editor), *Civil Law Principles* (in Chinese), (2000: 3rd ed.), China University of Political Science and Law Press, p. 914.

²³⁴ *Ibid.*, pp. 914-916.

²³⁵ Articles 122-127, 133

²³⁶ Article 123

²³⁷ Article 124

²³⁸ Article 122

²³⁹ Folsom, R. H. and Minan, J. H. (editors), *Law in the People's Republic of China: Commentary, Readings, and Materials*, (1989) Kluwer Academic Publishers, Dordrecht—Printed in the Netherlands, pp. 853-855

²⁴⁰ Article 130

²⁴¹ Ni Xuewei, *Legal Relationship in Maritime Transportation of Hazardous Goods* (in Chinese), *Annual of China Maritime Law*, Vol. 15 (2005) pp. 258-274, at 273.

example, during the shipment of dangerous cargoes, if the shipper is responsible for the improper packing and labelling and the carrier breaches his duty of care of cargo, in this situation, risks divided between shipper and carrier based on their fault. That is to say, the comparative negligence principle is used for apportionment of liabilities here.

Generally, the Civil Law does not contain a separate chapter that deals with tort law. Rather, tort law principles are generally interspersed throughout the Civil Law and sometimes it combines contractual liability and tortious liability in one chapter. But there is one exception is Section 3 of Chapter VI²⁴² which particularly dealing with tortious liability. Section 3: Civil Liability for Infringement of Rights.²⁴³

Considering tortious liability from the carriage of dangerous cargoes, under section 3, there are three articles which are relevant: Article 122 on product liability;²⁴⁴ Article 123 on liability for ultra-hazardous activity;²⁴⁵ and Article 124 on environmental pollution liability.²⁴⁶ All of these are based on strict liability, although the provisions of laws are not very specific, particularly those on product quality and environmental protection.²⁴⁷ Article 123 particularly relates to dangerous cargo liability, where the defendant's operations involving combustibles, explosives, highly toxic or radioactive substances or high-speed means of transport will be regarded as ultra-hazardous activity, he will be strictly liable for the damage. However, if it can be proven that the damage was deliberately caused by the victim, the defendant shall not be liable. An interesting

²⁴² Chapter VI is entitled Civil Liability, including four sections, section 1: General Stipulations; section 2: Civil Liability for Breach of Contract; section 4: Methods of Bearing Civil Liability

²⁴³ Another translation of the section 3 is "tort liability"

²⁴⁴ Article 122: If a substandard product causes property damage or physical injury to others, the manufacturer or seller shall bear civil liability according to law. If the transporter or storekeeper is responsible for the matter, the manufacturer or seller shall have the right to demand compensation for its losses.

²⁴⁵ Article 123: If any person causes damage to other people by engaging in operations that are greatly hazardous to the surroundings, such as operations conducted high aboveground, or those involving high pressure, high voltage, combustibles, explosives, highly toxic or radioactive substances or high-speed means of transport, he shall bear civil liability; however, if it can be proven that the damage was deliberately caused by the victim, he shall not bear civil liability.

²⁴⁶ Article 124: Any person who pollutes the environment and causes damage to others in violation of state provisions for environmental protection and the prevention of pollution shall bear civil liability in accordance with the law.

²⁴⁷ For example, the draft Civil Code 2002 expands the 1986 version's thirty four articles to the current sixty eight articles which state the basic principles of tort liability. The draft is divided into chapters on general provisions, compensation for harm, defenses, motor vehicle accident liability, environmental pollution liability, product liability, liability for ultra-hazardous activity and etc. See Conk George W., "People's Republic of China Civil Code: Tort Liability Law". Private Law Review, Vol. 5, No. 2 (The 10th Issue), pp. 77-111, December 2005 Available at SSRN: <http://ssrn.com/abstract=892432>

question arises: should the strict liability rule under Article 123 be applicable to shipowners who carry ultra hazardous cargoes by sea?

Although there have been no reported cases in respect of marine transportation under Article 123, as the author understands, it is likely for Chinese Maritime Courts to interpret the words of “defendant’s operations” with a broader meaning and include shipowner’s carriage of ultra-dangerous cargoes by sea. Particularly, if the cargoes are “combustibles, explosives, highly toxic or radioactive substances”, surely the shipowner’s operations (e.g. carrying cargoes in heavy seas) will be regarded as “ultra-hazardous activities”. Furthermore, the author suggests that Article 123 should be restricted to the situation where the shipowner is aware of dangerous cargo on board, because without knowing such a danger is on his ship (e.g. undisclosed dangerous cargo), it would be unfair for the shipowner to have strict liability for any damage caused by dangerous cargoes. This issue need be clarified by Chinese legislators in the draft Civil Code.

Compared with English law (e.g. the rule of strict liability in *Rylands*), we can see there are significant difference as to “ultra-hazardous activities”. In England, the Law Commission has rejected the approach to extend the strict liability rule in *Rylands* to ultra-hazardous activities.²⁴⁸ In China, it is possible for the shipowner to be held strictly liable for carrying ultra-dangerous cargoes under Article 123, but there are no other specific provisions on the application of strict liability to “ultra-hazardous activities”. Accordingly, Article 123 is far too general and need to be clarified.

With regards to environmental protection, pollution liability is a tort of strict liability²⁴⁹ and it does not necessarily involve someone’s fault. However, if someone has fault in a case of pollution caused by oil leaking or escaping, the party engaged in loading and unloading of oil will be held liable for the pollution caused by his negligence. In *The Water Supply Company of Guangzhou v. Yuexin Shipping Service Company Ltd of*

²⁴⁸ For details see section 3.1.3

²⁴⁹ The draft Code has big improvement on environmental liability, and it is clearly stipulated as a strict liability. See the discussion on the specific provisions of strict liability in the draft Code in the following section.

Zhaoqing Municipality,²⁵⁰ the plaintiff was responsible for supplying domestic water to the Municipality of Guangzhou. The defendant was using the Navy Pier without approval from the relevant authority to supply fuel to the Steel Plant of Guangzhou in 1997. A large quantity of heavy oil escaped from the hose and spilled into the water. The defendant's employee took no measures to deal with the pollution or reported the incident. As a result the escaped oil fouled the plaintiff's water pipes and immobilised its operations for 4 days.

The Maritime Court of Guangzhou and the Provincial Supreme Court on appeal held the defendant liable under Article 26 of the MEPL1982,²⁵¹ Article 41 (1) of the Law on Prevention and Control of Water Pollution, Articles 124 and 131 of the General Principles of Civil Law 1986,²⁵² though subject to a 20 per cent deduction for contributory negligence of the plaintiff for failing to install devices to prevent oil from leaking into its pipes.

3.2.2 Draft Civil Code as it Affects Dangerous Cargo

With the rapid development of the Chinese economy within the last two decades, the Civil Law 1986, is now outdated and needs to be clarified, simplified, and improved. China restarted the civil codification process in 1998, producing the first draft civil code on 17 December 2002.²⁵³

²⁵⁰ The first instance before Guangzhou Maritime Court, (1997) Guangzhou-maritime-No.63-3; on appeal before Guangdong People's High Court, (1998) Commercial Court- No. 15. The case was reported in Vol 37 (1998, No.3), *Maritime Trial* (in Chinese), pp.45-49. The case is not directly related to the maritime law, but the maritime court in China has jurisdiction to deal with such disputes. This is one of the few reported cases in China where a private party has sued another private party for the marine pollution caused by discharging of oil. In Chinese legal system, most of the stipulations in domestic laws are principled outlines or administrative in nature without providing a sufficient guidance in trials of civil cases in respect of oil pollution damage. Accordingly, most cases will be settled through negotiation or mediation with the help from competent authority based on relevant administrative rules. It is expected a new regulation will be implemented in 2010/ 2011 with the title of "China's Prevention and Control of Marine Pollution from Ships Regulation". Hopefully, with some specific stipulations covering the issue of civil liability and compensation in oil pollution, more cases relating to oil pollution damages will be solved in trials based on this new regulation. However, by the time of writing this thesis, the detailed requirements under the new Regulation have yet to be revealed.

²⁵¹ Article 26: "No vessel shall discharge oils, oily mixtures, wastes and other harmful substances into the sea areas under the jurisdiction of the People's Republic of China in violation of the provisions of this Law". See the discussion of MEPL in section 3.2.4

²⁵² Article 124 of the Civil Law: "Any person who pollutes the environment and causes damage to others in violation of state provisions for environmental protection and the prevention of pollution shall bear civil liability in accordance with the law". Article 131 of the Civil Law: "a victim is also at fault for causing the damage, the civil liability of the infringer may be reduced".

²⁵³ It was provided by the Legislative Affairs Commission (LAC) of the National People's Congress, which is the legislative office in charge of drafting a comprehensive new civil code for China. The draft code affirms, modifies, and elaborates existing rules based on experience since the last promulgation. After some internal debate, the

In the last twenty years, with the exception of the General Principles of Civil Law, China has formulated separate laws on contracts, hypothecation, copyright, trademark, patent, marriage, adoption and inheritance. Some of these²⁵⁴ were incorporated into the draft civil code with no change. According to the draft, victims whose civil rights were violated are entitled to seek moral compensation.

With regard to tort liability law, under Part VIII of the draft Code,²⁵⁵ it expands the 1986 version's thirty four articles to the current sixty eight articles which state the basic principles of tort liability. The draft is divided into chapters on general provisions, compensation for harm, defences, motor vehicle accident liability, environmental pollution liability, product liability, liability for ultra-hazardous activity and liability for damage caused by animals or facilities etc. The draft Code provides broad guidance but deference is afforded to the more specific provisions of laws such as those on product quality and environmental protection.

In addition, a separate Chapter VII of Part VIII is covering “Liability for Ultra-hazardous Activity” including 12 articles. Special attention will be given to Articles 45-47, 49 and 50 which are particularly relating to dangerous cargo liability.

Under Art 46,²⁵⁶ as the author understands, there are two liabilities: (1) the cargo owner’s (and relevant persons’) liability; (2) the carrier’s liability. Regards to the former, if the injury or damage is caused due to the highly dangerous nature of the products while in transport, the manufacturer, owner, possessor, or manager shall bear joint tort

government decided to follow a step-by-step legislative process, in which laws are researched, revised, and ratified individually, rather than attempting to legislate all areas of the civil code at the same time. LAC has set a goal of finishing the entire civil code by 2010.

²⁵⁴ For example, the existing laws on contract, marriage, adoption and inheritance were all incorporated into the draft Code with no change.

²⁵⁵ See the text of the draft Code (both in Chinese and English) at Conk George W., *People's Republic of China Civil Code: Tort Liability Law*. Private Law Review, Vol. 5, No. 2 (The 10th Issue), 2005, Peking University Press, pp. 77-111. Available at SSRN: <http://ssrn.com/abstract=892432>

²⁵⁶ Article 46: “Among owner, possessor, or manager transporting combustibles, explosives, poisons, radioactive material and other things of highly dangerous nature, if due to the matter’s dangerous nature damage is caused to another, the owner, possessor, or manager shall bear joint tort liability. On the basis of principles in the law of contract regarding the bearing risk, any party who actually satisfied the liability, may recover compensation from other parties. If an ultra hazardous material, due to its dangerous character, cause damage while in transport, a transporter who cannot show himself to be without fault in the occurrence of the injury shall bear joint tort liability.”

liability, and they are strict liable, pure and simple. The only defence is they can prove the injury is due to the victim's intentional act or *force majeure*.²⁵⁷ Regards to the latter, e.g. transporter (carrier), his liability is based on fault, thus he can exonerate himself by showing that he wasn't at fault in the occurrence of the damage.²⁵⁸

If unused dangerous products (e.g. never used & not being used at the moment of incident) caused damage while in storage, the owner and any warehouseman/ bailee, shall each bear joint liability (see Art 47).²⁵⁹ In the author's view, this liability is strict as well.

Under Art 49,²⁶⁰ if a third party's fault results in damages from dangerous materials, the innocent operator of dangerous cargo is entitled to recoup the costs from the third party after paying compensation. For example, if ship A carried dangerous cargoes on board and then collided with ship B due to the fault of ship C, resulting in serious damage to ship B, since A and B were both innocent, ship B, after paying compensation, had the right of indemnification from third party ship C.

In the situation of the irresponsible dumping of hazardous materials, liability is covered by Art 50. It states: "if abandoned or lost ultra dangerous material due to its hazardous nature causes injury to another, the owner or the one who abandoned it bears tort liability". Suppose dangerous cargo dumped by the carrier without good reason and causes damages, personal injury or pollution, the cargo owner or the carrier shall be held liable under the draft Code.

²⁵⁷ Article 45: "If manufacturing, processing, use or employment of combustible explosive, toxic, radioactive things of great danger, which because of their hazardous character cause injury to another, the owner, possessor, or manager shall bear tort liability; but if that owner, possessor, or manager can prove/show the injury is due to the victim's intentional act or to *force majeure*, he shall not bear tort liability.

²⁵⁸ See Article 46.

²⁵⁹ Article 47: "When not in use, but while in possession of combustibles, explosive, toxic, radioactive, etc. highly dangerous materials, that dangerous character does harm to another the material's owner shall bear tort liability. When not in use, but another stores combustibles, explosives, toxics, radioactive and other such highly dangerous matter, which because of its dangerous character cause damage, the warehouseman/ bailee and other owner shall bear the joint liability. If different owners store highly dangerous materials at the same place, which, because of their dangerous character cause injury to another, and one cannot show that the damage is not due to his own product, the warehouseman/ bailee and the owner shall each bear joint liability."

²⁶⁰ Article 49: "In case a third party's fault results in an ultra hazardous materials use/employment causing injury to another, the ultra hazardous material operator, after paying compensation, has the right of indemnification from the third party."

As we can see, in contrast to the 1986 codification, the draft Code has dramatically improved including substantial changes with specific provisions in those areas affecting cargo such as product liability. Moreover, the draft Code emphasizes the protection of environment, which is particularly important in respect of the carriage of dangerous cargo by sea.

3.2.3 Tort Liability under the Maritime Code 1992

There is no separate chapter on tort liability under Maritime Code, but Chapter VIII²⁶¹ cover collisions of ships as regards fault-based liability in tort. This chapter derives from the 1910 Collision Convention, like the English s.187 Merchant Shipping Act 1995.

Art 169(1) of Maritime Code provides “if the colliding ships are all in fault, each ship shall be liable in proportion to the extent of its fault; if the respective faults are equal in proportion or it is impossible to determine the extent of the proportion of the respective faults, the liability of the colliding ships shall be apportioned equally”.

As to the extent of liability, Art 169 (2) states that, the ships in fault shall be liable for the damage to the ship, the goods and other property on board pursuant to the proportions prescribed in the preceding paragraph. Where damage is caused to the property of a third party (e.g. cargo on the damaged vessel), the liability for compensation of any of the colliding ships shall not exceed the proportion it shall bear. It should be noted that the proportionate recovery for cargo on a colliding ship is same as that under the U.K., e.g. Merchant Shipping Act 1995, s. 187 (1); as well as all other states party to the Collision Convention 1910.²⁶² No doubt, Art 169 (2) is applicable to third party’s property damage, e.g. cargo on board.

Under Art 169 (3) the ships in fault shall be joint or severally liable to a third party if

²⁶¹ Articles 165-170.

²⁶² See Collision Convention 1910, Art 4, para.2. See also U. Drobnig & K. Zweigert, *International Encyclopedia of Comparative Law*, (37th ed. 2001), 4-11 p. 74

they have caused loss of life or personal injury to the third party.²⁶³ In addition, if a ship has paid an amount of compensation in excess of the proportion prescribed in paragraph 1 of this Article, it shall have the right of recourse against the other ship(s) in fault.

An interesting question arises: does Art 169 apply to a third party's pollution damage caused by both-to-blame collision? For example, when ship A (70% fault) collided with ship B (30% fault), dangerous chemicals leaked from ship A and polluted third party C's fishing pond (e.g. fish died or devalued by pollution and C' costs on cleaning up).

As we know,²⁶⁴ the environmental liability (for pollution damage) is strict (e.g. Art 124 of the Civil Law 1986),²⁶⁵ but Art 169 of Maritime Code is applicable to fault-based liability. In the author's opinion, if we choose a broader meaning for the third party's "property damage" under Art 169 (2) e.g. including those property (at harbour) damaged by collision. The "pollution damage" is still out of the scope of Art 169 (2). Therefore, Art 169 (2) is not applicable to C's environmental pollution damage.²⁶⁶

Instead, the Marine Environmental Protection Law 1999 (hereafter MEPL),²⁶⁷ specifically Arts 90-92 are referring to environmental pollution. Under Art 90 of MEPL, "whoever causes pollution damage to the marine environment shall remove the pollution and compensate the losses".²⁶⁸ Accordingly, it is the polluter who has strict liability. Since chemicals leaked from ship A, so ship A should be liable for the pollution damage to C. That means ship A takes the primary responsibility and compensates C's damage. Then he has a right of recourse from B to the proportion of loss represented by B's fault with regard to both-to-blame collision (e.g. A-70% and B-30%).

²⁶³ With regards to damage to the ship caused by a combination of collision and un-notified dangerous cargo in English law, see the discussion in section 6.1.3.1

²⁶⁴ See discussion in section 3.2.2

²⁶⁵ Article 124 of the Civil Law 1986: "Any person who pollutes the environment and causes damage to others in violation of state provisions for environmental protection and the prevention of pollution shall bear civil liability in accordance with the law". Thus the environmental damage is not relating to fault, but based on strict liability.

²⁶⁶ For example, the oil pollution caused by collision is out of the account of Article 169 of the Maritime Code, see Xu Zengcang, *Law application in the compensation of oil pollution caused by both-to-blame collision* (in Chinese), (2003) Maritime Law Review, Vol. 9, p. 234. See also Si Yuzhuo, *Maritime Law*, (2003), Law Press. China, p. 255

²⁶⁷ For details of MEPL 1999 see section 3.2.4

²⁶⁸ In addition, under Article 90, "in case of pollution damage to the marine environment resulting entirely from the intentional act or fault of a third party, that third party shall remove the pollution and be liable for the compensation". See full text of MEPL at <http://www.asianlii.org/cn/legis/cen/laws/meplotproc607/> (accessed on 29/07/2009)

Considering third party's damage caused by collision, we can see the pollution damage is different from the property damage (e.g. cargo on the damaged vessel).²⁶⁹ Only third party's property damage can be covered by Art 169 (2) of the Maritime Code. That is to say, Art 169 limits the liability of a ship to the proportion of the loss represented by its fault at the collision. However, this provision does not cover the strict liabilities discussed in the Civil Law 1986 (or draft Code 2002), including environmental pollution liability.

3.2.4 The Marine Environmental Protection Law 1982 (revised in 1999)²⁷⁰

The legal framework for the protection of the marine environment in China is based on the Marine Environmental Protection Law of the PRC 1982 (hereafter MEPL),²⁷¹ and the regulations²⁷² made in pursuance of MEPL, and the relevant international conventions²⁷³ signed by China.²⁷⁴ Since China's economy has developed rapidly and continuously and the conflict between environment and development is becoming ever more prominent, MEPL 1982 was revised in 1999.²⁷⁵ MEPL 1999 contains 10 chapters

²⁶⁹ See Zhao Linyue and Si Yuzhuo, *Research on Some Issues Concerning the Trial of the Cases of the Third Party Property Damage caused by both-to-blame Collision*, (in Chinese), (2004) Maritime Law Review, Vol. 11, p. 96.

²⁷⁰ It was adopted at the 24th Session of the Standing Committee of the Fifth National People's Congress on August 23, 1982 and effective as of March 1, 1983, and revised at the 13th Session of the Standing Committee of the Ninth National People's Congress on December 25, 1999. It came into force on April 1, 2000. See the English translation of MEPL 1999 at <http://www.chinamining.org/Policies/2006-07-18/1153190362d5.html> (accessed 10-08-2010)

²⁷¹ MEPL 1982 was adopted at the 24th Session of the Standing Committee of the Fifth National People's Congress on August 23, 1982 and effective as of March 1, 1983, and revised at the 13th Session of the Standing Committee of the Ninth National People's Congress on December 25, 1999. It came into force on April 1, 2000. See the English translation of MEPL 1999 at <http://www.chinamining.org/Policies/2006-07-18/1153190362d5.html> (accessed 10-08-2010)

²⁷² For example, (1) the Administrative Rules for Preventing Marine Pollution Caused by Vessels, promulgated on 29 December 1983 and effective from the same day; (2) the Rules for Administering Marine Environmental Protection in the Oil Exploration and Exploitation at Seas, promulgated on 29 December 1983 and coming into force on the same day; (3) the Administrative Rules for Dumping of Wastes at Seas, promulgated on 6 March 1985 and coming into force on 1 April 1985; (4) the Administrative Rules for Controlling Environmental Pollution Caused by Vessel Disassembling, promulgated on 18 May 1988 and effective on 1 June 1988; (5) the Administrative Rules for Preventing and Controlling Marine Pollution Caused by Offshore and Coastal Engineering and Construction Projects, promulgated on 25 June 1990 and coming into force on 1 August 1990; (6) the Administrative Rules for Preventing and Controlling Marine Pollution Caused by Land-Based Pollutants, promulgated on 22 June 1990 and effective on 1 August 1990.

²⁷³ For details see Section 1.1.1

²⁷⁴ On the other hand, in order to implement the relevant international treaties and to avoid potential conflict between MEPL 1999 and the international treaties, the MEPL especially provides that, in case of any discrepancy between the MEPL and the provisions of international treaties ratified or acceded to by China, the provisions of such treaties should prevail, except for those provisions for which China has made reservations (Article 97 of the MEPL).

²⁷⁵ It was revised by the Standing Committee of the Ninth National People's Congress and came into force on April 1,

with 98 Articles.²⁷⁶ In comparison, the old MEPL has only 8 chapters with 48 Articles.

The MEPL applies to China's internal waters and territorial sea, and all other sea areas under the Chinese jurisdiction.²⁷⁷ While the wording "internal waters and the territorial sea" is clear, the term "other sea areas under Chinese jurisdiction" seems to refer to the sea areas beyond Chinese territorial sea but within China's potential exclusive economic zone (EEZ) and continental shelf before China declared its EEZ in 1996.

There are many clauses in the revised MEPL that are borrowed from or drafted in accordance with the international treaties to which China is a party. For example, Article 39 of MEPL, which prohibits the transfer of hazardous wastes in China's jurisdictional waters, reflects China's commitment to abide by the 1989 Basel Convention.²⁷⁸ Also the definition of "Pollution damage" in MEPL is largely based on the definition of "the pollution of the marine environment" under the LOS Convention,²⁷⁹ though with some different expressions, as following:²⁸⁰

Any direct or indirect introduction of substances or energy into the marine environment, which results in such deleterious effects as harm to marine living resources, hazards to human health, hindrance to fishing and other legitimate activities at sea, impairment of quality for use of sea water and degradation of the environmental quality.

MEPL provides three kinds of liabilities, i.e. administrative liability,²⁸¹ civil liability²⁸²

2000.

²⁷⁶ These articles are divided into ten chapters. Chapter 1 General Provisions; Chapter 2 Supervision and Administration of the Marine Environment; Chapter 3 Marine Ecological Conservation; Chapter 4 Prevention and Control of Pollution Damage to the Marine Environment by Land-based Pollutants; Chapter 5 Prevention and Control of Pollution Damage to the Marine Environment by Coastal Construction Projects; Chapter 6 Prevention and Control of Pollution Damage to the Marine Environment by Marine Construction Projects; Chapter 7 Prevention and Control of Pollution Damage to the Marine Environment by Dumping of Wastes; Chapter 8 Prevention and Control of Pollution Damage to the Marine Environment by Vessels and Their Related Operations; Chapter 9 Legal Liabilities; Chapter 10 Supplementary Provisions.

²⁷⁷ Article 2 of MEPL 1999.

²⁷⁸ China ratified the Basel Convention on 17 December 1991.

²⁷⁹ China ratified the Law of the Sea (LOS Convention) in 1996.

²⁸⁰ Article 95 (1)

²⁸¹ For example, the Harbor Superintendent has the right to order a law-breaker to remedy the damage caused and imposed a fine.

²⁸² For example, all violators will be held strictly liable for any damage incurred to the Chinese marine environment, except those caused by "act of war", "irresistible natural calamities" or "negligence or other wrongful act on the part of the departments responsible for the maintenance of beacons or other navigational aids in exercising their functions". Article 43 of MEPL.

and criminal liability.²⁸³ The main difference between the new MEPL and the old one is that the Chapter on liability has been greatly expanded from the original 4 clauses to 25 clauses, and accounts for over 22% of the total provisions of the MEPL 1999 (Arts. 73-94). It provides for strict liability and the “polluter-pays” principle with more detailed and precise stipulations than in the MEPL 1982:

1. More administrative punitive measures are added;
2. Punishment for damaging the marine ecosystem is strengthened;
3. Civil liability compensation for marine environmental damage is also strengthened.²⁸⁴

Considering carrier’s dealing with dangerous cargoes during the voyage, although dangerous goods may be landed, destroyed or made harmless by a carrier under Article 68 of the Maritime Code 1992, the carrier must ensure that the goods are dealt with without incurring penalties under Chapter 7 of MEPL 1999: Prevention and control of pollution damages to the marine environment by dumping of wastes.²⁸⁵

For example, waste can only be dumped at sea after the State competent authority has examined and approved an application to do so.²⁸⁶ Dumping of waste into the sea is controlled in accordance with the categories and quantities of the wastes. The list of permitted types of waste shall be worked out by the State competent authority.²⁸⁷ Any conditions annexed to a permit must be followed and a written report subsequently supplied to the relevant department.²⁸⁸ The incineration of waste at the sea is forbidden. Disposal of radioactive waste at sea is also forbidden.²⁸⁹

Prevention and control of vessel-source pollution are covered by Chapter 8 of MEPL

²⁸³ For example the environmental crimes, ranging from causing pollution accidents, illegal import of hazardous solid wastes, illegal catching of aquatic products, to illegal catching and selling of endangered wildlife, illegal mining and illegal logging. See Articles 41, 42 and 44 of MEPL 1982. See also Article 338-346 of Criminal Law of the PRC.

²⁸⁴ See Zhang Haoruo, “Explanation on the Revised Draft of the Marine Environmental Protection Law of the PRC”, *Gazette of the Standing Committee of the National People’s Congress of the People’s Republic of China* (in Chinese), 1999, No. 7, p. 677

²⁸⁵ Articles 55– 61

²⁸⁶ Article 55

²⁸⁷ Article 56

²⁸⁸ Articles 59, 60

²⁸⁹ Article 61

1999.²⁹⁰ Vessels must possess certificates and documents for the prevention of pollution to marine environment and make factual records in conducting pollutant discharging and other operations.²⁹¹ Vessels must be equipped with corresponding pollution prevention facilities and equipment.²⁹² Vessels shall comply with the provisions provided in the marine traffic law and regulations and prevent maritime accidents of collision, running on rocks, stranding, fire or explosion, etc.²⁹³

Considering liabilities arising out of the carriage of dangerous cargoes, under Article 67, vessels loaded with cargoes with pollution damage may enter or leave port or conduct loading and unloading operations only after obtaining approval from the competent authority. In loading and unloading oil, and other toxic and harmful cargoes, the parties concerned with the vessel and the port should comply with relevant operation rules and regulations of safety and pollution prevention. If shipping cargoes without distinct pollution danger, the assessment should be made in advance.²⁹⁴ Generally, failure of complying with Articles 67 and 68, give rise to penal liabilities (warnings, fines etc)²⁹⁵ and in very serious circumstances, they affect criminal liability.²⁹⁶ It is very clear that the legislation wants serious accidents with grave consequences to be punished through criminal sanctions.

In addition, if vessels are subjected to maritime incidents causing or being likely to result in major pollution damages to the marine environment, the State competent authority has powers to take compulsory measures to avoid or decrease pollution damage. If the maritime incidents occurred at the high sea resulting in consequences of

²⁹⁰ Articles 62 -72

²⁹¹ Article 63

²⁹² Article 64

²⁹³ Article 65

²⁹⁴ Article 68

²⁹⁵ Chapter 9: Legal liability, Articles 73-94. For example, under Article79, “those who, in violation of the provisions of Paragraph 2 of Article39 of this law, transfers dangerous wastes through the sea areas under the jurisdiction of the People’s Republic of China, shall be ordered to have the vessel illegally transporting dangerous wastes withdrawn and sailed outside the sea areas under the jurisdiction of the People’s Republic of China, and fined not less than RMB50,000 yuan and no more than RMB500,000 yuan by the State competent authority being in charge of maritime affaires.”

²⁹⁶ Article 91: “Those who cause serious consequences of heavy losses of public and private property or human injuries and deaths of persons by major marine environment pollution accident, shall be investigated and imposed upon criminal responsibility by law”. Article 94: “Any person in charge of marine environment supervision and administration who abuses his power, neglects his duty or engaged in malpractice for personal gains to result in pollution damage to the marine environment, shall be given administrative penalties by law. If the circumstance constitutes a crime, he shall be investigated and affixed for criminal responsibility by law.”

major pollution damage or threat to the sea areas under the China's jurisdiction, the State competent authority shall have the power to take corresponding measures necessary for pollution damages which have caused or are likely to cause.²⁹⁷ As we can see the nature of public law is always shown in this law in relation to environmental liability.

Besides administrative measures taken by a range of different authorities under the MEPL, civil liability is not excluded, but the law itself makes a general statement under Article 90: Persons polluting the marine environment must repair the damage and compensate for losses incurred.²⁹⁸ If pollution damage is caused entirely by the intentional act or fault of a third party, third party should be liable for the compensation. Furthermore, it is interesting to note that even the administration is encouraged to claim civil compensation from the polluter for certain damages suffered by the State (Art. 90 para.2).

Article 90 of MEPL is stipulated in accordance with Article 124 of the General Principles of Civil Law (GPCL).²⁹⁹ Article 124 provides that "any person who pollutes the environment and causes damage to others in violation of state provisions for environmental protection and the prevention of pollution shall bear civil liability in accordance with the law." Article 124 is regarded as the legal basis of strict liability applicable to environmental torts under the basic law of GPCL. Indeed, both articles identify the civil liability for pollution damage and they are the principal sources for civil liability in pollution damage cases. Article 90 is regarded as more specific than Article 124, thus it is often referenced by Chinese judges as a legal basis in trials of civil cases involving pollution damage.

²⁹⁷ Article 71

²⁹⁸ Article 90: "Those who cause pollution damage to the marine environment shall eliminate the damage and compensate the losses; in case of pollution damage to the marine environment resulting entirely from the intentional act or fault of a third party, third party shall eliminate the damage and be liable for the compensation. If the State suffers heavy losses from the damages 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 damages".

²⁹⁹ Article 124 of the GPCL provides that "any person who pollutes the environment and causes damage to others in violation of state provisions for environmental protection and the prevention of pollution shall bear civil liability in accordance with the law."

In the author's view, both Articles are far too general in nature and need to be clarified. Also the words of Article 90 need to be rephrased. For example, regarding the second part of the first sentence, there is a conflict of Article 90 with the basic rule of polluter's strict liability for pollution damage under MEPL and GPCL, because the polluter can be exempted from strict liability due to the "fault" of third party under this Article. The wording of exemption from liability should be rephrased. One suggestion is: Chinese legislators could borrow the words from Article III 2 (b) of CLC 1992, which is much better phrased. It provides: "No liability for pollution damage shall attach to the owner if he proves that the damage was wholly caused by an act or omission done with the intent to cause damage by a third party". In China, the strict liability for pollution damage has been established under Article 42 of 1982 MEPL³⁰⁰ and Article 106 (3)³⁰¹ of GPCL. Exemption from the strict liability is covered by Article 92 of MEPL 1999³⁰² which is similar to Article III 2 (a), (c) of CLC 1992.³⁰³

No doubt, Article 90 needs to be clarified, rephrased and interpreted by Chinese legislators. At present, it can only be used as principled outlines without providing a sufficient guidance in trials. While the application of international conventions (e.g. CLC 1992) is restricted in certain aspects (only apply to cases involving international elements in mainland China), the handling of case relating to the liability and compensation for pollution damage is still lacking a sound legal basis in China.

The author must admit that China's legislation regarding the determination of liability for pollution damage (private law) is quite deficient, and the prevention of pollution and

³⁰⁰ Article 42 of the MEPL 1982 provides that "units or individuals who have suffered damage caused by marine environmental pollution shall be entitled to claim compensation from the party who caused the pollution damage..." Although this particular Article was not copied into MEPL 1999, but there is no doubt that the civil liability stipulated under Article 90 of MEPL 1999 is interpreted as "strict liability" in trials.

³⁰¹ Article 106 (3) of the GPCL clearly provides a strict liability by stipulating "civil liability shall still be borne even in the absence of fault, if the law so stipulates."

³⁰² Article 92 of MEPL 1999 provides "Those who causes pollution damage may be exempted from the liability if the pollution damage to the marine environment by any of the following circumstances can not be avoided, despite of prompt and reasonable measures taken: (1) War; (2) Natural calamities of force majeure; (3) Negligence of other wrongful acts in the exercise of functions of competent authorities responsible for the maintenance of light-towers or other navigational aids".

³⁰³ Article III 2 of CLC 1992 provides: "No liability for pollution damage shall attach to the owner if he proves that the damage: (a) resulted from an act of war, hostilities, civil war, insurrection or a natural phenomenon of an exceptional, inevitable and irresistible character, or (b) was wholly caused by an act or omission done with the intent to cause damage by a third party, or (c) 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.

environmental protection is mainly based on public law. Accordingly, it is difficult to find a sound legal basis to decide an individual case involving pollution damage. Chinese legislators are expected to make some updated and specified domestic legislation (regulations and rules) in pursuance of GPCL and MEPL in this area.

3.2.5 Strict Product Liability under the Product Quality Law (PQL) 1993

Strict product liability is set out in the PRC Product Quality Law ("PQL")³⁰⁴ and is strict in the sense that liability is determined without consideration of fault.³⁰⁵ Under Article 41 of the PQL, a producer shall be liable for personal injury or property damage caused by a defect³⁰⁶ in its product³⁰⁷ if three elements are proved: (1) a defect in the product; (2) injury to a person, or damage to property other than the defective product; and (3) causation between the defect and injury or damage.

The strict liability is not applicable to sellers of defective products unless the seller fails to identify the producer.³⁰⁸ Otherwise, a seller will only be liable for injury or damage caused by a defective product if his fault contributed to the defect. This is same as that under English law, such as Article 3(3) of the 1985 Directive (85/374/EEC) and the Consumer Protection Act 1987, s. 2(3).

Failure to warn may constitute negligence and give the injured party a claim in tort. Article 27 provides that products whose improper use is likely to cause the products themselves to be damaged or to endanger personal safety and/or the safety of property should carry a warning mark or a warning in Chinese. It is a statutory obligation for the

³⁰⁴ The PRC Product Liability Law was adopted at the 30th Session of the Standing Committee of the seventh National People's Congress on February 22 1993 and effective as of September 1, 1993, and revised at the 16th Session of the Standing Committee of the Ninth National People's Congress on July 8, 2000.

³⁰⁵ Except for strict product liability, product liability in China can be based on another two grounds: (1) fault-based tort liability under the general rule of tort in the Civil Law 1986; (2) contractual liability. See details at http://www.iclg.co.uk/index.php?area=4&country_results=1&kh_publications_id=58&chapters_id=1500; See also Zimmerman, James M., *Chinese Law Deskbook: A Legal Guide for Foreign-Invested Enterprises*, (2005) 2nd ed., Chicago, Ill.: ABA Section of International Law.

³⁰⁶ Under Article 46, "defect" is defined as an unreasonable danger existing in the product that threatens the safety of a person or property, or a product's non-conformity with applicable State or industry health and safety standards.

³⁰⁷ Under Article 2, "products" are defined as products available for sale following processing or manufacture. Primary agricultural products do not therefore fall within the definition.

³⁰⁸ Article 42 of the PQL

producer to warn against improper use. The content of the warning depends on how the product is expected to be used. If both end user and intermediary have a chance to use the product, the producer has the obligation to warn both the end users and the intermediary.³⁰⁹ As the author understands, other persons involved in the assistance of transportation or storage of products (e.g. stevedores, carrier, longshoremen and warehousemen) have the same protection as the user under the PQL.³¹⁰

Article 43 provides that a manufacturer and a seller are both liable when a product with an inherent defect causes personal injury or damage to property. If the claimant could not establish which of several possible producers manufactured the defective product, the legal position is that the producers should be jointly and severally liable to the injured party unless they are able to prove the injury is not attributed to them.³¹¹ This means that the claimant may claim full compensation from any one of them. The person who has paid compensation shall have the right of recourse against the other person(s) in fault.³¹² Suppose the manufacturer had produced defective chemicals. After leaving the loading port, in heavy weather, the defective chemicals exploded. The claimant carrier's vessel was seriously damaged. He had a choice to sue either manufacturer or seller. Both of them shall be jointly liable for the damage concerned.

Under the strict product liability regime, recoverable damages include personal injury, and damage to property,³¹³ and also a liability for death.³¹⁴ It should be noted the damage to property under PQL subject to all property, including "commercial property" and this is a significant difference from English law in which commercial entities cannot sue at all (s. 5(3) of Consumer Protection Act 1987).³¹⁵ Nonetheless, the damage to the product itself is not recoverable in either Chinese or English law.

³⁰⁹ There is no principle of "learned intermediary" in Chinese law

³¹⁰ See Articles 41-44, the claimants are not limited to the user.

³¹¹ Article 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.

³¹² Article 43.

³¹³ Article 44.

³¹⁴ Under Art 44: "In the case of death, the tortfeasor is also liable for the annuity for those persons to whom the injured party owed a duty of maintenance".

³¹⁵ See discussions in section 4.2.2.2.

3.2.6 Defences to Liability

Both the Civil Law and the Draft Code provide similar defences from liability. Art 107 of the Civil Law excuses citizens and legal persons from liability when the damage to a party is caused by *force majeure*.³¹⁶ Also, Art 167 of Maritime Code states “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”.

Suppose with undisclosed dangerous cargos on board, the carrying vessel collided with another vessel as a result of the heavy weather. Both vessels sunk with total loss. If the collision was not attributable to the fault of any shipowner, and in any event it was unrelated to the dangerous cargo, accordingly the shipper should not be liable to the other shipowner’s damage. However, with regard to the carrying vessel’s damage, the shipper has strict contractual liability³¹⁷ due to his failure to disclose dangerous cargos.

In addition, “emergency action” may become a defence to liability. Article 129 of the Civil Law provides³¹⁸ “in the case of danger arising from natural causes, one who takes emergency action to avoid or reduce the harm bears no tort liability or may bear appropriate tort liability.” However, if the emergency action is inappropriate or exceed the limits of necessity causing unwanted damage, the emergency actor shall bear appropriate tort liability. Under Article 131 of the Civil Law,³¹⁹ the tort liability of the tortfeasor may be reduced, when the victim is also at fault for the occurrence of the damage. However, if the emergency was created by the defendant’s own negligence, in the author’s view, he can not benefit from this defence.

Whether the emergency action is appropriate (or unnecessary) will depend on the fact of the case. For instance, if a shipper’s dangerous cargo caused a fire in harbour and some

³¹⁶ Force majeure is defined as an unforeseeable, unavoidable and unsurmountable objective conditions. For example, under Article 45 of Chapter VII of Part VIII (Draft Code): “If manufacturing, processing, use, or employment of combustible explosive, toxic, radioactive things of great danger, which because of their hazardous character cause injury to another, the owner, possessor, or manager shall bear tort liability; but if that owner, possessor, or manager can prove/show the injury is due to the victim’s intentional act or to *force majeure*, he shall not bear tort liability.”

³¹⁷ See Article 68 of Maritime Code, Art IV r6 of HR/HVR. For details see section 4.2.2.2

³¹⁸ It is Article 22 of Chapter III Defences in Part VIII of the Draft Code

³¹⁹ Same words in Article 24 of Chapter III Defences in Part VIII of the Draft Code.

longshoremen started fire fighting with CO₂, however after putting out the fire, they used more CO₂ on other containers (owned by the same shipper) and these containers were obviously safe. As a result, the cargoes inside were contaminated by the enormous amount of CO₂. Accordingly, longshoremen are responsible for the undue damage.

Practically, when a dangerous cargo claim is in tort, the defendant has the following defences (1) the damage or injury is due to the victim's intentional act or to *force majeure*; (2) the defendant has no fault in the occurrence of the damage; (3) the claimant or a third party contributed to the claimant's injury or damage. As we can see, the actual results of defences under Chinese tort law are similar to that under English tort law, although they are expressed in different ways.

3.3 Analysis and Comparison

Tort law has played a growing role between private individuals in China. However it is very rare to see maritime claims based on tort liability,³²⁰ due to the fact that Chinese maritime courts do not regularly admit claims on the basis of tort or contract, but prefer to rely on particular provisions of a statute law.

After China changed to a market-oriented system, efforts to modernise Chinese law accelerated. The General Principles of the Civil Law has played an important role during the reform of Chinese society, but needs to be revised and updated.³²¹ The draft civil code is expected to fill in gaps in current civil legislation³²² and offers basic regulations on almost every activity that a corporation may take.³²³ It also offers guidelines in respect of the individual.³²⁴ Therefore, the Chinese civil law is still in the process of development.

On the one hand, the principles of tort law in China have a lot in common with English

³²⁰ For example, cases involving collisions are related to negligence of tort, but the courts prefer relying on Article 273 of the Maritime Code 1992.

³²¹ There are lots of loopholes such as the lack of a clear definition of privacy and basic regulations on environmental infringement, traffic accidents and medical incidents, are posing great challenges for judges in determining contractual disputes.

³²² It was said by Wang Liming, a civil law professor with People University of China.

³²³ Such as trade, leasing, transportation, storage, fund-raising, settlement and the development of new products.

³²⁴ In relation to food, clothing, shelter and transportation - the basic necessities of life and recreation, marriage and family, among other daily activities.

tort law. Both Chinese and English tort law have two types of liability: one is fault-based liability; the other is strict liability. In China, both the Civil Law 1986 and the draft Civil Code briefly address the joint liability of tort-feasors. The meaning of joint liability has also been discussed in English law. Chinese law adopts comparative negligence principles, and it is same as the contributory negligence in English law.

On the other hand, there are significant differences of tort law between two countries. For example, Chinese law has not introduced an occupant's or vicarious liability. That means it is uncertain what liability the carrier has with regard to the tortious actions that its employees commit during the course of employment but outside of the navigation and management of the vessel.³²⁵ Nor is it clear what the carrier's liability is with regard to any tortious action of a third party committed against the navigation and management of the vessel. It is expected that Chinese court would somehow hold the carrier liable to any tortious action that its employees commit during the course of employment.

Moreover, there is no relevant rule of "duty of care" in Chinese tort law, it is expected that the Chinese court might impose a duty on the carrier and its employees to prevent any third party from interfering with the navigation and management of the vessel and to avoid the loss and damage to the goods caused by such interference.

Considering the extent of duty of care, in England it is unlikely to impose a duty of care on the defendant not to cause pollution-related loss in the absence of physical damage (e.g. pollution damage to fishing pond).³²⁶ In contrast, there is no "duty issue" in Chinese tort law, but theoretically (pure) economic loss is possible to be recovered under Article 106 of Civil Law, if the defendant has fault and it is a proximate cause of

³²⁵ Under Article 51 of the Maritime Code 1992, negligence of the shipmaster, seamen, pilot or other employees of the carrier in the navigation and management of ship is a common ground for the carrier to claim exemption. This exemption has at least two elements: first, the person committing the negligent act must be a pilot or an employee of the carrier; and secondly, the negligence which has caused loss or damage to goods must be committed for the purpose of, or in the process of, navigating and managing the vessel.

³²⁶ Following the decision in *Murphy v Brentwood District Council* [1991] 1 A.C. 398 HL, the scope for imposition of a duty of care not to cause economic loss was severely fettered.

the economic loss.³²⁷

It is good to see that the provisions of the Draft Code on liability for ultra-hazardous activity are more clarified, specific and in detail. With regard to the carriage of dangerous cargo, various parties' liabilities, such as cargo owner, shipper or carrier may be covered by the relevant provisions of the draft code, while they are regarded as owner, operator, bailee or manufacturer etc, and in certain situations it is strict tort liability. However, most commonly the defendant's act constitutes fault and contributed to injury or damage, he has therefore fault-based tort liability.

Under the PQL 1993, the strict product liability is not applicable to sellers, unless the seller fails to identify the producer.³²⁸ Otherwise, a seller will only be liable for injury or damage caused by a defective product if his fault contributed to the defect. This is same as English law. However, an important difference is the commercial property is recoverable under PQL but not in the Consumer Protection Act 1987.

With regard to collisions involving undisclosed dangerous cargo, the Chapter VIII of Maritime Code, like English s.187 MSA, derives from the 1910 Collision Convention and provides fault-base liability and each ship shall be liable in proportion to the extent of its fault. If the damage is not reasonably separable based on the degree of fault on each party, the shipper and carrier should be jointly and severally liable for all damage. However, in respect environmental pollution damage caused by both-to-blame collision, in the author's view, the above rule (based on fault) is not applicable, since "pollution damage" is different from property damage in both countries, and surely "pollution" always related to strict liability.

Furthermore, the re-assurance of strict liability rule in *Rylands* has vital meaning to environmental liability in England. The author argued that the rule in *Rylands* should be extended, so as to have a strict liability tort regime for ultra hazardous activities,

³²⁷ I will discuss it in detail in sections 3.2.1 and 6.2

³²⁸ Article 42 of the PQL

particularly considering the environmental legislation is not yet integrated and sufficient in this area. Unfortunately, there is no relevant rule or case law in China, as the strict liability rule in *Rylands* in England. But protection of environment has been emphasized by Chinese codified laws,³²⁹ and the strict tortious liability regarding environmental pollution is under Article 124 of the Civil Law 1986.

Moreover, regarding “ultra-hazardous activities”, there is a significant difference between two countries. In England, the Law Commission has rejected the approach to extend the strict liability rule in *Rylands* to ultra-hazardous activities.³³⁰ In China, according to Article 123 of the Civil Law, the shipowner can be held strictly liable for carrying ultra-dangerous cargoes. Furthermore, at English Common Law, the application of *Rylands* rule is restricted to foreseeable damage. Also “escape” from defendant’s property is a condition. If the shipowner is unaware of any dangerous cargoes on his ship, he will not be held strictly liable under the rule in *Rylands*.³³¹ But in China, there is no specific restriction on the application of strict liability under Articles 123 and 124. In the author’s view, these provisions under Civil Law are far too general and need to be clarified, particularly considering the Chinese Maritime Code does not have any provisions regarding strict liability for ultra-hazardous activities. Also there is no relevant principle of remoteness of damage in Chinese tort law.

Finally, the defences to liability in Chinese tort law including *force majeure*, “emergency action”, victim’s intentional fault and comparative negligence etc. Obviously, they have very different names from English law. But as the author understands, the practical results of implementing them in both countries are similar. Nonetheless in China these defences are implemented strictly according to codified laws and the scope of defences are relevant narrow. Comparatively in England there is enormous case law to apply and overall, the defences in English law have broader meaning in practice, and are more powerful than that in Chinese law.

³²⁹ For details see section 3.2.4

³³⁰ For details see section 3.1.3

³³¹ The requirement of “foreseeable damage” was discussed in the case of *Cambridge Water* in section 3.1.3

Chapter 4 Liability in Contract Law in England and P.R.C.

4.1 Introduction

Most dangerous cargo disputes involve a contractual background. They may, for example, consist of a claim by a vessel owner against a shipper for damages to his vessel by dangerous cargo, or a claim for cargo damage which is lodged by the charterer and/or cargo interests against the vessel.

For instance, if dangerous cargo overheats on board, the other cargo interests will no doubt claim for delay (such as demurrage or hire payments) and the extra expenses in cooling the cargo, seeking a port of refuge, discharging the hot cargo and contributing to general average.¹ First, they may raise contractual claims against the carrier who has the responsibility to deliver cargoes in the state in which he received them.² Secondly, the carrier may raise contractual claims against the shipper of the dangerous cargo, based on insufficient packing and labelling, or improper notice. Thirdly, the carrier may be liable to the shipper for damage to the dangerous cargo, if he does not exercise care and due diligence of the cargo. Fourthly, there is a possibility for the shipper to be liable to other cargo interests on the basis of the contract of affreightment.³

Generally, there is freedom of contract in carriage contracts, but there are exceptions. The risks associated with the carriage of goods by sea and, more especially, those associated with the carriage of “dangerous” goods have to be apportioned, like all other aspects of the contract of carriage, between two interests: the carrier and the shipper. The carriage conventions, e.g. Hague Rules (HR), Hague-Visby Rules (HVR) and Hamburg Rules deal specifically with liability issues between two parties. These rules are often incorporated into the contract of affreightment. The vast majority of maritime

¹ Bulow, Lucienne Carasso, *Dangerous cargoes: the responsibilities and liabilities of the various parties*, [1989] L.M.C.L.Q. 346

² Alternatively, they can claim in tort against the owner of the dangerous cargo.

³ Considering the issue of third party beneficiary's right, the important legislative initiative embodied in the Contract (Rights of Third Parties) Act 1999 will be discussed in this chapter, particularly in relation to contracts for the carriage of dangerous cargo.

jurisdictions have adopted and abided by HR or HVR. China does not adopt or abide, at least in pure form, any of them but instead, adopts a slightly pick-and-mix attitude between them. Consequently, the discussion on Chinese contract law is brief, since many liability issues covered by the Chinese Maritime Code are similar to that of the English contract law, e.g. they both apply the essential principles of HVR so far as carrier's liability is concerned. Of course, the differences between them will be pointed out.

In addition, there is a special clause⁴ in a bill of lading or a "clause paramount"⁵ included in a charterparty⁶ that deals with the transport of dangerous cargo and they have the purpose of clarifying the allocation of risks and of making the shipper's warranty absolute as a matter of contract. Furthermore, even in the absence of such a clause, at English common law there is an implied contractual obligation that the shipper will not ship dangerous goods whose characteristics the shipowner could not be expected to know or to discover by reasonable diligence.⁷ The shipper will be strictly liable for any damage resulting from his shipment.⁸

4.2 The Liability of the Shipper to the Carrier

4.2.1 English Law

Considering the liability of the shipper to the carrier for damage caused by dangerous cargo, first, there is an implied warranty⁹ and on occasion, indeed, an express provision¹⁰ in contract law against shipment of dangerous cargo; secondly, the

⁴ For example clause 19 of *Ellerman East Africa/Mauritius Service Bill*; clause 19 of *P & O Nedlloyd Bill*, Clause 22 of *Mitsui OSK Lines Combined Transport Bill 1992* and clause 4 of *FIATA (FBL)*.

⁵ For example, NYPE 1946, Lines 24-25, Cf. Baltimore 1939, lines 21-22, which expressly prohibits the carriage of dangerous goods and which then goes on to specify "acids, explosives, calcium carbide, ferro silicon, naphtha, motor spirit, tar, or any of their products".

⁶ It is not very common to find dangerous cargo clauses in the standard voyage charterparty forms, such as Gencon, possibly because it is in the nature of this charterparty that the cargo for shipment on the voyage will be expressly agreed between the contracting parties. This may be contrasted with most time charterparty forms, where the charterer has a greater discretion as to the cargo to be shipped and where it is more usual to find a clause expressly prohibiting the shipment of certain goods.

⁷ See *Scrutton on Charterparties and Bills of Lading*, 20th ed., 1996, p.105.

⁸ *The Giannis NK*, [1998] A.C. 605; [1998] 1 Lloyd's Rep 337, a cargo of ground-nut was infested with khapra beetle. The vessel was prevented by port authorities in the Dominican Republic and in the US from discharging the cargo. The infested groundnut together with the cargo of wheat was dumped at sea. It caused delay and other costs.

⁹ For example, at English common law, there is an implied obligation that the shipper will not ship dangerous goods without notifying the carrier in advance.

¹⁰ The contracting parties could make express provision for the consequences of the shipper's failure to notify the

Hague-Visby rules might provide some parallel liability; thirdly, the Hamburg Rules make this liability explicit.

It is clear that the shipper's liability, whether under an express clause or by virtue of an implied term, essentially concerns undisclosed dangers. This can be avoided by disclosing to the carrier the dangerous nature of the goods. As for standard cargoes, provided that the cargo is adequately labelled and described in the shipping documents, generally the carrier will be able to discover its characteristics by referring to the IMDG Code. However, the IMDG Code is not always correct¹¹ and not always up-to-date.¹² Despite the information available from the IMDG Code, the shipper may incur liability, for example, if the contents of the containers are inadequately described, or if the goods involve some special hazard that is different from those which a carrier of similar cargoes would normally foresee and guard against.¹³ If dangerous materials are not listed in the IMDG Code, the carrier needs special instructions from the shipper, and the shipper will be liable if he does not provide adequate ones. In addition, depending on the terms of the contract, the shipper or charterer may be liable for inadequate packing, marking or stowage¹⁴ of hazardous goods.

carrier of the dangerous character of the cargo shipped. For example clause 19 of *Ellerman East Africa/Mauritius Service Bill*; clause 19 of *P & O Nedlloyd Bill*, Clause 22 of *Mitsui OSK Lines Combined Transport Bill 1992* and clause 4 of *FIATA (FBL)*.

¹¹ For example, some of the materials listed as being subject to spontaneous combustion do not spontaneously ignite, e.g. wet cotton is listed at page 4229 under UN number 1365, it does heat when wet to about 60°C but does not progress to ignition. See Watt, etc., *Know Your Cargo*, P&I International, May 1999, p.104.

¹² This affects the shipper's liability to give sufficient notice about the dangerous nature of cargo to carrier.

¹³ *The Atlantic Duchess*, [1957] 2 Lloyd's Rep. 55, 95. The same would apply where the hazard is of a foreseeable type, but is sufficiently different in degree to amount to a difference in kind. See *The Athanasia Comminos & Georges Chr. Lemos*, [1990] 1 Lloyd's Rep. 277, 283; *The Amphion*, [1991] 2 Lloyd's Rep. 101, 104-105.

¹⁴ A number of charterparty forms express clauses dealing with dangerous cargo, e.g. Lines 21-22 of the Baltimore form and Clause 4 of the NYPE 93 form. Charterers will be in breach if they load cargo falling within such clauses or if they fail to treat it before shipment in the manner stipulated by the contract. In the absence of express provision, the obligation to load, stow, trim and discharge the cargo is at common law on the owners: see *The Filikos* [1983] 1 Lloyd's Rep. 9. Line 78 of the New York Produce Form has the effect of shifting from the owners to the charterers the primary responsibility for loading, stowing and trimming the cargo: see *Court Line v. Canadian Transport* (1940) 67 Ll.L.Rep. 161. The *NYPE 1993* emphasises the transfer of this primary responsibility by providing, in Lines 103 to 105, that "all cargo handling" is to be at the "risk" as well as at the expense of the charterers. In addition, under most standard forms of time charter, and many types of voyage charter, the loading and stowage of cargo is carried out by the charter or his stevedores under the supervision of the master. Unless the contract otherwise provides, the master is not responsible for bad stowage save to the extent (if any) that he ought to be aware that it affects the safety of the vessel, or that he intervenes to direct to the manner of the stowage. See *Canadian Transp. Co. v. Court Line, Ltd.*, [1940] A.C. 934, 952 (H.L.)

4.2.1.1 Liability for Legally Dangerous Cargo

At common law, the shipper may incur liability for “legally” dangerous cargo. For example, the shipments of goods which are not physically dangerous to vessel or other cargo, but only “legally” dangerous, i.e. give rise to delay, detention or seizure.

In *Mitchell, Cotts v. Steel*,¹⁵ the court extended the shipper’s obligation of notice to cases where the goods themselves were in no way physically dangerous. The charterers loaded a cargo of rice on board the *Kaijo Maru* and sent her to Piraus, knowing that the cargo could not be discharged there without the permission of the British authorities. The arbitrator found that at the time that Piraus was fixed as the port of delivery, the charterers had not communicated the permission requirement to the shipowners; furthermore, they had not obtained the requisite permission.¹⁶ As a result, the shipowners did not know and could not have reasonably known that permission was needed to discharge the cargo of rice at Piraus. Damages were awarded against the charterers for the delay caused.

In the view of Atkin J the loading of unlawful cargo which may involve the vessel in the risk of seizure or delay “is precisely analogous to the shipment of a dangerous cargo which might cause the destruction of the ship”.¹⁷ Accordingly, a cargo will be legally dangerous since it is subject to the public law restriction. That is to say “goods may be dangerous if owing to legal obstacles as to their carriage or discharge they may involve detention of the ship”.¹⁸ However, the principle in *Mitchell Cotts* did not operate independently of legal obstacle. Indeed, in *Transoceanica v HS Shipton*,¹⁹ the court rejected an argument that a grain cargo containing stones was legally dangerous merely because the stones might clog up the discharging apparatus and thus cause delay. In this case, the barley loaded on board contained a quantity of sand and stones. The ordinary method at destination for discharging grain in bulk was by employing pneumatic suction

¹⁵ [1916] 2 KB 610

¹⁶ *Ibid.*

¹⁷ *Ibid.* p 614

¹⁸ This principle regarding legally dangerous cargo is shortly summarised in *Scrutton* at Article 53, page 100.

¹⁹ [1923] 1 KB 31

pumps. The stones in the barley caused the suction pump choked and the discharge was thereby delayed for a day and a half. It was held by Mccardie J that there was no warranty that this barley was capable of being handled and unloaded expeditiously and effectively by the machinery and appliances in the ordinary use at the port of discharge.²⁰ Accordingly, the shipper was not liable for the extra time lost in the discharge.

Generally, a shipper's liability for shipping "legally" dangerous cargo subject to the principle in *Mitchell Cotts*, and it is governed by common law. A question arises: will a legally dangerous cargo is regarded as dangerous for the purpose of Art IV r6 of Hague Visby Rules? This is a tricky question. In the author's view, the answer is "Yes and No", depending on what kind of "legally" dangerous cargo is in question.

In *The Giannis NK*,²¹ Longmore J held as a matter of impression that the words "goods of a dangerous nature" in Art IV r6 mean "goods that are physically dangerous". However, in House of Lords, by Lord Lloyd and Lord Steyn,²² dangerous cargo "must be given a broad meaning" to the extent that such cargo is liable to lead to "physical damage" to the ship or other cargo. As the author understands, Art IV r6 includes "physically dangerous" cargo and "legally dangerous" cargo which lead to personal injury or physical damage. However, goods that merely cause delay to the carrier are probably not to be regarded as 'dangerous' within the Hague Rules, which is confirmed in a recent case *Bunge SA v ADM do Brasil Ltda (The Darya Radhe)*.²³ It was held that the shippers of cargoes of Brazilian soya bean meal pellets were not liable for expenditure and delay incurred in dealing with live rats which were discovered in the cargo loading, because a cargo loaded with a live rat was not a dangerous cargo under the Hague Rules. It was found that the cargo of pellets did not pose a physical danger to another maize cargo on board. It plainly posed no threat of damage to the ship itself. In fact the cargo was not rejected by the Iranian receivers after fumigating the cargo.

²⁰ *Ibid.* p. 31 & p. 40

²¹ [1994] 2 Lloyd's Rep. 171, at 180; where Longmore J. said: "more over the normal meaning of the word 'dangerous' in relation to goods does seem to me to imply that the goods are such as to be liable to cause physical damage to some object other than themselves." The higher courts in *The Giannis NK* followed this view.

²² [1998] 1 Lloyd's Rep. 337, at 341, 346

²³ [2009] EWHC 854 (Comm); [2010] 1 All E.R. (Comm) 784; [2009] 2 Lloyd's Rep. 175; [2009] 1 C.L.C. 608

Accordingly, it is most unlikely that the word of “dangerous” under Hague Rules has a meaning beyond physical danger.

As we can see, only part of “legally” dangerous cargo is left outside of the scope of Art IV r6: such cargo not liable to give rise to any physical damage, but only to consequences such as forfeiture and detention (by the operation of a local regulation relating to the characteristics of the cargo). Obviously, the HR/HVR provisions will not apply to it. However such “legally” dangerous cargo is still covered by the common law and the shipper has a strict liability.²⁴ Surely, the common law indemnity is different from that provided under Art IV r6 in so far as the “legally” dangerous cargo is concerned.

Finally, at common law the shipper implied undertakes not to ship dangerous cargo without first notifying the carrier of their particular characteristics. This approach places an onerous responsibility for such cargoes squarely on the shoulder of the shipper.²⁵ It was argued by Mustill, J. in *The Athanasia Comminos*.²⁶ If the shift in emphasis from “dangerous” to “injurious” were to take hold, then there might also be some justification for cutting down the scope of absolute liability,²⁷ since the range of dangerous substances could be constantly expanded.

4.2.1.2 Shipper’s Liability under the Hague, Hague-Visby and Hamburg Rules

Both the Hague and Hague-Visby Rules²⁸ make express contractual provision for the

²⁴ As Lord Steyn said in *The Giannis NK* ([1998] 1 Lloyd’s Rep. 337 at 347) “pro tanto the Hague Rules upon their enactment displaced the common law”. That means where a cargo is “dangerous” within Article IV r6 the common law indemnity will be superseded. See Baughen, S. *Obligations of the shipper to the carrier*, (2008) 14 JIML, 555, at 557. See also, Gay, R. *Dangerous cargo and legally dangerous cargo*, in Thomas D.R. (editor) *The evolving law and practice voyage charterparties* (2009) Informa, p. 107 and p. 120; see also Rose, F. D., *Cargo Risks: Dangerous Goods*, (1996) 55 C.L.J. 601;

²⁵ *Ibid.*, p502.

²⁶ [1990] 1 Lloyd’s Rep. p277

²⁷ Girvin, Stephen D., *Shipper’s liability for the carriage of dangerous cargo by sea*, [1996] L.M.C.L.Q 496

²⁸ Up to 22 November 2006, there are 89 states adopted Hague Rules 1924, 24 states adopted Hague-Visby Rules 1968 and 19 states adopted 1979 protocol; 32 states adopted the Hamburg Rules. The Hague-Visby Rules were given the force of law in the UK by the Carriage of Goods by Sea 1971 (the COGSA 1971), but the US is still clinging on longer to the Hague Rules 1924 and it was given the force by US Carriage of Goods by Sea Act 1936 (the COGSA 1936).

carriage of dangerous goods, in exactly similar terms, under Article IV rule 6. By their terms, the Rules apply by force of law, however the effect is very much the same as a contractual provision. The rules apply between parties to a contract of carriage and they are often incorporated in a B/L or a charterparty, where their effect must be contractual.

The Hamburg Rules specify requirements for the shipment of dangerous goods under Art. 13. The Hamburg Rules²⁹ go slightly further than the Hague-Visby Rules, supposedly because the number of dangerous goods has increased dramatically since 1924.³⁰ They specify that the shipper must mark and label the goods in such a way as to indicate that they are dangerous.³¹ 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 precautions to be taken.³² The bill of lading must include an express statement, if applicable, as to the dangerous character of the goods, as furnished by the shipper.³³ The provisions may not be invoked by the carrier if he has taken the goods in his charge “with knowledge of their dangerous character”.³⁴

There is no express definition of “dangerous” in either the Hague-Visby or Hamburg Rules, but both link special rules to the category. No doubt any substance listed in the IMDG Code will qualify but courts have tended to apply the rules to dangerous situations as well as to dangerous goods.³⁵

Although the Hamburg Rules have made more specific provisions, compared with HR and HVR, they haven’t fundamentally changed the known scheme of liability for

²⁹ The United Nations Convention on the Carriage of Goods by Sea (Hamburg Rules) entered into force on 1 November 1992 when the pre-requisite number of countries acceded to the Convention. However, none of the world’s major trading nations have acceded to the Hamburg Rules, nor have its provisions been widely incorporated in national legislation, reflecting a general view that the Hamburg Rules have over-compensated in their effort to redress a perceived imbalance in the Hague Rules in favour of shipowners. The Hamburg Rules probably cover less than 5 per cent of world maritime trade. Up to November 2007, there are 32 countries adopted it.

³⁰ UNCTAD Report: The economic and commercial implications of the entry into force of the Hamburg Rules and the Multimodal Convention (UNCTAD 1991), p.123.

³¹ Hamburg Rules, Article 13 (1).

³² Hamburg Rules, art.13 (2).

³³ Hamburg Rules, art.15 (1) (a).

³⁴ Article 13 (3).

³⁵ See Jackson, *Dangerous cargo: a legal overview*, op. cit. at A5

dangerous cargoes.³⁶ They all have very similar provisions for dealing with dangerous goods, which largely supersede the common law rules related to shipper's obligation to give notice. Since the vast majority of maritime jurisdictions have adopted and abide by one or other version of the HVR, this section will focus on shipper's liability under this regime.

Art, IV rule 6 of the HVR is as follow:³⁷

“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 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 the general average if any”

There are two important functions of Article IV (6). Where dangerous goods are shipped, on the one hand, this provision renders the carrier immune from certain legal liabilities and/or compensates the carrier for certain losses suffered;³⁸ on the other hand, it creates a liability for the shipper. This section will only focus on shipper's liability.

This provision distinguishes between two situations:

- First: the carrier's consent to the shipment of the cargo has been obtained in ignorance of the dangerous nature of the goods. In such an event the carrier is not only entitled to land, destroy or render the dangerous goods without paying compensation, but he is also able to hold the shipper liable for all the damages and expenses directly or indirectly arising from

³⁶ Girvin, *Shipper's liability for the carriage of dangerous cargo by sea*, [1996] L.M.C.L.Q. 502

³⁷ The provision is identical in Art IV rule 6 of the Hague Rules.

³⁸ Where a carrier does not know about the dangerous nature and character of goods before shipment, he has the right to land, destroy or render those goods harmless after shipment without liability to pay compensation. A carrier's immunity from liability will protect him against claims by any party to a bill of lading, or by any bailor (i.e. the owner of goods that are in the possession of the carrier for their safe carriage) on the terms of a bill of lading. Where a cargo owner who is not a party to a bill of lading brings a claim against a carrier, the carrier may be able to raise the common law defence of inherent vice to any such claim.

such shipment.

- Secondly: when a cargo is initially shipped with the knowledge of its dangerous character and consent of the carrier, if the goods become subsequently a danger to the ship, the carrier is entitled to take similar action to avoid the danger to ship or cargo, without liability to shipper except as to general average. In this situation, the shipper will not be liable to the carrier unless general average is an issue. The carrier must bear his own costs since he has sufficient knowledge of the risk or danger, by agreeing to carry the goods, accepted that risk as well.³⁹

In the first situation, a carrier has the right to recover from a shipper regarding “all damages and expenses *directly or indirectly* arising out of or resulting from such shipment”. So far as the wording “directly or indirectly” is concerned, in order for a carrier to make a recovery from a shipper, it seems that he does not have to prove that the dangerous nature of goods was the “proximate” (i.e. the nearest in time or physical location) or the “dominant” cause of the loss. All that the carrier has to prove is that the dangerous nature of the goods was “a cause” of the loss in order to succeed his claim against the shipper under Article IV r.6.

In *The Fiona*,⁴⁰ in the Court of Appeal Hoffmann L.J. and Hirst L.J. considered that the wording “directly or indirectly” related primarily to “causation”. Hoffmann L.J. stated that it might make the shipper liable, not only in cases where the shipment of dangerous cargo “caused” the damage, but also “in cases in which one would ordinarily say that the shipment had merely provided an occasion for something else to cause the damage, e.g. if the gas had been deliberately ignited by an arsonist or the explosion caused by some highly abnormal accident”.⁴¹ However, it also held in the Court of Appeal that the wording “*directly or indirectly*” did not exclude the normal rule that a person (e.g. a carrier) cannot, in the absence of clear provisions to the contrary, enforce an indemnity against a person (e.g. a shipper) where one of the effective causes of his loss was his

³⁹ There is an exception, if the shipper is in breach of a term of the contract (charterparty prohibits the shipment of any dangerous cargo) not to ship dangerous goods, he will be liable; see *Chandris v Isbrandtsen-Moller* [1951] 1 KB 240. See also Wilson, (2008) *Carriage of Goods by Sea*, 6th ed. p35

⁴⁰ *The Fiona* [1994] 2 Lloyd’s Rep. 506. The facts of *The Fiona* have been summarised in section 4.2.1.5 below.

⁴¹ [1994] 2 Lloyd’s Rep. 506, at 522

own negligence or wrongful act. This will be discussed in detail in section 4.2.1.5.

It has been suggested that the words “*directly or indirectly*” extend the rules of causation and hence by implication those of remoteness of damage,⁴² but no case has applied such an interpretation, for which it is difficult to see justification.

This section of the thesis only deals with the first situation where dangerous goods shipped without notice and a carrier has a cause of action against a shipper. If there is a proper notice such as in the second situation, there can be no question of recovery from the shipper.

4.2.1.3 Notice of the Shipment of Dangerous Cargo

A carrier may lose his right to sue for damages arising from the shipment of dangerous cargo if, having been informed of its dangerous nature, he nevertheless carries it. In essence, the object of the obligation imposed on the shipper to give notice is to provide the carrier with the opportunity either to refuse to carry the goods or to take necessary precautions to protect his vessel and any other cargo on board the ship.⁴³

Once specific notice has been given by the shipper e.g. full disclosure of the nature of the goods, and the warnings and information are adequate for a normal carrier to understand and to guard against⁴⁴ then, at common law, the shipper’s obligation has been discharged. If the carrier subsequently consents to carry the cargo, with full knowledge of the risks,⁴⁵ the shipper will not be liable for any resulting damages,⁴⁶ because the carrier is the author of his own misfortune (see *International Mercantile Marine Co. v. Fels*,⁴⁷ discussed below).

Nevertheless, it is possible that a carrier may not have been informed of the dangerous

⁴² *Ibid.* at 522 per Hoffmann L.J. See also Judge Diamond Q.C. in *The Fiona* at first instance [1993] 1 Lloyd’s Rep. pp. 286-287

⁴³ Girvin, *Shipper’s liability for the carriage of dangerous cargoes by sea*, [1996] L.M.C.L.Q. 491

⁴⁴ Cooke, Kimball & Young, *Voyage Charters*, (1993) LLP, at 111.

⁴⁵ Rose, *Cargo risks: “dangerous” goods*, (1996) C.L.J. 606

⁴⁶ Wilson, *op. cit.* p36

⁴⁷ *International Mercantile Marine Co. v. Fels*, 164 F. 337, (S.D.N.Y. 1988), *aff’d*, 17 F. 275 (2d Cir. 1990)

nature of a cargo, or has been deliberately misled. In such cases, it is clear that the shipper is in breach of his obligation to provide notice to the carrier of the cargo's dangerous characteristics. However, in other cases a carrier may be given certain accurate information regarding the nature and character of the goods, but the question is whether or not the information and notice was accurate or sufficient.

In *The Athanasia Comminos*,⁴⁸ where the contract was for the carriage of "coal", and the carrier argued that the coal shipped was particularly hazardous in that it had a propensity to emit unusually large quantities of methane gas. Accordingly, a special warning of its dangerous characteristics was required. Mustill J. held that although the incidence of risk with the cargo of coal concerned in this case was higher than with ordinary coal, the difference in degree was not so great as to amount to a difference in kind. He found that the damage was actually caused by the carrier's failure to comply with safety standards of the kind which should have been adopted in the carriage of any cargo of coal. Therefore the carrier's claim regarding an indemnity on damage from the charterer failed.

From this case we can see that if the danger posed by a cargo only different from ordinary cargo in degree, the shipper's obligation to notify the carrier does not extend to an obligation of a special warning regarding that danger. However, if the increased degree of risks involved in its carriage has changed into a new kind of risk, a special notice of the dangerous characteristics of the cargo should be given to the carrier. It seems that whether it is a different "kind" of danger is relating to whether it is necessary to have a different way of handling the goods, or different precautions to be taken. In *The Fiona*,⁴⁹ the cargo of fuel oil was unusually volatile due to the presence in it of methane bubbles. The cargo was described as "fuel oil" but this was held inadequate on the grounds that, at the time of carriage (1988), the risks attendant on carriage of certain types of fuel oil were not generally known, so a special notice should have been given.

⁴⁸ [1990] 1 Lloyd's Rep. 277, 283

⁴⁹ [1994] 2 Lloyd's Rep. 506, affirming [1993] 1 Lloyd's Rep. 257. The owner's claim failed on other grounds. See detailed discussions below in section 4.2.1.5. See also Cooke, (2007) *Voyage Charters*, 3rd edition Informa, London, p. 162; Baughen, *Obligations of the shipper to the carrier*, (2008)14 JIML, p. 557

Generally, the notice⁵⁰ must be presented in a manner that carrier with normal experience and skill would be able to appreciate the nature of the risks involved and to take the necessary precautions.⁵¹ Such information, if effective, must be communicated in an intelligible way to the right people (e.g. the shipper's master), at the right time (before shipment). Otherwise, the cargo can be dangerous without such special information such as in *Micada v. Texim*.⁵²

Surely, if an experienced carrier is unable to locate information about the dangerous cargo after exhausting all other means, the shipper or charterer must disclose this special information. Put another way, the obligation to give notice applies only to information that would not be available to a reasonable experienced carrier.⁵³

On the other hand, if the characteristics of a cargo are well known, and do not involve any unusual or peculiar hazards for goods of that type, there is generally no obligation on the shipper to provide the carrier with any information beyond that contained in the shipping documents. In *International Mercantile Marine Co. v. Fels*,⁵⁴ a vessel was damaged when naphtha vapour, which had exuded from a shipment of "Fels-Naphtha" soap, exploded in Liverpool harbour following a voyage from Philadelphia. The court held that the use of the word "naphtha" in the description of the goods was sufficient notice to the carrier of the dangerous nature of the goods.⁵⁵

Normally, provided the cargo is adequately labelled and described in the shipping documents, a carrier should be able to consult IMO publications, such as the IMDG

⁵⁰ In practice, a shipper will often provide a carrier with (1) comprehensive shipping documents/ instructions covering the carriage of the cargo; and/or (2) a Material Safety Data Sheet ("MSDS"), which includes details of the hazards associated with a chemical and provides information on its safe use.

⁵¹ Cooke, *Voyage Charters*, (1993), 2nd ed., at 111.

⁵² *Micada v. Texim* [1968] 2 Lloyd's Rep. 57. It was chartered on the Baltime form, excluding the shipment of "dangerous goods". A cargo of iron ore concentrate was loaded, but the master was misled as to its moisture content and was not informed that it was unusually wet and hence liable to shift. It shifted in transit and the ship had to put into a port of refuge. The time charterers were held to be in breach for shipping dangerous cargo

⁵³ Generally, experienced carriers will know about the dangers, but there may be specific things they don't know about.

⁵⁴ *International Mercantile Marine Co. v. Fels*, 164 F. 337, (S.D.N.Y. 1988), aff'd, 17 F. 275 (2d Cir. 1990)

⁵⁵ *Ibid.*, at 347; see also *Martines v. Dixie Carriers, Inc.*, 529 F.2d 457, 462-63 (5th Cir. 1976) and held the description of goods as "benzene" was sufficient warning.

Code and the BC Code⁵⁶ and cargo handling manuals such as Thomas' Stowage. Put another way, unless the shipowner knows or ought to know the dangerous character of the goods, there will be an implied warranty by the shipper that the goods are fit for carriage in the ordinary way and are not dangerous.⁵⁷

4.2.1.4 Shipper's Strict Liability

Considering the nature of shipper's liability relating to dangerous cargo, the House of Lords in *The Giannis NK*⁵⁸ confirmed that the shipper's duty is absolute both at common law and under the HVR.

In *The Giannis NK*, shippers shipped ground-nut extractions from Senegal to the Dominican Republic which, unknown to anyone, were beetle-infested. There was no danger to the other cargo, but the infestation made the vessel unwelcome at its destination. The carrier had no practical alternative but to dump the whole cargo at sea. After which the vessel put into San Juan, Puerto Rico, it had to be fumigated and was eventually cleared to load her next cargo 2½ months later. The shipowner's claim to recover damages for delay and other costs, together with an indemnity to cover any claims by the owners of cargo of wheat was successful.⁵⁹

The most important and interesting question, which has been addressed by both the Court of Appeal and the House of Lords in *The Giannis NK*,⁶⁰ is whether the shipper's liability under Art IV, r.6 was qualified by the principle embodied in Art IV, r.3,⁶¹ i.e. whether the negligent conduct at least was required. Hirst LJ rejected the argument put forward by the shipper, pointing out that the clear wording of Art IV, r.6 indicated the strict nature of the undertaking. Even if the undertaking was qualified by Art IV r.3 and

⁵⁶ The Code of Safe Practice for Solid Bulk Cargoes (BC Code) which is a guide on the standards to be applied in the safe stowage and shipment of solid bulk cargoes (excluding grain).

⁵⁷ *Scrutton on Charterparties and Bills of Lading*, 20th ed. Sweet & Maxwell, 1996, p105.

⁵⁸ *Effort Shipping Co. Ltd v. Linden Management SA (The Giannis NK)* [1998] 1 Lloyd's Rep 337

⁵⁹ [1994] 2 Lloyd's Rep. 171 (Longmore J.); aff'd [1996] 1 Lloyd's Rep. 577 (C.A.: Hirst, Morritt and Ward, L.JJ.); aff'd [1998] 2 W.L.R. 206 (H.L.), [1998] 1 Lloyd's Rep 337 (Lord Lloyd, Lord Steyn and Lord Cooke).

⁶⁰ [1996] Lloyd's Rep. 577; [1998] Lloyd's Rep. 337

⁶¹ Article IV rule 3 states that: the shipper shall not be responsible for loss and damage sustained by the carriage or the ship arising or resulting from any cause without the act, the fault or the neglect of the shipper, his agents or his servants.

the “act, fault or neglect” on the part of the shipper or his people was required, the act of shipment was sufficient for the purposes of the provision.

The House of Lords concluded that, for a variety of reasons, the obligation in Art IV r.6 of the HVR remained strict despite Art IV r.3. The majority considered the provision with regard to dangerous goods to be “free-standing”,⁶² whereas Lord Cooke referred the view that Art IV r.6, as a matter of construction of the Rules as a whole, takes priority over Art IV r. 3.⁶³ In any case the English law position made it absolutely clear that the shipper’s liability is not fault-based and is not dependent on his knowledge or the means of knowledge of the dangerous nature, both at common law and under HVR.

A question arises here: whether a shipper could exclude his strict liability under Art IV r.6 by means of an appropriately worded exception in the bill of lading? As the author understands, in England, except for “fraud”, all other types of liabilities can be excluded. Moreover, HR/HVR Art III r8 does not prevent shipper from doing so. Thus the answer to the above question is “yes”.

Presumably, both Art III r8 and Art IV r3 are intended to regulate freedom of contract, as two parts of the same regime (i.e. HR/HVR).⁶⁴ Art III r8 prohibits any contractual provision reducing the carrier’s liabilities below those stated in the Rules;⁶⁵ Art IV r3 does not allow the imposition on the shipper of obligations which depend on the shipper’s “act, fault or neglect”. Indeed, they are treated as regulating the express terms of a contract of carriage to control on certain topics the freedom of contract which the shipper and carrier would otherwise have. Accordingly, Art III r8 only prohibits the carrier from reducing his liability, not the shipper. Therefore it is possible for the shipper to exclude his liability, even if it is strict.

⁶² Article IV rule 3 provides a shipper will not be liable for damage caused by his cargo, unless he is negligent and it is a general provision about shipper’s liability based on fault. Article IV rule 6 is a specific provision dealing with dangerous goods which should be seen as exception to the provision in Article IV rule 3.

⁶³ [1998] 2 W.L.R. 206, at 224; Nicholas Gaskell, *Bill of Lading: Law and Contracts*. LLP, 2000, at p. 475

⁶⁴ Robert Gay, Chapter 6 *Dangerous cargo and “legally dangerous” cargo*, in D. Rhidian Thomas (editor), *The Evolving Law and Practice of Voyage Charterparties*, (2009) Informa—Maritime and Professional, p. 120.

⁶⁵ Unlike English law, there is no equivalent provision of the Maritime Code to Art III r8 of the HR/HVR. The author suggests that it should be stipulated during the revision of Chinese maritime code. See discussion in section 4.3.2.3

Nonetheless, the whole issue of dangerous cargo continues to attract the attention of national legislatures, the courts and international conventions.⁶⁶ This reflects the need to keep abreast of a constantly expanding range of dangerous cargoes which are being transported by sea, particularly considering the definition of dangerous cargo has a much broader interpretation both under HR/ HVR and common law.

This approach undoubtedly places an onerous responsibility for such cargoes on the shipper's shoulders, hence there might be some justification for cutting down the scope of absolute liability. Otherwise it will produce an imbalance between the rights and duties of the shipper and carrier. Under English case law, it is not easy to see any scope for cutting down the scope of absolute liability.⁶⁷ As a result, the shipper and his insurers⁶⁸ are put into a very difficult situation to bear the costs caused by undisclosed dangerous cargo.

4.2.1.5 Whether Joint Causation between Carrier's Liability and Shipper's Liability Bars the Carrier's Claim?—HVR and 1945 Act

In this section, the author will discuss the above question mainly under HR/HVR. A brief discussion on the Law Reform (Contributory Negligence) Act 1945 will be seen.⁶⁹

Art III of HR/HVR⁷⁰ is mainly concerned with cargo claims against the carrier. However, it may also be pleaded as a bar to a carrier's claim in the situation where the shipment of dangerous goods results in a damage or loss, but breach of the carrier's duty is identified as a contributory factor. A straightforward English illustration is

⁶⁶ See discussion in sections 5.2.2.3

⁶⁷ Particularly considering two recent decisions in *The Athanasia Comminos* and *The Giannis NK*, they have also endorsed the existence of an absolute obligation by the shipper.

⁶⁸ The shipper, more often than not, doesn't pay even if he is liable for shipping dangerous goods: his insurers do.

⁶⁹ In Chapter 7, section 7.3, I will discuss how the new Rotterdam Rules deal with the issue of contributing fault between shipper and carrier. The UN General Assembly adopted the "United Convention on Contract for the International Carriage of Goods Wholly or Partly by Sea" on 11 December 2008. The Convention will be open for signing on 23 September 2009 in Rotterdam. It is up to the nations (including U.K. and P.R.C.) to ratify the new Rules. They will enter into force one year after the twentieth ratification.

⁷⁰ See specific discussions on Article III in sections 4.3.1.3 and 4.3.1.4

Mediterranean Freight Services Ltd v. B.P. Oil International Ltd (The Fiona).⁷¹

In *The Fiona*, a vessel was preparing to discharge a consignment of fuel oil. During sounding operations a serious explosion took place that resulted in the loss of life and damage. The explosion took place predominantly because the fuel oil had become contaminated with previous cargo residues (thus putting the carrier in breach of Art III, r.1), but also because it had a tendency (which the shipper had wrongly failed to reveal) to produce explosive vapours. The central issue was which obligation prevailed. The Court of Appeal held that Art III rule 1 was an overriding article and that the carrier's breach of his obligation under that article prevented him from claiming an indemnity under Art IV r6. It should be noted that the unseaworthiness of the vessel in *The Fiona* was the major cause for the loss.⁷² However, if it is not the dominant cause, we can see a different result in *The Kapitan Sakharov*⁷³.

Generally, the breach of carrier's obligation cannot be pleaded to Art IV r6, if non-causative. That is to say, if the breach of the seaworthiness obligation is not related to the loss caused by the dangerous cargo, the carrier would still be able to invoke the indemnity under Art IV, r.6 of the HVR. Indeed, the view that the question of causality is of crucial relevance has been confirmed in *Northern Shipping Co. v. Deutsche Seerederei G. m.b.H. and others (The Kapitan Sakharov)*.⁷⁴ In this case, a shipper misdescribed a container of dangerous cargo that was loaded on deck. At the same time, the carrier wrongly stowed containers holding a highly volatile chemical under deck in a poorly ventilated compartment. The container of dangerous cargo on deck, which had been misdescribed by the shipper, exploded and caused damage to the surrounding containers. This led to the ignition of the containers containing the highly volatile chemical under deck, which in turn led to the sinking of the vessel. The Court of Appeal⁷⁵ held that the carrier was in breach of Art III r1 of the HR in failing to exercise

⁷¹ [1993] 1 Lloyd's Rep. 257, QB; [1994] 2 Lloyd's Rep. 506, CA.

⁷² Gaskell, op. cit. p475.

⁷³ [2000] 2 Lloyd's Rep. 255

⁷⁴ Ibid.

⁷⁵ The Court of Appeal rejected the appeals and fully confirmed the decision at first instance. In particular, the Court of Appeal rejected the shipowners' submission that *The Fiona* should be distinguished, as in contrast to that case the original shipment of the dangerous goods in the present instance was the initial cause of the whole loss. The Court of

due diligence to make the ship seaworthy regarding the stowage of the containers under deck, but not for the dangerous cargo stowed on deck as he was not aware of its hazardous nature. Consequently the carrier was not entitled to claim an indemnity from the shipper for his liability for the loss of the vessel and under-deck containers, however, he was entitled to claim an indemnity for the on-deck containers. It should be noted here the carrier's breach of seaworthiness was merely an effective cause, and not the dominant cause of the loss.

Following *The Fiona* and *The Kapitan Sakharov*, the law can be summarised as follows: where both a breach of the carrier's seaworthiness obligation and a breach of the shipper's obligation relating the shipment of dangerous goods contribute to a loss, the shipowner will only be entitled to rely on the indemnity provided in Article IV r.6 to the extent that damage is clearly attributable to the dangerous nature of the goods. Where the unseaworthiness was at least a necessary contribution factor to the loss, the carrier will have to bear the whole responsibility in the absence of evidence identifying dangerous goods as the sole cause for (part of) the loss.⁷⁶

Regarding the burden of proof in relation to the cause of loss in the above cases, it rests with the carrier (as plaintiff).⁷⁷ Under the HR/HVR, where a carrier who has sustained loss in connection with the carriage of dangerous cargo brings a claim against cargo interests under Art IV r 6, the burden of proof was on the *carrier* to establish that the whole or a specific part of the damage or loss was caused by dangerous cargo.⁷⁸ That is to say the carrier can only claim the indemnity (under Art. IV r6) for any part of the loss that can be shown to be due exclusively to the shipment of undeclared dangerous cargo

Appeal emphasized that the essential question was whether the shipowners' lack of due diligence in the stowage of the isopetane causing unseaworthiness of the vessel was an effective cause of the fire in the hold and the loss of the vessel. If that was the case, the existence of another cause, and the question of which cause was dominant, or their respective timings, were irrelevant. The shipper was held liable for that part of the damage caused solely by the initial fire but not for the consequent damage that resulted once the fire spread to the inflammable cargo stowed below the deck.

⁷⁶ *The Fiona* [1993] 1 Lloyd's Rep. 257, QB; [1994] 2 Lloyd's Rep. 506, CA.

⁷⁷ See the Court of Appeal decision in *The Fiona* [1994] 2 Lloyd's Rep. 506, particularly the speeches of Hirst LJ at p 519 and Hoffmann LJ at p 521. See also Regina Asariotis, *Loss due to a combination of causes: burden of proof and commercial risk allocation*, p. 138; and Simon Baughen, *Obligations owed by the shipper to the carrier*, in D R Thomas (editor) (2009) *A new convention for the carriage of goods by sea—the Rotterdam Rules*, Lawtext, p.176.

⁷⁸ *The Kapitan Sakharov* [2000] 2 Lloyd's Rep. 255, see particularly the statement by Auld LJ at 267-270. See also the Court of Appeal decision in *The Fiona* [1994] 2 Lloyd's Rep. 506, particularly the speeches of Hirst LJ at p 519 and Hoffmann LJ at p 521.

such as in *The Kapitan Sakharov*. In the absence of evidence on the relevant proportion of loss due to dangerous cargo and unseaworthiness, the carrier cannot claim the indemnity and will be held liable for the whole loss such as in *The Fiona*.

The above cases raise a very interesting question: should the defence of contributory negligence under the Law Reform (Contributory Negligence) Act 1945 be utilised and so allow apportionment between the carrier's breach of his due diligence obligation under Art. III, r.1 and the shipper's breach of his obligation not to ship dangerous goods under Art. IV, r.6?

Section 1 of the 1945 Act⁷⁹ permits damages to be reduced "where any person suffers damages as the result partly of his own fault and partly of the fault of any other person or persons..." Considering the carriage of dangerous cargo, if the carrier's breach of his obligation can be qualified as "fault" (e.g. lack of due diligence), it does not follow that the shipper's liability can be so described. As discussed in *The Giannis NK*,⁸⁰ the shipper's liability is absolute and not necessarily based upon negligence or principles of "fault". Where a claim is based on the breach of an absolute duty, without negligence, the Act does not apply.⁸¹ The machinery of the Act can be utilised but only in the shipment of dangerous cargo where the shipper is at "fault" and he is in some way negligent or lacking proper care, skill or prudence,⁸² such as "inherent vice" or "insufficient packing" etc. In short, with regards to contractual liability (not tort),⁸³ contributory negligence does not apply to strict liability.

Unlike the overriding obligation under Art. III r1,⁸⁴ the carrier's obligation under

⁷⁹ It should be noted that the words in S.1(1) of 1945 were repeated in the Civil Liability (contribution) Act 1978, ss.1(1) and 2(1). See also Spike Charwood, *Contribution and professionals: an overview of the 1978 Act, alternatives to it, and its relationship with contributory negligence*, [2007] Professional Negligence, p. 83.

⁸⁰ [1998] 1 Lloyd's Rep. 337.

⁸¹ The 1945 Act does not apply to strict (as against negligence-based) contractual duties: see *Forsikrings Vesta v Butcher* [1988] 2 All E.R. 43 and *Raflatac v Eade* [1999] 1 Lloyd's Rep. 506. See also *Tennant Radiant Heat v. Warrington Development Corporation* [1998] 1 E.G.L.R.41. It is submitted that the nature of the breach rather than the nature of the duty should be the guiding principle.

⁸² Cooke, *Voyage Charters*, op. cit, p 795.

⁸³ As to contributory negligence in tort, see details in section 3.1.6.1

⁸⁴ The overriding obligation under Article III r.1 in relation to Article IV r6, *The Fiona* [1993] 1 Lloyd's Rep. 257, discussed above. In addition, where loss or damage results from the unseaworthiness of a vessel before or at the beginning of the voyage due to failure to exercise due diligence, the carrier is not entitled to rely upon the exceptions in Art IV r2 of the Hague Rules, *Maine Footwear Co. v. Canadian Government Merchant Marine* [1959] A.C. 589

Art. III r2 is expressly stated to be “subject to the exceptions in Art IV”.⁸⁵ Accordingly, the carrier may avoid liability by proving that the loss or damage was in fact caused by one of the exceptions of Art. IV, r.2 (a) to (q). If the damage resulted from two causes (e.g. lack of care for cargo under Article III r2 and an exculpatory exception under Article IV r. 2), the carrier is responsible unless he can separate the loss resulting from each cause.⁸⁶ If the carrier can separate the losses, then he is responsible only for the loss caused by his improper care.⁸⁷

Considering the carriage of dangerous cargo, if the carrier fails to comply with Art III r2 (but not exempted from liability under Art IV r2), there might be a joint causation between shipper’s liability (Art IV r6) and carrier’s liability (Art III r2). However, there seems to be no direct English authority on the use of Art. III r2 as a defence. In the author’s opinion it should be discussed in two situations: (1) The only reason why a carrier failed to properly and carefully look after the goods was due to the shipper’s failure to provide proper information; (2) A carrier’s failure is not caused by any such lack of information. Obviously, in the first situation, there wouldn’t be a breach of Art III r. 2 by the carrier and the shipper will be held liable in full.

In the second situation, if the goods had been shipped with the consent and knowledge of a carrier and if the carrier’s own failure on care of cargo caused the damage, then the carrier is liable and he does not have the right to claim an indemnity from the shipper, since his own wrongful act or negligence was the cause of the loss. In *the Atlantic Duchess*,⁸⁸ the carrier failed to convince the Court that the cargo there involved greater risks than those which could be expected from the description in the contract of

⁸⁵ Article IV provides various defences for a carrier where loss or damage results from certain events (whether the cargo shipped is dangerous or not). Care of cargo under Article III (2) is a stringent obligation, there is nothing in the Hague or Hague-Visby Rules referring to due diligence to care for the cargo. Nevertheless, courts, particularly in the United States, continue to refer to due diligence to care for cargo. The reference to due diligence in caring for cargo has resulted in further errors. Some courts have stated that the carrier need prove only due diligence to care for cargo in order to exculpate itself. This is incorrect. See Tetley, *Marine Cargo Claims*, 3rd ed., 1988, chapter 26, p551.

⁸⁶ Tetley, *Marine Cargo Claims*, 3rd ed., p.557. This was clearly stated by the U.S. Supreme Court in *The Vallescura* (*Schnell & Co. v. S.S. Vallescura*, 293 U.S. 296 AT P. 306, 1934 amc 1573 at p. 1578 (1934)): “where it appears that the injury to cargo is due to either to sea peril or negligent stowage, or both, and the carrier fails to show what damage is attributable to sea peril, he must bear the entire loss”.

⁸⁷ Detailed discussion about exceptions (Art IV r2) can be seen in section 4.3.1.5

⁸⁸ [1957] 2 Lloyd’s Rep. 55, at pp. 95-96.

carriage.⁸⁹ Thus his claim failed.

On the other hand, if the precautions would have been appropriate for the goods as described in the contract, but were insufficient for the particular goods shipped, the shipper would be held liable, because the carrier could not have been expected to be aware of the particularly dangerous characteristics of the cargo.⁹⁰ This belongs to the first situation described above; the reason why the carrier failed to take sufficient precautions was his failure to receive proper information from the shipper.

The real problem is where the damage was caused partly due to the carrier's breach of his obligation under Article III r.2 and partly due to the shipper's failure to inform of the dangerous cargo (it being assumed that the carrier's negligence is not related to the lack of information about the dangerous cargo). If the carrier can separate the losses, then he is only responsible for the loss caused by his improper care for cargo and he is still entitled to claim indemnity against a shipper under Art IV r.6. Meanwhile, the shipper should not be entitled to recover significant damages materially caused by dangerous goods unless he can prove how much of the damage was caused by reasons other than his own breach of contract. For example, the reason for the damage is the carrier's negligence on looking after goods and the shipment of dangerous goods was in no way related to the loss, such as in *The Athanasia Comminos*.⁹¹

In certain circumstances, the damage cannot be separated due to two concurrent causes, e.g. carrier's negligence under Art III r2 and shipper's failure to notice under Art IV r6, it seems that the question is largely one of causation⁹²—a causation analysis of

⁸⁹ Ibid., pp120-121. Pearson J. held that any extra risks attached to the carriage of butanised crude oil were not different in kind from those attached to the carriage of ordinary crude oil, and thus warranted no special warning.

⁹⁰ *Micada Company Naviera S.A. v. Texim* [1968] 2 Lloyd's Rep. 57. In this case, the cargo loaded was iron ore concentrate, the moisture content of which was such that it required the fitting of shifting boards. The master was given inaccurate information about the moisture content, and no shifting boards were fitted. Holding the charterers were liable for the consequent shifting of the cargo on the voyage.

⁹¹ *The Athanasia Comminos*, [1990] 1 Lloyd's Rep. 277, pp.293-294. A claim by the shipowner based on the shipment of dangerous cargo failed because he could not prove the coal had special properties making it unusually hazardous in comparison with other coal. The shipper had no liability to pay any indemnity for the damage because, on the evidence, the explosion on that vessel had occurred when the gas and air mixture was ignited by a crew member striking a match to light a cigarette in the forecabin.

⁹² Durr, *Dangerous Cargoes*, presented at "Understanding and Manage Cargo Claims", Lloyd's List Events, 18th January 2006.

pinpointing which of the two competing breaches was the proximate or dominant cause of the loss.⁹³ If the damage from two causes cannot be separated, and there is no way to decide which of the two competing breaches was the proximate cause of the loss, in the author's opinion, the carrier and shipper should be jointly liable for the whole loss.

It is also applicable to a slight different situation. For example, in the case of charterparty bills of lading,⁹⁴ if the shipper⁹⁵ is in breach of its indemnity but the concurrent fault is that of stevedores engaged by the charterer⁹⁶ to load the vessel, and both charterparty and B/L have FIOST terms.⁹⁷ With FIOST terms, the fault is in no way the shipowner's (carrier),⁹⁸ who would not be responsible for defects in loading. So he should be able to recover under the shipper's indemnity from either the shipper or the charterer. Suppose the shipper has to pay the shipowner in full, what happens to the charterer? The author thinks: because there is concurrent fault of the stevedore (engaged by the charterer), the charterer should share the responsibility based on the proportion of damage caused by the stevedore's fault. If there is no contract between the charterer and the shipper, the shipper's recourse against the charterer would have to be in tort. If it is impossible to decide the proportion and no way to find out which cause is proximate (or dominant), the shipper and charterer should be jointly liable for the vessel's damage.

In a more interesting situation is where the shipper is in breach of its indemnity and the concurrent fault is that of the stevedores engaged by the carrier. If there is no charter, just a B/L on FIOST terms, it is not clear, despite *The Jordan II*,⁹⁹ whether the FioST terms would work or whether it would still infringe Art III r8. This point was

⁹³ The situation is different from two concurrent causes (bases on Article III r 2 & Article IV r6) which can be separated (see discussion in previous paragraph). It is also different from two concurrent causes in *The Kapitan Sakharove* (based on Article III r. 1 and Article IV r6) can be *separated* and damages caused by separated actions of different people (see discussion of this case in section 6.1.3.1).

⁹⁴ A "charterparty bill of lading" means if linking these contracts is through express words in the bill of lading incorporated the terms and conditions of the voyage charter. See also Simon Baughen, Chapter 11 *Charterparty bills of lading – cargo interests' liabilities to the shipowner*, in D. R. Thomas (editor) *The Evolving law and practice of voyage charterparties*, (2009) Informa, London, pp. 217-250.

⁹⁵ Shipper's liability is subject to the shipowner's bill of lading, and most commonly the indemnity in respect of dangerous cargo (Art IV r6) will be implied into the bill of lading as well as the charterparty.

⁹⁶ Charterer's liability is subject to the charterparty.

⁹⁷ "Free in and Out Stowed and Trimmed", a shipping term where cargo is loaded, discharged stowed and trimmed free of expense to the shipowner. That means the shipper takes the responsibility to load and the consignee to discharge.

⁹⁸ See *The Jordan II* [2004] UKHL 49, [2005] 1 W.L.R. 1363 that FIOST clauses are effective despite HVR Art III r8. For details about FIOST clause see section 4.3.2.3

⁹⁹ *Ibid.*

particularly left open by Bingham J in *The Saudi Prince (No 2)*,¹⁰⁰ where FIOST clause would only be effective to the extent that they reflected the facts and the contractual reality of the bargain between the carrier and the cargo owner.¹⁰¹ Although the B/L (clause 5 and clause 24) appeared to shift responsibility for loading and discharge onto the cargo owner, it was held the shipowner was responsible for loading, stowing and discharging, given the matter of facts was the shipowner paid for and arranged for the stevedoring.

Suppose, the FIOST clause is not effective, that means the carrier's loss is due partly to his own fault (breach of his duty under Art III r.2) and partly due to the shipper's breach of his duty under Art IV r6. The answer will be same as what has been discussed in respect of the relationship between Art III r2 and Art IV r6. Furthermore, if the FIOST clause is not effective and the shipowner's contractors (stevedores) have been negligent, an interesting question arises here: can the shipowner sue the shipper on the indemnity of Art IV r6, while he or his contractor has contributory negligence? One thing for sure is the 1945 Act is out of account here since it does not apply to strict contractual duties. So prima facie the shipowner recovers, but if he or his contractor (stevedore) has been very foolish, it may be an extreme case to argue lack of causation.¹⁰² We can see, generally the shipowner will be indemnified by the shipper under Art IV r6, then the shipper may have a recourse action against the negligent stevedores in tort.¹⁰³

In some circumstances, the carrier may lose his indemnity from the shipper. Suppose, a shipper did not notify the carrier about the dangerous cargo, but the carrier's action was reckless. For example, his crew noticed fumes from a container soon after loading the cargo on board. After realising it was dangerous cargo, the carrier kept silent and

¹⁰⁰ *The Saudi Prince (No 2)* [1986] 1 Lloyd's Rep. (QB) 347, 352; [1988] 1 Lloyd's Rep 1 (CA).

¹⁰¹ In this case, the bill of lading (clause 5 & clause 24) appeared to shift responsibility for loading and discharge onto the cargo owner. On the facts, "unloading was carried out under the control and supervision of the master by the owner's own stevedoring enterprise, with whose appointment the receivers had nothing to do whatever". Also the cargo owner was neither engaging the stevedores nor accepting any responsibility for their payment. It was the shipowner who both paid for and arranged for the stevedoring. The underlying reality was that the shipowner had accepted responsibility for loading, stowing and discharging, even if this was done in the name of the receivers. Therefore, the shipowner would continue to be liable for the acts and omissions of the stevedores in loading, stowing and discharging.

¹⁰² See *Beoco Ltd v Alfa Laval Co Ltd*, [1994] 4 All E.R. 464, [1995] Q.B. 137

¹⁰³ For detailed discussion on Recourse see section 4.7

continued sailing with his crew on board and did not discharge the cargo at a port where the ship had stopped, nor informed other parties. Finally the ship sank. In the author's view, the shipper should not be responsible for the loss since it was the carrier's fault. In this case, the carrier's fault broke the chain of causation between shipper's undisclosed cargo and the loss. Therefore the carrier should be responsible for the whole loss. Furthermore, under Art IV r.5(e) the carrier may lose his limitation¹⁰⁴ because he was acting recklessly which resulted in his damage.

The question of whether the unseaworthiness caused by carrier's lack of due diligence as a *novus actus interveniens*,¹⁰⁵ had broke the chain of causation between shipper's undisclosed cargo and a loss of a ship was raised in *The Kapitan Sakharov*,¹⁰⁶ where undisclosed dangerous goods were shipped in a container and ignited during the voyage. The resultant fire spread to inflammable cargo that had been wrongfully stowed under deck, in a breach of Article III rule 1. The shipper argued that the carrier's wrongful act in stowing the cargo under deck was a *novus actus*, and such an intervening act should release the shipper's liability for the damage of the vessel. It was held by Auld L.J. the shipper was liable for the part of the damage caused solely by the initial fire caused by undisclosed dangerous cargo but not for the consequent damage that resulted once the fire spread to the inflammable cargo stowed below deck. In addition, Auld L. J. cited the decision in *The Sivand*¹⁰⁷ that "whether an intervening act is truly the sole effective or independent cause is a question of fact to be resolved on a common-sense basis to which issues of foreseeability and fault may be but are not necessarily relevant." Accordingly, the carrier's claim against the shipper relating to undisclosed dangerous cargo would not have failed by reason of a break in the chain of causation.

¹⁰⁴ The standards for the shipowner (carrier) to qualify the limitation of liability are pretty same under CLC, HR/HVR and HNS etc. For example, Article IV r5 (e) of HVR provides: "Neither the carrier nor the ship shall be entitled to the benefit of the limitation of liability provided for in this paragraph if it is proved that the damage resulted from an act or omission of the carrier done with intent to cause damage, or recklessly and with knowledge that damage would probably result".

¹⁰⁵ In Oxford Dictionary of Law, "*novus actus interveniens*" is defined as "A new intervening act or cause. An act or event that breaks the casual connection between a wrong or crime committed by the defendant and subsequent act or event that breaks the casual connection between a wrong or crime committed by the defendant and subsequent happenings and therefore relieves the defendant from responsibility for these happenings".

¹⁰⁶ [2000] C.L.C. 933, at 952

¹⁰⁷ *Humber Oil Terminal Trustee Ltd v Owners of the ship 'Sivand'*, [1998] CLC 751, per Evan L.J. pp. 759-761.

4.2.2 Chinese Law

Chinese maritime law is derived primarily from international maritime conventions, international shipping practices and maritime regulatory documents in different forms and of different effect, legislated by the competent authorities of the People's Republic of China. It appears largely, though not exclusively, in the form of the Maritime Code of the P.R.C.,¹⁰⁸ in force as of July 1, 1993.¹⁰⁹ It is also worth noting that China does not apply, at least in pure form, any of the HR, HVR or the Hamburg Rules. Instead it adopts a slightly “pick-and-mix” attitude between them. The Maritime Code of the People's Republic of China 1992 (hereafter Maritime Code) essentially embodies the Hague-Visby Rules, but these are coupled with certain provisions under the Hamburg Rules, and there are also new provisions, notably on liability for economic loss resulting from delay in delivery of the goods (Art 57).¹¹⁰

For example, major elements drawn from the Hague-Visby Rules include seaworthiness, care of cargo, deviation, carrier's exceptions from liability, limitation on carrier's liability. Major elements drawn from the Hamburg Rules include the definition of carrier/ actual carrier, the period of carrier's responsibility, live animals and deck cargo, liability for delay, notification of loss and damage of cargo, shipper's liability, i.e. re bills of lading under Arts.72 to 74 of Maritime Code, which essentially ratified Arts.14 and 15 of the Hamburg Rules with slight modifications.

A good example for seeing China's legislative “pick and mix” policy is through Article 46 regarding the period of the carrier's responsibility. Article 46 of the maritime Code distinguishes container shipping from bulk carriage. In the case of container shipping,

¹⁰⁸ Adopted at the 28th Meeting of the Standing Committee of the Seventh National People's Congress on November 7, 1992, promulgated by Order No. 64 of the President of the People's Republic of China on November 7, 1992, and effective as of July 1, 1993. See the Maritime Code (in English) at <http://www.colaw.cn/findlaw/marine/maritime.htm>

¹⁰⁹ There is also the Chinese General Law of Contract. But the failure to segregate the various provisions dealing with contract law, combined with the absence of an index, makes the Civil Law difficult to use. See discussions in the following section.

¹¹⁰ 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. Re the negotiability of bills of lading at arts.79 and 80, China was greatly inspired by the U.S. Pomerene Act 1916. See Si Yuzhuo & Hu Zhengliang, *Question & Answer to the Maritime Code of P.R.C.*, (in Chinese), People's Communication Press, (1993) pp36-79. See also Li, *The Maritime Code of the People's Republic of China*, [1993] LMCLQ 204, at 209.

the carrier is liable for the safety of the containers from the time they have been delivered to the carrier to the time they are delivered to the consignee at the port of discharge (port to port for containerized goods).¹¹¹ This essentially modifies Article 4 of the Hamburg Rules, where the period of responsibility is from port to port for all types of goods. Since most containers with dangerous cargo inside are packed and sealed by the shipper (or his sub-contractor packer), the carrier is liable only for ensuring that the seal and container are intact. The shipper must be responsible for the authenticity of the dangerous cargo packed in an undamaged and sealed container.

In the case of bulk carriage under Article 46, the carrier is responsible for the safety of cargo from the time that the cargo is loaded on board to the time the cargo is unloaded from the ship (rail to rail for non-containerized goods), which is very similar to Article 1 (e) of the Hague and Hague-Visby Rules,¹¹² given HR/ HVR take the position that the carrier is liable for cargo from the time when cargo has passed the ship's rail in loading to the time the cargo has passed the ship's rail in unloading (rail to rail rule). The effect of Article 46 is the period of carrier's liability for bulk carriage is shorter than that for container shipping. It should be noted that regarding bulk carriage, Article 46, paragraph 2 does not prohibit the contracting parties from extending the period of carrier's liability by agreement. For example, carrier may agree to extend his responsibility for bulk goods so long as under the port to port rule. However, Article 46 does not appear to allow the parties by agreement to reduce the period of carrier's responsibility in respect of container shipping.

We can see the defect of this "pick and mix" policy is, effectively, the carrier may bear longer period of liability for the safety of containerized cargo than that for

¹¹¹ Article 46 of Maritime Code provides: 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 from the ship. 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

¹¹² Article 1 (e) of the HR/ HVR states that "carriage of goods" covers the period from the time when the goods are loaded on to the time they are discharged from the ship.

non-containerized cargo under Maritime Code. Obviously, it is different from the situation in the UK where Hague-Visby rules are implemented and two types of cargoes are treated equally in respect of the period of carrier's responsibility. Here a question arises: will this distinction between containerized cargo and non-containerized cargo have any effect to the shipper's liability for undisclosed dangerous cargo in China? As the author understands the effect will be the shipper should give notice to the carrier slightly earlier for containerized cargo than for non-containerized cargo under Article 68¹¹³ and Article 46 of the Maritime Code. For example, the shipper should notify the carrier the dangerous nature of the containerized cargo in good time i.e. before the carrier taking over the cargo at the port of loading. To non-containerized cargo, notice should be given before loading on board.

Finally, in respect of the relationship between Maritime Code and relevant international Conventions, as one of the main drafters of the Maritime Code, the adviser of the Standing Committee of the People's Congress, Guo Riqi, pointed out: "The Maritime Code has been drafted strictly according to international standards, either from a general point of view or from specific point of view."¹¹⁴ For example, in Chapter 2 of the Maritime Code, concerning maritime mortgages and liens, it adopts the provisions of the 1967 Convention on Maritime Liens and Mortgages. Considering the contracts of carriage of goods by sea in Chapter 4,¹¹⁵ although based on the substantial provisions of the Hague-Visby Rules, it incorporates many articles of the Hamburg Rules. Concerning contracts of carriage of passengers by sea in Chapter 5, it adopts substantial provisions of the 1974 Athens Convention. In Chapter 8, concerning collisions at sea, it adopts substantial provisions of the 1910 Collision Convention.¹¹⁶ In Chapter 9, concerning salvage, it adopts substantial provisions of 1989 International Convention on Salvage. In Chapter 10, concerning limitation of liability for maritime claims, it adopts

¹¹³ See detailed discussion about Article 68 in section 4.2.2.2

¹¹⁴ Guo Riqi, "An introduction to the legislation of the Maritime Code", in the Ministry of Communications (ed.), *The Essentials of the Maritime Code*, 1993, Beijing: People's Communications Press, p.2.

¹¹⁵ Chapter 4 Contracts of carriage of goods by sea (Articles 41- 106) and there are eight sub-sections within it. Section 1 Basic principles (Arts. 41-45), section 2 Carrier's responsibilities (Arts. 46-65), section 3 Shipper's responsibilities (Arts. 66-70), section 4 Transport documents (Arts. 71-80), section 5 Delivery of goods (Arts. 81-88), section 6 Cancellation of contract (Arts. 89-91), section 7 Special provisions regarding voyage charter-party (Arts. 92-101), section 8 Special provisions regarding multimodal transport contracts (Arts. 102-106)

¹¹⁶ On 28 August 1994, China acceded the Collision Convention 1910.

substantial provisions of the 1976 Convention on Limitation of liability.¹¹⁷

4.2.2.1 General Laws of Contract

Quite apart from the Maritime Code, however, there is the Chinese general law of contract. China's General Principles of Civil Law¹¹⁸ became effective on January 1, 1987. Prior to the adoption of the Civil Law, no statute existed that regulated the contractual relations between individuals. The Civil Law does not contain a separate chapter that deals with contract law. Rather, contract law principles are generally interspersed throughout it. The one exception is Section 2 of Chapter VI dealing with civil liability for breach of contract. The failure to segregate the various provisions dealing with contract law, combined with the absence of an index, makes the Civil Law difficult to use.¹¹⁹ Moreover, the Civil Law is not integrated with the other laws, statutes, and regulations dealing with contract law. The need to coordinate among the various laws affecting contract is especially noteworthy.

On March 15, 1999, the National People's Congress of China took a bold step towards modernising the country's legal system and its fledgling market economy by enacting the Unified Contract Law (UCL).¹²⁰ The UCL, which took effect on October 1, 1999, is extensive and sophisticated. Structurally, the Unified Contract Law is divided into three parts - General Provisions, Specific Provisions and Supplementary Provisions - with 23 Chapters featuring 428 Articles.¹²¹ The UCL does not replace the contract provisions of

¹¹⁷ Si Yuzhuo (Editor), *Maritime Law* (in Chinese), (2003), Law Press China, p.2. See also section 5.2.3.2.

¹¹⁸ It was adopted at the 4th Meeting of the Standing Committee of the Sixth National People's Congress on April 12, 1986, promulgated by Order No. 37 of the President of the People's Republic of China on April 12, 1986, and effective as of January 1, 1987. The English document is in "Laws and regulations of the P.R.C. governing foreign-related matters" (1991.7). It was compiled by the Bureau of Legislative Affairs of the State Council of the People's Republic of China, and is published by the China Legal System Publishing House. See the text (Chinese/English versions) at http://www.ahga.gov.cn/government/fagui/mf1/low_view1.htm

¹¹⁹ Folsom and Minan (editors), *Law in the People's Republic of China: Commentary, Readings, and Materials*, (1989) Kluwer Academic Publishers, Dordrecht—Printed in the Netherlands, p. 554.

¹²⁰ The unified Contract Law of the People's Republic of China was adopted at the Second Session of the Ninth National People's Congress on 15 March 1999 and came into force on 1 October 1999. Simultaneously, the *Economic Contract Law of the People's Republic of China*, the *Law of the People's Republic of China on Economic Contracts Involving Foreign Interests* and the *Law of the People's Republic of China on Technology Contracts*, were abrogated.

¹²¹ The first part - General Provisions - has 8 Chapters: General Provisions; Conclusion of Contracts; Effectiveness of Contracts; Performance of Contracts; Modification and Assignment of Contracts; Termination of the Rights and Obligations of Contracts; Liability for Breach of Contracts; Miscellaneous Provisions. The second part - Specific Provisions - contains 15 Chapters dealing with 15 types of contract: Sales; Supply and Use of Electricity, Water, Gas or Heating; Donation; Loans; Lease; Financial Lease; Hired Works; Construction Projects; Transport; Technology; Storage; Warehousing; Mandate; Commission Agency; Intermediation.

the Civil Law 1987, but it is a more specific legislation on contract law and is often used as reference in trials.¹²²

When drafting the Unified Contract Law (UCL), the Chinese legislators¹²³ referred extensively to the UNIDROIT Principles of International Commercial Contracts,¹²⁴ in particular those provisions in the chapter on General Provisions.¹²⁵ However, it is insufficient to have only general provisions without specific rules to deal with concrete cases. This is why specific provisions were included to regulate different kinds of contract under the second part of this legislation, e.g. Chapter 17 entitled: “Transport Contract”, including four sections, with a total of thirty four Articles.¹²⁶ Most are general provisions covering transport by sea, air, rail and road. Since these provisions are broadly worded (not as specific as the Maritime Code), in practice they are rarely used in Maritime disputes.

4.2.2.2 Shipper’s Liability under Chinese Maritime Code¹²⁷

Chapter 4 of the Maritime Code covers “Contract of Carriage of Goods by Sea”. It runs to eight parts, embodying Articles 41-106.¹²⁸ The shipper’s liability in respect of carriage of dangerous cargo appears under Article 68, and is effectively Article 13 of Hamburg Rules in another guise:

¹²² However, in maritime disputes, the more detailed Maritime Code is preferred rather than the UCL.

¹²³ See Zhang Yuqing & Huan Danhan, *The New Contract Law in the People's Republic of China and the UNIDROIT Principles of International Commercial Contracts : A Brief Comparison*. See details at <http://www.unidroit.org/english/publications/review/articles/2000-3.htm> ((1)Zhang Yuqing, Director General, Treaty and Law Department, Ministry of Foreign Trade and Economic Co-operation of the People's Republic of China (MOFTEC); Vice Chairman of the International Law Society of China; Member of the UNIDROIT Governing Council; (2) Huan Danhan, Attorney; Professor of Law; Counsel of the Chinese International Private Law Society, Member of the Working Group for the Preparation of the UNIDROIT Principles of International Commercial Contracts.)

¹²⁴ The UNIDROIT Principles of International Commercial Contracts, UNIDROIT (Rome), 1994.

¹²⁵ For example, Articles 3-7 of the Unified Contract Law set forth its basic principles, *i.e.* equality (Article 3), party autonomy (Article 4), fairness (Article 5), good faith (Article 6), public interest (Article 7). Such basic principles are likewise embodied in the UNIDROIT Principles, albeit in different words. Like the UNIDROIT Principles, the Unified Contract Law (Article 13) assumes that a contract is normally concluded by means of an exchange of offer and acceptance.

¹²⁶ There are four sections of chapter 17, including section 1: General provisions; section 2: Contract of carriage of passengers; section 3: Contract of carriage of goods and section 4: Multi-model transport contract (Articles 288-321).

¹²⁷ See the Maritime Code in details at footnote 108

¹²⁸ Chapter 4 of the Maritime Code: Section 1 Basic Principles; Section 2 Carrier’s responsibilities; section 3 Shipper’s responsibilities; section 4 Transport documents; section 5 Delivery of goods; section 6 Cancellation of contract; section 7 Special provisions regarding voyage charter party; section 8 Special provisions regarding multi-model transport contract.

“At the time of shipment of dangerous goods, the shipper shall, in compliance with the regulations governing the carriage of such goods, ensure they are properly packed, distinctly marked and labelled and notify the carrier in writing of their proper description, nature and the precautions to be taken. Where the shipper fails to notify the carrier or notifies 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 their carriage, 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 other goods. However, the provisions of this paragraph shall not prejudice the contribution in general average, if any.”

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 i.e. the packaging and labelling dangerous goods. The shipper must inform the carrier in writing of the name and dangerous nature of the goods and provide sufficient instructions for carrying them. If the shipper breaches this obligation, the carrier is entitled to discharge, destroy or take any measures deemed to be necessary by him or her after discovering the dangerous nature of the goods carried.

Article 68 has specified that shipper has the responsibility to pack, mark and label the goods in a suitable manner as dangerous. For example, in *China Foreign Trade Transportation Corporation v. China International Petroleum and Chemicals (Qinu) Company and Petroleum and Chemicals Import and Export Company of Shanghai*,¹²⁹ 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 leaking from the cargo. The Maritime Court in Qingdao in 1991 held that the packaging of the chemicals did not meet the standards set

¹²⁹ The Institution for Practice Legal Research of the National Supreme Court, ed., *Selected Cases of the People’s Court* (in Chinese), (1992) Vol. 1, Publishing House of the People’s Court, Beijing, pp 147-154.

out in the relevant international convention (IMDG Code) and supported the plaintiff's argument that the cost to clear up the gas from the holds carrying the chemicals in Amsterdam would be too great to justify the continuation of the planned journey after the leakage was discovered in Singapore. The defendant was liable for damages and costs caused by the dangerous gas leaking from the cargo.

In certain circumstances, if the hazardous substance is not listed in the IMDG Code, the shipper will be held liable for inadequate notice or insufficient packing under Maritime Code 1992. In *Orient Overseas Container Line Inc v. Sinochem Shandong Yantai Import & Export Co Ltd (Sinochem), and Yantai Native Products and Animal By-Products Import & Export Group Co Ltd (NPAB), (The Steady Crocodile)*,¹³⁰ the plaintiff (carrier) accepted a booking by NPAB on 15 August 1997 and issued an original shipped bill of lading (B/L). The B/L indicated that the cargo was thiocarbamide dioxide, the carrying ship was *The Steady Crocodile*, the port of discharge was Los Angeles, and the shipper was NPAB. On the night of 19 August 1997, when *The Steady Crocodile* was berthed at Shanghai, the second hold began to fume. According to the investigation of the Shanghai Pudong New Zone Environment Monitoring Centre, the fumes were attributable to the spontaneous combustion of thiocarbamide dioxide loaded in container number OOLU3360121. The ship left this container at the terminal and arrived at Kobe on 23 August. After arrival, the plaintiff appointed Seagull Marine (Yokohama) Co Ltd to inspect the contamination of the vessel and the conclusion was that the second hold, which held number OOLU3360121 container, and the surfaces of 25 other containers were contaminated. In August 1997 and August 1998, the plaintiff appointed Shanghai Zhong Heng Consulting Co Ltd Edmondson (a Hong Kong expert) and Mullen (a Singaporean expert) to examine the polluted container, and their conclusions were that the spontaneous combustion was attributable to improper stowage since there was no proper segregation or fixation between the cargo and container. Turbulence caused by rough seas led to several broken packages and the moisture came into contact with the dangerous cargoes. According to the investigation, Sinochem and NPAB concluded a

¹³⁰ This case was published at the website of Chinese Commercial and Maritime Trial involving Foreign Elements (sponsored by the Supreme People's Court of the PRC). See details (in Chinese) at <http://www.ccmt.org.cn/hs/news/show.php?cId=5693>

contract individually and NPAB was not liable for any disputes caused.

It was held,¹³¹ according to the PRC Maritime Code 1992 Article 66,¹³² that NPAB (shipper) had the obligation of proper packaging and encasing, so he was liable for the resulting damage. Sinochem was only the cargo owner without any contractual relationship with the plaintiff carrier. The export agency contract between NPAB and Sinochem could not antagonise the carrier. From this decision, we can see, although the thiocarbomide dioxide was not listed in the IMDG Code¹³³ when the contamination happened,¹³⁴ it did not exclude the obligation of packaging and encasing imposed on the shipper by Article 68 of Maritime Code 1992. It should be noted that the thiocarbomide dioxide was stowed under deck by the carrier and in this case it was not negligent stowage at that time since there was no specific requirement for it under the old IMDG Code. However, according to the new IMDG Code,¹³⁵ the thiocarbomide dioxide has to be stowed on deck.

If this case happened after the cargo was listed in the IMDG Code, in the author's opinion, the spontaneous combustion would be attributable to insufficient packaging by the shipper and improper stowed by the carrier. Since Chinese law allows the reduction of contractual liability for contributory negligence under Article 113 of the Civil Law,¹³⁶ the shipper's liability should be deducted by certain amount subject to the carrier's negligent stowage. That is to say Chinese law allows loss caused by the contributing fault of both the shipper and the carrier to be apportioned between these parties. This is very different from the existing English law¹³⁷ where the carrier would (under the HVR), clearly be held liable for the entire loss unless it could show that a quantifiable

¹³¹ The first instance was before Shanghai Maritime Court [1998] No. 419. The decision was given by Yongkang Chen Judge and another two assistant judges on 20th November 2002. Both parties did not appeal.

¹³² 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.

¹³³ The Chinese Government ratified IMDG Code on 2 October 1982 and the international transport was based on it.

¹³⁴ However, in a later edition of IMDG Code, thiocarbomide dioxide was added to category 4.2.

¹³⁵ Category 4.2

¹³⁶ Article 113 of the Civil Law states: "If both parties breach the contract, each party shall bear its respective civil liability". See the discussion of "*The Jin Han*" on application of the contributory negligence in contract under Article 113 in section 4.3.2.1

¹³⁷ For a summary of the legal position of English law, see *The Kapitan Sakharov* [2000] 2 Lloyd's Rep. 255, see particularly the statement by Auld LJ at 267-270. See also the Court of Appeal decision in *The Fiona* [1994] 2 Lloyd's Rep. 506, particularly the speeches of Hirst LJ at p 519 and Hoffmann LJ at p 521. See also section 4.2.1.5

part of loss was not at all due to its negligence.

In the second situation described in paragraph two of Article 68, if the shipper has complied with the obligation to pack and label the dangerous goods and has provided sufficient information for transportation, and the carrier has given consent to carry the cargo, the carrier is entitled to dispose of the goods for the safety of the ship or other cargoes on board when necessary and without compensation for the loss of dangerous cargo to the shipper. However, the carrier must bear his own costs and fees on dealing with dangerous cargo. In this situation, the carrier and shipper are not liable to each other unless general average is an issue. On the other hand, if the carrier fails to follow the instructions for carrying the dangerous goods correctly and has caused loss or damage to the dangerous goods or other goods on board, the carrier will be liable to compensate such loss or damage.

If the carrier has proper notice from shipper and consents to carry the dangerous cargo, the shipper will be still liable for damages if the packing was inadequate and would have to pay the expenses incurred by the carrier. In *Ocean Shipping Co of Shanghai v. Haerbing Chemical Products Import and Export (Dalian) Co*,¹³⁸ the defendant shipper, contracted the plaintiff carrier to ship 29 containers of acetic acid from the Port of Dalian to Japan in August 1991. The cargo was carried with the knowledge of the carrier, but many barrels containing the chemical were defective and the inadequate packing was not detectable by the carrier. Several containers housing the defective barrels showed serious leakage of acetic acid when the vessel arrived at the Port of Kobe. The local stevedore refused to unload the leaking containers. The carrier informed the shipper of the incident and the shipper instructed the carrier to bring the containers back to the Port of Dalian. The vessel visited the Port of Nagoya to discharge other cargoes on board. However the Japanese Maritime Safety Bureau discovered the leakage and banned the vessel from stopping at any Japanese port. The vessel sailed back to the Port of Dalian with the 29 containers containing the chemical and the other 95 containers that should have been unloaded at the Port of Yokohama. The vessel had

¹³⁸ *Select Cases of the People's Court*, op. cit., vol. 10, 1994, pp152-160.

to cancel its plan to bring 71 containers from Japan to China because of its inability to discharge containers in Japan.

In March 1992, it was held by the Maritime Court of Dalian that the shipper had the obligation to properly pack the dangerous chemical, so he was liable for the resulting damage. The carrier was allowed to claim the losses arising from the return carriage of 29 containers, the loss of freight arising from the next scheduled voyage of carrying the 71 containers to China, the costs for inspecting and repairing the containers and the vessel, the cost for inspecting the containers in Japan and the cost for storing the containers in the Dalian Port. Interest on the losses and costs claimed were also granted. The Court of the Appeal disallowed the claim for the loss of the next scheduled voyage because the carrier had arranged another vessel to carry the containers concerned. The Court of Appeal also reduced the costs for inspection in China, for repairing the containers and vessel and for storage of the containers because the carrier was held to be partially liable for the costs incurred.

This case involved the occurrence of indirect loss to the shipment of dangerous cargo. If the carrier didn't arrange another vessel to bring the 71 containers to China but he carried it back in his own ship, in the author's opinion the carrier's loss of freight should have been compensated by the shipper since the leaking containers with the acetic acid inside was the main reason of this loss.

4.2.2.3 Further Discussion and Recommendation

As we know, the acetic acid in the above case was carried with the knowledge of the carrier, but the packing was defective, if this case was determined under the HR/ HVR, the carrier may perhaps rely on Art IV r3 to allege that the loss concerned was caused by the fault or negligence of the shipper. It relates to the shipper's obligations to give notice to the carrier and properly pack and label his cargo. With regard to the shipper's liability to give notice, after *The Giannis NK*,¹³⁹ the position of English law is made

¹³⁹ [1996] 1 Lloyd's Rep. 577; [1998] Lloyd's Rep. 337.

absolutely clear that the liability is strict,¹⁴⁰ both at common law and under the HVR.

With respect to the shipper's liability to the carrier, the relevant provisions under Maritime Code are largely Hamburg-based which have made more specific provisions, but haven't fundamentally changed the scheme of liability for dangerous cargoes under HR/ HVR. No doubt, the liability of the shipper to give notice, under Article 68, is strict.

It is not clear whether the shipper's liability for incorrect labelling and insufficient packing under Article 68, it is strict or based on fault. In fact, the shipper's liability for labelling and packing has already been specifically stipulated by Articles 66¹⁴¹ and 70.¹⁴² Therefore, the author suggests that there is no need to repeat the same issue in Article 68 without further clarification or specification. According to Articles 66 and 70, the shipper's liability of incorrect labelling and insufficient packing is based on fault.

Another issue the author would like to point out is the definition of "actual carrier" under Maritime Code,¹⁴³ which is largely Hamburg based, has resulted in confusions relating to the shipper's notice to the carrier under Article 68.

Under Article 68, it is only referring to the shipper's liability to notify the carrier of cargo's proper description. It is not clear whether the shipper's notice to the "carrier" also includes the actual carrier. The author presumes the answer is "yes" given the meaning of Article 61: "The provisions with respect to the responsibility of the carrier contained in this Chapter shall be applicable to the actual carrier". The author suggests the wording of "actual carrier" should be added to Article 68.

¹⁴⁰ Shipper's liability is not fault-based and is not depend on his knowledge or the means of knowledge of the dangerous nature

¹⁴¹ 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.

¹⁴² 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.

¹⁴³ Under Article 42 of Maritime Code, "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. This definition is same as that in Article 1 of Hamburg Rules.

Also in practice, the shipper's agent or carrier's agent often act for their principal while dealing with the transportation of dangerous cargo. These persons are usually involved in the day-to-day business near the harbour. Unfortunately, in the Maritime Code, there is a lack of clarification of the status of agent's right and liability relating to the carriage of dangerous cargo. In my view, Article 68 needs to be clarified such that it applies to the shipper's and carrier's agents.

Whether or not the "actual carrier" knows of dangerous cargoes has meaning of importance in relation to the safety of transportation. No doubt, the scope of "carrier" should include the actual carrier or the person that has the authority to act as a carrier, such as ship master. In practice, the master is the person in charge of the ship and cargo.¹⁴⁴ It is the most straight and effective way to notice him about the dangerous nature of cargoes and make sure proper precaution has been done on board. Unfortunately the provision of Article 68 does not clarify the meaning of carrier at all.

In comparison, in England the shipper's liability to notify the carrier is under Article IV r6 of HR/HVR, which is specified to apply to "the carrier, master or agent of the carrier", and this provision is very clearly promulgated regarding to the meaning of carrier.

As the author understands, there is a lack of coherence among different chapters of Maritime Code. This is due to the fact that the Chinese legislative authority tried to "pick and mix" all the good aspects of the HR/HVR and Hamburg Rules. A negative impact of this attitude is real. The author suggests during the revision of Maritime Code, different chapters need further coordination and it would be better to have the revised Code based on one of the above international conventions or the new Rotterdam Rules.¹⁴⁵

¹⁴⁴ For example, the master should exercise due diligence to make the holds, refrigerating and cooling chambers in which dangerous cargoes are carried, fit and safe for cargoes' reception, carriage and preservation.

¹⁴⁵ The Rotterdam Rules known as "United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea". The ceremony on opening for signature of the Convention will be held on 23 Sep. 2009 in Rotterdam.

4.3 The Liability of the Carrier to the Shipper

4.3.1 English Law

It has been confirmed that a shipper's liability to notify carrier the dangerous nature of cargo is strict both under common law and HR/HVR.¹⁴⁶ However the risks of carriage of dangerous cargo by sea should be shared by carrier and shipper. Here a question arises: will the shipper be able to sue the carrier for damaging the dangerous cargo in any event? This question leads us to the real issue of causation: how far does wrongful shipment of dangerous cargo by the shipper affect the carrier's liability to him?

There are two situations. One is where the carrier has full knowledge of the dangerous cargo and consents to carry it. Accordingly, he is assumed to have taken the risk of any accidents which may ensue due to the dangerous character of the cargo. Under Article III of HR/HVR, the carrier has a stringent obligation to provide a seaworthy ship and properly carry, keep and care for the cargo. If the carrier fails to use ordinary skill and care, and to provide the special facilities required for dangerous cargoes, he will be liable for the resulting damage. The courts, therefore in the final analysis must decide whether the cargo loss or damage results from: (a) a lack of due diligence to make the vessel seaworthy; (b) improper care of the cargo or (c) one of the exculpatory exceptions protecting the carrier under Art. IV r2.

The other situation relates to unlawfully shipped dangerous cargo. First, presumably loss due to the dangerous nature (something the carrier is not liable for), such as, damage arising from inherent defect of the cargo (Art. IV 2 (m)); or inadequate packing and marking (Art. IV 2(n) & (o)); or misrepresentation of the nature or value of the cargo (Art. IV 5 (h)). Even if carrier was potentially liable to shipper, the carrier could immediately recover that sum from shipper as an indemnity. Secondly, presumably, loss not due to the dangerous nature of the cargo, even if the cargo is shipped unlawfully. For example, cargo of explosives shipped on board with insufficient packing, (Art IV

¹⁴⁶ See details in section 4.2.1.4

(m)), the carrier through unseaworthiness causes the cargo to become wetted by sea water. The carrier should be liable for the loss due to the unseaworthiness. Some relevant cases will be discussed (e.g. *The Fiona*¹⁴⁷).

4.3.1.1 Dangerous Cargo Shipped with Notice and Consent

If dangerous goods have been shipped with the carrier's consent, he is assumed to have taken the risk of any accidents which may ensue to his own vessel (not necessarily to the cargo). Whether or not the carrier is liable for any damages will depend on the reasons that caused the realisation of any potential dangers.

In practice, if the damage occurs during the course of transit because the shipped potentially dangerous cargoes become actually dangerous, the cargo claimants must attempt to prove that it was the carrier's lack of due diligence to make the ship seaworthy (Art III r1), or there was a lack of care for cargo (Art III r2). Generally, once a carrier receives special instructions from the shipper, he must follow those instructions, or negotiate new terms and conditions, or refuse the goods. Otherwise, he will be responsible for the consequences.¹⁴⁸

In response to the cargo interests, the carrier must prove his due diligence to make the ship seaworthy before and after the voyage with respect to the loss. In addition, he must prove either the cause of the loss was due to the dangerous character of the cargo or one of the exculpatory exceptions under Art. IV 2, e.g. loss due to inherent defect, quality or vice of the cargo (Art IV r2 (m)). If the only reason for the casualties was the breach of carrier's obligation under Article III r.1, the carrier would be held liable for the whole loss.

¹⁴⁷ [1993] 1 Lloyd's Rep. 257, QB; [1994] 2 Lloyd's Rep. 506, CA.

¹⁴⁸ See Tetley, *Marine Cargo Claims*, op. cit., p.557.

4.3.1.2 Liability with respect to Unlawfully Shipped Dangerous Cargo

If a loss is due to the dangerous nature of a cargo and the carrier does not have complete knowledge about the cargo which he is expected to have,¹⁴⁹ the carrier is not liable for the loss, e.g. damage arising from inherent defect of the cargo (Art. IV 2 (m)),¹⁵⁰ or undisclosed dangerous cargo (Art. IV r6).¹⁵¹ Even if the carrier was potentially liable to shipper, e.g. lack of due diligence to care for cargo (Art. III r.2), the carrier could immediately recover that sum from shipper as an indemnity.

The carrier's obligations imposed by Art. III r.2 are not absolute but subject to Art. IV. The carrier may avoid liability by proving that the loss or damage was in fact caused by one of the exceptions of Article IV r.2 (a) to (q).¹⁵² Comparatively, the obligation of seaworthiness under Art. III r.1 is an overriding one: if carrier doesn't fulfil it, he cannot be protected by the defences under Art. IV r. 2.

The excepted perils under Art. IV r.2 are as follows: (a) negligence of the carrier in the navigation or management of the ship, (b) fire, (c) & (d) overwhelming natural forces: perils of the sea¹⁵³ and acts of God, (e) to (k) overwhelming human forces: act of war, act of public enemies, restraint of princes, quarantine, strikes, riots and civil commotions, (l) certain deviation for saving for attempting to save life or property at sea, (i) (m) (n) (o) (p) faults of the shipper, inherent vice, insufficient of packing and latent defects and (q) catch-all exception.

In this chapter, we will not discuss all of them, but will focus on the rules particularly

¹⁴⁹ The degree of knowledge of the cargo expected of the carrier is not, however, of the highest expertise; such knowledge is the domain of the shipper who provides the cargo. See also Tetley, *op. cit.*, p. 485.

¹⁵⁰ See details at section 4.3.1.5

¹⁵¹ See the discussion at section 4.2.1.3

¹⁵² There are seventeen exculpatory exceptions under Hague and Hague-Visby Rules. But the later conventions such as the Hamburg Rules and the Multimodal Convention 1980, do not contain a list of exceptions drafted in the common law style, but rather have a general, all-inclusive article, drafted in typical civil law style, imposing responsibility on the carrier for loss of or damage to the goods, unless he proves "that he, his servants or agents took all the measures that could reasonably be required to avoid the occurrence and its consequences". See the Hamburg Rules art. 5(1) and Multimodal Convention 1980, art. 16(1).

¹⁵³ It is the most common defence of the carrier, has been described as "the carrier's best thought least dependable friend", see *Arakan*, 11 F.2d 791 at p. 791, 1926 AMC 191 at p. 192 (N.D.Cal. 1926).

relating to dangerous cargo liability. First of all, we will discuss the carrier's obligation as regards seaworthiness.

4.3.1.3 Seaworthiness

Under Art III r.1, a carrier is bound before and at the beginning of the voyage to exercise due diligence¹⁵⁴ to make the ship seaworthy. Seaworthiness is a wide concept: a ship can be unseaworthy not only if physically decrepit but also if unfit for the particular voyage anticipated through being improperly crewed, equipped and supplied, or if uncargoworthy,¹⁵⁵ such as unfit for the particular cargo to be carried.¹⁵⁶

When damages are caused by not only unseaworthiness but also a cause for which the carrier can exculpate himself, e.g. shipper's misrepresentation of the nature of cargo, the carrier could still be held liable. This is because seaworthiness is a preliminary obligation to any exculpatory exception. That is to say, if the carrier doesn't fulfil the obligation of seaworthiness, he cannot be protected by the defences under Art IV r2. As far as dangerous cargo is concerned, the duty to provide a seaworthy ship is to show and provide a seaworthy ship as regards the cargo which has been notified to the carrier.

4.3.1.3.1 Seaworthiness and Competent Crew

A vessel is judged to be unseaworthy if due diligence has not been exercised and that the owner failed to ensure that the crew were adequately experienced and trained in the operation of the ship.¹⁵⁷ For example, a crew member is incompetent and commits a negligent act such as the master navigating erroneously¹⁵⁸ or a second engineer opening the wrong valve and flooding cargo instead of a ballast tank.¹⁵⁹

¹⁵⁴ At common law there was an absolute obligation of seaworthiness, which was theoretically tempered in the Hague Rules by the introduction of the "due diligence" test from the US Harter Act 1893. Section 2 of the Carriage of Goods by Sea Act 1924 (s.3 of the Carriage of Goods by Sea Act 1971) abolished the absolute duty in Britain.

¹⁵⁵ Under Article III r. 1 (c), make the holds, Refrigerating and cooling chambers and all other parts of the ship in which goods are carried, fit and safe for their reception, carriage and preservation.

¹⁵⁶ Nicholas Gaskell, *Bills of Lading: Law and Contracts*, LLP, 2000, p.272.

¹⁵⁷ Tetley, *Marine Cargo Claims*, 3rd ed. (1988) p. 385.

¹⁵⁸ *Ta Chi Lim. Proc.* (Eurybates), 513 F. Supp. 155, 1981 AMC 2350 at p. 2358 (E.D. La. 1981). Gross error in navigation raised a presumption of incompetency which the shipowner had to rebut by showing due diligence in manning the ship.

¹⁵⁹ *The Farrandoc*, [1967] 2 Lloyd's Rep. 276.

With regards to dangerous goods, the carrier¹⁶⁰ should ensure that the officers and crew are at all times informed of such goods carried on board, and that their properties are known and what to do in case of an emergency (for example, how to use protective clothing and breathing apparatus).¹⁶¹ By the lack of knowledge of the peculiar hazards of the cargo, the incompetence of crew can amount to unseaworthiness. For example, in *The Eurasian Dream*,¹⁶² a fire started on deck 4 of the pure car carrier *Eurasian Dream* while in port at Sharjah. The fire, which was not contained or extinguished by the master and crew, eventually destroyed the vessel's cargo of new and second-hand vehicles and rendered the vessel itself a constructive total loss.

It was held by Cresswell, J.¹⁶³ that the loss and damage was caused by the unseaworthiness of *Eurasian Dream*; the fire would not have broken out if the master and crew had been properly instructed and trained; the master and crew were ignorant to the peculiar hazards of the car carriage, and the car carriers; the Univan manuals failed to give guidance for the supervision of stevedores; and the vessel should have been supplied with specific documentation dealing with the danger of fire on car carriers and the precautions to be taken to avoid such fires, including supervision of stevedores and the prohibition of hazardous activities by stevedores.

Carriers should ensure that the crews are properly trained,¹⁶⁴ and should be familiar with handling hazardous goods and to enable employees to recognise and identify

¹⁶⁰ This duty is a personal, non-delegable one placed on the carrier.

¹⁶¹ Peermohamed, Faz & Emery, Renaud Barbier, *Dangerous Cargo*, (2002) 16(7) P & I International, p. 19.

¹⁶² *Papera Traders Co. Ltd. and Others v Hyundai Merchant Marine Co. Ltd. and Another*, [2002] EWHC 118 (Comm); [2002] 1 Lloyd's Rep. 719

¹⁶³ [2002] 1 Lloyd's Rep. 719.

¹⁶⁴ A very good example that the experienced and fully trained crew they may be able to save a further incident is in *The Akatun 1986* (unreported American case, see Watt & Burgoyne, *Know your cargo*, (1999) 13(5), P&I International, pp.102-103). In this case, ship was loading propane in Mexico when the 10-inch loading arm flexible line broke. Unfortunately, the nearest accessible shut-off valve in the 16-inch loading line on the jetty was 400m from the ship. This meant that well in excess of 50m of propane was released onto the sea round Akatun before the valve could be closed. With a boiling point of -43°C, the cold liquid propane flash vaporised when it hit the sea and the gas could begin to drift. A small work boat entered the cloud, carrying with it a source of ignition, and the inevitable happened. The ensuing fire was quite exciting, being concentrated round Akatun. Fortunately the crew were well prepared, did a quick start, and the master put the vessel into full astern, ripping it off the berth. He then did a three-point turn and sailed out of the fire. The crew's quick actions had saved a much more serious incident. Compared the facts of *The Akatun*, where the crew are inexperienced in the operation of the ship and the owner fails to instruct them properly in the incident (owner's due diligence has not been exercised). No doubt the vessel will be regarded as unseaworthy.

hazardous materials.¹⁶⁵ There might be some duty of the carrier to train the crew even in respect of what to do about unlawfully-shipped cargo, so as to render the vessel unseaworthy if this was not done. Generally, the training for the safely handling dangerous cargo includes the relevant IMO Codes.¹⁶⁶ For example, IMDG Code, Emergency Procedures for Ships Carrying Dangerous goods (EmS),¹⁶⁷ The Medical First Aid Guide for Use in Accidents Involving Dangerous Goods (MFAG),¹⁶⁸ The IMO/ILO Guidelines for Packing Cargo in Freight Containers or Vehicles (Packing Cargo Transport Units),¹⁶⁹ and Regulations and resolutions referred to in the IMDG Code and supplement.¹⁷⁰

4.3.1.3.2 Cargoworthiness in Relation to Damage to Dangerous Cargo

Although many instances of unseaworthiness relate to defects in the ship or its machinery which may affect all cargo, e.g. engine defects or defective navigational equipment, the definition in Art III 1(c) clearly covers “uncargoworthiness”, e.g. where the ship is safe as a navigation entity, but unfit for the particular cargo to be carried.¹⁷¹ Under Art III r. 1(c), the carrier should exercise due diligence to make the holds, refrigerating and cooling chambers and all other parts of the ship in which goods are carried, fit and safe for their reception, carriage and preservation.

A classic example is “insect infestation” where holds are not fit for cargoes of foodstuffs (e.g. groundnuts), and the infested cargo may result in the vessel involving in a

¹⁶⁵ Peermohamed & Emery, op. cit., p.19.

¹⁶⁶ Shipping companies are required to assist seafarers in coping with these differences by establishing procedures to ensure that new personnel, as well as personnel transferred to new assignments, are given proper training for their new duties, see ISM Code 6(3) & 6(5). The revised STCW Convention also provides that seafarers should be given the opportunity for training in safety and survival; shipowners have many new training responsibilities under the STCW 1995 amendments. See Li, K.X. & Ng, Jim Mi, *International Maritime Conventions: Seafarers’ Safety and Human Rights*, 33 J. Mar. L. & Com. 381, July 2002, p. 392.

¹⁶⁷ This is one of the recommendations issued by IMO in Volume V of IMDG Code to provide extra guidance in safe carriage of dangerous goods. Its 1994 edition with sales No. English edition IMO-260E.

¹⁶⁸ Volume V of IMDG Code is a Supplement to the Code, including The IMO/WHO/ILO Medical First Aid Guide for Use in Accidents Involving Dangerous Goods (MFAG), see details at www.imo.org

¹⁶⁹ These guidelines are included in Volume V of IMDG Code. Where there is reason to suspect that a cargo transport unit in which dangerous goods are packed is not in compliance with the provisions of the IMDG Code, or where a container packing certificate/ vehicle packing declaration is not available, the unit should not be accepted for shipment.

¹⁷⁰ Such as other IMO instruments including BC Code, IBC Code, IGC Code, Dangerous Goods Declaration and Form for Cargo Information (issued under MSC/Circ 663) and so on.

¹⁷¹ Gaskell, *Bills of Lading: Law and Contracts*, (2000) LLP, at 275.

dangerous situation. However, contamination claims raise difficult questions of proof and the degree of care expected of the carrier.¹⁷² The obligation of seaworthiness could presumably extend to the information given by the master to the shipper, e.g. as to previous cargoes which had been shipped. Here the legal question will often be whether the carrier had exercised proper care once the cargo on board.¹⁷³

It would also be relevant to establish whether the insects presented in defective cargo have been notified to the carrier on shipment.¹⁷⁴ In *The Giannis NK*,¹⁷⁵ for the decision on the source of an infestation of khapra beetles in a cargo of groundnuts, the evidence pointed to cargo (rather than ship) infestation, despite a cargo fumigation certificate at the port of loading. So it is the shipper's liability for the shipment of infested cargo. In this case, the carrier did not know about the infestation of beetles, so he was not liable for unseaworthiness to the cargo owner of wheat (dumped into the sea). Suppose, if the carrier had noticed the beetles at the beginning of the voyage, but kept silence to the owner of wheat, he would be liable for unseaworthiness, where carrier's liability may supplement that of the shipper of groundnuts.

4.3.1.3.3 Stowage and Seaworthiness

Improper stowage can be a cause of unseaworthiness in two ways: (1) it may cause instability or danger of the ship, e.g. stowing inflammable cargoes near sources of heat and (2) it may cause damage to the cargo so stowed or to other cargo.¹⁷⁶ If the cargo is loaded in such a way as to endanger the stability of the ship, the latter will be unseaworthy.¹⁷⁷ By contrast, if the ship's holds are perfectly sound, but the cargo is

¹⁷² *The Athenian Harmony* [1998] 2 Lloyd's Rep. 410. Also see *The Fiona* [1994] 2 Lloyd's Rep. 506 (C.A.)

¹⁷³ *The Iron Gippsland* [1994] 1 Lloyd's Rep. 335.

¹⁷⁴ This issue would raise questions of apparent conditions on shipment such as bills of lading containing a pre-printed statement on the face that the goods have been received or shipped in "apparent good order and condition", as required by Art. III r.3 of the Hague and Hague-Visby Rules and Article 15(1)(b) of the Hamburg Rules 1978. Also there are possible liabilities of the shipper to give proper and sufficient information in order to carry the dangerous cargo safely.

¹⁷⁵ [1992] 2 Lloyd's Rep. 171.

¹⁷⁶ Poor stowage of cargo which results in direct damage to that cargo or other adjacent cargo is lack of due diligence to make the vessel seaworthy because the ship's holds, etc. are not fit and safe to receive the cargo. Direct damage to cargo by improper stowage is nevertheless better considered under Article III r. 2 where the carrier, because of his obligation to 'stow, carry, keep, care for', etc., is responsible for direct damage to all cargo when damaged by bad stowage, whether it was the cargo itself which was stowed badly, or other cargo loaded at the same, or later or earlier port. Tetley, M.C.C. 3rd ed., 1988, p387.

¹⁷⁷ See *Kopitoff v. Wilson and Others* (1876) 1 Q.B.D. 377, where poorly stowed amour plate broke through the side of the ship and sank it, and *Ingram & Royle Ltd v. Services Maritimes du Treport* [1913] 1 K.B. 538, where

stowed negligently next to another cargo which damages or contaminates it, the courts may hold that there was no breach of the obligation of proper stowage under Art. III r.1, but a possible breach of the obligation of proper stowage under Art. III r.2.¹⁷⁸

This is particularly relevant to dangerous cargo case: the same stowage may be safe for some types of cargo but not for others. In *Ingram & Royle Ltd v. Service Maritimes du Treport*,¹⁷⁹ where a dangerous sodium cargo¹⁸⁰ negligently secured on deck by the shipowner (it was insufficiently packed and stowed with insufficient care). The vessel started in rough weather; the cases of sodium broke loose, and coming into contact with water caused a series of explosions and fire on board, as the result the ship went down and the plaintiffs' cargo of mineral waters were lost.¹⁸¹ It was held by Scrutton J. that the ship was not seaworthy at the commencement of the voyage owing to bad stowage endangering her safety.¹⁸² The cause of the sinking of the ship with its other cargo was either fire or peril of the sea, but none of them could exempt the carrier from liability for unseaworthiness. Consequently, the defendants were liable for the loss of the plaintiffs' goods.

Nowadays, various publications give guidance to masters on stowage requirements,¹⁸³ e.g. *Thomas, Stowage* (2002),¹⁸⁴ but specific requirements may well be included in a charterparty and then incorporated into the bill.¹⁸⁵

The IMO, as might be expected, issues recommendations for the stowage of dangerous goods. For example, heat-sensitive commodities stowed below deck must not be stowed next to a fuel tank. Again, for some cargoes stowage below deck is considered the safest, but other cargoes may be stowed on deck according to their properties.¹⁸⁶ The stowage

inflammable sodium was inadequately stowed on deck.

¹⁷⁸ *CF. Elder Dempster & Co. Ltd v. Paterson Zochonis & Co. Ltd* [1924] A.C. 522; Scrutton, p. 98.

¹⁷⁹ [1913] 1 K.B. 538.

¹⁸⁰ More precisely, metallic sodium saturated with petrol.

¹⁸¹ The plaintiffs claimed damages for the loss of certain cases of mineral waters shipped on the defendants' steamship, the Hardy, for carriage from Le Tréport to London.

¹⁸² See also *Kopitoff v. Wilson* (1876) 1 Q. B. D. 377

¹⁸³ Gaskell, *Bills of Lading: Law and Contracts*, (2000) LLP, p.276.

¹⁸⁴ Thomas Robert Ellis, *Thomas's Stowage: the properties and stowage of cargoes*, (2002) 4th ed., Glasgow: Brown, Son & Ferguson

¹⁸⁵ Gaskell, *op. cit.*, p.276 and section 21B *Incorporation charterparty terms into the bill*, p 692.

¹⁸⁶ All three forms of calcium hypochlorite are now required by the IMDG Code to be carried on deck and to be

plans of dangerous cargo¹⁸⁷ should ensure that only valid positions are utilised for dangerous goods when planning the loading.¹⁸⁸ Likewise the dangerous goods plan on board must be duly filled in with information pertaining to the dangerous goods on board. This allows a quick and easy location of the dangerous goods.¹⁸⁹ Regulations pertaining to stowage and segregation of dangerous goods are stipulated in the IMDG Code¹⁹⁰ and must be followed.¹⁹¹

4.3.1.3.4 The I.S.M. Code and Seaworthiness

The International Management Code for the Safe Operation of Ships and Pollution Prevention (the “I.S.M. Code”)¹⁹² is now in force in most countries¹⁹³ and it creates a new and higher standard of seaworthiness, which can be expected to affect the interpretation of due diligence in Art. III r1 of HR/ HVR and “measures (relating to seaworthiness) that could be reasonably required” in Art. 5(1) of the Hamburg Rules¹⁹⁴ in the future.¹⁹⁵ For example, the failure of the shipowner to have a Safety Management System (SMS) complying the Code or to ensure that a valid Safety Certificate (SMC) is carried aboard the vessel, could constitute a lack of due diligence rendering the ship unfit to carry cargo and therefore unseaworthy.

shaded from direct sunlight. A deck stow avoids the risk of high ambient hold temperatures due to restricted ventilation and external heating by heated bunker tanks and steam pipes.

¹⁸⁷ The Maritime Safety Committee adopted in 1991 amendments to regulation VII/5 of SOLAS which include the provision of container packing certificates/ vehicle packing declaration and dangerous goods special lists, manifests or stowage plans.

¹⁸⁸ The class introductions (total 9 classes) in IMDG Code also give information concerning procedures which should be followed during loading and unloading.

¹⁸⁹ Peermohamed & Emery, *Dangerous Cargo*, (2002), 16(7), P & I International p. 19.

¹⁹⁰ Each class of dangerous goods in IMDG Code is preceded by an introduction which describes the properties, characteristics and definition of the goods and gives detailed advice on handling and transport, e.g. stowage and segregation, including separation from special spaces or areas in a ship. See details in Focus on IMO: IMO and dangerous goods at sea, May 1996, at www.imo.org

¹⁹¹ From 1 January 2004, the IMDG Code becomes mandatory (with some provisions remain recommendatory), where the flag State regulations require strict compliance with the IMDG Code, means that the stowage of cargo must follow the IMDG Code

¹⁹² See relevant discussion on I.S.M. Code in Appendix II

¹⁹³ I.S.M. Code adopted by IMO on November 4, 1993 as the Annex to Resolution A.741(18), was subsequently adopted as Chapter IX of the SOLAS Convention on May 24, 1994. It therefore now applies as mandatory law, rather than merely as a recommendation of the IMO, in 158 States SOLAS states (representing 98.8% of world merchant shipping fleet; both China and UK have ratified it.). I.S.M. Code came into force for most categories of cargo vessels engaging in international voyages, as of July 1, 1998 and became applicable to all cargo ships, as well as offshore drilling platforms, as of July 1, 2002. On 24th March 2006, EC Regulation 336/2006 on the implementation of the ISM Code within the EU entered into force and repealed EC Regulation 3015/95.

¹⁹⁴ Article 5 (1) of Hamburg Rules makes the carrier liable for loss or damage to the goods, as well as for delay in their delivery, unless the carrier proves that all measures that could reasonably be required to prevent the occurrence and its consequences were taken by it, as well as by its servants and agents. The burden of proof therefore continues to fall upon the carrier, but the due diligence obligation of Hamburg would seem to apply, not subject before and at the commencement of the voyage, but all times and stages of the journey. See Tetley, *Marine Cargo Claims*, 3rd ed., 1998, p396.

¹⁹⁵ Tetley, *International Maritime and Admiralty Law*, 2002, p84.

The ISM Code covers all tankers, chemical tankers, gas carriers, bulk carriers, and certain other cargo vessels.¹⁹⁶ The ISM Code sets International Standards for the Safe Management and Operation of ships. Shipowners are required to adopt and implement a SMS for their vessel and to designate a person with direct access to the highest level of management within the shipping company, to ensure that defects in the vessel are detected, reported and corrected quickly.¹⁹⁷

The Code requires carrier to document and implement clear procedures for safety management both ashore and afloat. Risk management (risk assessment) is commonly found to be part of the procedures within a company's or vessel's SMS.¹⁹⁸ As we can see, in order to manage the risk inherent with carrying dangerous cargoes, the carrier needs to ensure that his team is advised of the risks involved in advance and the team should follow the carrier's written procedures. A carrier may require his team to adhere to the procedures to carry the dangerous cargo safely.

Naturally, some cargoes that must be carried are dangerous. However, by assessing the risk of carrying such a cargo one can minimise the risk by being aware of the procedures and standards required to carry such a cargo safely. For example, there are a number of requirements or risks to be assessed in the standard procedure of loading a noxious substance or marine pollutant. An ISM approved vessel might have to complete several checklists before a cargo can be accepted for shipment. Once the vessel is ready to receive the cargo, further checklists are often prepared before operations commence. A responsible person on the ship should assess the risk to the vessel when carrying such a cargo, for example, the availability of breathing apparatus, special fire-fighting equipment etc.¹⁹⁹ Such a system can be said to be effective at managing the risk because while assessing the risk all dangers are highlighted.

¹⁹⁶ For example, passenger ship of Class I, II and IIa and cargo high-speed crafts of 500 tons or more, which are engaged in international voyages, and the cargo ships and mobile offshore units of 500 tons or more which are also engaged in international voyages, must be fully compliant by 1 July 2002.

¹⁹⁷ The I.S.M. Code's verification, reporting and auditing requirements also ensure that a "paper trail" is created relating to such defects, which will provide documentary evidence of the diligence or lack thereof on the part of shipowners and ship operators in complying with the requirements of SMS. *See also* Tetley, op. cit., p. 290.

¹⁹⁸ Peermohamed & Emery, *Dangerous Cargo*, P & I International, 2002, 16(7), p. 19.

¹⁹⁹ *Ibid.*

In addition, if a ship is not compliance with the ISM Code (unseaworthiness), the shipowner may loss his defences contained in Art IV r2 headings a-c of HR/HVR (e.g. navigating error, fire, perils of the sea). In the author's view, ISM Code is relevant to fault-based liability, e.g. shipowner's responsibility to cargo and ship. If the shipowner does not exercise due diligence to comply with the Code or it is below the standards of Code, he has fault and should be responsible for the resulting damages.

Surely, a seaworthy ship must have the degree of fitness with regards to certain circumstances,²⁰⁰ e.g. perils of the sea. If it is the unseaworthiness caused the damage, he can not rely on the exceptions under Art IV r.2. Moreover, non-compliance with the Code may lead to liability on the part of ship managers who undertake ISM compliance—relevant systems and general ability to manage ships will be tested. Presumably, the shipowner will not be allowed to deny liability for cargo loss resulting from navigating errors, if the negligent management of the ship related to lack of ISM-related documents and instructions. Finally, the shipowner may loss his limitation under Art IV r5 (e) of HVR,²⁰¹ because of his fault on non-compliance with the ISM Code (e.g. it is regarded as a reckless action).

4.3.1.4 The Duty Properly to Load, Handle, and Care for Cargo

Under the contract of affreightment, the carrier's duty of care²⁰² for the cargo is non-delegable,²⁰³ and the carrier is accordingly responsible for the acts of the master,

²⁰⁰ Panayiotis Neocleous & Costas Stamatiou, *Legal aspects of the ISM Code*, (2006) International Company and Commercial Law Review, p. 218. 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. See *McFadden v Blue Star Line* [1905] 1 K.B. 697.

²⁰¹ Art. IV r5 (e) Neither the carrier nor the ship shall be entitled to the benefit of the limitation of liability provided for in this paragraph if it is proved that the damage resulted from an act or omission of the carrier done with intent to cause damage, or recklessly and with knowledge that damage would probably result.

²⁰² The primary liability for loading, stowing and trimming the cargo maybe shifted from the owners to charterers by a clause paramount, e.g. Line 78 of NYPE 1993.

²⁰³ The duty of seaworthiness is non-delegable as well. With respect to the other obligations which the carrier must discharge under art.3(2), however, notably loading, stowage and discharge, the United Kingdom takes the position that the parties to the contract of carriage are free to agree to transfer some or all of those duties to the shipper, consignee or charterer (e.g. by inserting "FIO" clauses in the bill of lading). These terms, which really derive from chartering, but are sometimes included in bills of lading, transfer to the shipper or consignee the carrier's ordinary

the crew, the stevedore and his other agents; but not, very significantly, other cargo owners. This matters a lot in the case of dangerous cargo: it insulates the carrier from liability where a cargo owner fails to take proper precautions re dangerous cargo.

Unlike the duty of seaworthiness, which operates only before and at the beginning of the voyage, the duty of care for the cargo²⁰⁴ operates during the voyage as well, so that the carrier is responsible for the acts of the master and crew while the vessel is underway.²⁰⁵ Care for the cargo is a stringent obligation, because Art. III r.2 states that the carrier shall “properly and carefully” care for the goods.

There has been comparatively little discussion on Art. III r.2, probably because it is expressly made subject to the list of exceptions in Art. IV r.2 and most discussions have focused on whether the carrier falls within these exceptions. However, there are problems caused by Art. IV r.2(a), which exempts the carrier from “act, neglect, or default... in the management of the ship”, since almost every failure to care for cargo under Art. III r.2 could fall within these words, unless they are given the narrow meaning by the courts. Most importantly, it has to be distinguished between management of the cargo alone (a matter within Art. III r.2) and management of the ship as a navigable entity (a matter within Art. IV r.2(a)).²⁰⁶ The distinction is nearly always a difficulty, and somewhat artificial one.

For example, in *The Iron Gippssland*,²⁰⁷ a tanker loaded a mixed cargo of oil products, but inert gas was supplied for the whole ship under a common system. Automotive diesel oil in tank 3 was contaminated by the gas and it was shown that the carrier ought to have known that this cargo should have been isolated and was liable for failure to have a sound system under Art. III r.2. The carrier sought to rely on Art. IV r.2(a) on the

responsibility for paying for and controlling either loading and discharging (“free in and out”), loading only (“free in liner out”), loading, stowage and discharge (“free in and out, stowed”) or loading, stowage, trimming and discharge (“free in and out stowed and trimmed”). Accordingly, the carrier is required to load, stow and discharge carefully and properly, but only to the extent that it has undertaken contractually to perform those specific functions. See *Pyrene Co. Ltd. v. Scindia Navigation Co. Ltd.* [1954] 2 Q.B. 402 at pp.417-418, [1954] 1 Lloyd’s Rep. 321 at pp.328-329.

²⁰⁴ The obligation to properly and carefully care for the cargo means the carrier needs to use special skill and provide special facilities to the carriage and also the knowledge of the carrier relating to dangerous cargo.

²⁰⁵ Schoenbaum, *Admiralty and Maritime Law*, 3rd ed. (2001), p.605.

²⁰⁶ For example, in *Gosse Millerd v. Canadian Government Merchant Marine* [1929] A.C. 726.

²⁰⁷ [1994] 1 Lloyd’s Rep. 335 (Supp. Ct. N.S.W.)

basis that the inert gas system was a safety measure for the protection of the vessel. It was held that, despite this, the purpose of the system was primarily to manage the cargo, not only for the protection of the cargo but also for the ultimate protection of the vessel from adverse consequences associated with that cargo, and so there was no fault or neglect in the management of the ship within the exception.

In a recent case of *The Aconcagua*,²⁰⁸ where a shipper did not give proper notice to a charterer in respect of the dangerous nature²⁰⁹ of chemical calcium hypochlorite. The charterer had admittedly been negligently stored a container of this chemical next to a fuel tank which was heated during the voyage. It was held by Christopher Clark J. that heating the fuel tank when a container of calcium hypochlorite was stowed next to it was a failure properly to care for the cargo but it was an act, negligent or default in the management of the vessel which was an excepted peril under Art IV 2(a). Accordingly, even if the heating had been causative,²¹⁰ the charterer would still be entitled to an indemnity under Art IV r6.

A similar decision was given in *Compania Sud American Vapores v MS ER Hamburg Schiffahrtsgesellschaft Mbh & Co KG*,²¹¹ where a container of calcium hypochlorite exploded because it was stowed next to bunker tanker which was heated during the voyage. The shipowner brought a claim against the charterer for loss of fire and loss and damage. The interesting issue was whether the act [the heating of the bunker tanks] was done as part of the care of the cargo or as part of the running of the ship, not specifically related to the cargo. It was found that the heating of the bunker tank was to facilitate the transfer of oil from it to the engine. It was a single act which did not relate in any way to the care of the cargo.²¹² It was held²¹³ that the shipowner had defence to claim by

²⁰⁸ *Compania Sud Americana de Vapores SA v Sinochem Tianjin Import & Export (The Aconcagua)*, [2009] EWHC 1880 (Comm); [2010] 1 Lloyds' Rep. 1

²⁰⁹ The abnormal characteristics of the chemical: it ignited at a much lower temperature than could be expected by the carrier.

²¹⁰ The likelihood was that the heating of the tank was not a cause of the explosion. The sole cause of the explosion was the abnormal characteristics of the chemical that self-ignited at a much lower temperature. See [2009] EWHC 1880 (Comm), para. 339

²¹¹ *Compania Sud American Vapores v MS ER Hamburg Schiffahrtsgesellschaft Mbh & Co KG*, [2006] EWHC 483 (Comm); [2006] 2 All E.R. (Comm) 1; [2006] 2 Lloyd's Rep. 66; [2006] 1 C.L.C 683.

²¹² Albeit it may have indirectly adversely affected the cargo [2006] EWHC 483, para. 60.

²¹³ [2006] 1 C.L.C. 683, at 712; [2006] EWHC 483, para. 60.

reason of Art IV r.2(a) of the HVR—the heating of the bunker oil was an act, neglect or default in the management of the ship.

In virtually all cases involving an allegation of breach of the duty of care for cargo, the carrier will try to satisfy the proof of an excepted cause under Art. IV r. 2²¹⁴ such as inherent vice, insufficient packing and other matters. When the loss is due to both lack of care for cargo under Art. III r2 and an exculpatory exception under Art. IV r. 2, the carrier is responsible unless he can separate the loss resulting from each cause.²¹⁵ If the carrier can separate the losses, then he is responsible only for the loss caused by his improper care.

4.3.1.4.1 Duty to Care for Cargo: Obligations When Receiving Cargo

Considering the special feature of the dangerous cargo and risks involved in the voyage, the obligation to properly and carefully care for the cargo seems to imply this. First of all, the carrier must study the cargo carefully before loading, in order to be able to care for it (assuming the shipper has disclosed all relevant facts). On the other hand, the shipper has the reciprocal obligation to give special instruments for special cargoes.

While the carrier agreed to carry the goods with knowledge of its dangerous character, and the shipper supplied special instructions for the cargo, the carrier must follow those instructions, or negotiate new terms and conditions. Otherwise, he will be liable for the consequences.²¹⁶ For example, in the American case of *Waterman Steamship Corp. v. Virginia Chemicals, Inc.*,²¹⁷ where the plaintiff carrier accepted a hazardous cargo of sodium hydrosulfite knowing that it is a chemical which catches fire when it comes in contact with water. It was held that the carrier having done so, "it then accepted the obligation to carry [the cargo] safely."²¹⁸ The carrier's negligence in improperly handling and improper stowage of the hazardous cargo proximately caused the fire and

²¹⁴ For carrier's exception of liability see section 4.3.1.5

²¹⁵ Tetley, *Marine Cargo Claims*, 3rd ed., p.557.

²¹⁶ Ibid.

²¹⁷ 651 F. Supp. 452 at p. 456, 1988 AMC 2681 at pp.2688-2689 (S D. Ala. 1987)

²¹⁸ See also *Verbeeck v. Black Diamond Steamship Corp.* 269 F. 2d 68 at 70, 1960 AMC 163 (2 Cir. 1959)

rendered the vessel unseaworthy.²¹⁹ Therefore the carrier was guilty of fault and was precluded from recovering on its claim. Furthermore, the carrier should be liable for the loss of the hazardous cargo.

If the carrier cannot supply the type of stowage or ventilation required, for the safety of the vessel and other cargoes on board, the accepted practice is for the carrier to refuse the goods. But when the carrier has contracted to carry the goods with knowledge, then refuses to carry the cargo, it is the author's opinion that in this case the carrier will be in breach of the contract and he should be responsible for damages and losses caused. Where the carrier has had the same opportunity as the shipper to inspect the condition of the goods before agreeing to carry them, it has been held that the shipper or charterer is not liable if the goods become dangerous as a result of their unsound condition on loading. Special shipping instructions are not necessary if the care required by certain commodities is well known in the trade.²²⁰

(i) Obligation to familiarise oneself with the cargo

Prior to loading the carrier must study the cargo carefully and fill out the stowage plan of the dangerous goods with the appropriate information obtained from the dangerous cargo manifest. The master must ensure that only such dangerous goods included in the dangerous cargo manifest are loaded. The carrier, in studying cargo, must learn from the past and must employ modern methods and up-to-date practices,²²¹ and he must follow existing regulations, as in the American case of *Waterman Steamship Corp. v. Virginia Chemicals, Inc.*²²²

²¹⁹ F. Supp. 452 at p. 456, 1988 AMC 2681 at 2689

²²⁰ For example, cargo of liquid tallow in the American case of *M. Golodetz, Export Co. v. Lake Anja*, 751 F.2d 1103, 1985 AMC 891 (2cir. 1985). In the English case of *Ministry of Food v Lamport & Holt Line Ltd* ([1952] 2 Lloyd's Rep. 371), the plaintiffs were the owners of a consignment of maize shipped in the lower hold of the defendants' vessel; they were also the owners of a cargo of tallow shipped in the 'tween deck', over the maize in the same vessel; on arrival it was found that some of the maize had been contaminated by a leakage of tallow. Sellers, J. held that the defendants had not, knowing the nature of the tallow, taken adequate steps to protect the maize, that the tallow, which was in casks, was not improperly or insufficiently packed and that the exemption clause in the bill of lading of the maize, exempting the defendants for loss incurred owing to leakage or breakage, did not protect the defendants from liability for damage caused by the leakage of tallow. He also dismissed the defendant's counterclaim against the plaintiffs as owners of the tallow, holding that the defendants had full knowledge of everything material regarding the tallow, and therefore needed no warning of its possibly dangerous nature. See also Tetley, op. cit., p.557

²²¹ Tetley, *Marine Cargo Claims*, 3rd ed., p.554.

²²² *Waterman Steamship Corp. v. Virginia Chemicals, Inc.* (651 F. Supp. 452 at p. 456, 1988 AMC 2681 at pp.2688-2689 (S D. Ala. 1987)), the carrier stowing the hazardous cargo of sodium hydrosulfite in the No. 6 lower hold and then walling in the cargo with palletised tape, which is contrary to applicable U.S. Coast Guard regulations.²²² The negligent stowage prevented early discovery of the fire, as well as preventative safety measures and easy disposal of the cargo once ignited. The negligent cargo stowage has been held to compromise the safety of

The carrier has an obligation to familiarise himself with the cargo, but the shipper has a reciprocal obligation to give handling instruments where necessary. Prior to the arrival of the vessel, most commonly, a shipper needs to prepare (1) a full and complete set of dangerous cargo manifests for dangerous goods to be loaded with the shipper's declaration and container packing certificate (multimodal dangerous goods form) attached, and/or (2) provide a Material Safety Data Sheet (MSDS)²²³ which includes details of the hazards associated with a chemical carried on board and provides information on its safe use. The above documents must be handed to the master upon arrival. When the manifests have been received on board, they must be carefully checked by comparing the information submitted with the IMO Code²²⁴ and the vessel's dangerous cargo checklist.

(ii) Right to refuse cargo

A carrier is not generally obliged to accept hazardous cargo if he cannot give it proper stowage and care during the voyage. The purpose of the notification of the dangerous cargo is to enable the carrier to take the necessary precautions to ensure safe carriage, or to reject it—if he is not contractually obliged to carry it. Depending on the specific situation of each case, the carrier can choose to refuse the cargo or notify the shipper of its inability and obtain the consent of the shipper to carry the goods under special terms and conditions.²²⁵ Presumably once the carrier has knowingly accepted the cargo he is bound to take all reasonable steps as regards that cargo.

Where the charterparty contains an express prohibition of dangerous goods,²²⁶ the carrier will clearly be justified in refusing. In the absence of express prohibition, the issue would depend on how the cargo is described in the charterparty. If it is described only in general terms, the carrier is entitled to refuse if the extra precautions required to

the ship, rendering the vessel unseaworthy.

²²³ Most commonly, the MSDS is used in the shipment of dangerous cargo. Also the Intertanko has taken the initiative and submitted to IMO a paper requiring that SOLAS have a mandatory requirement that proper information be provided to ships through a standard MSDS.

²²⁴ Such as IMDG Code and the Code of Safe Practice for Solid Bulk Cargoes (the BC Code).

²²⁵ Ibid., p.556.

²²⁶ For example, Lines 32 to 36 of the Baltime form provide: "No live stock nor injurious, inflammable or dangerous goods (such as acids, explosives, calcium carbide, ferro silicon, naphtha, motor spirit, tar or any of their products) shall be shipped."

ensure safe carriage will cause unreasonable delay or expense.²²⁷ Where the cargo has been described specifically in the charterparty, but presents unusual risks which are different from those usually associated with a cargo of the charterparty description, it is unclear whether the carrier is entitled to refuse the goods on the ground that they fall outside the charterparty description (this view was taken by Evans J. in *The Amphion*²²⁸); or whether, having received the appropriate notice, he is obliged to carry them (this view seems more in accord with *The Atlantic Duchess*²²⁹ and *The Fiona*,²³⁰ although it should be subject to the qualification that if it is impossible to carry the goods safely, the carrier is justified in refusing them).

In addition, it is also the view taken in *Scrutton*,²³¹ subject to the qualification that if it is impossible to carry the goods safely, the carrier is justified in refusing them. Also the carrier's obligation to study the cargo and his right if necessary to refuse it was confirmed by the US Supreme Court in *The Ensley City*.²³²

4.3.1.4.2 Proper and Careful Loading and Stowage

The duty of a carrier at loading is extremely broad. It seems that the carrier must ensure the cargo is loaded safely including the cargo is loaded without delay and stowed in such a manner that it can be found for quick and safe discharge.²³³ When loading dangerous cargo, a number of dangerous chemicals are often stowed together in the same hold, particularly in the case of containerised cargoes. There is a potential risk of interaction between these chemicals. Thus a carrier should have a proper dangerous cargo stowage plan.

A shipper should give the carrier instructions for cargo requiring special care. Otherwise,

²²⁷ Cooke, *Voyage Charters*, 3rd ed. (2007) p.164

²²⁸ [1991] 2 Lloyd's Rep. 101., purporting to follow *The Athanasia Comminos*, at p.283.

²²⁹ [1957] 2 Lloyd's Rep. 55, 95.

²³⁰ [1993] 1 Lloyd's Rep. 257.

²³¹ *Scrutton on Charterparties and Bills of Lading*, 20th ed., op. cit. p. 103.

²³² 71 F. Supp. 444 , at pp. 447-449, 1947 AMC 568 at pp. 572, 576 (D.Md 1947). It was stated : "The law imposes upon shipowners the duty to use all reasonable means to ascertain the nature and characteristics of goods tendered for shipment, and to exercise due care in their handling and stowage, including such methods as their nature requires. There is no absolute obligation on a vessel to accept a cargo. Indeed, it should not be accepted unless it can be given the type of stowage that its character requires, and the placing of conditions in a bill of lading does not relieve the vessel of the obligation to take appropriate care of the cargo "

²³³ Tetley, op. cit., p. 527.

the carrier is expected to be an expert in respect to ordinary cargo and should stow it properly without having to receive special instructions.²³⁴ Stowage of cargo into containers when done by carriers must be done properly and carefully, with proper bracing, blocking and dunnage inside. The stowage in such circumstances is part of the loading of the ship.²³⁵ The contents must be firmly stowed and secured against movement and chafing. Particular care must be taken to ensure that the contents will not fall outwards when the doors are opened. Dangerous cargo forming only part of the load must be stowed in the door area of the container for ease of access and inspection unless specifically agreed otherwise by the operator.²³⁶ These precautions are of paramount importance as the effects of damage arising from the poor stowage of hazardous cargo could be widespread. If the improper stowage of cargo in containers is done by the shipper, and he stuffs and seals the containers, he will be responsible for the consequences.

The carrier's obligation of stowage under Art. III r.2 must be exercised throughout the whole voyage. The carrier must fulfil his obligations "properly and carefully", and for the safe carriage of chemicals, he should provide specialist knowledge, skill and equipment. For instance, through the stowage and segregation procedures the carrier should be able to (1) keep dangerous goods under constant surveillance in order that leaks (if any) are detected at an early stage; and (2) have adequate means of putting out a fire before it breaks out on board.²³⁷

4.3.1.5 Whether a Carrier is Exempt from Liability?

The basic problem with the liability scheme under HR/HVR is that it gives rise to uncertainty. It gives the cargo owner two causes of action, based on Art. III rr.1 and 2, which effectively involve the taking of care, yet in Art. IV r.2 it lists a whole catalogue of exceptions where the carrier is not liable, and the relationship between the two

²³⁴ Tetley, *op. cit.*, p. 546.

²³⁵ *Ibid.*

²³⁶ Luddeke, *Marine Claims—a guide for the handling and prevention of marine claims*, (1996) 2nd ed., LLP, at 45

²³⁷ Peermohamed & Emery, *Dangerous Cargo*, P & I International, 2002, 16(7) p. 19.

Articles is unclear.²³⁸ This is particularly so where the cause of loss could be regarded as concurrent,²³⁹ e.g. where goods are badly stowed (a failure to comply with Art. III r.2), but damaged during a storm²⁴⁰ (under Art. IV r. 2(c), exception of peril of the sea). It seems based on an analysis of causation and which of the two competing elements was the decisive or dominant cause of the loss.

In *Shipping Corporation of India Ltd v. Gamlen Chemical Co. (A/Asia) Pty Ltd*,²⁴¹ where drums of chemicals broke adrift in a storm and the carrier claimed to rely on the peril of the sea exception. It was held that, as the loss could have been avoided by the exercise of reasonable care by the carrier in stowing the cargo, there was no peril of the sea, given the fact that the bad weather, though severe, was not unforeseeable. Stephen J rested his judgment on the fact that the two possible causes were not of equal effectiveness and that the inadequate stowage was the decisive or dominant cause.²⁴²

Another group of defences absolve the carrier from liability for damage that is beyond his ken in terms of the knowledge.²⁴³ I will not discuss all of them, but only focus on those particularly relating to dangerous cargo liability. For example, under Art IV r 2: neither the carrier nor the ship shall be responsible for loss or damage arising or resulting from

- (I) Act or omission of the shipper or owner of the goods;
- (m) Wastage in bulk or weight or any other loss or damage arising from inherent defect, quality, or vice of the goods;
- (n) Insufficiency of packing;

All of these causes of loss for which the carrier is not liable potentially clash with the duty of the carrier to properly care for cargo; they are thus narrowly construed.²⁴⁴

²³⁸ Gaskell, *Bills of Lading: Law and Contracts*, LLP, 2000, p.282.

²³⁹ For relevant discussion in Chinese Law, see section 4.3.2.2

²⁴⁰ Whether or not a storm is a peril depends on the intensity of the storm and the weather conditions which could normally be expected in that geographic area, at that time of year. Everything depends on the appreciation of the facts by the trial judge. Generally, United States courts have been stricter in their definition of peril than English Courts, while Canadian courts appear to have been most lenient of all. See Tetley, *op. cit.*, p. 431.

²⁴¹ (1980) 55 A.L.J.R. 88 (H.C.Aust.).

²⁴² See also *Metals and Ores Pty v. Compania de Vapores Stelvi S.A. (The Tolmidis)* [1983] 1 Lloyd's Rep. 530.

²⁴³ The policy here is he cannot have complete knowledge of certain aspects of the transaction

²⁴⁴ Schoenbaum, *Admiralty and Maritime Law*, 3rd ed. (2001), p.618.

Accordingly, shipper's negligence or improper acts may result in the carrier being exempted from liability on care for cargo under Article III r.2.

4.3.1.5.1 Acts or fault of the Shipper

The defence of act or omission of the shipper (Article IV r. 2(i)) is holding that because the way the shipper either knew or specified the goods should be carried, the damage resulted despite a proper care taken by the carrier. For example, where the shipper risked sending perishable cabbages without refrigeration at lower cost, the carrier will not be liable.²⁴⁵ It should be noted that this defence, like most of the other defences under Art. IV r.2, presumably only applies to claims by the corresponding shipper (A), given the damage caused by his act or omission; it will not help the carrier where the claimant is another shipper (B). Because B's contract with carrier is a separate one from A's contract and the carrier cannot be exempt from liability regarding his failure of looking after B's cargo (under Art III r2). Furthermore, when the carrier is sued by a third party bill of lading holder (C), Art IV r2(i) is not a defence since C is a third party and the carrier cannot benefit the defence which is only to a contracting party, i.e. "the shipper".

By the broad exception under Art IV r2(i), the carrier is not responsible for damage to cargo arising from the acts of the shipper, his agents and representatives and owner of the goods. In addition, the carrier can be absolved his liability only if he could prove the shipper knew or be presumed to know of the risks involved and he had exercised proper care. If there is carrier's negligence, that is a question of concurrent causes. The carrier will be responsible for the whole loss,²⁴⁶ unless he can separate the loss resulting from each cause.

In *Ismail v Polish Ocean Lines*,²⁴⁷ where a charterer had authorised his brother to give instruction as to the stowage of potatoes on board and his brother as his agent had given

²⁴⁵ *Aunnt Mid. Inc. v. Fjell-Oranje Lines*, 458 F.2d 712, 1972 AMC 677 (7th Cir. 1972).

²⁴⁶ This can be called "the Vallescura Rules". See *Schell & Co. v. S.S. Vallescura*, 293 U.S. 296, 1934 AMC 1573 (1934).

²⁴⁷ [1976] 2 W.L.R. 477; [1976] Q.B. 893.

express instructions as to its stowage. When the ship arrived in England a large number of bagged potatoes were found to be rotten due to bad stowage. It was held that the charterer had assumed responsibility for the stowage of the cargo and the master was relieved of his responsibility for stowage and dunnaging under the charterparty (clause 49). Since the damage resulted from the act or omission of the charterer's agent or representative, the shipowners could rely on Art IV r. 2(i) of the Hague Rules. Accordingly, the shipowners were not liable for the damage of cargo due to improper stowage.

4.3.1.5.2 Insufficiency of Packing

The defence of "insufficiency of packing" under Article IV r.2 (n) is closely related to act or omission of shipper. It should be noted here shipper's liability of insufficient packing is based on fault. The determination of exception of carrier's liability is based on whether (1) the shipper knew the goods were at risk and could have specified a different method of packing and (2) the carrier exercised reasonable care in stowage.²⁴⁸ In the case of dangerous cargo, the shipper's liability of insufficiency of packing should be based on fault as well. By contrast, under Article IV r.6, shipper's liability of disclosure of dangerous cargo is strict and the carrier is not responsible for damage to cargo even if the shipper has no knowledge of the dangerous nature of the cargo.

In the author's opinion, the packaging exception should be given a wider meaning in relation to dangerous cargo. It deals with goods not only adequately protected from damage to themselves; but also requires the goods to be packed to avoid damage to other goods. Also safety labelling should be part of packaging. Of course, such packing should prevent all but the most minor damage under normal conditions of care and carriage.²⁴⁹ This is true although some objects are packed very lightly; for example, steel rods are normally tied in bundles without other packing, while some objects have to be packed strictly according to the instruction, such as dangerous cargo of Potassium

²⁴⁸ Schoenbaum, , *Admiralty and Maritime Law*, 3rd ed., 2001, p.620.

²⁴⁹ Proper packaging according to the conditions or the trade will generally be sufficient *The Southern Cross*, 1940 AMC 59 (S.D.N.Y.1939).

Monopersulfate²⁵⁰ in *The MOL Renaissance*.²⁵¹

There is an obvious connection between packing and dangerous goods. Some cargoes cannot simply be classified as “dangerous” or “not dangerous”. Certain types of cargo are capable of causing damage only in certain factual contexts. For example, goods which, although harmless if packed in a proper and recognised manner, become potentially deleterious if not so packed.²⁵² Or if they are allowed to escape from the vessel or from the container in which they are packed, e.g. crude oil, they will contaminate the environment. The insufficiency of packing can be the blasting fuse for potential dangerous cargo translated into an actual danger.

Obviously, packing capable of preventing even the most minor damage is not practical or expected for most commodities, just as the degree of care that would have to be exercised by carrier in order to avoid all minor damage is not always practical or expected. There must be some middle ground or rule of reason between the degree of packing required, the care to be taken and the minor damage expected.²⁵³ This was put clearly by Learned Hand Ct. J., in *The Silversandal*.²⁵⁴

In the case of dangerous cargo, a duty is clearly imposed on shippers to correctly label and package hazardous cargoes and to assist masters by properly apprising them of the properties of the cargoes. With the best will in the world, however, mistakes occur and cargoes are often incorrectly labelled, packaged or stowed.²⁵⁵ Most commonly, an

²⁵⁰ Proper shipping name: Corrosive solid, N.O.S., (Monopersulfate Compound), UN Number: UN3260, Hazard class: 8, Packing group: II.

²⁵¹ *The MOL Renaissance* (March 2006, unreported case under English jurisdiction, the file of this case was collected from a London maritime law firm and as the author understood that the parties were prepared to go for mediation), the cargo was carried on board and started fire during the voyage the carrier argued that the cause of fire on ship is the insufficient packing of “Potassium Monopersulfate” by the shipper. The shipper argued the cause of fire is two containers (HJ’ Container and MOL’s container) were not properly stowed by the carrier. Reading its Material Safety Data sheet (MSDS), there are important restrictions on the sufficiency of packing. For example, “Mass Limitation” of the product – pallets of 25 kg bags can be stacked if there are 2-3 inch of air space between them. If ignored, can prevent the dissipation of heat and can lead to “runaway decomposition” and cause a fire on ship.²⁵¹ After investigation the damaged container, most experts believed that the fire resulting from the insufficient and improper packing of Potassium Monopersulfate.

²⁵² See Mustill, *Carrier’s Liability and Insurance* in Gronfors (editor), *Damage from Goods*, (1978) at 76.

²⁵³ Tetley, *op. cit.*, p492.

²⁵⁴ *Bache v. Silver Line, Ltd.* (Silversandal), 110 F.2d 60, 1940 AMC 731 (2 Cir. 1940). Where Rubber could have been boxed to avoid all crushing damage, but such packing would have been too expensive for the shipper. The bales of rubber could also have been stowed so as to avoid all crushing, but this would have been too expensive for the carrier. The Court found both the stowage and the packing customary, and exonerated the carrier. (at p. 734)

²⁵⁵ This will be sufficient to exonerate the carrier even if it is non-one’s fault.

IMDG Code Listing will be the first indication of the general nature of dangerous substances being carried on vessel. With the cargo's UN number, full details of its hazards can be obtained by seeking advice from experts or by reference to databases and technical literature. Of course, the method and standard of packing can be found in the IMDG Code and the IMO/ILO Guidelines for Packing Cargo in Freight Containers or Vehicles. Where the flag State regulations require strict compliance with the IMDG Code and other IMO recommendations, that means both shipper and carrier must follow these rules strictly, for example shipper needs to provide a MSDS²⁵⁶ or a dangerous cargo manifest with container packing certificate²⁵⁷, and the carrier needs to provide a proper dangerous cargo stowage plan.

Where there is insufficient packing and any other cause of loss, the burden is, of course, on the carrier to show what percentage was due to the insufficient packing and what was due to the other cause.²⁵⁸ The carrier will be responsible for the whole loss if he is unable to separate the damage arising from the two causes. Suppose, insufficiency of packing of chemicals (with a broken water-resistant liner) was deemed to have caused part of the loss, but there was evidence showing that carrier negligently stowed the container of chemical together with a container of wet cargoes (it damped the nearby container of chemicals). If the carrier cannot separate which damage caused by the insufficiency of packing, he will be held liable for the whole loss.

4.3.1.5.3 Inherent Vice

The defence of "inherent vice" (Article IV r. 2(m)) covers loss or deterioration of cargo because of some internal characteristic, defect or inherent quality of the goods. This can be a natural characteristic of the goods, such as the tendency of fishmeal to generate heat,²⁵⁹ or of a chemical to discolour.²⁶⁰ The theory and policy of the exemption is that the shipper rather than the carrier should show the inherent characteristics of the goods

²⁵⁶ Material Safety Data sheet

²⁵⁷ If the dangerous cargo was packaged by the packer with a certificate and there is evidence showing cargo was negligently packed, the packer will be held liable for the resulted damage.

²⁵⁸ This can be called "the Vallescura Rules". See *Schell & Co. v. S.S. Vallescura*, 293 U.S. 296, 1934 AMC 1573 (1934).

²⁵⁹ *United States v. Central Gulf Steamship Corp.*, 340 F.Supp. 473, 1973 AMC 252 (e.d. La. 1972).

²⁶⁰ *United States Steel International, Inc. v. Granheim*, 540 F.Supp.1326, 1982 AMC 2770 (S.D.N.Y.1982).

shipped and should have the responsibility of guarding against it.²⁶¹

In practice where any undisclosed dangerous cargo is damaged or deteriorates owing to its dangerous characteristics, the carrier, if sued, will always argue this exception. There are three different situations. If the danger is unknown to the carrier the exception in IV2m will apply. If the danger is known to the carrier then if the carrier fails to take proper care to deal with the dangerous feature he will be at fault, and fault negatives the excepted perils. If the carrier does not know but ought to, and for that reason fails to take proper precautions for the cargo, in the author's opinion, it is the carrier's negligence on care for the cargo, so the exception is not applicable to him.

In addition, there must a middle ground between the care of cargo required of the carrier under Article III r. 2 and the right of the carrier to rely on an exception such as inherent vice under Article IV r. 2(m). The degree of care also depends on the explicit special conditions of care in the bill of lading contract or the implicit conditions of care arising from the well-known nature of the cargo and the practices and customs of the past.²⁶² For example, where refrigeration of a cargo is neither requested by the shipper nor provided by the carrier, the carrier need not refrigerate the cargo unless that is a custom and practice between shipper and carrier implied in the contract.

There may be an overlap between goods that are "dangerous" and goods that suffer from "inherent defect, quality or vice", *inter alia* because goods that suffer from inherent vice might become dangerous during a voyage. However, the distinction between them is not always easy to draw, but it is very important because whilst inherent vice constitutes a defence to a claim for damages arising out of loss or deterioration during a voyage, it does not of itself involve any breach of duty by the shipper, or confer any right of recourse on the carrier.²⁶³ Considering a shipper's responsibility for disclosure the nature of dangerous cargo, the obligation to give notice to a carrier is absolute. The shipper is strictly liable if notice of the cargo's actual

²⁶¹ Schoenbaum, , *Admiralty and Maritime Law*, 3rd ed., 2001, p.622.

²⁶² Tetley, op. cit., p. 485.

²⁶³ Cooke, *Voyage Charters*, 3rd ed., 2007, p.162.

condition is not given, unless the actual condition is apparent to the carrier.²⁶⁴

Then can we find any criteria to decide a particular cargo which is dangerous or inherent vice? It is submitted that in principle where the condition of the goods on shipment is such that they are liable to cause injury to persons or damage to the ship or other goods, or even serious delay to the voyage,²⁶⁵ they fall in the category of dangerous goods. However, how to draw the line is not always easy in practice. In *The Athanasia Comminos*,²⁶⁶ Mustill J. explained the decision on the grounds that it had not been proved that the cargo of coal had dangerous characteristics different in degree from those notoriously associated with goods of that type. He found that the damage was actually caused by the carrier's failure to comply with safety standards of the kind which should have been adopted in the carriage of any cargo of coal. Therefore the carrier's claim failed. In *Greenshields, Cowie v. Stephens*,²⁶⁷ where coal heated and ignited on the voyage, but since the carrier made no attempt to prove that it had been in a dangerous condition on shipment the case was treated as merely one of inherent vice. In *Transoceanica v. Shipton*,²⁶⁸ where the presence of stones in a cargo of barley prevented the cargo from being discharged by spout and delayed the vessel for a day and a half, it was suggested that the case was not one of dangerous goods, but merely of inherent vice.

Considering the carriage of cargo which either inherent vice or dangerous, both the carrier and the shipper must ask themselves whether the nature of the cargo implicitly, or explicitly by the wording of the contract of carriage itself, requires special care of the cargo, e.g. refrigeration, or a certain height of stow, or a minimum ventilation or not more than a certain length of voyage, etc.

²⁶⁴ Ibid.

²⁶⁵ By analogy with *Mitchell Cotts v. Steel* [1916] 2 K.B. 610.

²⁶⁶ [1990] 1 Lloyd's Rep. 277, 283. In this case the carrier argued that the coal shipped was particularly hazardous in that it had a propensity to emit unusually large quantities of methane gas. Accordingly, a special warning of its dangerous characteristics was required. Mustill J. held that although the incidence of risk with the cargo of coal concerned in this case was higher than with ordinary coal, the difference in degree was not so great as to amount to a difference in kind. See also the discussion of this case in section 4.2.1.3

²⁶⁷ [1908] A.C. 431

²⁶⁸ [1923] 1 K.B. 31. See also the discussion of this case in section 4.2.1.1

In *General Feeds Inc v Burnham Shipping Corp (The Amphion)*,²⁶⁹ anti-oxidant-treated bagged fishmeal²⁷⁰ was carried under a Gencon voyage charterparty. After the “fishmeal” had been loaded in Peru, a fire occurred within the cargo during outturn in China, and the shipowners incurred considerable expense in countering the fire, discharging the cargo, and rendering the hold fit for reuse. Expert witnesses found the cargo had been correctly loaded, stowed and cared for during the voyage and concluded that the fire was a consequence of a few bags of fishmeal within the consignment not having been adequately treated with the antioxidant chemical. That means the cargo did not comply with the description in the charterparty. It was held that owners were only under an obligation to ensure that the fishmeal presented for shipment complied with the IMDG Code, and the certificate issued by the Peruvian authorities established this to have been the case. Whereas owners may have accepted the residual risk of potential overheating occurring, even in an antioxidant treated-cargo properly handled, owners could not accept the risk from improperly treated fishmeal. The charterers were held liable, having shipped cargo other than specified in the contract.²⁷¹

4.3.1.5.4 Misrepresentation of Nature or Value

Misrepresentation of the nature or value of the goods by the shipper results in a very heavy sanction—the carrier is not responsible for any loss or damage. That is to say, the carrier is entirely exempt from liability for loss or damage in connection with the goods according to Article 4(5)(h) of the HVR if either their nature or value knowingly been misstated by the shipper.

Article 4(5) (h) of the HVR provides “Neither the carrier nor the ship shall be responsible in any event for loss or damage to, or in connection with, goods if the nature or value thereof has been knowingly misstated by the shipper in the bill of lading”

This kind of misstatement usually arises where the shipper described the goods as some similar merchandise in order to obtain a lower freight rate, or to avoid customs duties,

²⁶⁹ [1991] 2 Lloyd's Rep., at p. 101, 1991 WL 837699 (QBD (Comm Ct)).

²⁷⁰ IMO class 9 fishmeal (antioxidant treated).

²⁷¹ See also *The Nour* [1999] 1 Lloyd's Rep. 1, a charterparty case, in which charterers who had failed to supply a cargo of fishmeal treated in accordance with IMO guideline, i.e. IMDG Code, were unsuccessful in arguing that the cargo had been improperly carried.

or strategic goods embargoes.²⁷² The warranty is not absolute but relates only to a misstatement of which the shipper was aware.²⁷³ Accordingly, the carrier is not responsible to either shipper or consignee for any damage to the goods. This is different from Article III r5, where a misstatement as to marks, numbers, quantity or weight in the bill of lading cannot be relied upon by the carrier against an innocent third party consignee. In *The Aegean Sea*²⁷⁴ Thomas J stated that the obligations in Article III r.3 and r.5 of the Hague-Visby Rules was restricted to the shipper and did not extend to any third party holder of a bill of lading.

Compared with Article IV r.6 of HR/ HVR, the shipper's liability to disclose the dangerous characteristics of the cargo and give proper notice to the carrier is strict. The shipper shall be responsible for all damages and expenses directly or indirectly arising out of or resulting from such shipment. The shipper's liability of misstatement of the nature is based on fault but the sanction is very onerous since there is a complete fundamental breach. The carrier is not responsible for the goods under the contract and the law, even if there is no causal connection between the shipper's misstatement and the loss or damage.²⁷⁵ The difference between "misstated" and "not properly disclosed" is not easy to explain. Whether the shipper's liability is strict depending on whether the cargo is dangerous. Generally, if the goods are liable to cause injury to persons or damage to the ship or other goods, or even serious delay to the voyage, they are dangerous.

Article IV r.5(h) is very meaningful and important for the carriage of chemicals and other hazardous materials, particularly if they are not listed in the IMDG Code at the time of shipment. What should the shipper tell the carrier as to the particular dangers of the cargo? In *The Asian Gem*,²⁷⁶ the vessel contracted to carry some low-grade powdered zinc dross²⁷⁷ from Long Beach to Japan where, at that time, they were less fussy about

²⁷² See Tetley, p. 455.

²⁷³ Gaskell, *Bills of Lading: Law and Contracts*, (2000) LLP, at 465.

²⁷⁴ [1998] 2 Lloyd's Rep. 39, 69

²⁷⁵ Tetley, op. cit., p. 455

²⁷⁶ This is a case (U.S. 1981) involving United States Carriage of Goods by Sea Act 1936, § 1304, equivalent of Article IV r 5 para. 4 of the HR and Article IV r5 (h) of the HVR. This case was referred in Watt, "Know your cargo", P&I International, May 1999, p. 102.

²⁷⁷ While at that time zinc dross or zinc ashes was not specially named in the IMDG Code, it was effectively present as a class 4.3 "water reactive substance NOS" or "not otherwise specified" materials.

pollution when smelting low-grade zinc ores. The ship asked whether the material was dangerous and was told by the shipper: “it is not listed in the IMDG Code” despite the shipper’s knowledge that the material produced hydrogen. This was a bulk cargo and was transported to the ship in trucks and loaded. The ship was told to keep the material dry, despite it having been stored outside for up to two years, and despite the trucks having been sprayed with water to reduce dusting problems. As the ship sailed, the diligent crew began to apply Ram-nek bitumen tape to the hatch covers to keep water out, but it was cold so the seaman doing work used a paraffin blow lamp to heat the tape and metal to get good adhesion. The inevitable happened, there was an explosion and the hatch covers were blown up. Then the American Coast Guard and American fire experts got involved in the continuing fire fighting.

In this case the shipper did not give proper notice²⁷⁸ to the carrier about the dangerous characteristics of the cargo and he was liable for all damages and expenses caused. Following the incident, zinc ashes was specifically incorporated into the Code and entered in the IMO bulk cargo code, as a hazardous material generating flammable gas when wet.²⁷⁹

4.3.2 Chinese Law

Articles 47²⁸⁰ and 48²⁸¹ of the Maritime Code regulate the carrier’s liability. Most of the duties are related to the seaworthiness of the vessel. They also require the carrier to take reasonable care and due diligence to carry cargo during the voyage. These duties are identical to Article III of the HR/ HVR. In fact, the Chinese texts of Articles 47 and 48 appear to be based on a translation of Article III, hence this section is very brief.

²⁷⁸ The shipper should note there are often NOS catch-all categories in the IMDG Code and should notice the carrier that potential danger of zinc dross and it produces hydrogen.

²⁷⁹ See Watt & Burgoyne, *Know your cargo*, (1999) P&I International, 13(5) p.103.

²⁸⁰ 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.

²⁸¹ Article 48: The carrier shall properly and carefully load, handle, stow, carry, keep, care for and discharge the goods carried.

4.3.2.1 Seaworthiness

Seaworthiness of the vessel is the most important obligation of the carrier. The scope of the duty of due diligence must be ascertained in the particular context. The nature of the goods to be carried may vary, as do the weather conditions that may be encountered. The carrier must provide a vessel suitable to carry the cargo concerned in a particular route of voyage. Otherwise, the vessel will be uncargoworthy.

If the carrier is told about the dangerous nature of the cargo, he must provide a ship that is fit to provide that cargo. If the cargo holds are not suitable for stowing the cargo in an acceptable way, the vessel is uncargoworthy. In *The People's Insurance Company, Guangxi Nan'ning Branch v. Tianjin Navigation Co. Ltd (The Jin Han)*,²⁸² by a charterparty dated 3 July 1995, the defendant shipowners agreed to charter the “*Jin Han*” to charterers carrying 6,000 tonnes of zinc concentrate from China to Korea. During the course of loading,²⁸³ intermittent rain was encountered and without cover, this cargo became wet on the quay.²⁸⁴

The shipper did not produce a certificate of moisture content of 12.41²⁸⁵ to the ship's agent nor to the carrier, and instead presented a shipping order to the ship's agent showing the moisture content of 8.9 percent. Soon after departing from the load port, the sodden cargo shifted²⁸⁶ during heavy weather and the vessel sank with all cargo lost. There are two issues need to be concerned, (1) was the shipper²⁸⁷ liable for the consequences of the misstatement of the moisture content? (2) Was the ship seaworthy, and if not, was the defendant shipowner liable for the loss?

²⁸² *The Jin Han*, first instance before Guangzhou Maritime Court on 4 November 1996, (1996)

Guangzhou-maritime-No.80; on appeal before Guangdong People's High Court, 31 December 1997.

²⁸³ In the contract, the carriers were not to be responsible for loading, discharging, stowage and trimming.

²⁸⁴ A grapple bucket was needed instead of a thrower to effect trimming.

²⁸⁵ During the course of loading, China Commercial Inspection Bureau (CCIB) issued a Certificate in respect of the export of zinc concentrates confirming the moisture content of 12.41 percent.

²⁸⁶ This was exacerbated when the cargo took on a muddy, liquid-like condition.

²⁸⁷ The plaintiff underwriters had issued an insurance policy in respect of cargo carried on board the “*Jin Han*”. After the loss, the shipper received a full indemnity from their cargo underwriters (People's Insurance Company), and the plaintiff underwriters became subrogated to the shipper's rights, under the PRC law, entitled to sue in their own name.

The dangerous cargo of zinc concentrate is a mineral which will produce a free surface effect when the moisture content is more than 8 percent and this can seriously affect the stability of the vessel and the carrier would be entitled to refuse to load or carry the cargo according to a relevant Regulation in China.²⁸⁸ Therefore, this case concerns unlawfully shipped dangerous cargo.

It was held in Guangdong People's High Court that the defendant shipowner did not ensure that the vessel complied with safety requirement for the shipment of zinc concentrates prior to loading, since the cargo holds were not suitable for stowage of the cargo (with moisture content more than 8%) in a seaworthy status prior to voyage. Also the master and the chief officer failed to refuse to load the cargo on the basis that the moisture content was above 8 percent. The crew were incompetent and they failed to study cargo by testing the sample before loading. According to Article 47 of Maritime Code,²⁸⁹ the vessel was unseaworthy and the defendant shipowner was liable for 70% of the loss and damage concerned. Under Article 113 of the General Principles of Civil Law²⁹⁰ and Articles 66,²⁹¹ 68²⁹² of the Maritime Code, the plaintiff shipper was held responsible for 30% of the loss and damage to the cargo subject to their contributory negligence on misstatement and loading a cargo with more than 8% moisture content.²⁹³

²⁸⁸ [88] MC No. 275, Article 9. The PRC Ministry of Communications (MC) had promulgated regulations on 22 April 1988 providing that the moisture content of concentrates for shipment in bulk should be less than 8 percent, and if more than this, the carrier would be entitled to refuse to load or carry the cargo. Also under Article 6, before loading, shipowner should test the sample of cargo and if necessary, should notice shipper to apply for a new certificate from CCIB.

²⁸⁹ Article 47 of Maritime Code provides: "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".

²⁹⁰ Article 113 of the Civil Law provides: "If both parties breach the contract, each party shall bear its respective civil liability".

²⁹¹ Article 66 of the Maritime Code provides: "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 abovementioned information".

²⁹² Article 68 of the Maritime Code: "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".

²⁹³ The Court of Appeal also found on a subsidiary point, on the measure of damages for loss of the cargo, that in accordance with Article 55 of the PRC Maritime Code, damages for loss of the cargo should be calculated on the basis of CIF value of the cargo. The earlier court judgment at first instance, which held that the amount of the insurance payment by the plaintiff underwriters is the measure of loss, was overturned.

4.3.2.2 Properly Load, Handle and Care for Cargo and Exceptions for a Carrier's Liability

Under Art. 48 of the Maritime Code, the responsibility to look after and carry the cargo properly during the voyage is a broad one, including seven specific roles: load, handle, stow, carry, keep, care for and discharge the goods carried. Furthermore, it requires the carrier to “properly and carefully” handle, preserve and carry the goods during the whole process of voyage.

We can see Art. 48 is a direct incorporation of Art III r2 of the HR/HVR,²⁹⁴ but omits the introductory words of Art III r2 “subject to the provision of Article IV” (exceptions for the carrier's liability). This omission does not, however, make the carrier's obligation under Art. 48 absolute in China or more stringent than the UK where the HVR apply. Indeed, no problem in practice: Art. 48 of Maritime Code must be read together with Art. 51 which sets out exceptions for the carrier's liability. Art. 51 largely adopts the same approach as the HR/HVR, and specifies 12 exceptions which are a simplified version of the 17 exemptions listed under Art IV of the HR/HVR.²⁹⁵ If the carrier cannot prove the existence of one of these exceptions, he must be held liable for the damages caused during the voyage.

More specifically, where damage is entirely due to the carrier's failure to load, stow or care for the cargo, the carrier bears any loss. Thus where a shipper shipped flammable thiourea dioxide but gave impeccable notice of its danger to the carrier, he was not liable when the chemical started a fire because the carrier has stowed it too close to a source of heat such as in *China National Chemical Construction Corp. Shenzhen Branch (CNRCC) v. Hyundai Merchant Marine Co., Ltd.*²⁹⁶

²⁹⁴ Article III r.2 of HR/HVR: Subject to the provisions of Article IV, the carrier shall properly and carefully load, handle, stow, carry, keep, care for, and discharge the goods carried.

²⁹⁵ Article 51 leaves a number of exemptions, such as the act of public enemies, the arrest or restraint of princes, because they do not have much practical significance today. Article 51 has merged a few exemptions, such as insufficiency of package and insufficiency of marking.

²⁹⁶ Guangzhou Maritime Court, (2003)-Maritime-No. 307 & No. 343.

In this case, the claimant shipper (CNCCC) contracted the defendant carrier to ship 720 casks of thiourea dioxide²⁹⁷ from Shenzhen to Rotterdam on the *MOL Promise*. The carrier was given proper notice²⁹⁸ and the chemical was properly packed and labelled with a certificate of Inspection of Packing for Dangerous Export Goods. On 12 June 2002, the master of *MOL Promise* found some fuming containers that quickly led to a big fire and resulted in the total loss of claimant's cargo. According to the investigation of Sarda Ispezioni in Cagliari, the fumes were attributable to the spontaneous combustion of thiourea dioxide. After examining the damaged containers and other polluted containers nearby, it was found that 8 freezers stowed together and generated excessive heat around the thiourea dioxide.²⁹⁹ It was assumed the heat from the freezers caused spontaneous combustion.

It was held,³⁰⁰ according to Art. 68, that there is no liability of the shipper since he had given the carrier proper notice and also properly packed and labelled the dangerous cargo. According to Article 48 of the Maritime Code,³⁰¹ the carrier negligently stowed dangerous cargo very near the freezers, therefore he was liable for the total loss of the claimant's cargo. In addition, the court denied the defendant's motion to exempt from liability based on the damage caused by fire on the vessel³⁰² since it was obvious that the fumes from dangerous cargo led to a fire and the fire was caused by the negligence of the carrier.

There is a more complicated situation where the loss or damage occurs from two concurrent causes and there is no decisive or dominant cause (both contribute to the loss). For example, one cause, for which the carrier is liable e.g. failure to care for goods (under Art. 48) combines with an excepted peril such as inherent vice or navigational fault (under Art. 51). There is no relevant provision of the Maritime Code

²⁹⁷ Thiourea dioxide is listed in category 4.2 of IMDG Code, UN number 3341.

²⁹⁸ The carrier received the notice about the dangerous nature before shipment and consented to carry them in two containers (No. HDMU2323998 and HDMU2920777)

²⁹⁹ According to the IMDG Code, thiourea dioxide should be kept in a cool place and far away from heat sources.

³⁰⁰ For details see decision given by Guangzhou Maritime Court, (2003)-Maritime-No. 307 & No. 343 (in Chinese). This case is unreported (on file with the author).

³⁰¹ Article 48 The carrier shall properly and carefully load, handle, stow, carry, keep, care for and discharge the goods carried.

³⁰² Under Article 51, "fire" is one of the exceptions for the carrier, unless the fire was caused by the negligence of the carrier and his or her employees or agents.

covering this issue. In the author's view, the carrier should be responsible only to the extent of the losses and damages caused by his failure to care for cargo (first cause). Meanwhile, the carrier should bear the burden of proof with respect to the losses and damages resulting from the second cause which absolves him from liability.³⁰³ Accordingly, if the carrier can not satisfy the proof of the excepted cause, he should be responsible for all damages and losses. More specifically, there are two different situations depending on the type of damage.

One is, the faults of the shipper and the carrier cause different damages, for example if the fire starts on deck (A) because of the shipper's fault (e.g. insufficient packing), but then spreads to another part of ship (B) because of the carrier's fault (e.g. improper stowage of cargo under deck). Clearly here the shipper is responsible for A but the carrier for B.

The other one is: a single item of damage (e.g. a single explosion) is caused by the faults of both shipper and carrier. This is more difficult. If the shipper sues the carrier or vice versa, this can be regarded as a matter of "comparative negligence"³⁰⁴ under Chinese law. Apparently, no relevant provision of Maritime Code covering this issue, but in practice it is likely for the claimant's damage to be reduced, if it is partly due to his own fault.³⁰⁵ If a third party (e.g. another cargo owner) sues the carrier (or the shipper), in the author's view, the shipper and carrier should be jointly liable for the whole loss, given it is difficult to decide the proportion of liability for a single item of damage.³⁰⁶ But this does not affect the recourse between them later on.

³⁰³ Article 54 of the Chinese Maritime Code: "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".

³⁰⁴ The principle of Comparative Negligence in China is very similar to contributory negligence in England.

³⁰⁵ Article 113 of the Civil Law states: "If both parties breach the contract, each party shall bear its respective civil liability".

³⁰⁶ It is unlikely for themselves to agree the proportion of compensation that each (shipper/carrier) will be responsible for. It is impossible for each party to pay a proportion according to the scope of his liability. Normally, the proportion will be decided by the Maritime court in China. This will be a time consuming process. In addition, the claimant will be put into a very difficult situation if part of compensation can not be paid due to bankruptcy of one defendant.

4.3.2.3 Further Discussion on FIOST Terms in China—Compared with England

In China, the carrier's duty of care for the cargo under Article 48 is non-delegable. Accordingly, the carrier is responsible for the acts of the master, the crew, the stevedore and his other agents. For example, the carrier is responsible to ensure the master and seafarers keep the holds free of water and the temperature of the chambers for the carriage of dangerous cargo are adequately cooled. Also in practice, it is common for the carrier to subcontract some work (e.g. stowage) to an independent company (e.g. stevedore's company). If the stevedores failed to perform their jobs properly, the carrier would be responsible for any losses and damages caused. However, if these stevedores were hired by the shipper, would the carrier's obligation be transferred to the shipper and hence the carrier be relieved from liability for improper stowage? Again, if there is a FIOST clause³⁰⁷ in the bill of lading, can the carrier's responsibility for loading, stowing or discharging, be transferred to the shipper or consignee in China?

Some Chinese scholars³⁰⁸ believe the carrier's duty of care for cargo under Art. 48 is a stringent obligation and cannot be excluded by contract, such as by inserting FIOST clause in a bill of lading (although possible in charterparty).³⁰⁹ They think because no relevant provisions in the Maritime Code that entitle the carrier to exclude his obligations relating to loading, stowing and discharging of the goods, the carrier should be responsible for any losses or damages caused by the stevedores, even if they were hired by the shipper.

Obviously, the above result is not ideal, thus the author is not agree with their opinion. It would be unfair for the carrier to be liable for any delays, losses or damages caused by

³⁰⁷ FIOST (Free In and Out Stowed and Trimmed terms), where cargo is loaded, discharged, stowed and trimmed free of expense to the shipowner, that is to say the shipper is responsible for loading and the receiver is responsible for discharging the vessel.

³⁰⁸ Li Zhangjun, *Study on the marine carrier's liability system in China* (in Chinese), (2006) Law Press, China, p.63

³⁰⁹ This statutory liability is only referred to parties under Bill of Lading, not relating to parties under Charterparty. Under Chinese law, in order to leave freedom of contract to private parties, generally no compulsory legislation on the right and liability as to charterparty. Like England, it is possible for the carrier to be relieved of liability based on FIOST terms (inserted into Charterparty) in China. Under Maritime Code, Charterparty is regulated in a separate chapter. I will discuss it later.

shippers, consignees or their agents, who have agreed to be responsible for the loading, handling, stowing or unloading of the goods in the contract of carriage. The author suggests that the Chinese legislators should stipulate the FIOS terms under the Maritime Code. The carrier's obligation should be limited to the proper assistance and supervision of the stevedores to stow goods on board. The shipper (or consignee) should be liable for any damages or losses caused by improper stowage if the stevedores were hired by him.

In comparison, the issue has been satisfactorily interpreted in English law: but for Article III r8 of HR/HVR, there would be no problem with FIOST clauses.³¹⁰ The question is simply whether those clauses fall within the prohibition in that Article III r8.³¹¹ If not, the parties to the contract of carriage are free to agree to transfer some or all of the carrier's duties to the shipper or consignee (e.g. by inserting "FIO" clauses in the bill of lading).³¹² These terms, which really derive from chartering, but are sometimes included in bills of lading, transfer to the shipper or consignee the carrier's ordinary responsibility for paying and controlling either loading and discharging (FIO "free in and out"), loading only ("free in liner out"), loading, stowage and discharge (FIOS "free in and out, stowed") or loading, stowage, trimming and discharge (FIOST "free in and out stowed and trimmed").

In English Law, the carrier is required to load, stow and discharge carefully and properly, but only to the extent that it has undertaken contractually to perform those specific functions. For example, if the shipper was liable under its indemnity under English law, but the concurrent fault was that the stevedores who damaged the vessel while loading dangerous cargo on board, the bill of lading on FIOST term, what would happen? Surely, with the insertion of FIOST term, the shipper would be responsible for loading

³¹⁰ *The Jordan II* [2004] UKHL 49, [2005] 1 W.L.R. 1363, FIOS(T) clauses are effective despite HVR Art III r 8. But the issue of Art III r8 and the FIOST term was left open by Bingham J. in *The Saudi Crown*, where the FIOST term was not effective due to the fact of the case. This case has been discussed previously (near the end of section 4.2.1.5)

³¹¹ Article III rule 8 of HR/HVR: any clause, covenant, or agreement in a contract of carriage relieving the carrier or the ship from liability for loss or damage to, or in connection with, goods arising from negligence, fault, or failure in the duties and obligations provided in this article or lessening such liability otherwise than as provided in these Rules, shall be null and void and of no effect. A benefit of insurance in favour of the carrier or similar clause shall be deemed to be a clause relieving the carrier from liability

³¹² See *Pyrene Co. Ltd. v. Scindia Navigation Co. Ltd.* [1954] 2 Q.B. 402 at pp.417-418, [1954] 1 Lloyd's Rep. 321 at pp.328-329.

(stevedores employed by him). Meanwhile he had strict liability for non-disclosure of dangerous cargo under Art. IV r6 of HVR. Therefore, the shipper should indemnify the carrier in full.

In China, unlike English law, there is no equivalent provision in the Maritime Code to Art III r8 of the HR/HVR. The issue of “transfer carrier’s responsibility to the shipper or consignee” under FIO clause (inserted in the B/L) is not covered by the Code either. The current law lacks sufficient clarification and does not specifically provide the carrier with relief from liability where work is undertaken by a shipper or consignee based on the agreement (e.g. FIO clause). Actually, this lack of clarification with FIOST terms exists in all previous cargo conventions, such as HR/ HVR and Hamburg Rules, but it has been clarified in the recent Rotterdam Rules.

In the author’s view, the way of English case law interpretation of the carrier’s obligations under the FIOST clause is much more sensible and clear. In China if FIOST terms were to be incorporated into a bill of lading, parties would be free to transfer some of the carrier’s duties to the shipper as well. This “freedom” should be recognised and clarified during the revision of Maritime Code. Furthermore, an equivalent provision to Art III r8 of HR/HVR should be stipulated. At present, there is a potential danger that a carrier might insert a very wide exceptions clause in a bill of lading that gave him a better deal than under the exceptions listed in Article 51 of the Maritime Code,³¹³ given Article 78 of the Maritime Code which provides that: “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”. In most cases, the Chinese courts will have no choice but give effect to this express term in the B/L regarding carrier’s exception of liability. As a result, the listed exemption of liability will be in favour of the carrier; and the B/L holder will be left in a disadvantageous position. But, occasionally the carrier may fail to benefit from the exception if somehow he is challenged by the court on assessment of the available evidence and the carrier is

³¹³ Article 51 of the Maritime Code largely adopts the same approach as the HR/ HVR with a specific list of exception of liability. See the full text in Appendix II.

not able to prove the existence of exception concerned. Under Article 51 (last paragraph), the carrier is required to bear the burden of proof.

Finally, the author thinks the new UNCITRAL Convention on the international carriage of goods wholly or partly by sea, Article 13.2³¹⁴ and Article 17.3(i)³¹⁵ are very successful and appear satisfactory. These provisions overcome the problems with FIOS terms under previous cargo Conventions. So they could be used as a reference for Chinese legislators.

4.3.2.4 Concluding Remarks

Briefly, the liability of the carrier to the shipper under Maritime Code is HVR-based, which is the same as in England. However, considering the liability of the shipper to the carrier, the relevant provisions under Maritime Code are largely Hamburg-based which have made more specific provisions, but haven't fundamentally changed the scheme of liability for dangerous cargoes under HR/ HVR. They all have very similar provisions dealing with dangerous goods, which largely supersede the common law rules related to shipper's obligation to give notice.

Nonetheless there is still difference between two countries. For example, unlike English law, there is not any equivalent provision of the Maritime Code to Article III r8 of the HR/HVR (prohibiting the carrier from reducing certain liabilities). Also whether the carrier is relived of liability based on the FIOST clause inserted in B/L has been interpreted in different way. In England, it is clearly interpreted in case law that the parties to the contract of carriage are free to agree to transfer some or all of the carrier's duties to the shipper or consignee. But this issue has not been stipulated or clarified by Chinese Maritime Code, which need draw attention to Chinese legislators.

³¹⁴ Under Article 13 para2, "Notwithstanding paragraph 1 of this article, and without prejudice to the other provisions in chapter 4 and to chapter 5 to 7, the carrier and the shipper may agree that the loading, handling, stowing or unloading of the goods is to be performed by the shipper, the documentary shipper or the consignee. Such an agreement shall be referred to in the contract particulars".

³¹⁵ Under Article 17, para3 (i), "Loading, handling, stowing, or unloading of the goods performed pursuant to an agreement in accordance with article 13 paragraph 2, unless the carrier or a performing party performs such activity on behalf of the shipper, the documentary shipper or the consignee".

4.4 Will Transferee be Liable for Dangerous Cargo in England and China?

Having analysed the allocation of risks between the original contracting parties, we need next to address the question of whether this liability may extend to third parties. This leads on to the most pressing issue in this area of law—should third parties ever be contractually liable in respect of the shipment of dangerous cargo?

Generally, the approach is different in England and China: and that England will be dealt with first, based on a few important decisions relating to carriage of dangerous cargo. This issue is not particularly stipulated by Chinese legislation. In China, it is simply left to the freedom of contract. The right and liability of transferee is normally defined by specific clauses of B/L. For example, Article 78 of Chinese Maritime Code provides: “(1) 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. (2) 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”. Nonetheless, the author would like to do some exploration and briefly discuss this topic based on her understanding of Chinese law.

4.4.1 English Law

4.4.1.1 Transfer of Bill of Lading

As far as contractual liability is concerned, the HR/HVR (and also the Hamburg Rules) provide it is the shipper who is liable under its indemnity for damages caused by his undisclosed dangerous cargo.³¹⁶ Whether this can be transferred to a third party holder

³¹⁶ Gaskell, *op. cit.*, p. 476. The Hague/ Hague-Visby Rules and also Hamburg rules are related to the legal issues of the carriage contract between shipper and carrier, not referring to the third party such as a transferee of bill of lading. Considering the shipper's liability, it can be divided into three categories: the obligation to provide accurate information on the goods to the carrier; to give appropriate warning and instructions to the carrier for the carriage of dangerous cargo; and to be responsible for the carrier's loss or damage which is caused by the act, fault or negligence

of a bill of lading³¹⁷ is not entirely clear. Considering transfer of bill of lading during the voyage of dangerous cargo, there are three questions need to be discussed: first, does the third party (transferee of B/L) become liable with regard to the shipment of dangerous cargo? Secondly, if he does, does the shipper cease to be liable or the transferee's liability is only in addition to the shipper's rather than substitution? Finally, if the transferee is liable, does he cease to be liable when he passes the document of title on to a sub-buyer?

4.4.1.2 Whether Transferees become Liable

Based on a strict interpretation of the privity rule,³¹⁸ the only way a third party can be liable on a contract is by specific legislative enactment. The relevant legislation is section 3 (1) of the Carriage of Goods by Sea Act 1992. Under s. 3(1), the lawful holder of a bill of lading (or a sea waybill) who takes or demands delivery or claims under the contract of carriage becomes subject to the same liabilities under the contract as if he had been a party to it.³¹⁹

Baughen and Campbell have argued that “this wording would suggest that the third party simply assumes all the liabilities to which the original party to the contract was subject. However, this is not the only way in which the provision can be construed. ‘The same’ need not entail that every obligation of the shipper must be imposed on the third party as well”.³²⁰ Instead, what it should entail is a comparison of the third party's position with the position which would be occupied by an original shipper. In the

of the shipper, his agent or servants. In addition, the shipper is obliged to pay the freight to the carrier unless the bill of lading states otherwise. See also Mo, John Shijian, *International Commercial law*, 3rd ed., N.S.W.: LexisNexis Butterworths, 2003, p.277.

³¹⁷ Cf. s.3 of the Carriage of Goods by Sea Act 1992.

³¹⁸ It is well-known that there are two distinctive features of English contract law that are not found (in the same term) in civil law jurisdictions such as China, France, Germany or Scotland, namely consideration and privity. It is also well-known that, at least, privity has been subject to attacks from judges, legislators and academics for much of the 20th century.

³¹⁹ Section 3 (1) of the Carriage of Goods by Sea Act 1992: where subsection (1) of section 2 of this Act operates in relation to any document to which this Act applies and the person in whom rights are vested by virtue of that subsection

(a) takes or demands delivery from the carrier of any of the goods to which the document relates;
(b) makes a claims under the contract of carriage against the carrier in respect of any of those goods;
(c) is a person who, at a time before those rights were vested in him, took or demanded delivery from the carrier of any of those goods, that person shall (by virtue of taking or demanding delivery or making claim or, in a case falling within paragraph (c) above, of having the rights vested in him) become subject to the same liabilities under that contract as if he had been a party to that contract.

³²⁰ Baughen & Campbell, op. cit. p7.

situation that a third party had nothing to do with the cargo prior to loading, indeed he will have even less opportunity of ascertaining the true nature of the cargo than the carrier.

Nonetheless, the indemnity in Art IV r.6 does not contain an express statement to prohibit the transfer of a shipper's liability to other persons.

The question then arises whether the lawful holder of bill of lading or other document of title becomes liable to indemnify the carrier in respect of dangerous goods. The authors of *Scrutton*³²¹ suggest that the answer is in the negative. The note in *Scrutton* on Article III, rule 5 reads as follows:

“Under Section 3 (1) of the Carriage of Goods by Sea Act 1992, a person to whom rights of suit are transferred under the Act... becomes subject to “the same liabilities under that contract as if he had been a party to that contract”. If the guarantee referred to in this Rule is within the meaning of section 3 (1) of the Act, then the person on whom liabilities are imposed by the section would, like the shipper, be deemed to have guaranteed the marks etc... and would also be liable for any loss consequent upon the guarantee. The Rule itself, however, seems to show an intention that the shipper only and not the consignee or indorsee should be liable under this guarantee and the courts will probably give effect to this intention by holding that the person on whom liabilities are imposed by section 3(1), although deemed to be a party to the contract of carriage, is not the Shipper within the Rule. If this be so, the carrier, sued in the English Court under Article III Rule 4 by a transferee who has acted in good faith could bring in the shipper as third party.”

In an *obiter dictum* in *The Aegean Sea*,³²² Thomas J expressly indorsed the same view given by the authors of *Scrutton* that “shipper” in Article IV rule 6 cannot be read as including a lawful holder of the bill of lading to whom rights and liabilities are transferred under COGSA 1992, and that therefore such a holder is not subject to the shipper's Hague Rule liabilities in respect of dangerous cargo.³²³ In addition, there is

³²¹ *Scrutton on charterparties and bills of lading*, 20th ed.(1996), London (Sweet & Maxwell), p453

³²² [1998] 2 Lloyd's Rep. 39, 70.

³²³ Mildon, David & Scorey, David, *Liabilities of Transferees of Bills of Lading*, The International Journal of

some judicial support to impose the duty in Article IV r6 solely on the initial “shipper”. It is has indeed been interpreted in this fashion even in the case where the term “shipper” appears elsewhere in the HR/HVR such as in *The Filikos*,³²⁴ where the Court of Appeal considering the term in Art IV r2(i). Nonetheless, there is no reported case in which it has been held that the shipper’s contractual obligation can be transferred to a third party, given that the liability imposed on the shipper is strict.

4.4.1.3 Whether Transferees’ Liability is in Addition to the Shipper’s or in Substitution for it?

On the assumption that the dicta in *The Aegean Sea* are wrong, then the argument is that the dangerous cargo liability can be transferred to the holder of B/L. Subsequently, a question arises: will the transferee’s liability is in addition to the shipper’s or in substitution for it?

In *The Giannis NK*,³²⁵ the shipper had endorsed the bill of lading to their immediate purchasers and so the property in the cargo of ground-nuts had passed to those purchasers under s. 1 of the Bills of Lading Act 1855.³²⁶ Were the shippers divested of their liability for the carriage of dangerous goods by virtue of the endorsement to the purchaser of the ground-nuts? In the first instance, Longmore, J. expressed his opinion in a negative way³²⁷ and he relied expressly on the obiter statement of Mustill, J. in *The Athanasia Comminos*:³²⁸

It may well be that in the main a transfer of the document, satisfying the requirement of the 1855 Act, operates to transfer away many of the shipper’s contractual obligations, but the Act cannot in my judgement have been intended to divest the shipper of responsibility for the consequences of loss, arising from the act of shipment itself.

Shipping Law (IJS), part 2, 1999, pp94-104, at 96.

³²⁴ *Filikos Shipping Corp of Monrovia v Shipmair BV* (The Filikos), [1983] 1 Lloyd’s Rep. 9, at 12; [1982] Com. L.R. 253. See also Baughen & Campbell, op. cit. p7.

³²⁵ [1994] 2 Lloyd’s Rep. 171 (Longmore J.); aff’d [1996] 1 Lloyd’s Rep. 577 (C.A.: Hirst, Morritt and Ward, L.J.); aff’d [1998] 2 W.L.R. 206 (H.L.), [1998] 1 Lloyd’s Rep 337 (Lord Lloyd, Lord Steyn and Lord Cooke).

³²⁶ Bills of Lading Act 1855 was the predecessor of the COGSA 1992.

³²⁷ [1994] 2 Lloyd’s Rep. 171

³²⁸ [1990] 1 Lloyd’s Rep. 277, 281.

In the appeal in *The Giannis NK*, Hirst L.J. noted that at common law the shipper would have remained liable, notwithstanding endorsement of the bill of lading. He also emphasised that the Carriage of Goods by Sea Act 1992, s.3 (3)³²⁹ had made this point explicit.³³⁰

In my judgement it would require very clear words indeed to divest the owner of his rights against the shipper (with whom he is in contractual relationship) and leave him with his sole remedy against a complete stranger who happens to be the consignee of the goods, or an endorsee of the bill of lading, of whose whereabouts and financial stability he knows nothing, and who may be a man (or enterprise) of straw.... I am satisfied that the shippers were not divested of liability by virtue of s.1 of the 1855 Act.

In the House of Lords, both Lord Lloyd of Berwick and Lord Steyn assumed that although all the shipper's original liabilities were transferred under the Bills of Lading Act 1855,³³¹ such transfer was by way of addition to the liability of the original shipper, rather than by way of substitution.³³² Therefore, the shippers were not divested their obligations under Article IV rule 6 by virtue of indorsement of the bill.³³³ Obviously, the answer to the question above is the shipper doesn't cease to be liable, even if the transferee might be liable in addition to the shipper himself.

What has been discussed above approved the approach in the expression of Article IV rule 6 of Hague Rules which provide a liability of the shipper shall not be transferred to or otherwise prejudiced the position of a transferee of a bill of lading. In addition, shipper's liability under Article IV rule 6 shall be treated with similar intention to his

³²⁹ Section 3 (3) of COGSA 1992 states that:

This section, so far as it imposes liabilities under any contract on any person, shall be without prejudice to the liabilities under the contract of any person as an original party to the contract.

³³⁰ [1996] 1 Lloyd's Rep. 577, 586. In endorsing the view taken by Longmore, J., Hirst, L.J., drew upon the same authorities, both cases and academic literature, including also reference to *Caver, Scrutton and Cooke*.

³³¹ [1998] 1 Lloyd's Rep. 337 at 343 to 344 and 349. The House of Lords seems to have concluded or assumed (arguably obiter) that Article IV rule 6 obligations could be transferred by reason of the 1855 Act. Whatever the true position was under the 1855 Act, the Carriage of Goods by Sea Act 1992 has separated the transference of liabilities from rights and now provides in s.3(1). It will be necessary to consider when liabilities arise, how far the holder can be liable for the shipper's liabilities and what residual liabilities remains with the shipper. See also the discussion in Nicholas Gaskell, op. cit. 4C.5, p 132.

³³² Ibid. The continuing liability of the original shipper is made explicit by the wording of section 3(3) of the Carriage of Goods by Sea 1992. S. 3(3): "This section, so far as it imposes liabilities under any contract on any person, shall be without prejudice to the liabilities under the contract of any person as an original party to the contract,"

³³³ See also Gaskell, op. cit. 4C.5, p 131.

liability under Article III rule 5. Art III r.5 relates to shippers' liabilities of the marks, quantity and weight of goods³³⁴ do not appear appropriately transferred to the receivers of goods, because the "shipper" rather than the transferee has the opportunity to invest the goods, thus there is no possibility of transfer of shipper's liability to third parties in both Articles.³³⁵

However, it seems that the stated intention of the Law Commissions about the COGSA 1992 is different from the above approach. The Law Commission envisaged the possibility of statutory transfer of a shipper's liability for dangerous goods to a bill of lading holder. The Law Commission specifically rejected any provision preventing the transmissibility of this liability to third party. It was at 3.22 of Law Com No. 196 (1991) "Rights of suits in respect of carriage of goods by sea" stated:³³⁶

"We do not think that liability in respect dangerous goods is necessarily more unfair than liability in respect of a range of other matters over which the holder of the bill of lading has no control and for which he is not responsible, as for instance liability for loadport demurrage and dead freight. Also, it may be have been the prime mover behind the shipment. Furthermore, it is unfair that the carrier should be denied redress against the indorsee of the bill of lading who seeks to take the benefit of the contract of carriage without the corresponding burdens?"

The Law Commission achieved their apparent objective and the section 3 of COGSA 1992 does, in the cases to which it applies, subject a bill of lading transferee to the shipper's Hague Rule liability for the shipment of dangerous cargo. However there is still some confusions. With respect to the example of loadport demurrage or dead freight in above paragraphs, at least the indorsee can be alerted to its potential liability by scrutinising the terms of the bills of lading which is different from the position of dangerous cargo. In the latter situation, although the indorsee may have instigated their shipment in their actual condition with the undisclosed defect that rendered then dangerous. Therefore, it is both open to the courts to confine the obligation imposed

³³⁴ This rule is dealing with the shipper's guarantee of the accuracy of statement contained in the bill of lading.

³³⁵ Without existing cases to clarify the possibility of transfer of the shipper's liability under Article IV rule 6, third party's liability for the transport of dangerous cargo will remain open to argument.

³³⁶ The Law Commission and the Scottish Law Commission, 1991, (Law COM No. 196) & (SCOT. Law COM No. 130).

under Article IV rule 6 to the original shipper and desirable that they do so, in which case significant expression and answer will be given to the question whether third party should ever be liable in respect to the shipment of dangerous cargo?

4.4.1.4 Whether Transferees Cease to be Liable When Document of Title Passed on to a Sub-buyer?

If the intention of the Law Commission is eventually confirmed, and thus *The Aegean Sea* approach held to be wrong, and the shipper's undertaking in respect of dangerous cargo is transferable to third parties under section 3(1) of COGSA 1992, a further question arises—can such third parties (intermediate buyers) subsequently divest themselves of liability by transferring the bill of lading to another party, i.e. a sub-buyer?

This issue came before the House of Lords in *The Berge Sisar*.³³⁷ The case involved the liability of an intermediate party who had called for samples from the cargo prior to delivery and on the basis of their analysis had decided not to take delivery but to resell the cargo. In due course they obtained the bill of lading which they then passed on to their sub-buyer. This temporary possession of the bill gave the intermediate buyer rights of suit under section 2(1) of COGSA 1992, of which they were divested under section 2(5) when they passed on the bill to their sub-buyer. The question arose as to whether, at the time they had acquired rights of suit they also acquired liabilities under the bill by virtue of section 3(1) (c). If so, had they been divested of those liabilities when they in turn transferred the bill of lading?

The first question depended on whether the intermediate buyers had made a “demand for delivery” when they requested samples of the cargo from the shipowners. The House of Lords held that at the time the intermediate buyer made the request they were not in a position to make a “demand” for delivery as they lacked the bill of lading and so lacked

³³⁷ *Sub nom. Borealis AB v. Stargas Limited and others and Bergesen* [2001] 2 WLR 1118; [2002] 2 AC 205; Treitel, *Bills of Lading: Liabilities of Transferee-The Berge Sisar* [2001] LMCLQ 344

the authority to make such a demand. It would be preferable to have been that a request for samples prior to delivery could not amount to a “demand for delivery”.³³⁸

As to the second question, the House of Lords expressed their view that, even if liability had attached to the intermediate buyers, they would have been divested of it when they lost rights of suit under section 2(5) for the following reasons. First, the House observed that ss. 2(1) and 3(1) COGSA 1992 specifically adopted the crucial wording of the Bills of Lading Act 1855, which formed the basis of *Smurthwaite v. Wilkins*,³³⁹ that the holder of a bill of lading is liable under that bill unless and until he endorses the bill to someone who also fulfils the conditions of liability. Second, the underlying principle of COGSA 1992 was that of mutuality, tying statutory burdens to statutory benefits.³⁴⁰ One consequence of this wider analysis is that, contrary to the position in *Smurthwaite v. Wilkins*, divestment of liability would not be dependent upon the subsequent acquisition of liability by the third party to whom the bill of lading to be transferred. Thus, if that party decided not to take delivery, neither it nor the intermediate party would be liable.³⁴¹ The decision given by the House of Lords in *The Berge Sisar* is clear that neither the intermediate bill of lading holder nor their sub buyer would undertake the liability transferred from the original shipper.

4.4.1.5 Concluding remarks

From what has been discussed above, we can see the shipper’s liability under Article IV rule 6 does not transfer to a third party under COGSA 1992, although the Law Commission thought it did. I am disagree with the Law commission’s opinion, given that the liability imposed on the shipper is strict, and compared with the carrier, the third party has even less opportunity of ascertaining the true nature of the cargo. Furthermore the third party is in no position to give the appropriate notice to the carrier to enable it carry cargo safely.

³³⁸ Baughen & Campbell, op. cit. p. 9.

³³⁹ (1862) 11 CB (NS) 842.

³⁴⁰ [2001] 2 WLR 1118; Baughen & Campbell, op. cit. p. 9.

³⁴¹ It is an important difference between ACT 1992 and ACT 1855; an outcome would not have been possible under the Bills of Lading Act 1855 which was structured so that contractual benefits and burdens were assigned in a unitary package.

If the liability does pass, the shipper does not cease to be liable and the transferee can only be liable in addition to the shipper himself. If liability does pass, the transferee loses liability as soon as he loses his rights when B/L is passed to his sub-buyer.

4.4.2 Chinese Law

Unlike England, China has no specific legislation dealing with the transfer of rights and duties arising under a bill of lading. The matter has therefore to be dealt with as one of general principle. Moreover, the author will explore the third party's bill of lading holder's liability in China and most discussions will only represent the author's personal opinions in relation to dangerous cargo liability.

4.4.2.1 General Principles on “Transfer of Rights and Liabilities”

As a developing country, China only began setting up her detailed commercial law in the 1980s. Chinese legislators never tried to regulate the very complicated issues under the Maritime Code such as rights of the controlling party and the transfer of rights. Particularly, these topics have not been addressed in any cargo Conventions including Hague/ Hague-Visby and Hamburg Rules;³⁴² Nor has China any equivalent to English legislation, such as the Bills of Lading Act 1855 and the Carriage of Goods by Sea Act 1992.

In addition this section will focus on the “transfer of rights and liabilities” under negotiable transport documents (i.e. Order B/L³⁴³ and Bearer B/L³⁴⁴). The author has no intention to deal with “straight” bill of lading or seaway bill,³⁴⁵ since the non-negotiable B/L is very rarely to be used during the carriage of dangerous cargo in

³⁴² But the new UNCITRAL Convention (Rotterdam Rules) does deal with the matter, and I will discuss it later.

³⁴³ An order bill of lading may be negotiated with endorsement to order or endorsement in blank, such as “To Order”, “Order of Shipper”, and “Order of Bank”. This is the most popular type of B/L to be used in the carriage of dangerous cargo by sea.

³⁴⁴ A bearer bill of lading is negotiable without endorsement. In practice, it is not very common to be used in the carriage of dangerous cargo since it is in lack of safety without endorsement.

³⁴⁵ A straight bill of lading is not negotiable. See Article 79 of Maritime Code.

China.³⁴⁶

Under the Maritime Code, there is as stated above no particular provision in dealing with the “transfer of rights and liabilities” to a bill of lading holder, who is not an original party to the contract of carriage. The starting point is simply freedom of contract: as the Maritime Code, Art.78 r.1, says: “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”. Here the B/L holder includes transferees, and Art. 78 r.2³⁴⁷ refers to certain responsibilities (i.e. demurrage, dead freight and other expenses) might be transferred from the shipper under specific clause of B/L. But, the provision does not help us to understand, with regard to the shipment of dangerous cargo, whether the shipper’s liability can be transferred to a third party (e.g. consignee). Nonetheless, some general legislation might help, such as the General Principles of Civil Law and the Contract Law 1999.³⁴⁸

Under Contract Law 1999, Article 88 “Upon consent by the other party, one party may concurrently transfers his/her rights and obligations under a contract to a third person”. This means the burden of a contract can be transferred under Chinese law, but there are strict conditions to do it.

Firstly, there must be an agreement from the transferee. Some Chinese scholars³⁴⁹ think it is necessary to have a contract between the third party and the original contracting party with an express agreement by the third party to take the burden of contract. Although there is a lack of Chinese legislation on this issue, surely this must be

³⁴⁶ In practice, the straight bill of lading is very common to be found in the transport of paintings, art objects and something exhibited; or largess, antique porcelain and other goods in luxury, but it is not common to be used in the case of dangerous cargo. For details see Si Yuzhuo, (2003) *Maritime Law*, op. cit, p. 128

³⁴⁷ Article 78 rule 2, 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”

³⁴⁸ Contract Law of People’s Republic of China was adopted at the Second Session of the Ninth National People’s Congress on March 15, 1999. See the English version of Contract Law at <http://www.chinaiprlaw.com/english/laws/laws2.htm>

³⁴⁹ Zhang junhao, Liu xinwen & Yao xinhua (ed.) *Civil Law Principle* (in Chinese), (2000: 3rd edition) China University of Political Science and Law Press, p. 701.

necessary as a matter of logic. Secondly, according to Article 84 of Contract Law,³⁵⁰ it is subject to the carrier's consent that the shipper's obligation can be transferred to a B/L holder. Thirdly, according to Article 86,³⁵¹ if the obligation is exclusively personal to the original shipper, it cannot be transferred to a B/L holder. Fourthly, according to Articles 79 and 89,³⁵² in light of the nature of the contract, some rights and obligations cannot be transferred.

In the light of what I have said above, none of the conditions can be satisfied in the case of dangerous cargo. For instance, it is very unlikely to see the B/L holder would agree on taking all shipper's obligations on dangerous cargo, before knowing the exactly amount of damages could occur. Moreover, it is impossible to get the consent from the carrier in advance as to which transferee will take the responsibility (instead of the shipper) since the B/L can be transferred many times while the cargo on board during the voyage. Furthermore, considering the nature of the carriage contract, it is not realistic for the transferee to get hold of all information about the dangerous nature of cargo before cargo's delivery. Accordingly, the obligation to notify the carrier, as discussed in English law section, can be regarded as an exclusively personal duty of the original shipper and a third party cannot substitute for the shipper.

4.4.2.2 Further Discussion and Recommendation

Generally, the shipper's duty of notice cannot be transferred and the transferees will not become liable with regard to the shipment of dangerous cargo in China,³⁵³ same as that in England. However, the above general rules in the Contract Law and the Civil law are not specifically designed for applying to maritime cases, and cannot be construed as "transfer the shipper's contractual rights and liabilities to a B/L holder" particularly in

³⁵⁰ Under Article 84 of the Contract Law "Where the obligor delegates its obligations under a contract in whole or in part to a third person, such delegation is subject to consent by the obligee".

³⁵¹ Under Article 86, Where the obligor delegates an obligation, the new obligor shall assume any incidental obligation associated with the main obligation, except where such incidental obligation is exclusively personal to the original obligor.

³⁵² Article 79 of the Contract Law, The obligee may assign its rights under a contract in whole or in part to a third person, except where such assignment is prohibited: (i) in light of the nature of the contract; (ii) by agreement between the parties; (iii) by law. Article 89, Where a party concurrently assigns its rights and delegates its obligations, the provisions in Article 79, Articles 81 to 83, and Articles 85 to 87 apply

³⁵³ See also Zhouchao, *Shipper's duty of notice and related liability in shipment of dangerous goods by sea* (in Chinese), [2005] Journal of Political Science and Law, Vol. 22, Issue 4, p. 32.

the case of dangerous cargo. As stated above, the Chinese legislators have not touched the topic on transfer of rights and liabilities under the Maritime Code. This issue should be clarified during the revision of the Code, but how to stipulate it?

The author suggests to add a condition to “transfer of liability” such as “under fair and reasonable rule”. Based on this general rule, it would be obviously unfair and unreasonable for a third party bill of lading holder to be liable for the notice of dangerous cargo and to indemnify the carrier in the situation where he has nothing to do with the cargo prior to loading, and thus has less opportunity to check the cargo than the carrier. Therefore the shipper’s liability relating to the dangerous cargo must not cease after the bill of lading has been transferred to a third party. Furthermore, in the author’s view, the advantage of the “fair and reasonable rule” would leave space and flexibility for Chinese judges to interpret relevant provisions relating to the “transfer of rights” in dangerous cargo cases, given that China is not a “case law country” and so there is no possibility for a judge to “make” law.

Although the above general rule can be used as guidance, it would be necessary to clarify specific issues by Chinese legislation. Firstly, at what stage would the B/L holder become subject to the liabilities under the contract? Article 133 of Contract Law³⁵⁴ only deals with the “transfer of ownership” upon “delivery”. There is a big gap between “obtaining ownership” and “subject to liability”. The whole process of delivery is almost always a time consuming process. When and how the consignee assumes liability is a very difficult question, and was not answered satisfactorily either in the UK Bill of Lading Act 1855 or in the UK Carriage of Goods by Sea Act 1992.³⁵⁵

Secondly, the “ownership” of the cargo is transferred from shipper to consignee does not automatically result in the shipper losing his rights such as the “right of control” of cargo, the “right to delivery” of cargo, and the “right of recourse” against the carrier etc.

³⁵⁴ Article 133 “The ownership of an object shall be transferred upon the delivery of the object, except as otherwise stipulated by law or agreed upon by the parties”. A similar provision is Article 72 of Civil Law. Under General Principle of Civil Law, Article 72 “the ownership of property obtained by contract or by other lawful means shall be transferred simultaneously with the property itself”.

³⁵⁵ David Mildon & David Scorey, *Liabilities of Transfer of Bill of Lading*, [1999] International Journal of Shipping Law, Part 2, at 95. See also Anthony Diamond QC, *The Next Sea Carriage Convention*, [2008] LMCLQ 135, at 182.

Thus, the shipper's obligation for damages caused by dangerous cargoes in the author's view, should not automatically transfer to the consignee along with the "transfer of ownership". All these issues need to be stipulated if the topic of "transfer of rights and obligations" is added to the Maritime Code.

Thirdly, to what extent should the liabilities of the B/L holder be subject to? The author believes the extent should at least be narrowed down to "such liabilities have to be incorporated in or ascertainable from the B/L". The relevant issue is regulated under Article 58, r.2³⁵⁶ of the new UNCITRAL Convention,³⁵⁷ and it can be used as a reference for Chinese legislators during the revision of Maritime Code.

Indeed, the author thinks the new Convention has provided a much better solution as to "transfer of liabilities" in relation to dangerous cargo. Under Article 58, r.2, the B/L holder assumes the liabilities if it "exercise any right under the contract of carriage". But it does not then assume the same liabilities as if it had been the original party (i.e. shipper) to the contract. It only assumes any liabilities "imposed on it under the contract of carriage" and then only "to the extent that such liabilities are incorporated in or ascertainable from" the bill of lading. Accordingly, the B/L holder would not be liable to the carrier for damages for shipping a dangerous cargo.

4.5 Liability under Charterparty Forms

It is not very common to find dangerous cargo clauses in the standard voyage charterparty forms, such as Gencon,³⁵⁸ possibly because it is in the nature of this charterparty that the cargo for shipment on the voyage will be expressly agreed between the contracting parties. This may be contrasted with most time charterparty forms, such

³⁵⁶ Article 58 r.2, a holder that is not the shipper and that 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.

³⁵⁷ The UNCITRAL Convention is also called as The Rotterdam Rule. On 11 December 2008 the General Assembly of the UN adopted the UN Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea and authorized a ceremony for the opening for signature to be held on 23 September 2009 at Rotterdam. The new proposal requires adoption by at least 20 states to achieve elevation on the status of international law, no reservations are permitted (save jurisdiction and arbitration provisions).

³⁵⁸ For example, Part I, box 12 of Gencon form provides for a description of the cargo and it is only that cargo which the owner is obliged to load and carry to destination.

as NYPE 1993³⁵⁹ and Baltimore form³⁶⁰, where the charterer has a greater discretion as to the cargo to be shipped and where it is more usual to find a clause expressly prohibiting the shipment of certain goods.

Where the charter contains a clause paramount, such as clause 24 of the NYPE form incorporates the United States Carriage of Goods by Sea Act 1936 which following the Hague Rules, the common law obligation of the charterer to give notice of shipment of dangerous cargo is probably superseded by the rights expressly conferred on the carrier by Article IV r. 6 of the HR/ HVR.³⁶¹ Since Article IV r. 6 and some relevant provisions have been discussed in details, this section will focus on some particular charterparty clauses relating to charterer and shipowner's liabilities regards to dangerous cargo.

There is no separate section on charterparty in Chinese law. In China, most maritime laws/rules concern bill of lading not charterparties. Like most countries, China leaves relevant issues of charterparties to the uniform rules, such as Baltimore form, NYPE 1993 and Gencon, in order to be consistent with international formula.³⁶² Article 127 of the Maritime Code 1992 states: "The provisions concerning the rights and obligations of the shipowner and the charterer in this Chapter³⁶³ shall apply only when there are no stipulations or no different stipulations in this regard in the charter party". Accordingly, charterer's liability in respect of dangerous cargo will depend on the specific terms of the particular charterparty and nothing particularly different from that in England. One exception is the common law indemnity may be implied into charterparties in England, but not in China. I will discuss it in the last section.

³⁵⁹ Clause 4, Lines 49 to 69. The 1993 revision of the NYPE contains a special Dangerous Cargo clause. The first part permits the carriage of dangerous cargo when in accordance with the requirements of special national authorities, save for "livestock of any description, arms, ammunition, explosives, nuclear and radioactive materials". The second part limits the amount of IMO-classified cargo that may be carried and obliged the charterers to provide reasonably-required evidence of compliance with the IMO regulations.

³⁶⁰ Lines 32 to 36 of the Baltimore form read: "No live stock nor injurious, inflammable or dangerous goods (such as acids, explosives, calcium carbide, ferro silicon, naphtha, motor spirit, tar, or any of their products) shall be shipped".

³⁶¹ Cooke, *Voyage Charters*, 3rd ed., 2007, p.165.

³⁶² Si Yuzhuo, *Maritime Law* (in Chinese), op. cit, p. 218

³⁶³ See Chinese Maritime Code Chapter VI.

4.5.1 Rights of the Owners When Cargo Loaded in Breach of the Charterparty Terms

Where the dangerous cargo loaded does not comply with the terms of the charterparty, e.g. Clause 4(a) of NYPE 1993³⁶⁴ or Lines 32 to 36 of Baltime form,³⁶⁵ the charterers are in breach of the contract and the owners are entitled to recover damages for the loss caused by the breach. For example, in *The Maaslot*,³⁶⁶ the owner's claims were awarded for demurrage and related damages arising from the charterer's loading of condensate that did not conform to the charterparty specification ("undarker 2.5 NPA").

Where the breach consists in loading dangerous cargo, the carrier may also rescind the contract on the grounds that the charterers are in breach of a fundamental term. For example, in *The Merhanik Yuryev*,³⁶⁷ held the owner was justified in refusing to load Iraqi gas oil misrepresented by the charterer to be Iranian gas oil, in contravention of U.N. sanctions and Norwegian law.

If the carriers do rescind, they are entitled to freight on the basis of *quantum meruit* for the carriage actually performed, as well as to damages for any further loss which they suffer.³⁶⁸ If they elect to affirm the contract, they are entitled to damages for any loss resulting from the shipment of dangerous cargo, but the provisions of the contract will continue to apply, including any provisions which limit or exclude damages.³⁶⁹

In *Chandis v. Isbrandtsen-Moller*,³⁷⁰ the *Evgenia Chandris* was chartered for a voyage, the charter providing: "Cargo to consist of lawful general merchandise, excluding acids, explosives, arms, ammunition or other dangerous cargo." The charterers shipped turpentine, which was a dangerous cargo, and the discharge was delayed as a result. It

³⁶⁴ Clause 4(a) of NYPE 1993 permits the carriage of dangerous cargo when in accordance with the requirements of specified national authorities, save for "livestock of any description, arms, ammunition, explosives, nuclear and radioactive materials".

³⁶⁵ Lines 32 to 36 of the Baltime form read: "No live stock nor injurious, inflammable or dangerous goods (such as acids, explosives, calcium carbide, ferro silicon, naphtha, motor spirit, tar, or any of their products) shall be shipped".

³⁶⁶ SAM 3167 (1995) (Mannion, Cederholm, Georges).

³⁶⁷ SMA 3138 (1995) (Arnold, Forti, Kleppe).

³⁶⁸ Julian Cooke et al., *Voyage Charters*, 3rd ed., 2007, p.165.

³⁶⁹ *Ibid.*

³⁷⁰ [1951] 1 K.B. 240.

was held that this cargo was excluded under the above clause and that the charterers were accordingly in breach of a “fundamental terms”. Although the master had consented to the shipment of turpentine, it did not waive the rights of the owners in respect thereof.³⁷¹

If the charterers order the master to load excluded cargo and the owners either are unaware of this or instruct the master to accept it under protest, the owners may be entitled to additional remuneration based on the current market rate for carriage of the excluded cargo, either as damages or under an implied promise by the charterers.³⁷² In *Steven v. Bromley*,³⁷³ Atkin L.J. discussed the possibility, on which he reserved his opinion, of the shipowner who charters his ship for non-dangerous work and finds it used instead for dangerous work claiming as part of his damages for breach of contract reasonable extra remuneration for the dangerous work.

4.5.2 Indemnity under Employment Clauses in Time Charterparties

Most time charters³⁷⁴ provide that the master shall be under the orders and directions of charterers as regards employment of the vessel, agency and other arrangements, and that the charterers shall indemnify the owners against any consequences or liabilities that might arise from complying with such orders and directions.³⁷⁵ Even where the indemnity obligation is not express, it will frequently be implied as a concomitant of the owner’s obligation to comply with the charterer’s orders.³⁷⁶ Unlike the standard form of

³⁷¹ Ibid. However, since the shipowners had affirmed the contract, they were entitled to demurrage only and not to damages for detention. Devlin, J. construed the demurrage clause as applicable to excluded as well as permitted cargo.

³⁷² Wilford, *Time Charters*, 5th ed. (2003), p.178.

³⁷³ [1919] 2 K.B. 722.

³⁷⁴ For example, under Lines 123 to 127, an express right is given to the owners to be indemnified by the charterers against consequences or liabilities arising out of the master complying with the charterers’ orders. Lines 77-78 (Clause 8) of NYPE 1993: “... The Captain (although appointed by the Owners), shall be under the orders and directions of the Charterers as regards employment and agency”. Unlike the Baltime form, there is no express indemnity given to the owners. But an indemnity will normally be implied against liability incurred by the owners as a consequence of complying with the charterers’ orders or directions. See details at Wilford et al., *Time Charters*, 5th ed. (2003), p.317; Anderson & De La Rue, *Liability for Charterers and Cargo Owners for Pollution from Ships*, 26 Tul. Mar. L. J. 1, at. 37.

³⁷⁵ See generally Wilford et al., *Time Charters*, 5th ed., 2003, p. 315.

³⁷⁶ In NYPE 1993 (unlike the Baltime form) there is no express indemnity given to the owners. But an indemnity will normally be implied against the liability incurred by the owners as a consequence of complying with the charterer’s orders or directions. The owners have put their ship at the disposal of the charterers, who can choose (within the agreed limits) what cargo to load and where to send the ship; it is reasonable that the charterers should

indemnity given by a bareboat charterer, which covers all losses arising out of his operation of the vessel, a time-charterer's indemnity applies only to losses which are caused by his orders; he is not liable for all losses or misfortunes suffered by the owners on the mere ground that they arose while his orders were being carried out.³⁷⁷

In certain circumstance, a cargo is properly declared and carried, but nevertheless there is an accident and the ship is damaged. No doubt, under Article IV r. 6 of the HR and HVR, the shipper is not liable; but under the NYPE and similar charters the charterer is. Nonetheless, the indemnity provisions do apply to dangerous cargoes where damage is caused by the nature of the cargo without any breach on the charterer.

For instance, the bulk carriers *Athanasia Comminos* and *Georges Christos Lemos* were chartered to carry coal from Canada to the UK.³⁷⁸ Each ship was damaged on the voyage by an explosion of air and methane gas which had accumulated in the holds after loading. In *the Athanasia Comminos*, a claim by the shipowners based on shipper's indemnity as regards undisclosed dangerous cargo failed because they could not prove at the trial that the coal had special properties making it unusual hazardous in comparison with other coal cargoes.³⁷⁹ In *the Georges Christos Lemos*, an alternative claim for charterer's indemnity as regards employment of the vessel, which depended on the issue of whether, on the facts, the damages had been caused by the charterers' orders to load the coal, succeeded.³⁸⁰ Mustill J. concluded:

- (1) There was no liability to pay indemnity for the damage to *the Athanasia Comminos* because, on the evidence, the explosion on that vessel had occurred when the gas and air mixture was ignited by a crew member striking a match to light a cigarette in the forecastle³⁸¹;
- (2) By contrast, in relation to the *Georges Chr. Lemos* there was no such intervening cause, and the charterers were liable to indemnify the owners for the damage caused by the

bear the consequences of their choices. See *The Athanasia Comminon* [1990] 1 Lloyd's Rep. 277. See also Wilford et al., *Time Charters*, 5th ed., 2003, p. 318.

³⁷⁷ See *A/B Helsingfors S.S.Co. v. Rederiaktiebolaget Rex (White Rose)*, [1962] 2 Lloyd's Rep. 52, 59 (Q.B.), finding no liability to indemnify owner for damages paid to stevedore injured during loading operations.

³⁷⁸ *The Athanasia Comminas & Georges Chr. Lemos*, [1990] 1 Lloyd's Rep. 277.

³⁷⁹ *Ibid.*, p.283

³⁸⁰ *Ibid.*, pp. 293-294.

³⁸¹ *Ibid.*, p.294.

accumulation of gas emitted by the cargo; for this purpose it was unnecessary to show that the coal was in any way unusual.³⁸²

It should be noted for the owners to succeed under the indemnity, they must prove an unbroken chain of causation between the instructions of the charterers and the loss suffered.³⁸³ Donaldson, J., said in *The White Rose*:³⁸⁴ “A loss may well arise in the course of compliance with the time charterers’ orders, but this fact does not, without more, establish that it was caused by and is in law a consequence of such compliance and, in the absence of proof of such causation, there is no right to indemnity.” Another relevant case is *Portsmouth Steamship Co. Ltd v. Liverpool & Glasgow Salvage Association*.³⁸⁵

Where it is possible to segregate the damage caused by the charterer’s order from damage resulting from other causes, the owner may be indemnified in respect of the former. In *Deutsche Ost-Africa-Linie v. Legent Maritime (The Marie H)*,³⁸⁶ *The Marie H* was fixed on the NYPE form for trip to East Africa. An additional clause allowed explosives to be shipped subject to certain conditions.³⁸⁷ General cargo was loaded, including seven containers and a crate of explosives. The ship then encountered a violent storm and had to put to Lisbon where she was repaired and her cargo was repacked. Precautions made necessary by the presence of explosives among the cargo prolonged the time taken by this work and also increased its cost.

The sole arbitrator, relying on Clause 8 and the additional explosive cargo clause, held that the owners were entitled to an implied indemnity arising from their obedience to

³⁸² *Ibid.*, p.296.

³⁸³ Wilford et al., *Time Charters*, 5th ed., 2003, p. 323.

³⁸⁴ [1962] 2 Lloyd’s Rep. 52, 59 (Q.B.),

³⁸⁵ (1929) 34 Ll.L.Rep. 459. Where the Hillcroft was chartered to lighten the West Hesseltime, aground off the Cape Verde Islands. The charter obliged the captain to “follow the instructions of the charterers” who were to “indemnify the owners from any consequences, or liabilities that may arise” therefrom. The charterers ordered the transfer of barrels of palm oil which leaked, despite careful handling, and damaged the Hillcroft’s holds. The ship was also damaged by the transfer of large mahogany logs. Roche, J. held that the charterers were liable to indemnify the owners in both these cases, but not for further damage following the escape of oil from her forepeak tank, for although this had also been loaded on the charterers’ instructions, the effective cause of its escape was the subsequent breaking of a pipe connected to that tank.

³⁸⁶ *The Marie H* [1998] 2 Lloyd’s Rep. 71.

³⁸⁷ The explosive cargo clause stated: “at Charterer’s risk without any liability to owners for loss of or damage to cargo and/or ship howsoever caused”.

the charterer's orders to load the explosives, covering a refund of deducted off-hire/damages for delay and expenses at Lisbon but only to the extent that the delay and expense had been exacerbated by the presence of the explosives. His approach was approved by the Commercial Court.

4.5.3 The Responsibility of Cargo Handling

Who will be responsible for handling cargo is a very important issue in the case of dangerous cargo. Without proper and careful handling, some potentially dangerous cargoes may become real danger. In the absence of express provision, the obligation to load, stow, trim and discharge the dangerous cargo is at common law on the owners.³⁸⁸ However under specific clauses, both NYPE 1993³⁸⁹ and Baltime³⁹⁰ put the primary responsibility for loading on the charterer. It is submitted that these express clauses are sufficient to transfer to the charterers the responsibility for these operations, whether the Hague Rules are incorporated into the charter or not.³⁹¹

For example, during the course of loading, by incident, a careless stevedore started a fire in the hold of the vessel and a cargo of ferro silicon became dangerous and caused losses. Under ordinary NYPE, the charterer is responsible for loading and he pays for it. But NYPE may be altered so as to prevent charterers having to pay, see *The Clipper Sao Luis*.³⁹²

In *Macieo Shipping v. Clipper Shipping Lines Ltd (The Clipper Sao Luis)*,³⁹³ the issue arose, but in a slightly unexpected way. It was not so much the cargo that was dangerous, but the loading of it. The only relevance to dangerous cargo is the obvious one: even if the charterer is in breach, the owner must show the breach caused his loss. What happened was that, while loading in Rio de Janeiro, a careless stevedore somehow started a fire in the hold of the *Clipper Sao Luis*. The fire took hold in baled cotton

³⁸⁸ See *The Filikos* [1983] 1 Lloyd's Rep. 9.

³⁸⁹ Line 78 of the NYPE 1993 has the effect of shifting from the owners to the charterers the primary responsibility for loading, stowing and trimming the cargo. See *Court Line v. Canadian Transport* (1940) 67 Ll.L.Rep. 161.

³⁹⁰ Clause 4 of the Baltime form provides by Lines 58 to 60 (2001 revision) that the charterers are to "arrange and pay for" loading, trimming, stowing and unloading.

³⁹¹ See *The Filikos* [1981] 2 Lloyd's Rep. 555 and [1983] 1 Lloyd's Rep. 9.

³⁹² [2000] 1 Lloyd's Rep. 645

³⁹³ [2000] 1 Lloyd's Rep. 645; [2000] 1 All ER (Comm), 920.

which was already stowed and took time to control and put out. The re-entry of the vessel into service was delayed until necessary reports and certificates had been produced. The owners sued the charterers for the costs of delays attributable to extinguishing the fire and getting the vessel back into service and disputed the charterer's contention that the ship was off-hire under the charterparty for that period. The charterers counterclaimed 50% of the hire which they had agreed to pay pending the action and for survey fees and other expenses incurred as a result of the fire.

The charterparty, in NYPE form, and its clause 8 imposed the usual obligation on the charterers to "load stow and trim" and "the Captain ... shall be under the orders and direction of the charterers as regards employment and agency; and the charterers are to load, stow and discharge the cargo at their expense under the supervision and responsibility of the Captain". It should note where it is intended by the parties that responsibility for the operation set out in Line 78 shall be upon the owners, the words "and responsibility" should be inserted after "supervision". The addition of these words has been held to effect a *prima facie* transfer from the charterers back to the owners of liability for the entire operation of loading, stowing, trimming and discharging the cargo, unless it can be shown that the charterers have intervened and in so doing have caused the relevant loss or damage.³⁹⁴ But liability may revert to the charterers, despite the amendment of Clause 8 to include the words "and responsibility" before "of the Captain", if the loss or damage results from the appointment by the charterer of stevedores who are not reasonably competent.³⁹⁵

The judge concluded that an owner who did nothing about a fire would be better off than if he put it out and suffered delays.³⁹⁶ The interpretation is, surely, inevitable.³⁹⁷ Then, is there an implied obligation that the charterer must appoint non-negligent stevedores? David Steel J thought not, but did hold that there was a rather lower obligation to appoint competent stevedores. In the instant case, however, although a

³⁹⁴ Wilford et al., *Time Charters*, 5th ed., 2003, p. 336.

³⁹⁵ See also Wilford, *op. cit.* p. 337

³⁹⁶ Clause 35 further made the charterers liable for "damages to hull, machinery and equipment caused by stevedores" subject to a notice requirement. This, said David Steel J., in its terms applied only to physical damage, not at issue in this case [2000] 1 All ER (Comm), p. 921.

³⁹⁷ Grime, Robert P., *Shipping Law*, All England Law Annual Review 2000, p. 332.

warranty of competence existed, the owners had not established that the fire was caused by the incompetent stevedores.³⁹⁸

Finally, it drove the case finally back to dangerous cargoes. The question was whether the vessel was off-hire under the terms of the charterparty, clause 15 of which specifically mentions fire.³⁹⁹ The shipowners argued that the delays were attributable to the charterer's failure to obtain necessary dangerous cargo certification. What was loaded in Rio was a cargo of ferro silicon, which it was conceded was a dangerous cargo under the charterparty. It also required a certification, under SOLAS, relevant to the charterer's obligation with regard to dangerous cargo, and how far? David Steel J. did not need to get too deeply involved in that. He found, quite simply, there to be no evidence that the certification had delayed the ship: the fire delayed the ship. It was properly off-hire.⁴⁰⁰ Accordingly, the owners' claim was dismissed and the charterers' counterclaim allowed in respect of the hire.⁴⁰¹

4.5.4 Whether the common law indemnity is implied into charterparties?

In respect of the shippers' strict liability for undisclosed dangerous cargo, most old common law authorities are concerned with the bill of lading,⁴⁰² not charterparties. Will the charterer come under the common law obligations that apply to a shipper? This is a very interesting academic question, although not a problem in practice. In practice, most commonly modern charters will contain clauses expressly prohibiting the

³⁹⁸ The claimants shipowners have fallen a long way short of establishing that the fire was caused by the appointment of incompetent stevedores. (a) It is not suggested that the general standards of stevedoring in Rio were such as to preclude the legitimacy of an order to proceed there for cargo operations. (b) There is no direct evidence that the fire was attributable to the actions of an unregistered or inexperienced stevedore or that he was a habitual smoker in the presence of inflammable cargoes. (c) There is no evidence that supervision of the stevedores by the loading officers of the vessel presented any difficulty. The only un-containerized cotton was stowed in hold no.5. The chief officer gave a direct order to stevedores to cease smoking on one occasion, which instruction was obeyed. He did not report the incident. See details [2000] 1 All ER (Comm), pp. 926-927

³⁹⁹ Clause 15. That in the event of the loss of time from deficiency of men and/or default of crew or deficiency of stores, fire, breakdown or damages to hull machinery or equipment, grounding, detention by average accidents to ship or cargo... or by any other cause preventing the full working of the vessel, the payment of hire shall cease for the time thereby lost...".

⁴⁰⁰ [2000] 1 All ER (Comm), p. 921

⁴⁰¹ It was the charterers' case that the vessel was off-hire throughout the period from 19 February to 14 March. (Pending the outcome of this action, the charterers agreed to pay 50% of the hire and this forms the bulk of their counterclaim.)

⁴⁰² *Brass v Maitland* [1856] 6 E & B 470; *Ingram & Royle Ltd v. Service Maritimes du Treport* [1913] 1 K.B. 538; *Ministry of Food v Lamport & Holt* [1952] 2 Lloyd's Rep 371

shipment of certain goods (i.e. dangerous cargo). Accordingly, charterer's responsibility in respect of dangerous cargo will be clarified by specific terms of charters (e.g. with a paramount clause incorporating HR/HVR). It will be unlikely for the shipowner (unaware of the potential danger to his vessel) to have a charter in the absence of specific terms to deal with dangerous cargo.

In the author's view, generally there is no good reason at common law to differentiate between charterparties and the bill of lading with regards to the duties of the shipper,⁴⁰³ particularly so far as voyage charterparties are concerned. Therefore the answer to above question is "yes", but there are certain situations where a charterer cannot be deemed as a shipper. Accordingly, whether the common law strict liability can be extended to the charterer will depend on the specific terms of the particular charterparty.⁴⁰⁴ Three situations will be discussed here.

First, at common law the strict liability obligation is originally bound only the person who presents the goods to be loaded. Suppose for example in 19th century, a charterparty did not contain any words which would deem the charterer to be the shipper (Hague Rules or HVR did not exist). If the charterer had not shipped dangerous cargos, and had not agreed to be named as a shipper in a mate's receipt or a bill of lading, but he had simply made a separate contract under which the goods were carried, accordingly there would be no reason for him to be liable under the common law.⁴⁰⁵ Instead, the shipper should be responsible for it.

Secondly, most modern charters will incorporate the Hague Rules (in one or another

⁴⁰³ For example, similar warranty of seaworthiness, goods owner hands over to carrier and goods are being carried

⁴⁰⁴ Considering shipper's strict liability under Art. IV r6 of HR/HVR, Wilford expresses some doubt as to whether the provision should be effective as between the owner and the charterer as this involves reading "the shipper" as "the charterer". See M. Wilford et al., *Time Charters* (5th 2003), para. 9.20.,

⁴⁰⁵ A relevant example is given by Mr Robert Gay in *Dangerous cargo and "legally dangerous" cargo*, op. cit., p. 13. For example, an arrangement which was quite usual in the nineteenth century, where a charterer chartered a vessel to carry general cargo from A to B and agrees to be responsible for a lump sum freight. The charterer then advises the vessel to potential shippers at A and agrees with them the freight each of them will pay to have his parcel of cargo carried to B. When the shippers load their cargoes, they enter into bill of lading contracts with the shipowner, and the master collects, either from the shippers or upon delivery to the holders of the bills of lading at the discharge port, the amounts of freight agreed between the charterer and the shippers. If the total amounts of the bill of lading freight which the master collects is more than the lump sum freight agreed in the charterparty, the charterer gets the excess. If the total amount collected is less than the lump sum freight agreed, then the charterer pays the difference. In this arrangement, a nineteenth-century judge would certainly say that the shippers of each parcel of cargo are under the common law obligation not to load dangerous goods without informing the vessel of their nature.

version) and it will put the charterer under obligation in respect of dangerous cargo, but the charterer's obligations will not be more than that is set out in the Rules. i.e. it is limited to "physically" dangerous cargo. Accordingly, the incorporation of the HR/HVR will not place a charterer under any obligation with regard to "legally" dangerous cargo which is not such as give rise to physical damage. However, if the specific terms of charterparties clearly exclude "legally" dangerous cargo and the charterer is deemed to be the shipper, then the incorporation of the Rules would have the effect that the charterer comes under the common law obligations that apply to the shipper,⁴⁰⁶ including "legally" dangerous cargoes.⁴⁰⁷

Finally, a voyage charter may contain words which would have the effect of deeming the charterer to be the shipper.⁴⁰⁸ If the charterer himself is also the shipper, surely the charterer will be strictly liable for dangerous cargo⁴⁰⁹ and so the charterer comes under the common law obligations that apply to the shipper.

In summary, regarding the duties of the shipper to dangerous cargo, originally the common law indemnity concerned the B/L, not the Charterparty. However, with specific terms of the particular charterparty, such as by the way of provisions in the charterparty which has the effect of deeming the charter to be the shipper, the common law obligations may apply to charterer. With the incorporation of HR/HVR, the charterers may undertake the obligations implied at common law which apply to the shipper, but only to the extent which set out in the Rules.

In the situation where a shipper's indemnity as regards undisclosed dangerous cargo is implied into charterparties, a question arises: is there any difference between an indemnity and a contractual obligation in respect of shipper's (or charterer's) liability for damages caused by dangerous cargo? In the author's view, there is a difference

⁴⁰⁶ See also Gay Robert, *Dangerous cargo and "legally dangerous" cargo*, op. cit., p. 131.

⁴⁰⁷ As we discussed in section 4.2.1.1, in respect of shipper's strict liability to dangerous cargo, the common law indemnity is different from that provided under Art IV r6 in so far as "legally" dangerous cargo is concerned. The common law indemnity applies to cargoes which are not liable to give rise to any physical damage, but only to consequences such as forfeiture and detention (legally dangerous).

⁴⁰⁸ For instance, in the Asbatankvoy form, clause 1 provides that the vessel shall load "from the factors of the charterer".

⁴⁰⁹ For example, *Atlantic Oil Carrier v. British Petroleum Co.* [1957] 2 Lloyd's Rep. 55, 95

between them since not all indemnities are relating to breach of contract. Indeed, some are, some not, depending on the particular provisions of a specific charterparty. For instance, in a case where a charterer is deemed as a shipper, without breach of a charterparty (contract law), it is possible for the charterer to be held liable under indemnity as regards undisclosed dangerous cargo, particularly in respect of legally dangerous cargo at common law. Accordingly, a charterer can be held liable under its common law indemnity as regards undisclosed dangerous cargo, even if he does not breach his contractual obligation under a charterparty.

In addition, considering the charterer's indemnity under employment clauses in time charterparties, a charterer's indemnity applies to losses caused by his order or direction, even if the indemnity obligation is not express in the charter, such as in NYPE 1993.⁴¹⁰ For example, if a dangerous cargo is properly declared and carried, but nevertheless an accident occurs and the ship is damaged. No doubt, under Article IV r. 6 of the HR and HVR, the shipper's liability is discharged because he has give proper notice to the carrier (i.e. proper and sufficient disclosure of dangerous nature of the cargo). But, under a charter in NYPE (or similar charters) a charterer will be held liable for damages caused by the dangerous cargo due to implied indemnity obligation against any consequences or liabilities that might arise from complying with his order.⁴¹¹ Therefore, the indemnity provisions do apply to dangerous cargo cases where damage is caused by the nature of the cargo without any breach of a contractual obligation on the charterer.

In contrast, regarding China, as a codified law country, obviously the common law indemnity has no influence on China. Accordingly, neither shippers nor charterers will be held liable for "legally" dangerous cargo under Chinese law.

⁴¹⁰ In NYPE 1993 (unlike the Baltime form) there is no express indemnity given to the owners. But an indemnity will normally be implied against the liability incurred by the owners as a consequence of complying with the charterer's orders or directions. The owners have put their ship at the disposal of the charterers, who can choose (within the agreed limits) what cargo to load and where to send the ship; it is reasonable that the charterers should bear the consequences of their choices.

⁴¹¹ See discussion in section 4.5.2 Indemnity under employment clauses in time charterparties.

4.6 Third Party Reliance on Contract of Carriage Terms

Under English law, there is longstanding criticism of the privity rule,⁴¹² and what we concerned is the problem for third parties who are not agents or servants to limit their liability in casualties involving dangerous cargo.⁴¹³ Can we find a way to allow third parties⁴¹⁴ to benefit from the contract of carriage? A more interesting question is this the shipper breaks his contract with the carrier by loading dangerous cargo and a third party (other cargo owner) suffers loss, can the third party claim against the shipper as a third party beneficiary of the contract?

4.6.1 Problems of Third Party Relying on Contract

On a strict interpretation of the privity rule,⁴¹⁵ exclusion clauses could not be relied upon by third parties, such as the carrier in the case of a bill of lading issued by the charterer to a shipper, or stevedores. In the past, the courts have found ways to circumvent the doctrine in the carriage context, *inter alia* by reliance on principles of the law of agency⁴¹⁶ or bailment⁴¹⁷, but particularly by giving precedence to a policy of respecting the commercial intentions of the contracting parties.⁴¹⁸

While the House of Lords strictly applied the privity rule in *Scruttons v. Midland Silicones*⁴¹⁹ in refusing to allow stevedores, engaged as independent contractors, to invoke to protection of a limitation clause in the contract of carriage.⁴²⁰ Lord Reid

⁴¹² The criticism came from both judicial and academic circles. See Beatson, Jack, *Reforming the Law of Contracts for the Benefit of Third Parties: a Second Bite at the Cherry*, [1992] 44 CLP 1, 2. See also Burrows, *The Contracts (Rights of Third Parties) Act 1999 and its implications for commercial contracts* [2000] L.M.C.L.Q. 540

⁴¹³ There is no separate section dealing with it in Chinese law, since there is no privity rule of contract in civil law and no relevant problems on third party beneficiary in China.

⁴¹⁴ For example, stevedores and terminal operators, whom the carrier declares are not his agents or servants, but independent contractors.

⁴¹⁵ It is well-known that there are two distinctive features of English contract law that are not found (in the same term) in civil law jurisdictions such as China, France, Germany or Scotland, namely consideration and privity. It is also well-known that, at least, privity has been subject to attacks from judges, legislators and academics for much of the 20th century.

⁴¹⁶ See *Scruttons v. Midland Silicones*, [1961] 2 Lloyd's Rep. 365, at 374, Lord Reid set out four conditions must be fulfilled to create an agency relationship. See foot note 420.

⁴¹⁷ *The Pioneer Container* [1994] 2 AC 324. There was no privity of contract between the original bailor and the sub-bailee (bailment on terms). See also the words of Lord Denning MR in *Morris v. C.W.Martin* [1966] 1 Q.B. 716, at 729. This case did not concern a contract of carriage of goods by sea.

⁴¹⁸ Girvin, *The Law Commission's Draft Contracts (Rights of Third Parties) Bill and the carriage of goods by sea*, [1997] L.M.C.L.Q. 541, at 542.

⁴¹⁹ [1961] 2 Lloyd's Rep. 365, at 374

⁴²⁰ In this case, a drum of chemicals was shipped under a bill of lading which contained a paramount clause limiting the carrier's liability to USD 500 for any package by reference to the United States Carriage of Goods by Sea Act 1936. The drum was damaged by the negligence of stevedores employed by the carrier and damage exceeding USD

concluded that,⁴²¹ on the facts, the word “carrier” in the bill of lading could not include a stevedore, an independent contractor, and so this argument had to fail.⁴²²

It is standard practice for charterparty forms and bills of lading to include clauses which exempt the carrier from liability,⁴²³ either explicitly or by incorporating the terms of the HR/HVR in a clause paramount.⁴²⁴ If the voyage is covered by HR/HVR, the catalogue of exceptions enumerated in Art. IV, r.2 will be mandatorily applicable to the contract.⁴²⁵ The HVR,⁴²⁶ Art. IVbis, rr. 1 and 2 now provides that a servant or agent of the carrier may rely on the defences and limits of liability which may be invoked under the Rules in an action in tort or contract against him. But Art. IVbis, r. 2 specifically excludes independent contractors.⁴²⁷ To be properly effective, this provision needs to be revised so that it covers any third party that performs services for which the carrier is responsible under the HVR. This encouraged the drafting of Himalaya clauses.⁴²⁸

Nonetheless, the Himalaya clause was examined in a recent case *Whitesea Shipping & Trading Corp v EI Paso Rio Clara Ltda and others (The Marielle Bolten)*,⁴²⁹ where a disputation involved some third parties and they are the carrier’s servants, agents or sub-contractors within the Himalaya clause. But in fact these third parties did not undertake the sea carriage; and the actual carriage was undertaken by the carrier alone. It was held by Flaux J. that the enforcement of a covenant (contained in a Himalaya clause in the bills of lading) not to sue against the third parties was not contrary to Art.

500 resulted to the chemicals. The consignee sued the stevedores. Held, (Lord Denning dissenting) that damages were not limited to USD 500 as the parties to the contract of carriage were not acting as agents for the stevedores, who were not “carriers” within the meaning of the bill of lading or the USA Act 1936, and were not themselves parties to the contract of carriage, and there was no other, implied contract with them.

⁴²¹ [1962] A.C. 446. Lord Reid set out four conditions must be fulfilled to create an agency relationship: first, the bill of lading makes it clear that the stevedore is intended to be protected by the provisions in it which limit liability; secondly, the bill of lading makes it clear that the carrier in addition to contracting for these provisions on his own behalf, is also contracting as agent for the stevedore that these provisions should apply to the stevedore; thirdly, the carrier has authority from the stevedore to do that, or perhaps later ratification by the stevedore would suffice; fourthly, that any difficulties about consideration moving from the stevedore were overcome

⁴²² *Ibid.*, p. 447.

⁴²³ E.g. Gencon 1994 cl.16 and 17 (strikes and wars); NYPE 1993 cl. 32 (war). Such clauses will also be supplemented by exceptions implied by the common law. See *Scrutton*, para.105.

⁴²⁴ See Congenbill 1994, cl. 2; NYPE 93, CL.31(a).

⁴²⁵ By virtue of the Carriage of Goods by Sea Act 1971, s. 1(2).

⁴²⁶ But not the Hague Rules.

⁴²⁷ It states “such servant or agent not being an independent contractor”—who are in most cases stevedores. See Gronfors, *Why not Independent Contractors?* [1964] J.B.L. 25.

⁴²⁸ The Himalaya clause sought to extend the defences of the carrier to servants, agents and independent contractors engaged in loading and unloading the cargo. See also Collinebill 1994, cl.18; Combiconbill, cl. 16.

⁴²⁹ [2009] EWHC 2552 (Comm); [2009] 2 C.L.C. 596

III r8 of the Hague Rules. Accordingly, the carrier could show a sufficient interest in enforcing the covenant to entitle them to an anti-suit injunction.

However, the use of Himalaya clause has its limitation,⁴³⁰ as was exemplified in *The Starsin*.⁴³¹ The majority of the Court of Appeal held that, in so far as the clause sought to extend to the independent contractor a wider exemption than that available to the contractual carrier under the HR, it was rendered void by Art. III r.8.⁴³²

In a case where an incident involving carriage of dangerous cargo, how can a way be found to permit third parties who are independent contractors, such as stevedores or terminal operators to limit their liability and benefit from the contract of carriage? One possible solution is to amend the privity rule by a new statute such as the Contracts (Rights of Third Parties) Act 1999 and by reliance on it a third party may “in his own right” enforce a term of a contract where the contract expressly provides that he may do so (section 1(1)(a)).

4.6.2 The Contracts (Rights of Third Parties) Act 1999

The U.K. Parliament passed the Contracts (Rights of Third Parties) Act 1999⁴³³ after a report by the Law Commission in 1996.⁴³⁴ This Act reforms the law of privity of contract⁴³⁵ to give third parties a right,⁴³⁶ in circumstances set out in s.1, to enforce terms of contracts. In essence, if a contract between a promisor (e.g. holder of a bill of

⁴³⁰ According to William Tetley, “the Himalaya clause is an ingenious, short-term solution to a difficult problem, but is a solution which raises infinitely more problems than it solves.” See Tetley, *The Himalaya clause—revisited* (2003) J.I.M.L. vol.9 (1), pp40-64, at 42.

⁴³¹ [2003] 1 Lloyd’s Rep. 571. Charterers’ bills had been issued which include a Himalaya clause purporting to exclude the independent contractor from any liability to the shipper resulting from, inter alia, negligent damage to the goods.

⁴³² Rule 8 provides that “any clause, covenant or agreement in a contract of carriage relieving the carrier or the ship from liability for loss or damage to, or in connection with, goods arising from negligence, fault or failure in the duties and obligations provided in this Article or lessening such liability otherwise as provided in this Convention shall be null and void and of no effect...”.

⁴³³ The Act does not apply to contracts made before 11 May 2000.

⁴³⁴ *Report on Privity of Contract: Contracts for the Benefit of Third Parties*, Law Com. No. 242 (1996) ; see also Burrows, “Reforming Privity of Contract: Law Commission Report 242” [1996] L.M.C.L.Q. 467.

⁴³⁵ The Act amends but does not abolish the common law doctrine of privity of contract. In the words of the Law Commission’s Report on which the Act is based, the effect of the Act will be to create “a general and wide-ranging exception to the third party rule it [will leave] that rule intact for cases not covered by the statute”. See *Privity of Contract for the Benefit of Third Parties*: Law Com. No. 242 (1996) §5.16.

⁴³⁶ The common law doctrine of privity is generally thought to have two limbs or branches: that (C) the third party cannot take the benefit of a term of a contract between (A) the promisor and (B) the promisee; and that C cannot be bound by a term in such a contract. The exception created by the Act will be to the first branch of the doctrine; it will not directly affected the second branch.

lading) and promisee (e.g. carrier) provides expressly that a third party (e.g. stevedore) can enforce those terms in its own right, it will be a question of construction of the contract whether benefit was intended.⁴³⁷

So far as contracts for the carriage of goods by sea are concerned, the right of a third party under s.1 must be read with s.6, which sets out exceptions. In particular s.6(5)(a), a third party has no right to enforce such a term for his benefit, in the case of a contract for the carriage of goods by sea, which is governed by the Carriage of Goods by Sea Act 1924. So bill of lading contracts or their equivalent are excluded but not charterparties.⁴³⁸

There is, however, one major exception to this exception, permitting the third party beneficiary, in reliance on s.1, to “avail himself of an exclusion or limitation of liability in such a contract” (section 6(5)(a)). This proviso is expressly designed to preserve (and enhance) the operation of Himalaya clause.⁴³⁹ As the Explanatory Note to section 6(5) states:

Subsection (5), which excludes certain contracts relating to the carriage of goods, nevertheless does not prevent a third party from taking advantage of a term excluding or limiting liability. In particular, this enables clauses which seek to extend an exclusion or limitation of liability of a carrier of goods by sea to servants, or agents and independent contractors engaged in the loading and unloading process to be enforced by those servants, agents or independent contractors (so called “Himalaya” clause).

It follows that stevedores and others may now rely on s.1 of the 1999 Act in order to

⁴³⁷ Gaskell, *Bills of Lading: Law and Contracts*, LLP, 2000, p. 380.

⁴³⁸ Charterparty forms, such as clause 15 of GENCON and preamble J of ASBATANKVOY, both concern the right of third party brokers to earn commission, the new Act would give a direct right of action to a broker to enforce a right to commission, even if specifically unnamed. Standard clauses 29 and 36 of the NYPE Form charter party may also potentially give rise to an action on the basis of the Act. Clause 29 of the NYPE provides that charterers will pay for crew overtime in relation to work ordered by charterers. Applying section 1 of the Act, clause 29 can be seen as an express benefit to a third-party crew member. If such a crew member was then not paid by his owner-employer it is possible that the crew member could utilise the new Act to mount a direct claim against a charterer. Clause 36 of the NYPE form provides a similar regime for compensation where a charterer is obliged to provide and pay for sweeping, washing and/or cleaning of holds between voyages and such work is undertaken by the crew. See Vlasto & Clark, *The effect of the Contracts (Rights of Third Parties) Act 1999 on voyage and time charter parties*, 25 Tul. Mar. L.J. 519, at 534.

⁴³⁹ Tetley, *The Himalaya clause—revisited*. (2003) Vol.9 (1), J.I.M.L. 40, at 49.

enforce Himalaya clauses and that the restriction imposed by the doctrine of privity (e.g. relating to agency) may now not apply.⁴⁴⁰ If third parties such as stevedores do wish to rely on Himalaya clauses by virtue of the Act they will have to show either an express term to that effect in the contract (section 1(1)(a)) or the contract “purports to confer a benefit” on them (section 1(1)(b)). Section 1(3) provides that the third party need not be identified by name, nor need they be in existence at the time the contract is made. It will be enough that they are a member of a class or answer to a particular description.

This applies to stevedores and independent contractors involved in transportation of dangerous cargo. Stevedores and other sub-contractors can now be protected by much simpler wording by virtue of s.1. It could also provide similar protection for an actual carrier where performance of the carriage itself had been delegated to a sub-contractor⁴⁴¹ or where it formed part of a combined transport operation.⁴⁴² Although the third party’s security is potentially threatened by the provisions on variation and cancellation contained in section 2, this is unlikely to be a problem in practice.⁴⁴³

However, if the shipper breaks his contract with the carrier by loading dangerous cargo and a third party (other cargo owner) suffers loss, in the author’s opinion, the third party cannot claim that loss from the shipper as a third party beneficiary of the contract. There are three reasons. Firstly, the contract does not expressly provide that another cargo owner may claim that loss, nor does the term of the contract purport to confer a benefit

⁴⁴⁰ Gaskell, *Bills of Lading: Law and Contracts*, op. cit., p. 381.

⁴⁴¹ See *The Starsin* [2003] 1 Lloyd’s Rep. 571. Where the House of Lords held that the actual carrier (shipowner) fell within the definition of an “independent contractor” for the purpose of the clause.

⁴⁴² Even though the liability may arise out of land, not sea carriage, it seems that the exclusion in s.6(5)(a) relates to the nature of the contract, rather than the place of any damage. Provided that the relevant term appears in a contract which is also evidenced by a bill of lading, then s.6(5)(a) will apply. The road or rail carrier would have to rely on the proviso to s.6(5), whereas if there were an independent contract of road or rail transport the wider protection of s.1 would apply. Such an independent transport contract between the cargo owner and the road or rail carrier might arise through the agency of the sea carrier; but it would be necessary to clarify whether the sea carrier was really acting as an agent, or was merely using the road or rail carriers as sub-contractors to fulfil its own combined transport obligation. See Gaskell, op. cit., p. 383.

⁴⁴³ One possible defect of the new legislation is the retention of the right of the original parties to vary or rescind the contract without the consent of the third party beneficiary (s.2(1)). This exercise of such a right of revision, which could effectively remove the protection otherwise afforded to the third party, is however, subject to certain qualifications. The parties to the contract can not vary or rescind the contract without the third party’s consent once the third party has communicated to the promisor his assent to the provisions in the contract to his benefit (s.2(1)(a)), or where he has relied on such provisions and the promisor is either aware of such reliance (s.2(1)(b)) or could reasonably be expected to have foreseen it (s.2(1)(c)). See Wilson, *Carriage of Goods by Sea*, 5th ed. 2004, p. 115;

on the third party, accordingly the third party cannot rely on section 1(1)(b). Secondly, the other cargo owner is not “expressly identified in the contract by name or as a member of a class or as answering a particular description”, thus not qualified as a third party beneficiary under Section 1(3). Thirdly, the other cargo owner seeks to enforce a right against the shipper is not a deviate right (a right under the contract between shipper and carrier), that is against section 3(2). Therefore, other cargo owners cannot claim their loss from the shipper of undeclared dangerous cargo as third party beneficiaries under the 1999 Act.

4.6.3 Concluding Remarks

The 1999 Act amends but does not abolish the common law doctrine of privity of contract. The explicit recognition given to Himalaya clause is a very important development.⁴⁴⁴ Provided that the Himalaya clause is accurately drafted, an independent contractor can rest assured on his statutory entitlement to reliance on the terms of the clause.

If the Act applies to the contract involving dangerous cargo, the stevedore and independent contractor will be protected by exclusion or limitation of liability in a contract of carriage.⁴⁴⁵ However, a third party (other cargo owner) cannot rely on the Act to claim his loss against a shipper of dangerous cargo.⁴⁴⁶ There is no doubt the Act will be widely welcomed for the statutory certainty which will give to the vast majority of Himalaya clauses, without necessary of having to argue by analogy with the established authorities.⁴⁴⁷

⁴⁴⁴ Although the Himalaya clauses have been accorded judicial recognition throughout the Commonwealth for several decades now, there has always been some insecurity as to the contractual basis under which such clauses may be relied upon.

⁴⁴⁵ The direct relief provided by the new statutory remedy might be expected in time to supplant the more cumbersome agency device in the Himalaya clause. The new Act effectively dispenses with all but one of the four conditions that were set out in *Scruttons v. Midland Silicones* [1961] 2 Lloyd's Rep. 365, at 374. The condition that remains is the two-fold test in section 1(1) of the Act. For this reason, while the new Act greatly alleviates the previous problem and largely replaces the need for Himalaya clause, it does not automatically follow that Himalaya provisions are completely obsolete or no longer necessary.

⁴⁴⁶ Another cargo owner can not be regarded as a third party beneficiary of the contract of carriage (between the shipper of dangerous cargo and the carrier).

⁴⁴⁷ Although such authorities are not binding on the courts in England, it is unlikely that a serious case could ever be made out for not following them. See Baughen, *Shipping Law*, 2nd ed., p. 53.

4.7 Complex Liabilities and Rights of Recourse

The HNS Convention makes the carrier liable to third parties, but there are ways of passing the loss on to the person who ought to pay. Under the HNS Convention, Article 7(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.”⁴⁴⁸ As we can see a shipowner has the right of recourse under the Convention. Although the Convention is not in force yet, the shipowner still has the right of recourse under general principles of municipal law.

If the carrier is liable to a third party,⁴⁴⁹ but considers either that he was not himself at fault, or that he was not the only person at fault, he may wish to look to someone else for reimbursement of what he has had to pay the claimant.⁴⁵⁰ By way of recourse, a charterer or cargo owner may be held liable to the shipowner under a charterparty or similar contracts, e.g. shipowner’s recourse action against demise or bareboat charterers based on the indemnity which is given by a bareboat charterer and normally covers all losses arising out of his operation of the vessel.

Again there may be recourse against time or voyage charterers based on their breach of the safe port warranty, typically following grounding incidents at or near ports; or shipment of dangerous cargo, particularly in relation to the loading, stowage and carriage of various hazardous or noxious substances.

Furthermore, many time charters provide that the master shall be under the orders and directions of charterers as regards employment of the vessel, agency and other

⁴⁴⁸ Article 7(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 preventing 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.

⁴⁴⁹ Whether a stranger to the adventure or the owner of other goods on board his vessel

⁴⁵⁰ See, Mustill, *Carrier’s Liabilities and Insurance*, in Grönfors, Kurt (ed.), *Damage from Goods* (1978), op. cit, p. 84.

arrangements, and that the charterers shall indemnify the owners against any consequences or liabilities arising from complying with such orders and directions.⁴⁵¹

The rights of recourses considered in this chapter are based on contractual liability and they mainly subject to HNS and other conventions. But, in respect of the possibility of a contribution action in tort,⁴⁵² the carrier or shipowner has also a recourse action against other persons. For example, (1) against the manufacturer of the ship or subcontractors if the way the ship was built aggravated the consequence of the fault of the dangerous cargo owner. It is an application of the concept of product liability, and it is based on strict liability in tort.⁴⁵³ (2) Against members of the ship's crew, the captain for instance, if the shipowner or carrier can prove the fault (gross negligence) of that person (e.g. captain), against him the recourse action is brought. (3) Against the stevedore, if the accident took place during the embarkation or during the discharge of the dangerous cargo and if the fault of the stevedore aggravated the fault of the goods owner or was one of the causes of the damage. (4) It is quite the same against the packer of the containers if the way of packing, the negligence in packing aggravated the fault of the goods owner.⁴⁵⁴

In addition, in a case where the dangerous cargo damages involving third parties' fault, the shippers (or charterers, receivers) may have recourse actions in tort against these third parties such as longshoremen, warehousemen and stevedores etc.

Nonetheless, in practice, it should be avoided to use recourse actions as a means of channelling responsibility back to one finally responsible person, since the variety of liability rules under general law relate to dangerous cargo already create big difficulties, and any attempt to single out one person in a chain by moving the loss from the one after the other, is bound to create all sorts of trouble.⁴⁵⁵ Flexibility of solution is needed,

⁴⁵¹ See generally Wilford, et al., *Time Charters*, 4th ed., 1995, at 291.

⁴⁵² See relevant discussions in sections 3.1.6.1; 3.1.6.3

⁴⁵³ See details in Chapter 3, e.g. section 3.1.4 Product Liability.

⁴⁵⁴ See Pontavice, Emmanuel du, *The Victims of Damage Caused by the Ship's Cargo*, in Gronfors, Kurt (ed.), *Damage from Goods*, (1978) op. cit., p.54.

⁴⁵⁵ As the author understands, the trouble is relating to the existing, sometimes far-reaching divergences between different national legal regimes with regard to the laws in relation to civil liability and compensation. It is suggested

because situations differ considerably as to the multi-dimensional problems involved in the carriage of dangerous cargo. Different types of cases call for different solutions. Therefore the freedom of contract seems to be meaningful and it may offer one method of keeping a reasonable degree of flexibility.

to apply the general rules of torts and of law of contract under the national law. For example whether the damages caused by dangerous cargoes are recoverable, there are different rules, e.g. causation and remoteness in common law countries, but these rules do not exist in civil law countries. In addition, there can be so many persons involved and it is extremely difficult to single out one responsible person. Finally, it will be not easy to reach agreement on an international level regarding whether and to what extent there should be made exceptions from the principle of channelling in terms of rules on recourse actions.

Chapter 5 The International Framework for Marine Pollution Control

Pollution is one of the most important areas¹ for dangerous cargo liability. The following two chapters will therefore cover the topic in depth. Chapter 2 deals with international anti-pollution regimes (other than intra-EU) as they apply to dangerous cargoes; Chapter 3 deals with the corresponding EU anti-pollution regimes.

5.1 Introduction

First, we discuss and analyse the international framework for marine pollution control, particularly with a focus on the liability system.

As we know, the concern over the carriage of hazardous substances is shown by the growing number of international conventions relevant to it. They deal with all three main areas—regulating safety, carriage and third party liability. Some are focused on particular substances where the catastrophic nature of potential harm (e.g. nuclear materials) or the sheer amount carried (e.g. oil) or both have given rise to a need for special international controls.²

International conventions with respect to pollution effectively divide into two types: measures aimed at prevention ex ante and those directed to compensation ex post. The most important conventions of the former sort are SOLAS and MARPOL;³ of the latter, the regimes built up by the CLC and Fund Conventions, Bunker Convention 2001 and HNS Convention 1996. Prevention measures mainly focus on the technical requirements such as ship structure standards and safety standards, which should be enforced by the contracting states. The liability system on the other hand is not only meant to compensate the victims, but can also be designed to such a way that it will

¹ Dangerous cargoes raise two serious legal issues: pollution and other kinds of loss.

² Jackson D.C., *Dangerous cargo: a legal overview* in “Maritime Movement of Dangerous Cargoes—Public Regulation and Private Liability”, Papers of a one day seminar, Southampton University 11th September 1981.

³ See Appendix II.

give incentives to the actors to take preventive measures to avoid pollution. This chapter will examine and assess the international liability conventions in details. For prevention measure, such as MARPOL 1973/78,⁴ I.S.M. Code⁵ and Dumping Convention,⁶ see Appendix II.

With regard to other international conventions covered by this thesis, (1) the safety convention, e.g. SOLAS and IMDG Code have been discussed in Chapter 1; (2) the carriage conventions, e.g. the Hague, Hague-Visby and Hamburg Rules relating to carriage contracts governed by these rules which will be discussed in Chapter 4.

So far the only area of pollution where the acceptance of an international regime is widespread is oil, although marine pollution caused by hazardous and noxious substances may come into consideration. Since the existing system regarding pollution resulting from the carriage of oil is now well-established as a legal model for other marine pollution legislations,⁷ it is very important to discuss the CLC 1969 / 1992 Protocol⁸ and Fund Convention 1971/ 1992 Protocol.⁹ From the development of the oil pollution legislation, we can see how effective the international legislation has been in reducing marine pollution.

Furthermore, the HNS Convention is modelled on the very successful and widely accepted oil pollution conventions. However by August 2009, only 14 countries have ratified it, comprised 13.61% of merchant tonnage.¹⁰ In section 5.2.2.5, we will discuss

⁴ The 1973 MARPOL Convention includes regulations aimed at preventing and minimizing pollution from ships—both accidental pollution and that from routine operations, see “International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78)”, at <http://www.imo.org/home.asp>

⁵ The I.S.M. Code was first enacted as an Annex to IMO Resolution A.741, adopted November 4, 1993. IMO adopted the ISM Code as Chapter IX of SOLAS on May 24, 1994. Up to 31 March, 2007, SOLAS 1974 has been ratified by 158 States, representing 98.8% of world merchant shipping. Both China and UK have ratified it. ISM Code became applicable to all categories of cargo ships, as well as to offshore drilling platforms, as of July 1, 2002.

⁶ International Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, adopted in quadruplicate at London, Mexico City, Moscow, and Washington, December 29 1972 and in force August 30, 1975, as subsequently amended. It has been ratified by 84 States, representing 67.71% of world merchant shipping (by 31 March 2008). It became operational in China on 15 December 1985.

⁷ For example, the Bunker Convention 2001, NHS Convention 1996, etc.

⁸ International Convention on Civil Liability for Oil Pollution Damage (CLC), 1969; The Protocol of 1992. See details at <http://www.imo.org/home.asp>

⁹ International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (FUND), 1971; The Protocol of 1992. See details at <http://www.imo.org/home.asp>

¹⁰ For detail see http://www.imo.org/includes/blastDataOnly.asp/data_id%3D26103/status-x.xls and

the reasons that have delayed or hindered the ratification of the HNS Convention.

5.2 Liability Conventions

An international liability and compensation scheme has long been seen as necessary particularly when concerned with liability to third parties, which is not covered by the regime of carriage conventions;¹¹ and where relevant domestic laws vary and may not be effective. This conclusion has been more easily accepted with respect to the carriage of oil than with the transportation of other hazardous and noxious substances (hereafter HNS) such as chemicals.¹² The IMO has strived for twenty years to produce a Convention designed to do for the victims of chemical related incidents, what the International Convention on Liability for Oil Pollution Damage (CLC)¹³ and the Compensation for Oil Pollution Damage (Fund)¹⁴ Conventions have done for oil pollution victims.

Public attention to oil pollution was first raised on an international scale after the *Torrey Canyon* incident in 1967. Action was then taken by several governments within the framework of the IMO which resulted in the adoption of CLC 1969,¹⁵ followed in 1971 by the adoption of Fund Convention.¹⁶ Since then, CLC/Fund conventions have been regarded as a well-established legal model for other marine pollution legislations.

Governments participating in the 1969 International Conference on Marine Damage have of course been aware of the fact that pollution may also be caused by agents other than oil. They decided, however, to tackle the problem of oil pollution as a first

<http://www.imo.org/>

¹¹ Notwithstanding improved safety standards for the design, construction and equipment of ships carrying HNS, it is inevitable that accidents of a catastrophic nature cannot be totally prevented

¹² Cleton, Robert, *Liability and Compensation for Maritime Carriage of Hazardous and Noxious Substances (HNS)*, De la Rue Colin (editor), "Liability for Damage to the Marine Environment" chapter 15, Lloyd's of London Press Ltd, 1993, at 173

¹³ International Convention on Civil Liability for Oil Pollution Damage (CLC), 1969; The Protocol of 1992. See details at <http://www.imo.org/home.asp>

¹⁴ International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (FUND), 1971; The Protocol of 1992. See details at <http://www.imo.org/home.asp>

¹⁵ The International Convention on Liability for Oil Pollution Damage in 1969

¹⁶ The International Convention on the Establishment of an International Fund for the Compensation for Oil Pollution Damage; followed by the International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001 (The Bunker Convention) which is very similar to CLC/ Fund.

priority.¹⁷ Nevertheless, other forms of pollution came to be regarded as a serious priority later on, and the result in 1996 was the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea (HNS).¹⁸ It is clear that by the time of its adoption, the elaboration of the HNS Convention had become a very complex and often cumbersome operation.¹⁹ There is no doubt that it represents an important step forward; however, it also has a number of potentially significant defects which should be challenged.

In this section, appropriate, comparative references will be made to other international legal instruments, such as the 1976 International Convention on Limitation of Liability for Maritime Claims (1976 LLMC), and the “nuclear” conventions. Besides, another convention which has had some influence on the elaboration of the HNS Convention is CRTD Convention in the field of inland transport.²⁰ I will refer to these conventions in so far as their provisions are relevant to the various items discussed.

5.2.1 The *Torrey Canyon* and Oil Pollution Conventions

The pollution of the seas and coastal waters by oil escaping from sea carriers or even the threat of it has become a serious problem in the middle of 20th century. However, prior to the historic disaster of the *Torrey Canyon* incident in 1967, there was no international legal regime to protect those who suffered damage as a result of it.²¹ Where an incident occurred outside a state’s jurisdiction, international law was powerless to address the questions of liability and compensation.²² At that time, compensation was governed by the various general rules of tort law in each state.

¹⁷ LEG VII/11, paras. 8-10. Furthermore, there was general consensus within the legal committee that as regards issues of liability and compensation in particular, if the required “technical” information did not become available in relation to possible types of pollutants other than oil and their polluting potentialities, any further work could not be usefully undertaken.

¹⁸ See details at <http://www.imo.org/home.asp>

¹⁹ Little, Gavin, *The Hazardous and Noxious Substances Convention: a new horizon in the regulation of marine pollution*, [1998] L.M.C.L.Q. 554.

²⁰ Convention on civil liability for damage caused during carriage of dangerous goods by road, rail and inland navigation vessels (CRTD), elaborated in 1989 under the auspices of the Economic Commission for Europe of the United Nations in Geneva.

²¹ Although individual states might have laws i.e. *Esso Petroleum Co. Ltd. v. Southport Corpn.* [1956] A.C. 218.

²² See also Wu Chao, *Pollution from the Carriage of Oil by Sea: Liability and Compensation*, KLUWER LAW, International London- The Hague-Boston, 1996, p.2.

5.2.1.1 *Torrey Canyon*

In March 1967 the tanker *Torrey Canyon* grounded off Lands End. She was carrying 107,000 tons of crude oil and despite the efforts of professional salvors she could not be refloated. Despite the UK government's ordering the bombing of the cargo to burn it off to prevent pollution, the consequence was severe pollution to the UK and French coasts.

The victims that suffered from the spill were in an unfortunate position. The law in relation to liability and compensation for oil pollution was not favourable to claimants. The principal claimants were the central government and local authorities who had incurred expenditure for cleaning up the oil spill and those who had suffered other financial losses.

In presenting their claims, however, they were faced with numerous legal and practical problems. At the time of the *Torrey Canyon* incident, there was no rule of international law specifying an applicable law so it was therefore necessary to turn to the national legal system for pollution. The incident has to constitute a tort in English law.²³ However, there was also no legislation relating to liability for oil pollution in England, hence the principles of common law were applied.²⁴ Common law provides three main causes of action which form the basis of tortious or quasi-tortious liability: trespass,²⁵ nuisance²⁶ and negligence.²⁷ But the principles of trespass and nuisance are unlikely to

²³ Morris, *The Conflict of Laws*, Sweet & Maxwell Ltd, 6th ed., 2005, p75, p367. In reality, if a tort is committed in England, it is natural that English law should apply. If the tort is committed on board a vessel on the high seas, the court applies the law of the vessel's flag state; if the tort takes place in the territorial waters of another country, the law of that country applies. In all these cases, the incident has to constitute a tort in English law. In other words, the defendant may also take advantage of the law of the place where tort was committed. It should be noted that the difficulties encountered in determining the governing law only relate to the basis of liability.

²⁴ Before the *Torrey Canyon* incident, there was a very important case—the Southport Corporation Case—the first case in the United Kingdom to be concerned with oil pollution damage. On that account alone it constitute a most important authority; in addition it provided an opportunity for the discussion of most of the major issues of common law liability in such cases. Particularly the principles of tort law discussed in that case were very useful in the analysis of the *Torrey Canyon* in the following paragraphs. See *Esso Petroleum Co. Ltd. v. Southport Corpn.* [1956] A.C. 218; also Abecassis and Jarashow, *Oil Pollution from Ships*, op. cit., p.357.

²⁵ In order to bring an action in trespass, there must be unjustifiable and intentional interference with the plaintiff's property. This interference must be direct; if it is consequential damage, it is then considered to be a nuisance. It can be concluded that trespass will not normally lie in oil pollution cases, either because the injury suffered will be held to be consequential, not direct, or because, in cases where the discharge was unintentional, the court is not likely to allow any other action than one in negligence. See Rogers, *Winfield and Jolowicz on Tort*, 12th ed, 1984, p.360. See also Abecassis and Jarashow, *Oil Pollution from Ships*, 2nd ed. (1985), Stevens & Sons, at p.358

²⁶ Rogers, *Winfield and Jolowicz on Tort*, 12th ed, 1984, p.380. Public nuisance is primarily a part of the criminal law. However, it is established law that an individual who suffers special damage as a result of a public nuisance may maintain civil proceedings for damage. In the case that the foreshore is polluted, it will constitute a public nuisance

be effective in oil pollution claims.

In order to found an action in negligence,²⁸ four requirements must be satisfied: (1) duty of care;²⁹ (2) breach of duty by the defendant; (3) a causal connection between the defendant's careless conduct and the damage; (4) foreseeability of the damage.³⁰ In the *Torrey Canyon*, it is possible that the first two elements were in place but not the last two.³¹ Unfortunately a claim raised in negligence was likely to fail. The damage must be the foreseeable consequence of the negligent act and the burden of proof falls on the plaintiff.³² Private claimants might also have difficulty because of the peculiarities of pollution cases in which it is the environment, not their property, which is injured.³³ Under English law no duty of care is owed to those who are exposed to pure economic loss (as distinct from consequential economic loss resulting from property damage or personal injury).³⁴

In the wake of the *Torrey Canyon* disaster, the Brussels Conference of November 1969 adopted the 1969 CLC ("Civil Liability Convention") and the International Convention

only if a sufficiently large class of Her Majesty's subjects have been affected. If even quite a large stretch of coastline (say two or three miles) owned by one person, and not habitually used for recreation by more than a few members of the public, were to be polluted, it is not certain that there could be a public nuisance. But where such a stretch is so used, for instance, harbours, public beaches and marinas, there probably will be a public nuisance. In such cases, the question of whether or not a plaintiff can recover damages will rest on whether he can show "special damage". See also Abecassis and Jarashow, *Oil Pollution from Ships*, 2nd ed., (1985) Stevens & Sons, p.370. Private nuisance has been described as the unlawful interference with a person's use or enjoyment of land, or some right over or in connection with it. Proof of the nuisance shifts the burden of proof that the interference is justifiable (i.e. reasonable) on to the defendant. Prove your nuisance, and liability is established unless the defendant can exculpate himself. No defendant will be able to show that oil pollution is reasonable—it is simply not that kind of interference.

²⁷ A case framed in nuisance or trespass could be supported only if the Government was able to show that the Crown was seeking compensation in respect of damage suffered by or expenses incurred in relation to property in its ownership or occupation. But the Crown did not own much of the foreshore involved in the accident and this made it difficult to frame a claim in nuisance or trespass. See Griggs, Patrick, *Extending the frontiers of liability—the proposed Hazardous Noxious Substances Convention and its effect on ship, cargo and insurance interests*, [1996] L.M.C.L.Q 146

²⁸ *Clerk & Lindsell on Torts*, 18th ed. (2000) London, Sweet & Maxwell, p.274

²⁹ Duty of care: the existence in law of a duty of care situation to avoid injury

³⁰ That means that the particular kind of damage to the particular claimant is not so unforeseeable to be too remote.

³¹ Griggs, Patrick, "*Extending the frontiers of liability—the proposed Hazardous Noxious Substances Convention and its effect on ship, cargo and insurance interests*", [1996] L.M.C.L.Q. 146. It should be considered that shipowners have a duty not to carry out any action which they might reasonably consider may pollute the coastline, as with any duty not to interfere with the rights of others. Breach of that duty, commonly found in the actions of the master, or even those of the shipowner, is carrying out an action which a reasonable man would not carry out. There was no doubt that the crew of the *Torrey Canyon* had been negligent and that the owners were vicariously responsible for the acts of their servants. See also Wu Chao, *op. cit.* p.16.

³² There is an essential requirement of negligence is the "foreseeability of the damage". This requires the existence of a link of causation between the breach of duty and the damage.

³³ Wu chao, *op. cit.* p16

³⁴ Griggs, *Liability for hazardous and noxious cargoes: the HNS Convention*, International Business Lawyer, September 1996. pp 350-351.

Relating to the Intervention on the High Seas in Cases of Oil Pollution Casualties (“Public Law Convention”). The former is a very important convention in the field of civil liability for pollution damage and I will give a special attention to it and its replacement, the 1992 CLC in my thesis. The latter is less important since its effect is merely to confirm the previously uncertain right of a State to intervene on the high seas when faced with pollution, or the threat of pollution from a foreign-flagged vessel.

The practical importance of the CLC, by contrast, can be seen in connection with the *Braer* and *Sea Empress* casualties. The *Braer* brought devastation to the Shetland fishing industry in 1993 and in 1996 the *Sea Empress* did much the same for the fishing industry around Milford Haven. Although none of those whose livelihoods have been affected by these two incidents can be happy with the compensation which they have received, at the end of the day, most are likely to have done better than the *Torrey Canyon* victims.³⁵

On the other hand, it has to be recognised that there must be a limit to any increase in liability. Profit and risk must be balanced: if the risk is greater than the profit, it would not be surprising to see traditional industries abandoning the activity generating the risk. As for oil pollution, if the burden imposed by the law is too great, it is conceivable (though one suspects unlikely) that industry will stop transporting oil because it is no longer commercially viable to do so.³⁶ In the United States, the very strict law on pollution is significant, so much so, that some major oil companies today have opted not to be owners or bareboat-charterers of oil tankers going to the United States. This has led to the creation of more and more single-ship companies which are content to trade with the United States on the basis that they have very limited financial capability and therefore very limited risks.³⁷

The 1969 Convention, which achieved international effect in 1975, by which year the

³⁵ Griggs, Patrick, *Liability for hazardous and noxious cargoes: the HNS Convention*, (1996) International Business Lawyer, 24-8, pp 350-351

³⁶ Wu chao, op. cit, p5

³⁷ Wu Chao, op. cit, p5, see also Susan Hodges and Christopher Hill, *Principles of Maritime Law*, London: LLP, 2001, p138

minimum number of states as required by the Convention itself had signified adoption, has itself been replaced by what was initially known as the 1984 Protocol but which has now become the 1992 Convention.³⁸ Currently, both China³⁹ and United Kingdom are parties to 1992 CLC. I will firstly give a description of the 1969 Convention and then discuss the important differences of the 1992 Convention from 1969 Convention.

5.2.1.2 The Original 1969 Convention — Significant Provisions

The International Convention on Civil Liability for Oil Pollution Damage (1969 CLC),⁴⁰ provides that the shipowner has strict liability⁴¹ (i.e. he is liable also in the absence of fault) for pollution damage caused by oil spilled from his ships carrying oil in bulk as cargo (i.e. laden tankers),⁴² subject to a few exemptions.⁴³ Another significant provision is the channelling of liability that only the shipowner and no one else is exposed to liability.⁴⁴ That means claims for pollution damage under 1969 CLC can be made only against the registered shipowner concerned.⁴⁵ The Convention prohibits claims against the servants or agents of the owner.⁴⁶ But the owner is entitled to take recourse action against third parties in accordance with national law.⁴⁷

In addition, the shipowner is normally entitled to limit his liability under the 1969

³⁸ See Hodges, Susan and Hill, Christopher op. cit, p140.

³⁹ China adopted 1992 CLC on 5th January 1999 and it came into force in China on 5th January 2000. P.R.C does not adopt 1971 Fund (1984/1992 Protocols) but both Hong Kong and Macau are parties to 1992 CLC and 1992 Fund. It should be noted, in mainland China, 1992 CLC are only applicable in the litigation concerning foreign affairs. Chinese ships with total weight over 300 tonnes carrying oil in bulk as cargo and transporting oil internationally, if the litigation without involving foreign elements, Chinese Maritime Code (Chapter 11) applies. Chinese ships with total weight under 300 tonnes transporting oil within Chinese waters and the litigation without involving foreign affairs, the 1994 compensation limitation regulation promulgated by the Ministry of Communications applies.

⁴⁰ International Convention on Civil Liability for Oil Pollution Damage, 1969 (The CLC), Brussels, November 1969; Cmnd. 6183. The 1969 CLC applied to China on 29th April 1980 and applied to U.K. on 19th June 1975.

⁴¹ Article III(1) of 1969 CLC.

⁴² Article I (1). Very significantly, spills of bunkers from tankers are excluded from CLC 1969 because they are not carried as cargo. Now, they are covered by the Bunker Convention 2001.

⁴³ Article III(2): No liability for pollution damage shall attach to the owner if he proves that the damage: (a) resulted from an act of war, hostilities, civil war, insurrection or a natural phenomenon of an exceptional, inevitable and irresistible character, or (b) was wholly caused by an act or omission done with intent to cause damage by a third party; or (c) 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.

⁴⁴ Article III (1), Article I (3); see details at Susan Hodges and Christopher Hill, op. cit, p140.

⁴⁵ This does not preclude victims from claiming compensation outside this Convention from persons other than the shipowner.

⁴⁶ See the second part of Article III(4).

⁴⁷ Article III rule 5. See also the right of subrogation in Article V (5) of CLC. The receivers of oil will pay through the Fund.

CLC.⁴⁸ We can see this provision provides the corresponding balance to temper the harness of strict liability.⁴⁹ To those in the shipping industry, it is probably easy to accept that the limitation of liability is as natural as the fact of liability. The theory is that without limitation industry would not carry out hazardous activities which are nonetheless essential to society. The more “strict” the liability, the more necessary it is on this argument to limit this liability.⁵⁰ The 1969 Convention was no exception: its limitation provisions, referred to below, were very much dictated by the heavy burden of liability.

Under the original provisions, the owner is entitled to limit his liability and the limits⁵¹ were much higher than those of the 1957 Limitation Convention.⁵² As with say collision liability, the right to limit was lost if the accident resulted from the shipowner’s actual fault or privity.⁵³ In order to benefit from the limitation, the shipowner or his insurer had, according to Article V (3), to set up a limitation fund through a court in a Contracting State,⁵⁴ which court was solely competent to determine all matters regarding apportionment and distribution of the fund.⁵⁵

With strict liability under the CLC 1969, another important feature of CLC is its system of compulsory insurance under article VII,⁵⁶ which protects claimants in the event that the registered owner is unable to meet his liabilities under the Convention. Under the

⁴⁸ Article V(1)

⁴⁹ Susan Hodges and Christopher Hill, *op. cit.*, p142; see also Z. Oya Ozcayir, (1998) *Liability for Oil Pollution and Collisions*, LLP, p. 217

⁵⁰ Wu Chao, *op. cit.*, p62.

⁵¹ Tanker owners were permitted to limit their liability to 2,000 gold francs per ton of the ship’s tonnage, with a maximum of 210 million francs under Article V (1).

⁵² The 1957 Convention offered 1,000 francs for damage to property and 2,100 francs for personal injury, since pollution damage generally consists of damage to property.

⁵³ Article V (2). The condition of limitation is the same as that for 1957 Convention.

⁵⁴ If several courts in the Contracting States are involved, the owner or his insurer only has to set up one fund through one of the courts.

⁵⁵ Article IX (3).

⁵⁶ Article VII: “The owner of a ship registered in a Contracting State and carrying more than 2000 tonnes of oil in bulk as cargo, shall be required to maintain insurance or other financial security such as the guarantee of a bank or a certificate delivered by an international compensation fund in the sums fixed by applying the limits of liability prescribed in article V paragraph 1 to cover his liability for pollution damage under this Convention”. Compulsory insurance is not unknown in international law, but this was the first time for it to be stipulated in international shipping law (i.e. 1969 CLC). More than half century ago, the Compulsory Insurance was stipulated under The International Convention for the Unification of Certain Rules relating to Damages Caused by Aircraft to Third Parties on the Surface 1933 (the Rome Convention). Moreover, compulsory insurance has become a feature of recent liability conventions, notably CLC 1992 (Article VII), Bunker Convention 2001 (Article 7); HNS Convention 1996 (Article 12) and Nairobi International Convention on the Removal of Wrecks, 2007 (Article 12).

CLC 1969 the owner of a tanker carrying more than 2,000 tonnes of persistent oil as cargo is obliged to maintain insurance to cover his liability.⁵⁷ Tankers must carry a certificate on board attesting the insurance cover. In practice, the insurance certificate is issued by the tanker's P&I Club. This was universally considered adequate security.

In addition, claims for pollution damage under the CLC 1969 may be brought directly against the insurer or other person providing financial security for the shipowner's liability,⁵⁸ as they placed themselves in the position of guarantors. That is to say, a claimant may sue the insurer directly, without need to sue the ship or its owner. As a quid pro quo for the direct action against the insurer, he got two important rights. Firstly, he was endowed with a right to limit his liability, independently upon whether the insured tanker was permitted to limit.⁵⁹ That is to say, even in the case of fault or privity on the part of the shipowner, the insurer could take advantage of the limits of liability. Secondly, in addition to the shipowner's defence,⁶⁰ the insurer had another defence in the shape of intentional fault on the part of the shipowner, in which case the insurer will be relieved from his liability to make payment, with the assured bearing the entire burden.⁶¹

No doubt, the concept of compulsory insurance is just as important as strict liability and limitation of liability. The reason is that these insurance guarantees are available only if they are subject to clear limits. Consequently, the right of the shipowner and his insurer to limit liability goes hand in hand with the imposition of strict liability and the compulsory insurance provisions. Furthermore, with the provisions of compulsory insurance in place, in practice it is most likely all claimants would seek to recover damages from the registered owner or directly from his insurer in accordance with Article VII and to ignore other potential defendants except in extreme cases.

⁵⁷ Article V

⁵⁸ Article VII (8)

⁵⁹ Article VII (8) gives the insurer the right to limit his liability to the Article V(1) amount, and this right is absolute—it applies even in the case of the actual fault or privity of the assured owner. Article V (11) provides the insurer with the right to constitute a limitation fund in any event. Article V (5) also grants of subrogation to the insurer in the event that it pays compensation for pollution damage before distribution of the fund.

⁶⁰ Article VII (8) affords the insurer all the defences which the owner could have invoked under Article III (2) and (3), except the bankruptcy or winding-up of the owner.

⁶¹ Wu Chao, *op. cit.*, p71.

5.2.1.3 The Civil Liability Convention as Revised⁶²

The CLC was revised by the 1992 Protocols and took the basic provisions of the 1984 Protocols.⁶³ It came into force on 30 May 1996⁶⁴ and was enacted into English law by ss 152-170 of the Merchant Shipping Act 1995.⁶⁵ China ratified the 1992 Protocol on 5th Jan. 1999 and became applicable to both China and Hong Kong on 5th Jan. 2000.⁶⁶

The broad aim and indeed effect of the 1992 CLC is to additionally embrace those areas of compensation which were traditionally provided by the ship and which were covered by TOVALOP,⁶⁷ but were not covered by CLC 1969.⁶⁸ The international regimes established by the two Conventions and the voluntary agreements respectively, although innovative and beneficial at the time, quickly became deficient. The main reason is that the risk of pollution increased at a rate to which existing laws could not adapt. In particular, the *Amoco Cadiz* and *Tanio* incidents revealed not only the insufficient compensation limits but also the obstacles to their application.⁶⁹

The idea of raising the compensation limits was at the heart of the initiative to revise the 1969 CLC and 1971 Fund.⁷⁰ As we know, the two conventions formed a whole and the resulting regime was founded on an apportionment of the financial burden between the shipowners and the cargo interests. When seeking to raise the ceiling of liability and compensation, it is essential to keep this interaction in mind. Should the CLC limits be

⁶² Up to 31 December 2007, 1992 CLC has 120 Contracting States, 1992 Fund has 102 Contracting States, see general information at IMO website <http://www.imo.org/home.asp>

⁶³ The attempts at revision began in 1979 and the work itself was completed in 1984 when two protocols were signed in order to revise the 1969 and 1971 Conventions. These 1984 protocols were replaced by two new protocols in 1992, with amendments intended to facilitate their entry into force.

⁶⁴ The UK has introduced the 1992 Convention into its own law by sections 152-171 of the Merchant Shipping Act 1995. Thereby the Merchant Shipping (Oil Pollution) Act 1971, which contained the 1969 CLC, was repealed.

⁶⁵ The provisions of the convention with modification are to be found in Part VI Chapter III of the Merchant Shipping Act 1995, ss. 152-170. Section 171 contains traditional provisions dealing with the transition from the 1969 CLC to the 1992 Protocols.

⁶⁶ China declared that the Protocol will be applicable to the Hong Kong Special Administrative Region at the same time. In mainland China, it is only applicable to cases involved foreign elements. See Si, *Maritime Law*, 2003, p. 323.

⁶⁷ TOVALOP stood for a shipping industry agreement entitled "Tanker Owners Voluntary Agreement concerning Liability for Oil Pollution". The final demise of this industries' voluntary agreement was on 20 February 1997.

⁶⁸ This was believed to be essential if "life after TOVALOP" (RIP 20 February 1997) was, from a victim's point of view, to be as fully functional as it was when TOVALOP was alive and well. Hill, *Maritime Law*, 6th Edition, LLP, 2003, p 433.

⁶⁹ Wu Chao, *op. cit.* p129.

⁷⁰ The International Convention on the Establishment of an International Fund for Compensation 1971 (Fund Convention 1971). See section 5.2.1.4

raised excessively, the shipowners would shoulder the bulk of the financial burden. Conversely, if the CLC limits were not adequately increased, the cargo owners, that is, the oil industry, would have to fund the bulk of compensation for pollution damage.

Except for the inadequate limits of liability and compensation, there are some other weak points of the original Conventions. The definitions of “ship” and “incident” need to be expanded, the definition of “pollution damage” should be clarified, and also it is necessary to re-discuss the “Geographical Scope” and make the “channelling of liability” more sufficient. Therefore, there was an urgent requirement to revise the legal regime.

The 1992 CLC builds on the structure of the 1969 CLC but contains the following important differences. I will particularly discuss the provisions which have been specifically updated or clarified with comparisons to the equivalent provisions in its predecessor.

- Article I, rule 1—“Ship”

The definition of ship under 1992 CLC is more specific than that in 1969 CLC. The 1969 definition was brief and restricted to “any sea going vessel and any seaborne craft of any type whatsoever actually carrying oil in bulk as cargo”. The 1992 definition⁷¹ requires the ship to be constructed or adapted to carry oil, i.e. capable of carrying oil in bulk.⁷² This new provision makes the convention apply to unladen tankers (tankers in ballast) and to oil pollution from bunkers in such vessels.⁷³ In short, the first part of the new definition refers to tankers and any ships adapted to carry oil in bulk as cargo and that pollution damage caused by such ships, either laden or unladen is recoverable under

⁷¹ Under Article II, rule 1 of 1992 Protocol, “ship” means “any sea-going vessel and seaborne craft of any type whatsoever constructed or adapted for the carriage of oil in bulk as cargo, provided that a ship capable of carrying oil and other cargoes shall be regarded as a ship only when it is actually carrying oil in bulk as cargo and during any voyage following such carriage unless it is proved that it has no residues of such carriage of oil in bulk aboard.”

⁷² If it is capable of carrying other cargoes, i.e. a ship which is not characteristically a tanker in the traditional sense, but provided it is actually carrying oil in bulk at the time of the spill, the provisions of the convention will apply to that incident.

⁷³ During the draft of 1984 Protocol, there were doubts about the way in which the inclusion could be effective, because no definition of unladen tankers was given for the purpose of this extension. But these doubts were not considered to be serious enough to be addressed. It seems no big problem in practice so far. See http://www.coastalwiki.org/coastalwiki/North_Sea_pollution_from_shipping:_legal_framework (accessed on 07/07/2010). See also *Marsden on Collisions*, 13th ed., 2003, p.423

the terms of 1992 CLC.

There is a question arises here: whether offshore craft, namely floating storage units (FSUs) and floating production, storage and offloading units (FPSOs) should be regarded as being covered by the definition of “ship” under the 1992 Conventions? In October 1999, the 1992 Fund Assembly had endorsed the conclusions that an offshore craft should be regarded as a ship under the 1992 Conventions only when it carries oil as cargo on a voyage to or from a port or terminal outside the oil field in which it normally operates, although in any event the decision would be taken in light of the particular circumstances of the case.⁷⁴ However, some member states have applied a different interpretation of the definition of ship⁷⁵ from the IOPC Fund’s interpretation.

At present member states still have different views in respect of the definition of ship. Some are in favour of a wider definition of ship than the one applied at present by the Funds, while others are against by arguing that the present wording of definitions simply cannot be interpreted to cover FSUs and FPSOs. Regarding the broader definition, the risk is that the Funds could be liable to pay for an FSU incident, but the Funds would not have received contributions covering the operations of the FSU because contributions are determined by contributing oil, which at present does not include Ship To Ship (STS) operations. In addition, if the IOPC Funds decide to amend the present interpretation in order to cover FSUs and FPSOs, that means shipowners and insurers would subject to strict liability and in many cases compulsory insurance under the 1992 Conventions. Accordingly, regarding either upholding or amending the present

⁷⁴ See details at https://www.bimco.org/Members/News/General_News/2009/10/16_IOPC_Funds_will_reconsider_definition_of_ship.aspx (accessed 06/07/2010). See also Willem Oosterveen, *Some recent developments regarding liability for damage resulting from oil pollution- from the perspective of an EU Member State*, *Environmental Law Review*, 2004, 6(4) pp 223-239, at 235.

⁷⁵ For example, in 2006 the Greek Supreme Court made a decision differing from the above interpretation given by IOPC Funds. This case was involving the Slops incident occurred in Greece in 2000. The Slops was originally designed and constructed for the carriage of oil in bulk as cargo, but in 1995 underwent a major conversion in the course of which its propeller was removed and its engine was deactivated and officially sealed with a view to converting the status of the craft from a ship to a floating oily waste receiving and processing facility. According to the IOPC Funds’ interpretation, the Slops should not be regarded as a ship under 1992 Conventions. But the Greek Supreme Court decided that at the time of the incident the Slops should be regarded as a ship as defined in the 1992 Conventions because it had the character of a seaborne craft which, following its modification into an FSU, stored oil products in bulk and, further it had the ability to move by being stowed with a consequent pollution risk without it being necessary for an incident to take place during the carriage of the oil in bulk. As a result, the 1992 Fund in July 2008 paid 4 million Euros to the claimants as principal, legal interests and costs in accordance with the judgement by the Greek courts.

IOPC Funds' interpretation, there are a large majority of Member States at a meeting in October 2009, in support of having a study carried out by external consultant, which could then be presented at the next session of IOPC Funds.⁷⁶

The author is in favour of a wider definition of ship to cover FSUs and FPSOs. To amend the present IOPC Funds interpretation is desirable because these units do pose a significant risk of oil pollution incidents, while they operate at sea and usually contain large quantities of oil.

The second part of the definition (conditional clause) concerns combination carriers in the situation where ships sometimes trade with oil in bulk as cargo and sometimes with other cargoes (e.g. minerals in bulk).⁷⁷ It should be noted that the literal meaning in the 1969 CLC included combination carriers, provided that they were carrying oil in bulk as cargo at the time of the incident. The new definition in 1992 CLC extends the coverage of combination carriers to any subsequent voyage, with the term of "any voyage" being defined as the whole return voyage. This means the liability of combination carriers under the 1992 CLC is extended to include the whole voyage following the carriage of oil in bulk as cargo unless it is proved that there are no oil residues remaining on board from such carriage of bulk oil.

- Article I, rule 5—"Oil"

In Article I, rule 5, oil is widely defined and significantly includes bunker oil.⁷⁸ CLC 1969 did not include bunkers, but TOVALOP did if they came from a tanker, and the 1992 CLC follows TOVALOP. It must be noted that spills of bunkers, if they are to be covered by the convention, must be from vessels capable of actually carrying oil as

⁷⁶ Dates for this meeting will be informed when available. See also https://www.bimco.org/Members/News/General_News/2009/10/16_IOPC_Funds_will_reconsider_definition_of_ship.aspx (accessed 02/07/2010)

⁷⁷ These ships must have an insurance certificate (P&I) when they are operating as tankers, but not when operate as bulk carriers. The P& I Clubs need to know at what point a ship requires a certificate. Therefore they proposed the 1984 Protocol should apply during the carriage of oil and should cease to apply at the end of the voyage following the carriage of such oil. It was agreed that the end of the voyage subsequent to the carriage of oil in bulk as cargo would be the determining point. For details see O.R.1984, Vol. 2, LEG/CONF. 6/ 47, 2/4/84, p. 52. See also the discussion about the combination carriers in respect of the definition of "ships" in the 1969 CLC and the 1984 Protocol in Wu Chao, op. cit, p. 142.

⁷⁸ Article I rule 5, "oil" means "any persistent hydrocarbon mineral oil such as crude oil..." See also Hodges, Susan, *Principles of Maritime Law*, op. cit. p147.

cargo.⁷⁹ The convention does not apply to bunker spills from any merchant ship.

- Article I rule 6&7—“Pollution damages” and “Preventive measure”

The 1992 CLC clarifies how pollution damage may be recovered following an oil spill. The concept of “pollution damage”⁸⁰ was based on 1969 CLC,⁸¹ but the meaning is narrower than that attributed to it in the 1969 CLC.⁸² The Protocol covers pollution damage as before but environmental damage compensation is limited to costs incurred for reasonable measures to reinstate the contaminated environment. But the 1992 CLC definition of “pollution damage” is far from ideal. Particularly it is vague and unclear regarding the criteria for compensation for reinstatement of the environment.⁸³ It does not state explicitly what kinds of reinstatement measures would be eligible for compensation.

As a system of economic compensation for oil spill damage, claims relating to the impairment of the environment would be accepted by IOPC Fund only if the claimant had suffered a quantifiable economic loss, measurable in monetary terms, according to the declaration in Resolution No 3 of the IOPC Fund Assembly.⁸⁴ The Fund will pay for clean-up costs, environmental restoration costs, including measures taken at an alternative site, plus the cost of assessing environmental damage, provided that the restoration and assessment fulfil the criteria established in the 2002 Claims Manual on Environmental Damage by IOPC Fund.⁸⁵ The Fund will not pay for compensation of

⁷⁹ Ibid. p148.

⁸⁰ Article II, rule 3 of 1992 CLC.

⁸¹ Under Article I (6) of 1969 CLC, “pollution damage” is defined as “loss or damage caused outside the ship carrying oil by contamination resulting from the escape or discharge of oil from the ship, wherever such escape or discharge may occur (1992 CLC added more about environment here), and includes the costs of preventive measures and further loss or damage caused by preventive measures.”

⁸² Article II, rule 3 of 1992 CLC. Pollution damage means “(a) 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, provided that compensation for impairment of the environment other than loss of profit shall be limited to costs of reasonable measures of reinstatement actually undertaken or to be undertaken”; (b) “the cost of preventive measures and further loss or damage caused by preventive measures”.

⁸³ De La Fayette, *New approaches for addressing damage to the marine environment*, The International Journal of Marine and Coastal Law, Vol 20, No 1 (2005), pp. 167-224, at 180

⁸⁴ Michael Mason, *Civil liability for oil pollution damage: examining the evolving scope for environmental compensation in the international regime*, Marine Policy 27 (2003) 1-12, at 3. See also De La Fayette, *op. cit.*, pp. 180-182.

⁸⁵ The aim of any reasonable measures of reinstatement should be to bring the damage site back to the same ecological state that would have existed had the oil spill not occurred, or at least as close to it as possible (that is, to re-establish a biological community in which the organisms characteristic of that community at the time of the incident are present and are functioning normally). Reinstatement measures taken at some distance from, but still within the general vicinity of, the damaged area may be acceptable, so long as it can be demonstrated that they would

environmental damage beyond economic loss. Strictly speaking, the definition of “pollution damage” under the 1992 CLC is undeveloped and it does not include “pure” environmental damage such as ecological damage. Unlike the EU Environmental Liability Directive 2004/35, *biodiversity damage* (e.g. damage to species and habitats)⁸⁶ is not covered by the 1992 CLC/Fund conventions.

The 1992 CLC also allows expenses incurred for preventive measures⁸⁷ to be recovered even when no spills of oil occurred, provided there was grave and imminent threat of pollution damage.⁸⁸ In contrast, the 1969 CLC would neither reimburse such costs nor allow them to rank against a limitation fund set up because a spill subsequently took place. However TOVALOP did and the 1992 CLC caught up with this development.⁸⁹

- Article II—Geographical scope

The 1969 CLC only covered damage on shore or in the territorial waters.⁹⁰ According to Article II (a) (2) of the 1992 Protocol,⁹¹ the territory extends to “the exclusive economic zone” (EEZ) and it follows that shipowners can now be made liable in respect to oil spills much further out on the high seas than before under the 1969 CLC. The words of Article II of 1992 Protocol originally came from Article 3 of the 1984 Protocol,⁹² which was different from 1969 CLC.

actually enhance the recovery of the damaged components of the environment. This link between the measures and the damaged component is essential for consistency with the definition of pollution damage in the 1992 CLC and Fund Conventions. See De La Fayette, *op. cit.*, p. 210 and p. 218

⁸⁶ For detail see discussion in sections 5.3 and 5.3.2

⁸⁷ Article I, rule 7 of 1969 CLC, Preventive measures means any reasonable measures taken by any person after an incident has occurred to prevent or minimize pollution damage. There is no definition of preventive measures in 1992 CLC.

⁸⁸ Merchant Shipping Act 1995, Section 153(2). See Baughen, *Shipping Law*, 2nd ed. Cavendish Publishing Limited, 2001, p334.

⁸⁹ It should be noted here, that as with the CLC 1969 definition, the new definition still does not deal with the question of causation and is left to be decided according to provisions contained within national regimes. See discussion in 6.1. See also *Marsden on Collisions*, 13th ed., 2003, p.425.

⁹⁰ Article II of the 1969 Convention states: “This Convention shall apply exclusively to pollution damage caused on the territory including the territorial sea of a Contracting State and to preventive measures taken to prevent or minimise such damage.” We can see the 1969 CLC was exclusively territorial in application. That means what mattered and what had to be determined for that Convention to apply was the damage caused by the escape of oil within the territorial limits of a Contracting State.

⁹¹ Under Article II, The convention shall apply exclusively: (a) to pollution damage caused: (1) in the territory, including the territorial sea, of a Contracting State, and (2) in the exclusive economic zone of a Contracting State, established in accordance with international law, or, if a Contracting State 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 base lines from which the threat of its territorial sea is measured; (b) to preventive measures, wherever taken, to prevent or minimise such damage

⁹² This provision was one of the most contentious at the 1984 Conference. See Abecassis, D.W. & Jarashow, R.L., *Oil Pollution from Ships—International, United Kingdom and United States Law and Practice*, London: Stevens &

It should be noted that the definition of EEZ is a major innovation of the 1982 LOS Convention,⁹³ which extends to 200 Nautical Miles from the territorial sea baseline.⁹⁴ According to Article 56 of LOS, EEZ confers on coastal states, jurisdiction for the prevention of the marine environment.⁹⁵ At the 1984 IMO conference, developing countries successfully pushed EEZ into the amendment to CLC/Fund Conventions.⁹⁶ Eventually, EEZ is incorporated into CLC/Fund 1992.⁹⁷ Obviously, the extension of the geographical coverage will help to enhance the rights of victims by admitting extra territorial claims in EEZ.

A question arises: how about oil pollution occurred outside of EEZ? According to the IOPC Fund 1992 Claims Manual,⁹⁸ responses on the high seas to an oil spill would in principle qualify for compensation only if they succeed in preventing or reducing pollution damage within the territorial sea or EEZ of a contracting state. According to IOPC Fund, given world shipping lanes, oil spills on the high seas are rare.⁹⁹ Moreover, we cannot ignore the difficulty of mounting a practical response to an oil discharge on the high seas. That is to say, it is rare to have responses on the high seas. If there is, the above criteria must be satisfied. Generally, the geographic scope of CLC/Fund will not be extended to the high seas.

However, it should be noted in theory that Article 221 (1) of the LOS Convention affords states the right of intervention on the high seas in respect of maritime casualties threatening harmful pollution in spite of the practical rationale for restricting liability for high seas oil pollution damage to its impact on national interests.¹⁰⁰ More radically,

Sons, 2nd ed., 1985, p234.

⁹³ United Nations Convention on the Law of the Sea (LOS) 1982, see full text at <http://www.globelaw.com/LawSea/lscnts.htm>; both UK and PRC have ratified the Convention.

⁹⁴ Article 57 of the LOS 1982

⁹⁵ Specifically, Article 56(1)(b)(iii) of the LOS Convention recognized for the first time coastal state jurisdiction in the EEZ over protection and preservation of the marine environment.

⁹⁶ Michael Mason, *Civil liability for oil pollution damage: examining the evolving scope for environmental compensation in the international regime*, Marine Policy 27 (2003) 1-12, at 6.

⁹⁷ EEZ is incorporated into CLC 1992 as Article II and the Fund 1992 as Article 3

⁹⁸ International Oil Pollution Compensation Fund 1992. Claims Manual. London: IOPC Fund 1992, 2000, p.7.

⁹⁹ Michael Mason, op. cit. p. 6.

¹⁰⁰ As a general rule that only the flag state may exercise jurisdiction over a ship on the high seas (Article 91 of the LOS). But there are certain exceptions to the exclusive of flag state jurisdiction. See Z. Oya Ozcayir (editor), (1998) *Liability for Oil Pollution and Collision* LLP, London and Hong Kong, p. 405. See also Michael Mason, op. cit. 7.

Article 218 (1) provides that a port state may also take legal proceedings against a vessel in one of its ports that is alleged to have illegally discharged oil outside that state's territorial sea or EEZ, including high seas. Where the port state ascertained that a vessel in one of its ports is in violation of applicable international rules and standards, and thereby threatens damage to the marine environment, it shall take administrative measures to detain prevent the vessel until the cause of the violation have been removed, or the vessel goes to the nearest repair yard (Article 219). Accordingly, the discharges are no longer regarded as freedom of the seas. Proper control of all sources of pollution, including oil pollution is now a matter of legal obligation. This obligation covers not only "States and their maritime jurisdiction, but also the marine environment as a whole, including high seas (Article 194). We can see it is possibility for a coastal state to intervene the oil pollution occurred on high seas under LOS.

- Article III rule 4 — Channelling provisions

The CLC aims to channel liability through the carrier; thus it bars claims against a number of others involved. The 1992 text excludes claims (whether under the Conventions or otherwise¹⁰¹) not only against the servants or agents of the owner (who were protected under the 1969 provisions)¹⁰² but also against various other parties.¹⁰³

The full list is given in rule 2 of Article IV of CLC 1992:

- (a) The servants or agents of the owner or a member of a 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 bare boat charterer), manager or operator of the ship;
- (d) Any person performing salvage operations with the consent of the owner or on the instructions

Farkhanda Zia-Mansoor, *International Regime and the EU Developments for Preventing and Controlling Vessel-source Oil Pollution*, (2005) *European Environmental Law Review*, p.166.

¹⁰¹ Article III (4) of 1969 CLC was limited under the convention.

¹⁰² Article III (4) of 1969 CLC provided that: "No claims for compensation for pollution damage shall be made against the owner otherwise than in accordance with this Convention. No claim for pollution damage under this Convention or otherwise may be made against the servants or agents of the owner". The scope of Article III (4) of 1969 CLC was very limited and did not offer any protection to salvors, charterers and others. Where such a person was responsible for the spill, claimants would have claims against both the owner, under this convention, and such other person, under general principles of municipal law. See Abecassis and Jarashow, *Oil Pollution from Ships*, Stevens & Sons, 2nd ed. 1985, p.255

¹⁰³ Anderson, Charles B. & De la Rue, Colin, *Charter party symposium—part II: liability of charterers and cargo owners for pollution from ships*, (2001) 26 *Tul. Mar. L.J.*1, at 7.

of a competent public authority;

- (e) Any person taking preventive measures;
- (f) All servants or agents of persons mentioned in subparagraphs (c) (d) & (e).

- Article V—Limitation of liability

Where the limitation of liability is concerned, generally, oil pollution claims have always been treated separately from maritime claims.¹⁰⁴ The revised limits¹⁰⁵ under 1992 CLC are as follows:

- (1) There is a flat rate of 3 million SDRs for vessels whose gross tonnage does not exceed 5,000 tons.
- (2) For vessels whose gross tonnage exceeds 5,000 tons but does not exceed 140,000 tons, the figure is 3 million SDRs plus 420 SDRs for each additional ton over 5,000 tons.
- (3) For vessels whose tonnage exceeds 140,000 tons, the figure is a flat rate of 59.7 million SDRs.

Limitation of in respect of CLC claims, which are excluded from the 1976 Limitation Convention, will now (since 1992 Protocol) be lost in the same way. The type of conduct which would break limitation is covered by 1992 Protocol, Art. 6.2.¹⁰⁶ The old “fault or privity” test (Art. V of 1969 CLC) has been replaced with a test by which “it is proved that the pollution damage resulted from owner’s personal act or omission, committed with the intent to cause such damage, or recklessly and with knowledge that such damage would probably result”.¹⁰⁷ The new wording is adopted from the 1976 Convention.

¹⁰⁴ Where the polluting vessel is also responsible for other loss or damage (e.g. loss of life, personal injuries, property damage or cargo claims), the owner must seek limitation under global limitation provisions, e.g. LLMC 1976 or 1996 Protocol.

¹⁰⁵ A simplified procedure has been adopted for increasing these figures. Under Article 6.3 of the 1992 Protocol, the limitation fund can be established before any action under the convention is brought.

¹⁰⁶ Article V.2 of CLC 1969 is replaced by Art. 6.2 of the 1992 protocol which provides as follows: “The owner shall not be entitled to limit his liability under this Convention if it is proved that the pollution damage resulted from his personal act or omission, committed with the intent to cause such damage, or recklessly and with knowledge that such damage would probably result”.

¹⁰⁷ The wording of the 1992 Protocols refers to the “personal” acts or omissions of the shipowner. This word is omitted from the Merchant Shipping Act 1995, which adds “any” to the words “such damage” which appear in the Protocols. It is probable that these two linguistic differences between the Act and the protocols will not prove significant. Under MSA 1995, s. 157 (3), the claimant needs to prove that the damage or cost “resulted from anything done or omitted to be done by [such person] either with intent to cause any such damage or cost or reckless and in the knowledge that any such damage or cost would probably result”.

5.2.1.4 The 1971 “Fund” Convention

The International Convention on the Establishment of an International Fund for Compensation 1971 (“Fund Convention”) was a natural progression from the CLC 1969. UK is a party to the Fund Convention,¹⁰⁸ but China is neither a party to 1971 Fund nor 1992 Protocol up to August 2009. There are a few reasons for China not ratifying the Fund Convention/ Protocols which will be discussed later.¹⁰⁹

The starting point is the level of compensation provided under the CLC was not high enough. It was recognised at the time that the 1969 CLC was merely an interim compromise. A compromise solution had to be found in order to bring the 1969 Conference to a conclusion.¹¹⁰

This compromise was achieved by the adoption of two texts: the 1969 Convention and a Resolution¹¹¹ on the Establishment of an International Compensation Fund for Oil Pollution Damage.¹¹² Without the promise of a fund, the 1969 Conference would very probably have failed to adopt an instrument at all.¹¹³ We can imagine that if the CLC had been the only Convention spawned by the 1969 Brussels Conference, there would have been great disappointment amongst coastal States, potential victims of oil pollution and shipowners liable for the damage.¹¹⁴

Since the CLC had chosen the shipowner as the liable party on the basis of strict liability, it was considered that the oil industry should share some of the burden of compensation,

¹⁰⁸ From 16 May 1998, Parties to the 1992 Protocol ceased to be Parties to the 1971 Fund Convention due to a mechanism for compulsory denunciation of the “old” regime established in the 1992 Protocol. See “Fund 1971” at <http://www.imo.org/home.asp>. U.K. is party to 1992 Protocol, therefore ceased to be party to the 1971 Fund.

¹⁰⁹ See section 5.2.1.7

¹¹⁰ See discussion in section 5.2.1.2.

¹¹¹ O.R. 1969, LEG/CONF/C.2/WP.44, WP.45, pp. 603-609. This resolution was adopted by 33 votes to 6 with 6 abstentions.

¹¹² At the Conference 1969, in order to facilitate the compromise formula, a Working Group was set up to examine the question of liability based on an international fund. It was apparent by the time the group produced its report that there was no hope of formulating an instrument to set up such a fund, and so the Conference adopted a Resolution that IMO put the matter in hand immediately, and call a Diplomatic Conference not later than 1971 to consider and adopt a suitable Convention.

¹¹³ Abecassis and Jarashow, *Oil Pollution from Ships*, , 2nd ed. 1985, Stevens & Sons, p.253

¹¹⁴ The motivating force behind the setting up of this convention was a clear recognition by the oil industry, the main beneficiary of the carriage of oil by sea, that the shipping industry should not be obliged to shoulder the full burden of responsibility for the consequences of oil pollution damage from an escape or spill from a ship at sea. Hodges, *Principles of Maritime Law*, op. cit., p145. See also Wu Chao, op. cit, p76

which led to the idea of a second convention establishing a Fund to which the industry would contribute. Broadly speaking, the IOPC Fund is financed by contributions which, by Article 10, must be paid by those persons who have received crude oil or fuel oil in the territory of contracting States, namely, the importers of oil. Compared with the CLC which only concerned the owners of oil cargoes indirectly, the Fund Convention concerned them directly, by making them contribute to the Fund.¹¹⁵

The provisions of the Fund Convention are directly tailored to supplement those of the 1969 Liability Convention, so that in most cases the same definitions are adopted. The basic principle is that, where liability under the Liability Convention ends, the IOPC Fund's liability begins.¹¹⁶

Under the terms of Article 4 (1), the Fund shall pay compensation to any person suffering pollution damage in the following situations:

- Where the shipowner and his insurer are unable to fulfil their financial obligations (IOPC Fund as substitute or supplement).¹¹⁷
- Where the value of the damage caused by the escape of oil exceeds the offending shipowner's CLC liability limits (IOPC Fund as supplement).¹¹⁸

The most important of the above reasons is that contained in sub-paragraph (c) of Article 4 (1), and to date it is under this heading that all Article 4 claims against the IOPC Fund have arisen. It means that usually the IOPC Fund comes in at the point where the damage exceeds the Liability Convention limit of 2,000 gold francs (about 133 SDRs) per limitation ton. But where the owner is not entitled to limit his liability, due to his actual fault or privity, of course in that case the IOPC Fund is unlikely to have to pay anything because the claimant should have received full and adequate compensation for their pollution damage from the shipowner. If the owner is incapable of paying claims in full and his insurance fails, Article 4 (1) (b) would apply.

¹¹⁵ The IOPC Fund is governed by an Assembly of all contracting States to the Fund Convention. Hence, while it is States who govern the IOPC Fund, it is largely oil companies who contribute to it. Only states party to the 1969 Liability Convention may become party to the 1971 Fund Convention.

¹¹⁶ Abecassis and Jarashow, *Oil Pollution from Ships*, (1985, 2nd ed.) Stevens & Sons, p.255.

¹¹⁷ Article 4 (1) (b)

¹¹⁸ Article 4 (1) (c)

On the non-applicability side,¹¹⁹ the Fund incurs no obligation in situations:

- (1) where pollution damage results from an act of war, hostilities, civil war or insurrections;¹²⁰ or
- (2) from oil spilled from a warship or a ship under government ownership engaged in non-commercial operations;¹²¹ or
- (3) 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;¹²² or
- (4) the claimant victim was unable to show conclusively that the damage was directly consequent upon an incident in which one or more vessels were involved.¹²³

The text of the 1971 Convention provided for a maximum sum of 450 million gold francs (30 million SDRs¹²⁴) although the Convention had the capability built into it of having this figure stepped up to 900 million francs (60 million SDRs¹²⁵) if circumstances in the future justified such a doubling.¹²⁶ The 1971 Convention came into force in October 1978 and has proved to be a success. The IOPC Fund has been presented with claims from 57 incidents from its creation in October 1978 until June 1991.¹²⁷ It has made payments of compensation and indemnification amounting to some \$70 million.¹²⁸

¹¹⁹ See Article 4 (2)

¹²⁰ Article 4(2) (a)

¹²¹ Article 4(2) (a)

¹²² Article 4(3): "... The Fund shall in any event be exonerated to the extent that the shipowner may have been exonerated under Article III, paragraph 3, of the Liability Convention." Article III paragraph 3: "... The owner will escape liability if he proves that 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".

¹²³ Article 4(2)(b)

¹²⁴ In 1976 a Protocol to the Convention had been adopted which changed the expression of the various amounts from gold francs to SDRs, as defined by the International Monetary Fund. The 1976 Protocol follows the 1976 Protocol to the Liability Convention, in expressing the gold franc amounts in Articles 4 and 5 of the Convention in SDRs on the basis of 15 gold francs equals 1 SDR. Hence, for instance, 450 and 900 millions francs become respectively 30 and 60 million SDRs.

¹²⁵ Ibid.

¹²⁶ Hodges, *Principles of Maritime Law*, op. cit. p145

¹²⁷ Wu Chao, op. cit, p101.

¹²⁸ Ibid.

From what has been discussed above, we can see the twin pillars of the liability and compensation regime have been a resounding success. They are truly revolutionary instruments of international law. They create a regime of strict liability with very few exceptions. Considering implementation of liability, it is concomitant with principles in the compulsory insurance and direct action against the insurer. As a result, they make provisions for governments and citizens alike to have relatively quick and assured compensation for their oil pollution losses.¹²⁹

The texts of the Conventions themselves are not free from ambiguities, such as the definition of “pollution damage” should be clarified, and also it is necessary to re-discuss the “Geographical Scope” and make the “channelling of liability” more sufficient (most of them are cleared up or revised by the 1992 protocols, see 5.2.1.3). It means that particular care must be taken in ratifying legislation.¹³⁰ Further, states should consider the extent to which they wish to make provision in their national legislation for the special regulation of the problem of oil pollution from ships and installations not covered by the instruments discussed in these two conventions.¹³¹

5.2.1.5 The 1992 Fund Convention¹³² and the 2003 Protocol¹³³

In the same way that CLC 1992 is a revision and economic update of CLC 1969, so Fund 1992¹³⁴ is the same in relation to Fund 1971. The 1992 Protocols have made the following alterations in the operation of the fund:

(a) The overall fund limit has been increased to 135 million SDRs, with a simplified

¹²⁹ Abecassis and Jarashow, *Oil Pollution from Ships*, op. cit., p.301.

¹³⁰ At the time of the 1969 Liability Convention and 1971 Fund Convention, not so many criticisms could be made of these instrument, but after several decades, because gaps or vagueness in the liability convention and fund convention, which has eventually caused continual and needless problems of interpretation. The Oil Conventions, like all the other international conventions, from time to time need updating.

¹³¹ Ibid.

¹³² Up to August 2009, records show that 121 States had accepted the 1992 Protocol to CLC and 104 States had accepted the 1992 Protocol to the International Fund Convention. These acceptances include nearly all of the significant maritime States, (e.g. U.K.), but not including P.R.C. (China declared that the 1992 Protocol will be applicable to the Hong Kong Special Administrative Region only from January 5, 2000). Another notable exception is the US.

¹³³ The 2003 Protocol establishing an International Oil Pollution Compensation Supplementary Fund was adopted on 16 May 2003 and came into force on 3 March 2005. U.K. is party to the 2003 Protocol but China is not.

¹³⁴ The provisions of the Fund Convention have been given UK endorsement by sections 172-81 in the main body of the Merchant Shipping Act 1995. By July 2010, China has not ratified the 1992 Fund.

procedure for increasing the limit.

- (b) The fund's rights of subrogation can now come into existence before any judgment is given against the shipowner.
- (c) "roll-back" relief¹³⁵ is abolished.

Same as with the 1969 CLC, the 1992 CLC is based on the principle of the shipowner's strict liability, creating a system of compulsory liability insurance. The IOPC Fund, which supplements the 1992 CLC, provides additional compensation to injured parties when the compensation under the CLC is inadequate. The new regime gives a broader meaning to "ship" "oil" and definition of recoverable "pollution damage" with wider "channelling" provisions which exclude claims against a broader range of parties (associated with the shipowner) for the types of damage which they cover. By becoming a member to the CLC, a state becomes eligible to share in the corresponding IOPC Fund. The overall fund limit has been increased to 135 million SDRs, with a simplified procedure for increasing the limit.

In October 2000, the IMO adopted two resolutions increasing the limits contained in the 1992 CLC and IOPC Fund by 50%.¹³⁶ The amendments raise the maximum amount of compensation payable from the IOPC Fund for a single incident, including the limit established under the 2000 CLC amendments, to 203 million SDR.¹³⁷

In addition, recent experience in the maritime transport field has shown that environmental damage can be very high (the *Erika*¹³⁸ and the *Prestige*¹³⁹). Although it

¹³⁵ "roll-back relief": this is colloquially known as the "fairy godmother" approach of the oil industry to the tanker industry. The 1971 Fund committed itself to reimbursing the offending tanker owner with amounts in excess of the equivalent of 15000 francs (i.e. 500 francs less than the ship limitation figure) per ton of the ship's tonnage or a maximum of 125 million francs whichever is the less. This seemingly generous obligation need not, however be paid where the damage has been occasioned or at least contributed to by the willful misconduct of the tanker owner.

¹³⁶ The amendments entered into force on November 1, 2003 (under tacit acceptance). See

<http://www.imo.org/home.asp>; see also "International Oil Pollution Compensation Funds, The Prestige Incident—Spain, 13 November 2002 (hereafter IOPC Prestige Report), <http://www.iopcfund.org/prestige>

¹³⁷ The limits provided as follows: (a) For a ship not exceeding 5,000 gross tons liability will be limited to 4.51 million SDRs. (b) For a ship between 5,000 and 140,000 gross tons liability will be limited to 4.51 million SDRs plus 631 SDRs for each additional gross ton over 5,000. (c) For a ship over 140,000 gross tons liability will be limited to 89.77 million SDRs.

¹³⁸ The Malta registered tanker ERIKA sank on Sunday, December 12 1999, in bad weather in the Atlantic Ocean, 80 km west of the French coast of Brittany. The ship broke in two and sank with 20,000 tons of heavy crude oil. The ERIKA oil spill was the largest heavy crude oil spill in European waters since AMOCO CADIZ in 1978 spilled 220,000 tons near the small French fishing village Portsall, also in Brittany. A 360 km long coast line was severely

was decided in October 2000 to raise the liability limits by more than 50% contained in 1992 CLC/ FUND,¹⁴⁰ the European Commission considered this insufficient to guarantee an adequate protection for victims of major oil spills.¹⁴¹ The Commission has proposed increasing available funds by 50%, providing a total of SDR 300 million, and creating a third tier fund, the Compensation for Oil Pollution in European Waters Fund (hereafter “COPE”), with a EUR 1 billion ceiling.¹⁴² This would compensate for damage relating to oil spills that occur in European waters and for which the claims exceed the liability limits of the Fund Convention. COPE was proposed to be financed by European oil recipients.¹⁴³

When informed of this initiative at a Fund meeting, some non-EU states expressed concern about regional measures adversely affecting the international regime. In response, several members later proposed the elaboration of a Supplementary Protocol¹⁴⁴ to the IOPC Fund that would serve the same purpose, but would be open to all members of the Fund.¹⁴⁵ Then European ministers decided that it would be preferable to proceed by improving the international regime, rather than by establishing a European Fund. The European Parliament agreed, but it proposed adding pollution damage by HNS and Bunker fuels to the draft COPE Fund and insisted upon a review of the international regime after three years to determine whether its operation was satisfactory. If it was not, a European alternative should be adopted.¹⁴⁶

polluted.

¹³⁹ On 19 November 2002 the Bahamas-flagged single-hull tanker *Prestige* sank off the Atlantic coast of Spain spilling a huge amount of one of the most polluting types of oil into the ocean and causing an ecological and economic catastrophe of unprecedented proportions.

¹⁴⁰ Fund Protocol 2000 came into effect on 27 June 2001. <http://www.itopf.com/compensation02.PDF>

¹⁴¹ COM (2000) 802 final, 55. The commission refers to the type of the damage for which claims are made. No claims have yet been presented to the IOPC Fund for costs incurred in taking measures to restore affected habitats or other natural resources. The Commission correctly notes that if such measures are going to be taken more frequently, the total amount of compensation claimed will exceed liability limits more often.

¹⁴² See *European Parliament Resolution on the ‘prestige’ Oil Disaster off the Coast of Galicia*, 2004 O.J. (C 25 E) P415—COPE Resolution, available at <http://europa.eu.int/eur-lex/pri/en/oj/dat/2004/ce025/ce02520040129en04150417.pdf>

¹⁴³ COPE has been blocked in the Council since June 2001. The Council has been waiting for the IMO to increase the overall compensation well above the maximum limit of 135 million SDRs under 1992 CLC and 1992 Fund Conventions. Since the Fund Protocol 2003 has increased the overall limit by more than 50%. So far COPE has not taken place.

http://www.greens-efa.org/cms/default/dokbin/102/102989_our_key_proposals_for_maritime_safety_in@en.pdf

¹⁴⁴ The 2003 Protocol. See details in the following paragraph.

¹⁴⁵ Fund Doc. 92FUND/WGR.3/8/4, 1 June 2001.

¹⁴⁶ De La Fayette, Louise Angelique, *New Approaches for Addressing Damage to the Marine Environment*, (2005) Vol. 20, number 2, *The International Journal of Marine and Coastal Law*, pp167-224, at 207.

Finally, the agreement on a protocol establishing a third tier of compensation for oil spills had been reached in May 2003 at the IMO.¹⁴⁷ The 2003 Protocol establishes a supplementary fund to provide compensation to victims in states parties only when the amount of compensation owing to the victims exceeds both the CLC limit and the funds available under 1992 IOPC Fund. The receivers of oil in states parties to the Protocol designated under the IOPC Fund would have to pay additional contributions to the supplementary fund when called upon to do so. Under this scheme, concerning the equitable burden sharing as between the shipowner and the cargo interests, shipowners would not have to pay any additional amounts.¹⁴⁸ Under the agreement, the aggregate amount of compensation available to victims of oil spills will be SDR750m, close to one billion Euros, which is inclusive of compensation from the CLC and Fund Conventions as well as additional compensation from the International Oil Pollution Compensation Supplementary Fund.¹⁴⁹

According to Mans Jacobsson,¹⁵⁰ with the establishment of the new fund, the IOPC fund would be able to pay 100% of claims secure in the knowledge that back up funding was available through the supplementary fund.¹⁵¹ A cap of 20% on annual contributions payable by a single contracting state was agreed which will be particularly pleasing to the countries such as Japan, a heavy oil importer. The new fund was to come into existence three months after at least eight states who have received a combined total of 450m tons of oil had ratified the protocol. The Supplementary Protocol came into force on 3 March 2005.¹⁵² After its ratification, the future compensation level is more in line with the magnitude of oil spill damage.

Last but not least, we need to double check whether the result of the designed regime is fair for both parties—the proportions of compensation paid by shipowners and receivers.

¹⁴⁷ Up to July 2010, there are 27 Contracting States to the 2003 Protocol, <http://www.imo.org/home.asp>

¹⁴⁸ Protocol of 2003 to the 1992 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, text in IMO Doc. LEG/CONF.14/20.

¹⁴⁹ IOPC Fund Press Release of 16 May 2003, *The International Community Adopts Protocol on the Establishment of a Supplementary Fund for Compensation for Oil Pollution*, EU Institutions Press Release DN: IP/03/701, 16/05/2003, “Maritime Safety: Loyola de Palacio Welcomes the Agreement for New Levels of Oil Pollution Compensation”.

¹⁵⁰ The International Oil Pollution Compensation Fund director.

¹⁵¹ Lloyd’s List 19/5/03, page 1

¹⁵² Up to August 2009, Fund Protocol 2003 has 24 Contracting States. See details at <http://www.imo.org/home.asp>

For a ship of the size of the *Erika* the liability limit under CLC 1992 works out at around US\$12 million.¹⁵³ It has been suggested that this figure is too low and the owner's proportion of the total compensation should be increased. Considering shipowner's proportion of compensation, it is important to have the big picture in view, rather than just a single case. When the Fund Conventions are in force the shipowner's limit is of little significance to claimants; it serves mainly to determine how the overall cost is apportioned between the shipping industry on the one hand and oil receivers on the other.

When the two industries agreed to share this burden, they adopted the two-tier system described above. Naturally this means that in the case of a major spill the proportion contributed by oil receivers is considerably larger than the shipowner's share, particularly if the ship is a small one with a relatively low limit. But these cases are in a small minority.¹⁵⁴ The question whether the apportionment is well struck cannot be judged from a single case, but only by reviewing how the overall cost of oil pollution claims has been met over a period of time. A study of 360 tankers spills in the ten years (1990-1999) demonstrated that their overall cost would have been shared approximately equally between the two industries if the 1992 Conventions had applied in each case.¹⁵⁵

5.2.1.6 Two Voluntary Schemes—STOPIA 2006 and TOPIA 2006

We notice that the increased compensation discussed above, e.g. the Supplementary Fund came into force in March 2005 and would be financed entirely by the oil industry. One question arises: will the overall cost be shared equally between the shipping and oil industries?

¹⁵³ See CLC 92, Article V.

¹⁵⁴ On the other hand, somebody argued that "in most instances the money comes entirely from the shipowner and the oil industry contribute is nil". See Anderson, Charles B. & De La Rue, Colin, op. cit., p. 55.

¹⁵⁵ *Communication from the Commission to the European Parliament and the Council Communication on the Safety of the Seaborne Oil Trade [Erika I Package]*, COM(2000) 142 final, available at <http://europa.eu.int/comm/energy<uscore>transport/library/com142-en.pdf>; *Communication from the Commission to the European Page 69, Parliament and the Council on a Second Set of Community Measures on Maritime Safety Following the Sinking of the Oil Tanker Erika [Erika II Package]*, COM(2000) 802 final, available at <http://europa.eu.int/scadplus/leg/en/lvb/124242.htm> (summarizing).

The IOPC Fund Assembly met in October 2005 to consider whether or not to proceed with the revision of the 1992 CLC and Fund Conventions. Unsurprisingly, the decision was made to halt the revision.¹⁵⁶ For many states, this decision was made in reliance on the offer made by the shipowners to share the overall cost of claims equally with the oil receivers.

In order to address the imbalance, the International Group of P& I Clubs¹⁵⁷ (supported by the shipping industry) introduced on a voluntary basis, a compensation package consisting of two agreements: the Small Tanker Oil Pollution Indemnification Agreement (STOPIA) 2006¹⁵⁸ and the Tanker Oil Pollution Indemnification Agreement (TOPIA) 2006.¹⁵⁹ These contractually-binding agreements¹⁶⁰ entered into force on 20 February 2006.

The International Group of P & I Clubs agreed to indemnify:¹⁶¹ (a) the 1992 Fund, for damages caused by small tankers¹⁶² to the effect that the maximum amount of compensation payable by the owners of such ships would be 20 million SDRs (in accordance with STOPIA 2006);¹⁶³ and (b) the 2003 Supplementary Fund, 50% of the

¹⁵⁶ It made the following decisions: (1) That there was insufficient support to continue the revision process which would be removed from the Assembly's agenda. The Working Group set up to consider revision would be disbanded; (2) The proposal authorized by International Group Club Boards shortly before the meeting to put in place a binding contractual scheme in order to share the overall cost of claims 50/50 with oil receivers in the event that revision was abandoned was noted, and the Fund Director was instructed to collaborate with the International Group acting on behalf of shipowners and with OCIMF on behalf of oil receivers in order to put forward a package of voluntary agreements for consideration by the Assembly at its next meeting in February or March 2006.

¹⁵⁷ A group of 13 mutual insurers that between them provide liability insurance for about 98% of the world's tanker tonnage.

¹⁵⁸ STOPIA 2006 largely mirrors the original STOPIA which has been in force since March 2005 and under which the owner of relevant tankers of 29,548 or less agree to indemnify the 1992 Fund for the difference between the vessel's limit of liability under CLC 92 (SDR 4.5 million) and SDR 20 million. STOPIA 2006 differs from the original STOPIA in that it contains a review mechanism. In addition STOPIA 2006 applies to all states party to 1992 Fund whereas the original STOPIA only applied to such states as were also party to the Supplementary Fund 2003.

¹⁵⁹ International Oil Pollution Compensation Funds, STOPIA and TOPIA, Note by the Director, submitted to the 10th Extraordinary Session of the Assembly of the 1992 IOPC (92FUND/A./ES.2/7), 1 February 2006. Further information can be sought at the IOPC Fund's website (www.iopcfunds.org), or ITOPF's website (www.itopf.com). For recent information about the numbers of ships entered in STOPIA and TOPIA 2006, see 13th session of the Assembly of the 1992 IOPC (92FUND/A.13/23) on 2 October 2008.

¹⁶⁰ This legally binding agreement is between shipowners and their P&I club. This means owners' increased liability incurred under these voluntary agreements is covered by P&I.

¹⁶¹ The implementation of STOPIA 2006 and TOPIA will be reflected in changes to the Memorandum of Understanding (MOU) which is currently in force between the IOPC Funds and the International Group in order to give effect to the Clubs' undertakings to provide automatic entry in STOPIA 2006 and TOPIA and to provide cover for the liabilities arising thereunder. In addition the MOU gives the 1992 and Supplementary Funds the right of direct action against the Clubs in respect of those liabilities.

¹⁶² The relevant tankers of 29,458 GT or less.

¹⁶³ At the IOPC Assembly meeting it was agreed that this offer should not be extended to non-Fund states (which are

amounts paid in compensation by that Fund (under TOPIA 2006). It should be noted they operate by indemnifying the 1992 Fund/ Supplementary, rather than paying the claimant directly.¹⁶⁴ Moreover, STOPIA 2006 and TOPIA 2006 are not contracts between the Funds and the shipowner, but unilateral offers by shipowners which confer enforceable rights on the Funds. Finally, both STOPIA and TOPIA 2006 will be reviewed in 2016 and at five-year intervals thereafter.¹⁶⁵

In practice, these voluntary schemes are established by a legally binding agreement between the owners of ships in the relevant category, which are insured against oil pollution risks by P&I Clubs in the International Group. In all but the rare cases, the relevant vessels will automatically be entered into the scheme as a condition of club cover.¹⁶⁶ Shipowners' increased liability incurred under these voluntary agreements is covered by P&I.

Generally TOPIA 2006 is similar to STOPIA 2006, but two differences should be noted: (1) TOPIA applies to all relevant tankers regardless of size, whereas STOPIA only applies to small tankers; (2) under TOPIA 2006, indemnification is 50% of the amount of any claim falling on the Supplementary Fund, i.e. the amount payable under the Supplementary Fund is shared from the bottom up, as opposed to STOPIA, whereby the indemnification of Fund is for the difference between the vessel's limit under CLC 92 (i.e. SDR 4.5 million) and SDR 20 million.

As we know, the reason to constitute these voluntary schemes is to deal with two problems connected with sharing the burden of compensation between the shipping and

party to CLC 92 but not the Fund 92), given that it would act as a distinctive to them becoming signatories to the 1992 Fund. See www.iopcfunds.org

¹⁶⁴ This means the Fund/ supplementary would continue to be liable to compensate claimants in accordance with the 1992 Fund Convention and the Supplementary Fund Protocol respectively. Then they would be indemnified by the shipowner in accordance with STOPIA 2006 and TOPIA 2006.

¹⁶⁵ Both contain a review mechanism whereby the agreements may be adjusted to compensate prospectively if after the first ten years of its operation the proportion of claims paid by either shipowners or oil receivers under all three conventions (CLC 1992, Fund 1992 AND Supplementary Fund 2003) since 20th Feb. 2006 is greater than 55%. If that proportion is greater than 60%, the agreements must be adjusted. See also *The International Regime for Compensation for Oil Pollution Damage—Explanatory note prepared by the Secretariat of the International Oil Pollution Compensation Funds*, (June 2009) at <http://www.iopcfund.org/npdf/genE.pdf>

¹⁶⁶ Gard News 182, May/ July 2006, *STOPIA and TOPIA 2006- What, why and when?* at http://www.gard.no/gard/Publications/GardNews/RecentIssues/gn182/art_3.htm

oil industries. One problem is the limitation of liability enjoyed by small tankers under the 1992 CLC is out of proportion to the damage that they can cause. The other problem is the Supplementary Fund will be financed entirely by cargo interests. Before drawing any conclusions, it would be helpful to see some specific examples/figures illustrating the impact of these voluntary agreements.

The IOPC Fund carried out a statistical review¹⁶⁷ on the cost of pollution claims falling under the CLC and Fund Conventions between 1978 and 2003. The cost had been shared approximately equally between the shipping and oil industries during this period.¹⁶⁸ If the claims figures for the same period were to be adjusted as if the STOPIA and TOPIA had been applied, the shipowners would have paid 51% and oil receivers 49% at 2002 values. This split is reversed if the claims figures are inflated to the projected 2012 values.¹⁶⁹ Although the equitable result for the past may not necessarily be repeated in the future, it does give us some confidence on the application of STOPIA 2006 and TOPIA.

In summary, the target of TOPIA and STOPIA 2006 is to ensure the total cost of pollution claims falling within CLC 92, Fund 92 and Supplementary Fund 2003 are shared equally between the shipping and oil industries. Although there may be large variations in the proportion of claims cost borne by the two industries from year to year, particularly if serious incidents do occur, the review mechanism of these new schemes will provide a means for correcting any significant imbalance.

¹⁶⁷ See further information at <http://www.westpandi.com/WestPandi/NoticesToMembers/ArchiveContainer/2005-2006/2005-13.htm>
Or <http://www.simsi.com/Circulars-London/L.51.pdf>
Or see www.iopcfunds.org

¹⁶⁸ See details at http://www.simsi.com/Articles/STOPIA_TOPIA0406.asp (accessed on 18th June 2009)

¹⁶⁹ For further information see www.iopcfunds.org. See also “OCIMF 2006 Annual Report” at http://www.ocimf.com/view_document.cfm?id=777;
See also <http://www.skuld.com/templates/newspage.aspx?id=1106> (accessed on 24th June 2009)

5.2.1.7 Why has not China Ratified the Fund Convention/ Protocols?

By August 2010, nearly all significant maritime States would have ratified the Fund Convention/ 1992 Protocol (including U.K.), but not including China.¹⁷⁰ The author will analyse the main reasons for China not ratifying the Fund/Protocol and give some personal recommendations for the domestic legislation for compensation, e.g. a national Fund.

China has ratified the CLC 1969/1992 Protocol, but not the Fund Convention 1971/1992 protocol. The reason is financial: China has always regarded herself as a developing country, and taken the view that Chinese industries would be unfairly disadvantaged if it had to pay into the compensation fund under the same contribution rules as the developed countries.

China has imported significant amounts of oil in last two decades; 158.3 million tonnes of oil in 2005 including 126.8 million tonnes of crude oil and 30.5 million tons of fuel oil.¹⁷¹ Were China a contracting state to the 1992 Fund/ Supplementary,¹⁷² its contribution would be over 10% in 2006, based on its status as the second heaviest oil importer (after Japan) among all members states.¹⁷³

¹⁷⁰ By August 2010, 105 States had accepted the 1992 Protocol to the International Fund Convention. See details at <http://www.imo.org/> China declared that the 1992 Protocol will be applicable to the Hong Kong Special Administrative Region only from 5th January, 2000, but not to mainland China. Another notable exception is the US.

¹⁷¹ Song Jiahui,(2006) *Prevention of Pollution from Ships – Creating a system of Prevention, Reduction and Compensation* (in Chinese), Dalian Maritime University Pressing, at p.13. See also http://www.lrn.cn/stratage/expertpoint/200606/t20060620_90885.htm (In Chinese, Access on 17 April 2009)

¹⁷² The basis for the levy of contributions to the Fund 1992 is: any person (in a member state) who receives more than 150 000 tonnes of crude oil or heavy fuel oil transported through sea in a calendar year has to pay. The levy of contributions is based on reports on oil receipts in respect of individual contributors (oil reports) which are submitted to the Fund Secretariat by the Governments of Member States. Contributions are paid by the individual contributors directly to the IOPC Funds. Governments are not responsible for these payments, unless they have voluntarily accepted such responsibility. As regards the Supplementary Fund, for the purpose of contributions at least 1 million tonnes of crude oil or heavy fuel oil will be received each calendar year in each Member State of that Fund. If the aggregate quantity of contributing oil received in a Member State is less than 1 million tonnes, that Member State will be liable to pay contributions for a quantity of contributing oil corresponding to the difference between 1 million tonnes and the aggregate quantity of actual contributing oil receipts in respect of that State. For details see “IOPC Fund Annual Report 2007” at http://www.iopcfund.org/npdf/AR06_E.pdf p. 37 ; see also <http://www.marinebuzz.com/2008/03/11/international-oil-pollution-compensation-funds-iopc-funds-an-overview/>

¹⁷³ China is the third heaviest oil importer after US (not member of CLC/Fund) and Japan in the world. For details see Chenhui, *Thousands of tonnes of oil spilled into Shenzhen sea water* (in Chinese), Yang Cheng Evening news, 2nd

For example, in oil year 2005 (annual contribution year 2006), Levy per tonne: £0.0020156 to the 1992 Fund and £0.0020154 to the Supplementary Fund. Suppose China is a member state to the Fund 1992, she should contribute [157 million tons x £0.0020156= £316,449]. The Fund Assembly decided to levy 2006 contributions of £3 million; contribution to the General Fund, if China is a member state, she should contribute over 10%. As to Supplementary Fund, China will pay [157 million tons x £0.0020154= £316,418]. The Supplementary Fund Assembly decided to levy 2006 contributions of £1.4 million; contribution to the General Fund, if China is a member state, she has to contribute about 20% (a cap of 20% on annual contributions payable by a single contracting state to the Supplementary Protocol 2003). In this case, those oil companies in China who have imported crude oil and fuel oil must contribute to the 1992 IOPC Fund¹⁷⁴ and the Supplementary Fund based on oil received in the preceding year with regard to the general fund contribution.¹⁷⁵ Obviously, this will put a big financial burden on Chinese oil industry. In comparison, the UK as the eighth heaviest oil importer among all member states, contributed just 5% to the 1992 Fund in 2006.¹⁷⁶

Moreover, there is no doubt that this figure (China's contribution to Fund) would increase, since it is predicted that China will import up to 250 million tonnes of oil in 2020.¹⁷⁷ It is not clear whether China will have the same economic strength as developed countries such as Japan to contribute significant amounts of money to the Fund, particularly given in the event of another major incident such as the *Prestige*, member states would have to contribute to the major claims fund which will be much

August 2002, A6.

¹⁷⁴ For details see "IOPC Fund Annual Report 2007" at http://www.iopcfund.org/npdf/AR06_E.pdf, p.40.

¹⁷⁵ It was decided by the Fund Assembly that there should be no levy of 2006 and 2007 contributions to the *Erika* and *Prestige* major claims fund. If there is any major claim as *The Erika* and *The Prestige*, member states' contributions to the IOPC Fund will be much more. As we know, levies for a major incident probably spread over several years. For details see <http://www.iopcfund.org/npdf/4%20The%20HNS%20Fund%20Mans%20Jacobsson.pdf> and see also see "IOPC Fund Annual Report 2007" at http://www.iopcfund.org/npdf/AR06_E.pdf p. 39

¹⁷⁶ 1992 Fund--General Fund Contributions by member states in 2006: Japan 18%, Italy 10%, Republic of Korea 8%, Netherlands 8%, France 7%, India 7%, Canada 6%, United Kingdom 5%, Singapore 5%, Spain 5%, and others 21%. Supplemental Fund—General Fund Contributions 2006: Japan 20%, Italy 19%, Netherlands 15%, France 15%, Spain 9%, and others 22%.

¹⁷⁷ Song Jiahui, op. cit. p. 136

more than the normal figure.¹⁷⁸ Some Chinese scholars¹⁷⁹ have argued that it is not fair for the Chinese industries which are still in the process of developing and growing, to bear this kind of burden.

The author must admit that Chinese's economic is fragile in certain aspects, particularly after the credit crunch of 2008-2009 where many industries are still struggling to survive. However there must be a time scale for Chinese legislators to decide the ratification of Fund Convention. Currently China is a member state to the 1992 CLC (but not to 1992 Fund), that means Chinese oil cargo interests have no economic responsibility to bear any contributions to the Fund Convention, and leave Chinese shipping industry to bear the total responsibility under CLC. This will result in an imbalance of responsibility in respect of sharing the risks of oil pollution between the shipping industry and the oil cargo interests in China. Furthermore, it will deviate from the original design of the regime of the CLC and Fund Conventions. At the time of the adoption of CLC, shipowners are chosen to bear the strict liability under CLC, and this is combined with liability for the oil cargo interest (receivers) to contribute to the supplementary compensation under Fund. The levy of contributions is based on how much they have received crude oil and heavy oil in one calendar year in a member state.

Generally, the 1992 Fund will pay supplementary compensation to those suffering oil pollution damage in a member state, who do not obtain full compensation under the 1992 CLC. It is not difficult to see the advantages for China to ratify Fund Convention in order to benefit the higher limit of compensation. For example if a pollution incident occurs involving a tanker and China is a party to the Fund, the supplementary compensation under the Fund is available to the Chinese governments or other authorities have incurred costs for clean-up operations or preventive measures. Compensation is also available to Chinese private bodies or individuals who have

¹⁷⁸ The payments made by the 1971 and 1992 Funds in respect of claims for compensation for oil pollution damage have varied considerably from year to year. As a result, the level of contributions to the Funds has fluctuated from one year to another. See "IOPC Fund Annual Report 2007" at http://www.iopcfund.org/npdf/AR06_E.pdf p. 41.

¹⁷⁹ Ni Xuewei & Zai Wuyang, *Research Study on the principles of legislation and compensation mechanism of the international Conventions relating to the civil liability for oil pollution* (in Chinese), [2004] Maritime Law Review, Vol. 10 Issue1, 35, at 46, Law Press China.

suffered damage as a result of the pollution. More specifically, fishermen whose nets have become polluted are entitled to compensation, and compensation for loss of income is payable to fishermen and to hoteliers at seaside resorts. This compensation is independent of the flag of the tanker, the ownership of the oil or the place where the incident occurred, provided that the damage is suffered within a member state of the Fund. Therefore the ratification of Fund by China should be put on the agenda by Chinese legislators.

The author believes it will be a necessary step for China to ratify the Fund 1992 in the future, since China will try to maintain economic growth and significant amounts of oil will be transported by sea. There always is a potential risk of oil pollution. Only after China becomes a member of the Fund Convention, we can say the risks of transportation of oil will be shared and digested by all member states. Accordingly, Chinese victims can benefit from a much more adequate compensation scheme designed by CLC/ Fund Conventions. After drawing this conclusion, we need make a further study to reveal the financial pros and cons for China to sign up the Fund.

On the one hand, so far as the timescale of ratification of Fund is concerned, some issues worry Chinese legislators, such as the “uncertainty” of the total amount of claims arising from some serious oil pollution incidents. For example, in the case of the *Erika*, for quite a few years, the level of the 1992 Fund’s/ Supplementary Protocol’s payment is uncertain.¹⁸⁰ Actually, regard to any serious incident, no doubt it will be an expensive bill for all member states.¹⁸¹ Therefore a realistic question for the Chinese oil industries is: if China ratifies the Fund Convention, could they survive if a number of serious oil pollution incidents occur somewhere in the world? Frankly, there is not any assured

¹⁸⁰ Such as the *Erika* incident, the Executive Committee decided in July 2000 that the payments by the 1992 Fund should be limited to 50% of the amount of the loss or damage actually suffered by the respective claimants, as assessed by the 1992 Fund’s experts. The Committee decided in January 2001 to increase the level of the 1992 Fund’s payments from 50% to 60% and in June 2001 to 80%. In February 2003 the Committee authorized the Director to increase the level of payments to 100% when he considered it safe to do so. In April 2003 the Director increased the level of payments to 100%.

¹⁸¹ For example, regards to the *Erika*, by 31 December 2007, 7130 claims for compensation had been submitted for a total of £155 million. Payment of compensation has been made in respect of 5926 claims for a total of £95.1 million, out of which the 1992 Fund had paid £85.7 million. In addition, for the French government’s claim for clean-up costs, the 1992 Fund paid the French state £10 million in 2005 and a further £6.7 million in 2006.

answer until China finally signs up the Fund and some casualties actually occur in the world. But we can go further and argue if Chinese industries had to pay into the compensation fund under the same contribution rules as the developed countries, would they be unfairly disadvantaged? In the author's view, unfortunately they would be. But we have to accept the reality that it is very unlikely for the IMO to create any preferential policies for developing countries. Therefore, by ratifying the Fund Convention, Chinese cargo interests (oil receivers) must bear the costs and contribute to the Fund under the same rules.

On the other hand, it is an urgent issue for China to ratify the Fund, especially considering the poor situation of oil pollution clean-up in China. The reality is without recovery compensation from the Fund, it will be very difficult to improve levels of efficiency and coordination regarding pollution clean-up in China, particularly considering clean up companies are unattached to the government. They would be reluctant to be involved in cleaning the pollution if there was no guarantee of compensation recovery from the Fund or from any other scheme. This problem can be seen from the following cases.

On 1 May 1996, the *Zhe-Pu-Yu-You No. 31*¹⁸² collided with rocks and sunk. 476 tonnes of oil spilled into the Old Metal Mountain Water Channel causing major pollution to the surrounding area in Liaoning Province. The Liaoning Harbour Superintendence Administration was responsible for organising the pollution clean up. The Chinese Transport Department paid RMB2.6 million in advance to clean up the pollution which would be paid back later by the shipowner according to the polluter pays principle. However, the shipowner owned a single-ship company and announced bankruptcy immediately after this accident. At that time, insurance was not compulsory for a domestic transportation company under Chinese law,¹⁸³ there would be no way for the government to get the tax payer's money back.

182 This case was unreported. See relevant information at the website of Qing-Dao-Huan-Bao (in Chinese) at <http://www.qepb.gov.cn/demo1/dictionarycontent.asp>

183 The 1969 CLC applied to China on 29th April 1980. China ratified the 1992 CLC on 5th January 1999 and it

The above case illustrates the victims that suffered due to the spill, who were in an unfortunate position as the pollution clean-up fees could not be recovered from any clean-up funds. The solution to the problem is by China either ratifying the IOPC Fund or setting up a national Compensation Fund, accordingly the victims would have much better rights of recovery compensation.

In recent years, many high-profile oil spills happened along Chinese coasts, the public's attention to oil pollution was raised on a large scale. On 24th March 1999, the *Min-Ran-Gong No.2*¹⁸⁴ had over 589.7 tonnes of oil spilled after its collision with the *Dong-Hai No. 209*, polluting Zhuhai Fishing Pond, Red Tree national park and 300 sq. km of sea near the port of Zhuhai. Immediately after the incident, the Zhuhai Harbour Superintendence Administration with the support of local Council started an oil-spill emergency and more than 2000 people were involved in the pollution clean-up.

It was held by the Guangdong Maritime Court that under Art. 169 of the Maritime Code, the *Min-Ran-Gong No.2* was at fault and shall be liable for damages caused by the collision and oil pollution clean-up costs, totalling RMB 9.7 million. However, the shipowner was entitled to limit his liability to 52, 934 SDR (RMB 0.6 million) under Articles 207 and 208 of the Maritime Code. Since the *Min-Ran-Gong No.2* was performing domestic transportation, the shipowner was not subject to the CLC limits.¹⁸⁵ In addition, for any unsatisfied claims (e.g. costs of cleaning up and other damages), the claimants have no recourse to the Fund/Protocol, given that the Fund can only be invoked when the oil pollution occurs on the land or territorial seas of the “contracting” state. Unfortunately China will not ratify the Fund Convention in near future.¹⁸⁶

became applicable to China on 5th January 2000. China declared that CLC/Protocol is only applicable to cases involving foreign elements in mainland China. That means no compulsory insurance required for the shipping company doing domestic transportation in China. See Si Yuzhuo, *Maritime Law*, 2003, p.323. See also MOC (2000)–Order (No. 15) Announcement for China's ratification of 1992 CLC and the Compulsory Insurance is applicable to tankers doing international transportation (“international” means it will involve foreign elements)

¹⁸⁴ This case was unreported, but relevant information can be found at <http://www.gzhsfy.org/>

¹⁸⁵ China declared that CLC/Protocol is only applicable to cases involving foreign elements in mainland China. See MOC (2000)–Order (No. 15) Announcement for China's ratification of 1992 CLC and the Compulsory Insurance is applicable to tankers doing international transportation (“international” means it will involve foreign elements)

¹⁸⁶ Si Yuzhuo (editor), *Research study on the tendency of international maritime legislation* (In Chinese), (2002) Law

The above cases provide examples of how the lack of further recourse to the FUND/protocol (or any other clean-up fund) can be a great disadvantage to Chinese claimants. In fact, there are serious problems on raising clean-up funds and using modern science and information technology to improve the marine environment in China. In practice, the equipment used in pollution clean-up is primitive. Except for Qingdao and Shenzhen Harbour Superintendence Administrations who have some underdeveloped machines,¹⁸⁷ all other harbours lack of proper equipment to deal with oil spill emergencies.¹⁸⁸

In the author's opinion, if China does not ratify the Fund convention/Protocol, it would be necessary to set up a national Compensation Fund for oil pollution damage, such as the domestic legislation in US (i.e. OPA 1990) or Canada (i.e. SOPF).¹⁸⁹ Following the international scheme, the national fund would be paid by those persons who received crude oil and fuel oil in China. Since China is a party to CLC 1992, but not to the FUND convention, the author suggests that the national fund cover damages that occur within Chinese territory but not limited to domestic or international transportation. It can be used to pay claims arising from spills of both persistent and non-persistent oil from all types of ship. This means any Chinese claimant would be entitled to recourse from the national fund, if the valid claims exceeded the 1992 CLC limit or the transportation does not involve foreign elements (not covered by CLC).

With regard to the total amount of money that the national fund would levy

Press China, pp237-240.

¹⁸⁷ For example, the oil skimming machines can recycle oils slowly (based on 30 m³/hour), and encircling oil spills inflators.

¹⁸⁸ Song Jiahui,(2006) *Prevention of Pollution from Ships – Creating a system of Prevention, Reduction and Compensation* (in Chinese), Dalian Maritime University Pressing, at p.121. For example, in the *Taiyang* case in 2003, oil spilled near Shanghai Harbor. The national Army joined in to clean up pollution, but they were supplied with very basic tools such as oil absorb carpets, casks, reaping hook and throwing straws to the sea.

¹⁸⁹ In fact, a couple of countries have their own domestic legislation for compensation of oil spills. The most comprehensive example is the US Oil Pollution Act of 1990 (OPA). The OPA is a comprehensive piece of legislation, but considering the length of this thesis, I will not discuss it in details. Canada also has its own Ship-source Oil Pollution Fund (SOPF). As Canada is party to the 1992 CLC and Fund Convention, the SOPF would only become involved in paying compensation in a case falling within the scope of these conventions if the total value of the valid claims exceeded the 1992 Fund limit.

contributions on, in my view the following issues should be taken into account. In 2003, China had approximately 2500 tankers in total of which 2000 of them (80%) are under 1000 tonnes.¹⁹⁰ Among those 2000 tankers, only 51 bought insurance¹⁹¹ covering oil pollution damage.¹⁹²

From 1973 to 2003, Chinese registered ships have been involved in 30 serious oil pollution incidents and each of them had over 50 tonnes of oil spilled; 73% of the incidents were caused by small tankers (under 1000 tonnes).¹⁹³ From 1991 to 2003, on average, each serious incident caused RMB 6.8 million of oil pollution damage, and there were two serious oil spills per year along the Chinese coast.¹⁹⁴ It is predicted that the national fund must levy contributions of over RMB 40 million during a financial year. It would be a reasonable decision to make for all tankers over 500 tonnes.

Another interesting question arises: should small tankers (less than 2000 tonnes) be regulated to have compulsory insurance of oil pollution damage under national legislation? Although China is a party to the CLC Convention, most of the tankers carried less than 2000 tonnes of oil, so there was no compulsory insurance requirement for them under the CLC.¹⁹⁵ In China it is not difficult to promulgate the rule of compulsory insurance by the legislative authority, but in practice shipowners would face great difficulty in getting insurance if no insurance company would be willing to take up the risks to the scope that shipowners wish to be insured. Currently the majority of oil pollution insurance policies in the Chinese market are undertaken by either the China Shipowners Mutual Assurance Association or the People's Insurance Company of China (PICC).¹⁹⁶ The latter took up 80% of the Chinese market relating to oil pollution claims.

¹⁹⁰ 17% of tankers are between 1000 and 5000 tonnes; 2.5% are over 5000 tonnes.

¹⁹¹ People's Insurance Company of China is the biggest insurer undertaking the insurance of oil pollution damages with regard to marine transportation. In 2000, this company promulgated (Additional Risks)[2000] No. 183 "The Insurance Clause relating to Oil Pollution Damages for Small and Coastal Ships". It is very common that the oil pollution claims (under the insurance clause of additional risks) are treated separately from other maritime claims covered (under the insurance clause of Principal Risks).

¹⁹² Song Jiahui,(2006) *Prevention of Pollution from Ships – Creating a system of Prevention, Reduction and Compensation* (in Chinese), Dalian Maritime University Pressing, at p.132.

¹⁹³ Ibid, p. 129

¹⁹⁴ Ibid. p. 137

¹⁹⁵ Article VII of CLC Convention.

¹⁹⁶ See Song Jiahui,(2006), op. cit. p. 133. See also "PICC insurance clause covering oil pollution damages" at <http://www.chinabaike.com/law/gjt/1426081.html>

Its relevant clauses can be summarized as follows:

Insurance Clause re: Oil Pollution claims for Small and Coastal Ships in China (PICC)

Tankers (gross tonnes)	Premium (RMB)	Measurement of Indemnity (RMB)
<200	10,000	1 million
201-500	20,000	2 million
501-1000	25,000	3 million
1001-1600	30,000	5 million
>1600	+20/tonnes	10 million

We can see the premium is relatively/comparatively low, and the maximum measurement of indemnity is only RMB10 million. The PICC policy is particularly designed for the small tankers which could not afford the expensive premiums. The advantage is that it would not put a heavy burden on shipowner, even if compulsory insurance becomes applicable. On the other hand, there is negative impact to the claimants given that the insurance can not cover all the resulting damages, particularly in the case of serious oil pollution incidents.

In my view, this is a positive step by insurance companies who are willing to insure small ships against oil pollution damages. It would make the regulation and enforcement of compulsory insurance much easier in China in the future. However the reality is the current Chinese shipping industry is still struggling to pay for the insurance of Principal Risks. This is especially true for tankers less than 500 gross tonnes because most of them are owned by one-ship companies and it is still too much for them to insure other additional risks such as oil pollution damages. However it is a necessary step for compulsory insurance to be applicable to Chinese domestic transportation when China's economic strength is strong.

In short, it is urgent for Chinese legislators to set up a national fund for compensating those affected by oil spills in China. The relevant domestic legislation in US and Canada can be used as a model. The author suggests the scope of this fund should cover claims

arising from spills of both persistent and non-persistent oil from all types of ships in China. Furthermore, compulsory insurance should be applicable to ships (doing domestic transportation¹⁹⁷) over 500 tonnes.

5.2.1.8 Concluding Remarks

From what has been discussed so far, we can see the international civil liability regime for oil pollution damage is much more successful than other legal regime in this area. This is largely due to the fact that ocean-shipping is a well-developed trade built on a set of established customs and regulations. Additionally, the oil industry comprises a relatively uniform body of commercial interests identified with the single commodity of oil.¹⁹⁸ However, persistent oil is not the only substance carried by sea which has a potential for doing damage to the environment or to individuals. Numerous chemicals of a hazardous nature are regularly transported by sea and there have been enough incidents in recent years to raise the spectre of a huge chemical related incident,¹⁹⁹ in respect of which claimants would be faced with the same problems as were encountered following the loss of the *Torrey Canyon*.

5.2.2 HNS Convention 1996

We now pass from international conventions in force to those that are not. As noted above, oil is not the only dangerous pollutant and there are lots of problems raised by marine pollution by agents other than oil. For example, with a vessel transporting Hazardous and Noxious substances (hereafter HNS), there is the risk of damage occurring on a massive scale as a consequence of an accident. Notwithstanding improved safety standards for the design, construction and equipment of ships carrying HNS, sometimes in large quantities, accidents of a catastrophic nature cannot be totally prevented. Therefore, an international liability and compensation scheme is called for.²⁰⁰

This conclusion has been more easily accepted in the past with respect to the carriage of

¹⁹⁷ See foot note 185.

¹⁹⁸ De La Rue, *Environmental Damage Assessment*, in Kroner, Ralph P. (editor), "Transnational Environmental Liability" (1993), London: Graham & Trotman, p 68.

¹⁹⁹ I.e. LPG Tanker Yuyo Maru No. 10, Japan, 1974; Port Kelang, 1980; Ariadne, 1985; Cason, 1987; Masqasar 1989. See also "*IMO and dangerous goods at sea*", May 1996, at

http://www.imo.org/includes/blastDataOnly.asp/data_id%3D7999/IMDGdangerousgoodsfocus1997.pdf

²⁰⁰ De la Rue (editor), *Liability for Damage to the Maritime Environment*, 1993, Lloyd's London, p173

oil than with respect to the transport of other HNS, but international opinion is changing.

Due to specialised trade practices in the HNS industry, and the complexity of the substances involved, there are greater difficulties in deciding on a proper channelling of liability for ocean-shipping of HNS, because it required an agreed policy as to which participants in the processing chain should share liability for damage.²⁰¹ After an initial failure to agree on a draft at a diplomatic conference held in 1984,²⁰² several years' further consideration culminated in the adoption of the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea (HNS Convention) on May 3, 1996.²⁰³ It is the production of 20 years' work by the IMO, based upon the text of the 1984 revisions to the CLC and Fund Conventions.²⁰⁴

5.2.2.1 International Law Background

In order to realise the problems that have come up in connection with the elaboration of the HNS Convention, it is necessary to have a short look at those conventions which deal with the shipowner's liability and the limitation of this liability.

First, there is the 1957 Limitation Convention which entered into force in May 1968 and which, generally, limits the shipowner's liability with respect to all personal and property claims including claims for oil pollution, nuclear damage and, of course, damage caused by noxious and hazardous substances. However, soon after the adoption of this Convention, shipowners and insurers were unwilling to risk the possible unlimited liability for maritime nuclear damage, commerce in some nuclear substances was being frustrated. This came about indirectly and in part as a result of the

²⁰¹ Xue Hanqin, *Transboundary Damage in International Law*, (2003) Cambridge University Press, p81.

²⁰² The 1984 International Conference on Liability and Compensation for Damage in connection with the Carriage of Certain Substances by Sea. The conference was held at the IMO in London for a period of four weeks (30 April- 25 May 1984). It was attended by over seventy States and some thirty observer organizations. See details at C52/11/Add.1, paras. 1-3.

²⁰³ Cmmd. 3580; also publishes by IMO in 1997. Not yet in force.

²⁰⁴ For the most recent information on the status and implementation of the Convention, see IMO Docs. LEG 89/10, LEG 89/16, paras. 201-205, LEG 90/9 and IOPC Fund Doc. 92 FUND/A.8/26, 10 October 2003.

predilection of courts in some States to “break” the 1957 limits in order to give plaintiffs higher amounts of compensation.²⁰⁵ A special regime of liability was needed for this special form of carriage.

After the adoption of the Paris and Vienna Convention of 1960 and 1963 regarding liability for nuclear damage from land based sources, which channelled the liability to the operator of the nuclear installation, the 1971 Brussels Convention Relating to Civil Liability in the Field of Maritime Carriage of Nuclear Materials extend the liability to the transportation of nuclear substances by sea.²⁰⁶ This Convention provides that not the shipowner but only the operator, as defined in the convention is responsible for damage caused by a nuclear incident.²⁰⁷ It entered into force in 1975.

Similarly it was recognised that the 1957 limits of liability were unsuitable for the damage caused by crude oil carried in tankers. Therefore, the 1969 CLC was adopted.²⁰⁸ Like the 1971 Nuclear Convention, the 1969 CLC constituted in effect an exception to the 1957 Limitation Convention by new and more effective limitation systems and higher limits. We can see that between the 1969 CLC and the “nuclear” conventions there was a large gap, as hazardous and noxious substances are considered, which should be filled by a single comprehensive convention.

During the preparatory work of the IMO legal committee on the draft HNS Convention, another limitation convention was particularly considered— The 1976 Convention on Limitation of Liability for Maritime Claims (1976 LLMC),²⁰⁹ which was intended to replace the 1957 Convention and took account of the developments since 1957. Although the Convention generally covers all maritime claims, it excludes from its scope those claims for which there was in 1976 a special limitation regime, i.e. claims for pollution damage (whether or not actually covered by the 1969 CLC) and claims

²⁰⁵ Ganten, R. H., *Draft convention on liability and compensation in connection with the carriage of noxious and hazardous substances by sea* in a booklet named “*Maritime Movement of Dangerous Cargoes—Public Regulation and Private Liability*”, Papers of a one day seminar, Southampton University 11th September 1981.

²⁰⁶ De Bievre, Aline F. M., *Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea*, (1986) Vol. 17, No. 1, J. Mar. L. & Com. , p70.

²⁰⁷ See footnote 6. See also Ganten, op. cit. at C3.

²⁰⁸ See section 5.2.1.2

²⁰⁹ See discussion in section 5.2.3.1

subject to legislation governing liability for nuclear damage.²¹⁰

However, the 1976 LLMC had not made any exemptions for liability resulting from the carriage of HNS but had rather, on purpose, included claims caused by these substances in the global limitation provided for by this Convention. When attempting to draft a new convention regarding liability and compensation for HNS, the IMO Legal Committee was accordingly confronted with the task of fitting such a new convention into the system of the already existing maritime liability conventions.

5.2.2.2 Development of the Draft HNS Convention

As early as the Brussels Conference of November 1969, which in the wake of the *Torrey Canyon* disaster—adopted the 1969 CLC, governments represented at the conference urged that IMO (then IMCO) should identify its work on “all aspects of agents other than oil”.²¹¹ However, from a questionnaire sent out to the Member States of IMO, it was found that there was no sufficient expertise available on the extent of possible risks involved;²¹² and any further work could not be usefully undertaken until the required “technical” information became available in relation to possible types of pollutants other than oil, and their polluting potentialities.²¹³

Also many governments showed a lack of interest in the matter, mainly because they failed to see a special need for a new convention. Perhaps this was also due to the fact that there were no records of many serious HNS incidents.²¹⁴ It was very different from the situation when 1969 CLC was elaborated.²¹⁵ The industries involved (shipowners, chemical industry and insurers) were very much opposed to the idea of a new HNS

²¹⁰ Ganten, R. H. op. cit., at C4.

²¹¹ Conference resolution on international co-operation concerning pollutants other than oil. This subject was subsequently raised by the Legal Committee of IMO, which at its seventh session in January 1970, recognised the need to solve the problems raised by marine pollution by agents other than oil “as a matter of urgency”. See Ganten, op. cit, p 63; see section 5.2.1.2.

²¹² Cleton, *Liability and Compensation for Maritime Carriage of Hazardous and Noxious Substances (HNS)*, in De la Rue (editor) (1993), “Liability for Damage to the Maritime Environment”, Chapter 15 Lloyd’s London, p.174

²¹³ LEG VII/11, paras. 8-10

²¹⁴ See details in the appendix.

²¹⁵ There is not any specific incident which serves, like the *Torrey Canyon* for the CLC, as a model for the risk to be dealt with in the HNS Convention.

Convention.²¹⁶

At its 33rd session in September 1977, the IMO Legal Committee ascribed “highest priority to work on a new and comprehensive convention to provide a liability and compensation system for hazardous and noxious substances other than oil (referred to as the Draft HNS Convention).²¹⁷ One of the most controversial issues has been the question of who should be liable to pay compensation under the new HNS Convention. It is not surprising that none of the industries²¹⁸ involved in the transportation of HNS has been eager to accept new liabilities and the resulting financial burdens.

Shipowners and P & I Clubs have argued that any special risks created by the transport of HNS are not caused by the movement of these substances but by their inherent dangerous qualities.²¹⁹ According to these industries there is no reason to impose on a shipowner a liability which would go beyond his traditional liability for negligence. The chemical industry has pointed out that shipowners are well aware of the special risks involved with the transportation of HNS and that they should know which precautions must be taken to avoid HNS accidents and that, once the cargo has passed into the custody of the carrier, it is out of control of the shipper and other interested parties in the cargo.²²⁰

However, from the point of view of the victims, it does not so much matter who will be liable to pay compensation, provided that a new liability and compensation scheme will guarantee efficient and adequate compensation. It should be noted that the person on whom the liability will be imposed must be easy to identify. In general the shipowner will fulfil such a condition since he can be traced by consultation of the ship’s register. Also the P & I Clubs would be in a better position to provide suitable insurance cover

²¹⁶ Meanwhile the legal committee was concerned with the preparation of other Conventions such as the Athens Convention 1974 on maritime transport of passengers and the 1976 London Limitation Convention. This caused a considerably delay. The work on the HNS Convention was actually resumed only after the 1976 Conference. See details at Cleton, “*Liability and Compensation for Maritime Carriage of Hazardous and Noxious Substances (HNS)*”, chapter 15, op. cit. p175. See note 212.

²¹⁷ LEG XXXIII/5, para.52.

²¹⁸ Shipowners and their P & I Clubs have on the one hand and the chemical and gas industries on the other hand.

²¹⁹ Cleton, “*Liability and Compensation for Maritime Carriage of Hazardous and Noxious Substances (HNS)*”, op. cit. p175.

²²⁰ Ibid.

than cargo insurers since environmental liability insurance does not exist at present for cargo owners.

At the Legal Committee's 36th session in June 1978, an "Informal Working Group" was set up and three alternative texts of draft articles for a new instrument were developed.²²¹ In addition, consideration was given to another two alternative texts. They basically concerned different possible systems of party liability,²²² including:

- (1) joint and several liability of the shipper and the shipowner (Alternative I);²²³
- (2) a two-tier system of liability providing for a primary liability of the shipowner and an excess ("residual") liability of the shipper (Alternative II);²²⁴
- (3) exclusive liability of the shipper (Alternative III);
- (4) allocating liability to the shipowner alone (Alternative IV);
- (5) the liability should be borne exclusively by the cargo interests as product liability (Alternative V).²²⁵

It was decided at the Committee's 41st session in October 1979, to deal first with Alternative II²²⁶ and then proceed at a later stage to Alternative IV.²²⁷ The Legal Committee elaborated a draft Convention on the basis and submitted it to the 1984 IMO Conference.²²⁸ The 1991 Draft HNS Convention made the shipowner or operator

²²¹ LEG XXXVII/3

²²² De Bievre, Aline F. M., op. cit. p72

²²³ Before the 1984 Conference the Legal Committee has discussed mainly Alternatives I & II, a shared liability. Both the owner's and shipper's liability would have to be covered by compulsory insurance. At a later stage, Alternative I was rejected because it would require full insurance cover from both owner and shipper for the full amount of liability and would require double insurance. See details at Cleton, "*Liability and Compensation for Maritime Carriage of Hazardous and Noxious Substances (HNS)*", op. cit. p175

²²⁴ Alternative II involved a "mixed", two-tier system of strict liability. This imposed primary responsibility for damage compensation on the shipowner and held the shipper liable for any claims not covered by the shipowner, either because the total damage cost exceeded the limit of the shipowner's liability or because he was financially incapable of meeting his obligations in full. It was this liability system which ultimately became the exclusive basis of the Committee's further work. See details at De Bievre, Aline F. M., op. cit. p72.

²²⁵ Considering Alternative V, it required either a cargo levy fund (by analogy to the International Compensation Fund for Oil Pollution Damage established under the 1971 Fund Convention), or a system of cargo insurance, including the right of direct action by the claimants against the insurer, and the possibility of the recourse by the insurer against the shipowner and the cargo interests. See details at De Bievre, Aline F. M., "*Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea*", (1986) Vol. 17, No. 1, Journal of Maritime Law and Commerce, p. 69

²²⁶ Alternative II involved a "mixed", two-tier system of strict liability. This imposed primary responsibility for damage compensation on the shipowner and held the shipper liable for any claims not covered by the shipowner, either because the total damage cost exceeded the limit of the shipowner's liability or because he was financially incapable of meeting his obligations in full. It was this liability system which ultimately became the exclusive basis of the Committee's further work. See details at De Bievre, Aline F. M., op. cit. p72.

²²⁷ LEG XLI/5, para. 26. Alternative IV prescribed a system based on the exclusive liability of the shipowner.

²²⁸ Unfortunately, the draft text submitted was not adopted by the conference.

strictly liable for damage caused by dangerous goods at sea.²²⁹ Under the 1991 Draft, the shipowner was not liable for damage if the consignor failed to inform the shipowner that the consignment contained dangerous goods, and if the shipowner did not know nor could have known of the goods' dangerous nature.²³⁰

Nonetheless, there was a big divergence of views about a possible second tier of compensation. A number of delegations argued that a future HNS Convention should not go any further because any second tier for the compensation of HNS damage would create serious complications and could become a barrier to the establishment of a new international instrument. However, other delegations proposed a second tier in the form of an international compensation fund (the "Scheme"). They believed that the Scheme should make supplementary compensation available in case of major accidents,²³¹ taking into accounts (a) shipowner's unwillingness to bear the full risk; (b) uncertainty over the capacity of the insurance market to absorb it;²³² and (c) the lack of prior experience of major HNS cleanup costs.

When discussing these issues, we should always be aware of one important fact: unlike the situation of the 1969 CLC was elaborated, there is, although several incidents²³³ have occurred, no specific incident,²³⁴ which serves like the *Torrey Canyon* for the CLC, as a model for the risk to be dealt with in the HNS Convention. This has the

²²⁹ Defences to liability include, however, damages resulting from act of war or "exceptional, inevitable and irresistible" national phenomena; damage caused by third parties' act or omission; or the wrongful act of a government responsible for navigational aids, see details at Schoenbaum, Thomas J., *Admiralty and Maritime Law*, (2001, 3rd ed.) St. Paul, Minn: West Group, p885.

²³⁰ HNS Convention Annex, Art. 4.

²³¹ Cleton, *Liability and Compensation for Maritime Carriage of Hazardous and Noxious Substances (HNS)*, op. cit. p176.

²³² The question of "sustainable" insurance market capacity to absorb risk of potentially catastrophic levels is dependent on the amount of premiums available. This, in turn, depends on how much premium the assured can afford, and is willing to pay. The question of long-term availability of cost effective insurance, then appears to relate not only to the frequency of loss but also, and above all, to the actual amount lost in relation to each risk covered (the "per vessel, per incident" limit). The certainty that in most cases liability can be limited at some upper level appears to have been an important criterion, if not the most important principle on the basis of which insurance market operators have been prepared to make available increased cover for maritime claims. The market's ability to live with ever-higher loss exposure, then, has been greatly helped by the operation of "risk spreading" mechanisms.

²³³ See footnote 199. See also the Appendix.

²³⁴ A few incidents involved HNS substances but fortunately ended with little environmental damage, such as the collision of the tanker *Vicky*, laden with 70,000 tonnes of kerosene, with the wreck of the *Tricolor* in the Channel off France January 1 2003; the *Ievoli Sun*, carrying 3,998 tonnes of styrene, sank while under tow off the Channel Island in October 2000; also a report prepared for the IMO legal committee by the UK Department of Transport states that in August 1999, the container vessel *Ever Decent*, which was carrying HNS including cyanide, was involved in a collision off the southeast coast of England with Norwegian *Dream*.

disadvantage of making it difficult if not impossible for all delegates to have the same idea of the situation to be covered by the Convention.²³⁵

The difficulties the Legal Committee had to cope with when elaborating the new Convention were mainly in the following four basic areas:²³⁶

- (1) the scope of application (especially the noxious and hazardous cargoes to be covered, the mode of carriage on the ship and the nature of damage for which compensation should be provided in this Convention);
- (2) the nature and limitation of liability;
- (3) the definition of the person liable in addition to the shipowner, if any;
- (4) the establishment of compulsory insurance and its control, including the availability of third party insurance cover, in the P&I Clubs or in the open insurance market.

5.2.2.3 Main Elements of The HNS Convention 1996

In this section, I intend to discuss the main issues addressed by the HNS Convention. The HNS Convention as adopted on 3 May 1996, has its object: the establishment of a system for determining liability and providing compensation for damage arising out of the carriage of specified hazardous and noxious substances at sea.²³⁷ It is based on the two-tier system established under the CLC and Fund Conventions. However, it goes further in that it covers not only pollution damage but also the risks of fire and explosion, including loss of life or personal injury as well as loss of or damage to property.

The HNS Convention will not come into force internationally until it has been ratified by at least 12 States of which at least four must each have a fleet totalling more than two million gross tons.²³⁸ In addition, the Secretary General of the fund must be satisfied

²³⁵ It has, on the other hand, the great advantage of not unduly restricting the discussions to certain peculiarities of a specific incident.

²³⁶ Ganten, *Draft convention on liability and compensation in connection with the carriage of noxious and hazardous substances by sea* in a booklet "Maritime Movement of Dangerous Cargoes—Public Regulation and Private Liability", Papers of a one day seminar, Southampton University 11th September 1981, at C7.

²³⁷ Little, Gavin, *The Hazardous and Noxious Substances Convention: a new horizon in the regulation of marine pollution*, [1998] LMCLQ 554.

²³⁸ Article 46 (1)(a)

that potential fund contributors have received in the preceding year not less than 40 million tons of contributing cargo.²³⁹

●The structure of the Convention

As noted above, the 1996 HNS Convention contains a two-tier system in one international instrument. The first tier, providing for a strict shipowner's liability, is modelled on the CLC 1984. The second tier provides for an international compensation scheme, which will be financed by contributions by the receivers of such cargoes in contracting states. The first tier has the following characteristics:²⁴⁰

- (1) Strict liability placed upon the shipowner with a very limited range of defences.²⁴¹
- (2) "Damage" includes loss of life and personal injuries as well as property damage.²⁴² Claims for loss or damage by contamination of the environment will be paid²⁴³ "provided that compensation for impairment... other than loss of profit from such impairment shall be limited to costs of reasonable measures of reinstatement".
- (3) The shipowner's liability can arise from damage caused by a wide range of bulk and packaged substances carried as cargo; these are generally defined by reference to existing international Conventions and Codes.²⁴⁴
- (4) The shipowner will be required to maintain insurance or other financial security to cover his liability for damage.²⁴⁵ Any damage claims may be brought directly against the insurer of the ship or other person providing the financial security for the owner's liability.²⁴⁶
- (5) Liability will be directed away from servants and agents and directed towards the registered owner.²⁴⁷
- (6) The owner's right to limit liability will only be lost "if it is proved that the damage resulted from his personal act or omission, committed with the intent to cause such damage or recklessly and with knowledge that such damage would probably result"²⁴⁸ (The same test

²³⁹ Article 46 (1)(b)

²⁴⁰ Griggs, Patrick, *Extending the frontiers of liability—the proposed Hazardous Noxious Substances Convention and its effect on ship, cargo and insurance interests*, [1996] LMCLQ 145, at 148

²⁴¹ Article 7(1)(2)

²⁴² Article 1(6)

²⁴³ This formula is similar to the one agreed in the 1984 and 1992 Protocols to the CLC and Fund Conventions. See discussion in section 5.2.1.3.

²⁴⁴ Bunkers are excluded from the definition of HNS because they are not carried as cargo

²⁴⁵ The ship's maximum liability based on its tonnage limit (Art.12(1))

²⁴⁶ Article 12 (8)

²⁴⁷ Article 7

²⁴⁸ Article 9(2)

as appears in the 1976 Limitation Convention).

If two ships²⁴⁹ are involved in an incident and the HNS Convention applies, the vessel owners are held jointly and severally liable for all such damages which result from the release of the hazardous substance and the damages are not reasonably separable.²⁵⁰ That means a cargo owner cannot be subject to first-party liability under the HNS Convention. So much is for the first shipowner tier.

The second tier is meant to be the HNS equivalent of the 1971 Oil Pollution Fund. It has generally been agreed that shipowner liability alone would not provide sufficient cover for the damage in connection with the carriage of HNS cargo.²⁵¹ The first tier is therefore supplemented by the second tier, the HNS Fund. The fund will become involved in the following situations (as in the CLC):

- (1) No liability for the damage arises for the shipowner. This could occur, for instance, if the shipowner was not informed that a shipment contained HNS or if the accident resulted from an act of war.²⁵²
- (2) The owner is financially incapable of meeting the obligations under this convention in full and any financial security that may be provided does not cover or is insufficient to satisfy the claims for compensation for damage.
- (3) The damage exceeds the owner's liability limits established in the Convention.

Contributions to the second tier will be levied on persons in the Contracting Parties who receive a certain minimum quantity of HNS cargo during a calendar year. This tier will consist of one general account and three separate accounts for oil, liquefied natural gas (LNG) and liquefied petroleum gas (LPG), for avoiding cross-subsidisation between

²⁴⁹ Both ships must carrying HNS at the time

²⁵⁰ Article 8 (1)

²⁵¹ See Griggs, Patrick, *Extending the frontiers of liability—the proposed Hazardous Noxious Substances Convention and its effect on ship, cargo and insurance interests*, [1996] LMCLQ 145, at 148; see also “International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea (HNS), 1996”, see the general information about HNS Convention at IMO website www.imo.org

²⁵² Article 14, the HNS Fund is similar to the IOPC Fund in that it will provide under Art. 14 compensation to a victim (i) because there is no shipowner liability under Chapter II (e.g. where the shipowner can rely on a defence in Art. 6.2), see Gaskell, *The Draft Convention on Liability and Compensation for Damage resulting from the Carriage of Hazardous and Noxious Substances*, in Wetterstein, Peter and Beijer, Anders (1996) “*Essays in Honor of Hugo Tiberg*”, Stockholm: Juristforlaget, p. 281; See also the general information at IMO website. <http://www.imo.org/home.asp>

different HNS substances.²⁵³ The fund will be financed by the receivers of HNS cargo through a tax payable to the fund. When an incident occurs where compensation is payable under the HNS Convention, compensation would first be sought from the shipowner, up to the maximum limit of 100 million SDR.²⁵⁴ Once this limit is reached, compensation will be paid from the second tier, the HNS Fund, up to a maximum of 250 million SDR (including the first tier).

● Scope of application: Definition of HNS

One of the main questions under discussion relates to the definition of hazardous and noxious substances. There seems to be an understanding within the Legal Committee that the new Convention should in principle be applicable to a relatively large range of HNS, including not only HNS carried by sea in bulk but also in package form.²⁵⁵ However, this decision is no more than a starting point which has to be elaborated further. There are several questions to be answered:²⁵⁶

- (1) To what extent will the HNS Convention fill the gap left by CLC and FC, which do not cover for example pollution caused by bunker fuel oil carried by ships other than oil tankers and caused by oils other than those defined in CLC Art. I?
- (2) Should the HNS Convention cover HNS carried in bulk and in packaged form as well, and what will be the consequences of the inclusion of HNS in packaged form?
- (3) Should ships carrying only residues of HNS or oil be covered (the “empty tanker problem”)?
- (4) Should the compulsory insurance requirements be applied to all ships carrying HNS or should a threshold or minimum quantity be introduced?
- (5) Should there be a separate definition of “contributing cargo”?

Finally, it has been decided that the definition will be by reference to existing lists of substances used in IMO instruments.²⁵⁷ That means instead of checking a cargo

²⁵³ “International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea (HNS), 1996”, see the general information about HNS Convention at IMO website www.imo.org

²⁵⁴ The liability limits contained in the first tier are based on the gross registered tonnage of the ship concerned.

²⁵⁵ Cleton, *Liability and Compensation for Maritime Carriage of Hazardous and Noxious Substances (HNS)*, op. cit. p177.

²⁵⁶ Ibid.

²⁵⁷ See relevant discussion in sections 1.2.1.2, The same as CRTD Convention, which is also refers to an existing Convention (ADR). But the delegation of Mexico has expressed its preference for a specific list.

manifest against a single checklist of substances, a shipowner will have to check in the appendices to seven separate international instruments²⁵⁸ in order to know whether there is HNS cargo on board.²⁵⁹ Also there is a catch-all provision under Art. 1(5)(b).²⁶⁰

It is noteworthy that bunkers have escaped again from the HNS Convention because they are not carried as cargo. As we know, IMO has placed the subject of pollution from bunkers in its priority work programme after HNS Convention 1996. On 23 March 2001, the International Convention on Civil Liability for Bunker Oil Pollution Damage (“Bunker Convention”) was adopted. From the above discussion, we can see the definition of HNS is not a typical technical matter but it depends largely on decisions of a more political nature.

• Damage covered by the Convention

The Convention provides for compensation to be paid in respect of loss of life or personal injury or damage by contamination of the environment.²⁶¹ The Convention covers damage created in the territory or territorial seas of a state which has adopted the Convention including its exclusive economic zone (EEZ).²⁶² The compensable damage can be briefly summarised as follows:²⁶³

- (1) Claims for loss of life or personal injury on board or outside the ship carrying HNS;
- (2) Claims for the costs of preventative measures and clean-up operations;
- (3) Claims for replacement or repair costs for damaged property;
- (4) Claims for quantifiable economic losses (this seems to include, e.g. loss of income due to

²⁵⁸ See Article 1(5) (a) (i) to (vii) of the HNS Convention.

²⁵⁹ For example, (1) Oils carried in bulk (other than persistent oil covered by the CLC and Fund Conventions); (2) “Noxious liquid substances” as defined in the International Convention for the Prevention of Pollution from Ships 1973; (3) Dangerous liquid substances carried in bulk as defined in the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemical in Bulk 1983; (4) Dangerous, hazardous and harmful substances, materials and articles in packaged form covered by the IMDG Code; (5) Liquid gases as defined in the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk 1983 (IGC Code); (6) Liquid substances carried in bulk with a flashpoint not exceeding 60°; (7) Solid bulk material possessing chemical hazards covered by the Code of Safe Practice for Solid Bulk Cargoes (BC Code); (8) Waste carried on board a ship as defined in the Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matter 1972 (the London Dumping Convention). See also Griggs, *Extending the frontiers of liability—the proposed Hazardous Noxious Substances Convention and its effect on ship, cargo and insurance interests*, [1996] LMCLQ 145, at 149

²⁶⁰ Art. 1(5)(b) residues from the previous carriage in bulk of substances referred to in (a)(i) to (iii) and (v) to (vii) above.

²⁶¹ This is effectively the same as Article 1.6 of the CLC, except for personal injury. See discussion in section 5.2.1.3.

²⁶² Article 3 of the HNS Convention; see also Griggs, *Liability for hazardous and noxious cargoes: the HNS Convention*, (1996), *International Business Lawyer*, 24-8, p351.

²⁶³ Article 1(6); see also Griggs, *Extending the frontiers of liability—the proposed Hazardous Noxious Substances Convention and its effect on ship, cargo and insurance interests*, [1996] LMCLQ 145, at 149.

restrictions on fishing, reduced custom for hoteliers etc.);

- (5) Claims for the costs of reasonable measures of reinstatement (e.g. removing and replacing contaminated shingle on a tourist beach).

There is nothing particularly revolutionary about the damage covered by the HNS Convention and the wording is principally borrowed from the Convention on Civil Liability for the Carriage of Dangerous Goods by Road, Rail and Inland Navigation Vessels (CRTD). It should be noted, under the HNS Convention, damage to own cargo is not covered. Damage to property outside the ship (including other ships and their cargoes) is covered.²⁶⁴

Clearly, making provisions for claims for death, personal injury and damage to property is relatively straightforward and uncontroversial.²⁶⁵ The provision for loss or damage caused by impairment of the environment is, however, rather more open to criticism.²⁶⁶ First, it must be appreciated that only a restricted range of claimants, such as fishermen or hoteliers who can establish a chain, will receive compensation for “loss of profits” as a result of impairment of the environment. Those suffering other forms of economic loss (e.g. employees of service industries) will not, on the basis of Fund Convention practice, be successful.²⁶⁷ Secondly, the provision made for environmental damage is only limited. The Convention will provide welcome funding for reasonable measures of reinstatement of the environment after impairment, and preventative measures. It may, however, be very much more difficult to identify, in practical terms, how the environment has been impaired by a spill of hazardous and noxious substances, and then how to go about reinstating it, than in the aftermath of an oil spill.²⁶⁸

The HNS Convention does not apply to damage caused by oil or nuclear substances

²⁶⁴ Ibid., at 150.

²⁶⁵ Article 6 (a) of the HNS Convention

²⁶⁶ Article 6 (c) of the HNS Convention; see also Little, Gavin, *The Hazardous and Noxious Substances Convention: a new horizon in the regulation of marine pollution*, [1998] LMCLQ 554, at 563.

²⁶⁷ See Jacobsson, *The International Convention on Liability and Compensation for Oil Pollution Damage and the Activities of the International Oil Pollution Compensation Fund*, in De La Rue (editor), “Liability for Damage to the Marine Environment” (1993), London, at pp. 51-52; see also Little, Gavin, op. cit. p564.

²⁶⁸ Little, Gavin, *The Hazardous and Noxious Substances Convention: a new horizon in the regulation of marine pollution*, [1998] LMCLQ 554, at 567.

which are governed by other conventions.²⁶⁹ Although this means that pollution damage caused by persistent oil is not covered, the HNS Convention does extend to non-pollution damage²⁷⁰ caused by persistent oil such as damage caused by a fire or an explosion.²⁷¹ As such it goes further than the CLC and Fund Conventions.

●Limitation of Liability

Here, in Art. 9, we come to the heart of the Convention. The system of limitation takes a familiar form. A shipowner will be entitled to limit his liability by applying a specified number of SDR to the tonnage of his vessel.²⁷² For vessels up to 2,000 tonnes the maximum liability of the shipowner will be 10 million SDR. Above the minimum tonnage, the liability of the owner will increase by reference to the tonnage of the vessel up to the maximum liability of 100 million SDR for a vessel of 100,000 tons. By way of illustration and comparison, a vessel of 30,000 gross tons would have an LLMC 1976 property damage limitation fund 5 million SDR, a CLC (with 1992 Protocol) limit of 14 million SDR and a HNS limitation fund 45 million (for ships between 2,001 and 50,000 grt, limitation is 1,500 SDRs per ton). We can see the size of the extra burden which will be placed on shipowners and insurers if this convention comes into force.

It should be noted that following a most heated debate at the Diplomatic Conference, it was decided that the shipowner would be required to provide a separate limitation fund to cover HNS claims alone. Where an incident involves both HNS damage and other non-HNS related damage the HNS fund will be exclusively available to cover HNS claims and the shipowner's normal limitation fund for maritime claims will cover non-HNS claims.

The limitation fund of HNS can be established by provision of a bank guarantee in the courts of any States Parties under which the action is brought, or could be brought under

²⁶⁹ HNS Convention, Article 4 (3); see the other international conventions in section 5.2.2.1.

²⁷⁰ HNS Conventions covers not only pollution damage but also the risks of fire and explosion. However, CLC/ Fund Conventions only cover pollution damage (Art. 1.6 of the CLC 1992 Protocol).

²⁷¹ Article 1(6) (a) (b) of the HNS Convention; see also Hawke, Neil and Hargreaves, Pamela, *Environmental Compensation Scheme: Experience and Prospects*, (2003) *Enviro L.R.* 5.1(9).

²⁷² Griggs, *Extending the frontiers of liability—the proposed Hazardous Noxious Substances Convention and its effect on ship, cargo and insurance interests* [1996] *LMCLQ* 145, at 150.

Art 38.²⁷³ The fund can be established by the liability insurer on behalf of the shipowner.²⁷⁴ Once a fund is established, the courts of the State where it is established shall obtain exclusive jurisdiction to determine all matters relating to its apportionment and distribution.²⁷⁵

At first, shipowners and their liability insurers were strongly opposed²⁷⁶ to the creation of two separate self-standing funds but at the end of the day it proved impossible to devise a system which has allowed the shipowner's liability under the HNS Convention to be treated simply as a supplement to the existing limitation fund.²⁷⁷ If every nation in the world operated an exactly similar limitation regime (e.g. the 1976 LLMC)²⁷⁸ there would be no difficulty. In those circumstances the HNS Convention could simply provide that a Contracting State could declare that the shipowner's underlying right to limit in respect of any incident would be the LLMC 1976 and that in an HNS incident, if the LLMC 76 fund was not sufficient to meet all claims, the shipowner would provide a special HNS supplementary fund to meet the shortfall.²⁷⁹

However, it is difficult to make this work if there is no international uniformity in relation to the underlying right to limit. Ratifying an international Convention brings with it certain reciprocal treaty obligations.²⁸⁰ Suppose, a HNS incident occurs in country A, which has moved on from the 1957 Convention (without denouncing it) and now applies the LLMC 1976 and also the HNS Convention. Let us further assume that the ship involved flies the flag of country B, which applies the 1957 Convention and does not apply the HNS Convention. In those circumstances the courts of country A would, it is said, be bound to permit the shipowner to limit according to the 1957

²⁷³ Article 9(3)

²⁷⁴ Article 9(11)

²⁷⁵ Article 38(5)

²⁷⁶ When the idea of an HNS Convention was first mooted, the insurance industry, which ultimately has to find the funds to support this type of liability regime, point out that it was all very well to create supplementary funds to augment existing liability regimes. But it was quite a different proposition to introduce completely new funds which would stand beside, rather than sit on top of, existing liability regimes. They talked about lack of insurance market capacity and urged the Legal Committee to make the HNS fund a supplementary fund sitting on the top of existing limitation funds.

²⁷⁷ Griggs, *Liability for hazardous and noxious cargoes: the HNS Convention*, International Business Lawyer, (1996), 24-8, at p351.

²⁷⁸ See discussion in section 5.2.3

²⁷⁹ Griggs, *Extending the frontiers of liability—the proposed Hazardous Noxious Substances Convention and its effect on ship, cargo and insurance interests*, [1996] LMCLQ 145, at 151.

²⁸⁰ Ibid.

Limitation Convention. Claimants in country A would then find their claims falling into the gap which occurs between the upper limit of the 1957 Convention and the point at which the HNS scheme kicks in.

It should be noted that on 13 May 2004, the 1996 Protocol to amend the Convention on Limitation of Liability for Maritime Claims 1976 (LLMC1976), entered into force.²⁸¹ The big difference between the LLMC 1976 limit and the HNS is narrow.

Nonetheless, the amount of compensation to be made available for claimants under the HNS Convention is still open to criticism. There is wide acceptance of the fact that a catastrophic spill of hazardous and noxious substances could give rise to a very much higher level of damage than a large scale oil spill. Even small spills of some substances could have extremely serious consequences for public health, property, and the coastal and maritime environment.²⁸²

- Compulsory insurance & direct recourse

Those familiar with CLC 1969 will not be surprised to find that owners will be required to maintain insurance against liabilities arising under the HNS Convention and the ship will be required to carry on board at all times a certificate proving that she is properly insured.²⁸³ That is to say, the owners of ships registered in countries which have adopted the HNS Convention will be required to maintain insurance or other financial security up to the limits specified in the convention. Any damage claims may be brought directly against the insurer of the ship or other person providing the financial security for the owner's liability.²⁸⁴ In the event of an incident, once a shipowner establishes its limitation fund, no further claims may be brought against the shipowner²⁸⁵ or the vessel.²⁸⁶ Therefore, any property arrested as security, must be released. The

²⁸¹ See discussion in section 5.2.3.3. For an overview of the new limitation regime, visit IMO website http://www.imo.org/Conventions/mainframe.asp?topic_id=256&doc_id=664

²⁸² Little, "The Hazardous and Noxious Substances Convention: a new horizon in the regulation of marine pollution", [1998] L.M.C.L.Q. 554, at 562.

²⁸³ See discussion in section 5.2.1.2. See also Griggs, *Extending the frontiers of liability—the proposed Hazardous Noxious Substances Convention and its effect on ship, cargo and insurance interests*, [1996] LMCLQ 145, at 152.

²⁸⁴ Article 12 (8).

²⁸⁵ Article 7, (3)(4).

²⁸⁶ Article 10, (1)(b).

requirements under the Convention for compulsory insurance and the creation of a fund for compensation should be recognised as positive developments.

5.2.2.4 Who is Liable to Whom?

Claims for compensation for damage must generally be made against the shipowner,²⁸⁷ and him alone²⁸⁸ unless it can be shown that the damage resulted from the act or omission of another person, “committed with the intent to cause such damage, or recklessly and with the knowledge that such damage would probably result.”²⁸⁹ In accordance with the aim of facilitating adequate, prompt and effective compensation, claims may be brought directly against the insurer or person providing financial security.

(1) Recover from Shipowner

If charterers and cargo owners have paid pollution claims or incurred the cost of preventive measures, they can take a recourse action against shipowners.²⁹⁰ Sometimes this has occurred under the present regime when the charterer or cargo owner is a major oil company which intervenes or participates in the response to an incident either because it is in the best position to provide promptly the necessary resources (e.g., spill response equipment in the case of an incident at or near to one of its terminals), or because it decides that it should intervene in the interests of public relations.²⁹¹

Where a charterer or cargo owner incurs the cost of preventive measures and the HNS Convention applies, he will enjoy the same right as any other person to recover the costs incurred.²⁹² However, these rights are subject to certain constraints. The onus is on the party taking the measures to demonstrate that they are reasonable, and this may be questioned if there are any concerns that the nature or scale of the measures was guided

²⁸⁷ Article 7(1)

²⁸⁸ Under Article 7(5), liability is directed away from servants and agents of the owner; the pilot, charterer and any person performing salvage operations etc.

²⁸⁹ Article 7(5)

²⁹⁰ Article 9(5)(6)

²⁹¹ Anderson & De La Rue, *Liability of Charterers and Cargo Owners for Pollution from Ships*, 26 Tul. Mar. L.J.1, p.48.

²⁹² HNS Convention, Article 1(7) (defining “preventive measures” as any reasonably measures taken by any person after an incident has occurred to prevent or minimize pollution damage).

by considerations of publicity rather than by a technical appraisal of the appropriate steps.²⁹³ A claim to recover such expenses would also be subject to the owner's right to limit liability. Even if this does not ultimately prevent the charterer or cargo owner from making a full recovery (e.g. because supplemental compensation is available from HNS Fund), full payment may be delayed if the incident gives rise to multiple claims and it is not initially clear whether the total of established claims will fall within the compensation limits.²⁹⁴ For reasons such as these, charterparties have sometimes contained clauses designed to improve the charterer's right of receiving prompt reimbursement in such a case.

Where claims for pollution damage are paid in the first instance by a charterer or cargo owner (or indeed by any other party), the question may arise whether the paying party can take over the rights which the person compensated would have had against the owner of the ship under the applicable compensation regime. If such rights are founded on strict liability they may in some cases provide a better remedy than a claim for damages under a contract between the charterer or cargo owner and the shipowner.

It is very doubtful to what extent rights of recovery under the international compensation regime would be automatically transferred to the paying party by operation of law. The HNS Convention allows for the possibility that a person paying compensation may exercise rights of subrogation against the owner of the ship, but this is "only to the extent that such subrogation is permitted under the applicable national law".²⁹⁵ The law of at least some countries would not recognise any right of subrogation in the absence of a pre-existing obligation to pay the compensation.²⁹⁶ Accordingly, a party paying compensation in such a case may have better rights of recovery if he obtains an assignment of the payee's rights.²⁹⁷

²⁹³ HNS Convention, Article 1(7).

²⁹⁴ For example in the case of oil pollution, the charterer (Total Fina) of the Erika has volunteered not to maintain its claim until all other legitimate claims have been paid in full. The anticipated size of other claims is such that there may ultimately be little, if any, compensation remaining available to meet Total's claim. See IOPC Funds Annual Report 2000, available at <http://www.lopcfund.org/publications.htm>

²⁹⁵ Article 9(6) of the HNS Convention

²⁹⁶ A right of subrogation might also arise pursuant to a bona fide settlement to compromise an honest claim. For the position in English law, see *King v. Victoria Ins. Co.*, [1896] A.C. 250, 255-256 (P.C.)

²⁹⁷ In practice the participation of a charterer in the processing and settlement of pollution claims would be likely to involve significant practical complications, e.g. oil pollution, not only in arranging assignments, but also in

(2) Recovery from HNS Fund

The shipowner and his P&I Club are not the only parties from whom charterers or cargo owners may be entitled to recover compensation in respect of the cost of their response to an incident. In the case where the HNS Convention applies, they will enjoy the same rights as any other party to claim compensation (or supplemental compensation) from the second tier fund involved, i.e., the relevant HNS Fund.²⁹⁸

In general, the criteria governing such claims are the same as those relating to claims against the shipowner.²⁹⁹ Also where the shipowner or the liability insurer pays a claimant prior to the distribution of the fund, they will be subrogated to the claimant's rights against the fund.³⁰⁰ The right to limit will be lost in the same way as under the 1976 Limitation Convention.³⁰¹

In order to encourage the owner to take adequate precautions to prevent damage, expenses reasonably and voluntarily incurred by the owner to prevent or minimise damage shall rank equally with other claims against the fund constituted by the shipowner pursuant to Article 9,³⁰² and shall also be treated as damage for the purpose of payment of compensation from the HNS Fund.³⁰³

5.2.2.5 The difficulty of ratifying the Convention and a Draft Protocol to the HNS Convention

Neither the P.R.C. nor the UK³⁰⁴ has yet ratified the HNS Convention. There has admittedly been pressure from the European Council for ratification by the major

coordinating claims-handling with the shipowner, his club, and the IOPC Fund. Oil companies responding to an incident have normally concentrated their efforts on clean-up or other preventive measures.

²⁹⁸ HNS Convention, Article 14.

²⁹⁹ This criteria is based on the definition of "damage" under Article 1 (6).

³⁰⁰ Article 9(5)

³⁰¹ Article 38(5).

³⁰² HNS Convention, Article 9(8).

³⁰³ *Ibid.*, Article 14(2).

³⁰⁴ However the Convention may become part of UK domestic law before the Convention comes into force internationally. Section 14 of the Merchant Shipping and Maritime Security Act 1997 inserts a new s 182(B) into the Merchant Shipping Act 1995. This allows the government to give effect to the Convention by means of Order in Council on or after its ratification by the UK, even though the Convention may not yet have come into force. For example, it was in this way that the provisions of the 1989 Salvage Convention became part of domestic law before the Convention came into force internationally.

European States.³⁰⁵ By August 2009, however, only 14 countries had ratified the convention, comprising 13.61% of world tonnage.³⁰⁶ Although certain other states have expressed an intention to ratify the convention,³⁰⁷ uncertainty remains as to whether enough countries will ratify it so that it will enter into force.³⁰⁸ In a further effort to encourage adoption, the IOPC Funds agreed on a draft new protocol for the HNS Convention³⁰⁹ in June 2008. It is expected that a Diplomatic Conference will be held during 2010 with a view for final adoption. The proposed Protocol is referred to in more detail below.

All this raises the question of why the HNS convention, which is modelled on the very successful and widely accepted oil pollution conventions—the CLC and Fund Conventions—should struggle to gain international acceptance. Some reasons discussed in the following paragraphs probably give some clues.

Firstly, the fact that there has not been a serious HNS incident³¹⁰ may well have induced a somewhat false sense of security, especially in the light of certain high-profile oil spills³¹¹ that have happened in the last few years.

Secondly, without incidents creating lasting public outrage, other political and practical

³⁰⁵ In November 2002, the European Council adopted a decision (2002/971/EC) requiring all European Union Member States to take the necessary steps to ratify the HNS Convention within a reasonable time period and, if possible, before 30 June 2006 (but it did not happen). See “Workshops on Implementation of the HNS Convention” (5 June 2006) at <http://www.hnsconvention.org/en/workshop.html>. On December 6, 2002, the EU Transport Council agreed to encourage all member states to become parties to the HNS Convention as soon as possible. See Lloyd’s List International (January 16, 2003).

³⁰⁶ By August 2009, there are 14 countries, including the Russian Federation, Angola, Morocco, Tonga, Cyprus, Saint Kitts and Nevis, Samoa, Slovenia, Lithuania and Sierra Leone, Hungary, Liberia and Syria Arab Republic had ratified the Convention, of which two States (Cyprus and the Russian Federation) have more than two million units of gross tonnage. See details at http://www.imo.org/includes/blastDataOnly.asp/data_id%3D26103/status-x.xls; see also “Workshops on Implementation of the HNS Convention” (5 June 2006) at <http://www.hnsconvention.org/en/workshop.html>

³⁰⁷ For example, the Permanent Norwegian Law Commission for Maritime Matters called on Norway to ratify the HNS Convention in Feb. 2005 (but Norway has not ratified it). By April 2005, the following states have reported on their considerations of possible ratification: Japan, Netherlands, Denmark, New Zealand, Ireland, Italy, Singapore, Germany, Sweden, Canada, Finland, Norway, Greece, Latvia and Spain. For details see UK consultant paper, section 3.6 at <http://www.dft.gov.uk/consultations/archive/2005/pchns/ion3outcomeoftheinitialc1813.pdf>

³⁰⁸ See “*The HNS Convention – Early ratification is vital*”, Gard News, 175 November 2004/January 2005, p11

³⁰⁹ See the draft protocol in the annex to document LEG 95/3, at <http://folk.uio.no/erikro/WWW/HNS/LEG%2095-3.pdf> The intention was to ensure that both instruments (Convention and Protocol) be read together and in this way to provide a workable solution to the problems of implementation that had so far prevented many states from becoming party.

³¹⁰ See footnote 234. See also the Appendix.

³¹¹ *The Prestige* in December 2002, *the Erika* in December 1999.

considerations have delayed accession to the HNS Convention.³¹² Countries that import significant amounts of HNS cargo fear their industries will have to pay a disproportionate amount into the compensation fund for incidents elsewhere which would put them at a disadvantage as against their competitors.³¹³ The UK is one of these countries, but is “keeping the issue under constant review”.³¹⁴ China has the same problem: ratifying the HNS convention would put Chinese importers and industry at a cost disadvantage.

Thirdly, another important issue is the complexity of the HNS Convention because it covers a large number of substances and wider range of risks, compensation to be paid in respect of loss of life or personal injury, pollution damage or damage caused by fire and explosion. Comparatively, CLC/ Fund Conventions only cover pollution damage. To see the difference, one example is whereas everyone can recognise an oil cargo when they see it, the same isn't true of an HNS cargo. All this makes the ratification of HNS Convention far more difficult than the Oil conventions.

Considering the above problems of obtaining signatories, at the 1992 Fund Assembly's October 2007 session, it was decided to create a HNS Focus Group with the objective of developing a draft Protocol to the 1996 HNS Convention to offer solutions to remove the obstacles.³¹⁵ The IMO duly approved a draft Protocol at its 95th session in early 2009.³¹⁶ The Group has worked within three areas³¹⁷ which have been regarded as

³¹² See “*Environment—Growing momentum for HNS clamp*”, Lloyd's list, January 16, 2003. p5

³¹³ For details see “Consultation on UK Implementation and Ratification of the Hazardous and Noxious Substances (HNS) Convention” (Final stage) April 2005, at <http://www.dft.gov.uk/consultations/archive/2005/pchns/> (accessed on 4th June 2009). There is concern that the UK could become one of the main contributors to the Fund for the foreseeable future with direct impact on industry's competitiveness. It was argued that any increase in import prices would erode margins because in a global, competitive market place, such costs can rarely be passed down the supply chain. See it at section 4.12 at

<http://www.dft.gov.uk/consultations/archive/2005/pchns/ion4otherissuesarisingfr1814.pdf>

³¹⁴ However, recent work within the IMO correspondence group to identify likely levels of contributing cargoes suggests that this is not as great a risk as feared. In addition, in the author's view, UK ratification of the Convention/ Protocol may not put UK industries at a competitive disadvantage, given its industries survived at present are generally relating to high technical products and their competitors are mainly in the EU. The financial requirements of the Convention, in terms of contributing to the HNS Fund, will only enter into force in the UK when the Convention enters into force internationally. It is likely that this will only happen following ratification by those EU Member States who will provide significant financial contributions to the HNS Fund. The cost to receivers of HNS in financing the HNS Fund when in force would be spread globally through all member states, including those in the EU.

³¹⁵ For details see IMO Document 92FUND/WGR.5/11, see the text of the Protocol at <http://folk.uio.no/erikro/WWW/HNS/LEG%2095-3.pdf>

³¹⁶ See IMO document LEG 95/3/1 or <http://folk.uio.no/erikro/WWW/HNS/LEG%2095-10.pdf>

³¹⁷ For details see IMO document LEG 94/12, at pp. 12-14. See also <http://www.mb.com.ph/node/199646> (accessed 280

particularly problematic and the Protocol has addressed each of them.

Firstly, the difficulty in collecting data and reporting on packaged HNS has been identified as a serious obstacle. The solution in the Protocol is that packaged HNS should not be regarded as a type of cargo carrying liability to contribute, and accordingly that receivers of such goods should not be liable for contributions to the HNS Fund.³¹⁸ However, it would still be possible to receive compensation from the HNS Fund in incidents involving packaged HNS,³¹⁹ and indeed the shipowner's liability limit for incidents involving packaged HNS will be increased. The specific level of increase will be set at the Diplomatic Conference.

The second problem relates to contributions to the LNG (i.e. liquefied natural gas) Account.³²⁰ Under the 1996 HNS Convention, the person liable for LNG contributions is a titleholder³²¹ to an LNG cargo. In other cases of HNS cargoes, the person liable is the receiver. While the receiver must be subject to the jurisdiction of a State Party, the titleholder need not be. It would, therefore, have been impossible to enforce payment of contributions to the LNG account by titleholders in non-member states. A solution in the draft Protocol is to remove the anomaly: the receiver, as defined in Article 1.4 of the Convention, would be liable for contribution, except for limited situations.³²²

Finally, there is the issue of how to ensure submission of contributing cargo reports by States. Despite an obligation to do so, very few States, when ratifying the HNS Convention, have submitted reports on contributing cargo.³²³ The draft Protocol deals

on 3rd June 2009); <http://www.dma.dk/sw23105.asp> (accessed 6th March 2009)

³¹⁸ For details see IMO document LEG 94/12, pp. 6-7

³¹⁹ Because incidents involving packaged goods will remain eligible for compensation

³²⁰ For discussions on Contribution to the LNG Account, see IMO document 92FUND/WGR.5/11, see also IMO document LEG 94/12, pp 8-10

³²¹ More precisely, the person who held title immediately prior to the LNG cargo's discharge. See Article 19.1(b) of the HNS Convention. For details see also IMO Document 92FUND/WGR.5/11 or <http://seafarerblog.com/2009/04/11/imo-approves-draft-hns-protocol-aimed-at-bringing-1996-hns-convention-into-effect.html> (accessed on 01 June 2009)

³²² For example, in the situation where the titleholder pays them, following an agreement to this effect with the receiver and the receiver has informed the State Party that such an agreement exists.

³²³ This omission has been a contributing factor to the Convention not entering into force. In addition, there has been a growing awareness of the desirability of preventing the invidious situation which has occurred in the IOPC Funds, where non-submission of reports results in non-payment of contributions but not in withholding of compensation. See IMO document LEG 94/12, pp 10-12.

with this by imposing sanctions for non-reporting.³²⁴

The IMO legal committee has now requested the IMO Council, which meets in June 2009, to approve the holding of a diplomatic conference as early as possible during 2010 to consider the draft Protocol, with a view to formally adopting it.

In addition, in recognition of the complexities of HNS substances,³²⁵ an electronic system³²⁶ has been developed to provide an optional reporting system for use by industry, States and the HNS Fund Secretariat. The electronic system also contains a database of all chemicals covered by the Convention.³²⁷ Surely all this will encourage countries to ratify the HNS Convention/ Protocol.

5.2.2.6 Further Discussion and Recommendation: UK and PRC

With regard to the ratification of HNS Convention/ Protocol, the UK is likely to ratify on principle as soon as the matters in the Protocol are sorted out. The following issues are worthy to be discussed.

Firstly, due to major HNS incidents occurred along UK coast,³²⁸ it has increased the

³²⁴ For example, (a) In order to ratify the draft Protocol, States will be required to submit reports on contributing cargo - IMO, as Depositary, will not accept any ratifications which are not accompanied by such reports. States will also be obliged to continue to submit reports annually thereafter until the Protocol enters into force. (b) Should a State fail to submit reports annually, after depositing its instrument of ratification, but prior to entry into force of the Protocol, it will be temporarily suspended from being a Contracting State. The Protocol will, therefore, not enter into force for any State which is in arrears with reports. (c) Once the Protocol has entered into force for a State, compensation will be withheld, temporarily or permanently, in respect of that State, if it is in arrears with reports, except in the case of claims for personal injury and death.

³²⁵ Not least 6000 substances would fall within the scope of the Convention. See, p. 56, at <http://www.dft.gov.uk/consultations/archive/2005/pchns/>

³²⁶ IMO suggested to develop a software programme which would identify all substances covered by the HNS Convention

³²⁷ The system known as the HNS Cargo Contribution Calculator (HNS CCC) is currently available on CD ROM, users will need to download the software but once this has been done system can be accessed quickly and provides secure data storage.

³²⁸ For example, when the *Ever Decent* collided with a cruise ship (the *Norwegian Dream*) in 1999 off the east coast of England, the incident resulted in substantial physical damage to both vessels, including a fire on board the *Ever Decent* whose cargo included a number of HNS substances in containers. While the incident did not result in fatalities, or serious injuries, it did highlight the potential for a serious incident to occur. Another example, the *Levoli Sun* incident off the Channel Islands in 2000 was also a major HNS incident, for which claims for compensation would have been governed by the Convention, if in force. The Cargo presented a pollution threat and was carcinogenic. The *Levoli Sun* sunk and the cargo and bunker fuel on board had to be removed. This led to a long and costly savage operation. The government's claim for response costs arising from the incident have still not been settled. See

urgency for the ratification of the convention. In addition, some preparation has been already undertaken by Parliament to allow UK to implement the convention.³²⁹ Moreover, in December 2003 and April 2005, the Department of Transport published two consultation papers both entitled “Consultation on UK implementation and ratification of the HNS Convention”.³³⁰ From the Government’s Response,³³¹ we can see there were strong intentions to ratify the Convention.³³² However, due to UK’s worries over certain aspects of the compensation scheme, and the process of waiting for the Protocol to address those concerns, it hasn’t ratified the Convention.

In comparison, China has so far not had much interest in the HNS Convention, but this may change. With the development of Chinese industries, the amounts of HNS imported into China are increasing dramatically through marine transportation.³³³ Chinese coasts have been seriously affected by HNS incidents.³³⁴ However the difficulty hindering the ratification of HNS Convention is that there has been insufficient research undertaken on how much damage remains uncompensated at present, which would be compensated were China to ratify the HNS Convention.

“Consultation on UK Implementation and Ratification of the Hazardous and Noxious Substances (HNS) Convention” (Final stage) April 2005, Annex VIII, page 128, at <http://www.dft.gov.uk/consultations/archive/2005/pchns/>

³²⁹ The enabling legislation which allows UK to implement the HNS Convention is contained in Section 14 and Schedules 3 of the Merchant Shipping (Maritime and Security) Act 1997. The need for the UK to become a party to the HNS Convention has, therefore, already been accepted by Parliament. All that remains is for Parliament and the Secretary of State to determine when and how.

³³⁰ For details see “Consultation on UK Implementation and Ratification of the Hazardous and Noxious Substances (HNS) Convention” (Final stage) April 2005, at <http://www.dft.gov.uk/consultations/archive/2005/pchns/> (accessed on 4th June 2009).

³³¹ Ibid., in the second consultant paper, Section 3 of the Consultant paper, p. 16

³³² There were strong intentions to ratify the Convention by June 2006, to ensure the UK would be compliant with the European Council’s Decision. European Council Decision (2002/971/EC) was adopted on 18 November 2002 authorizing EU Member States to ratify the HNS Convention, and if possible by June 2006. (It should be clarified that this decision does not require the UK to ratify. It merely permits it to do so). In addition, there was a sign of political intent to proceed towards ratifying the Convention from a very early stage. The UK signed the HNS Convention within 12 months the Convention was open for signature as a sign of political intent to proceed towards ratifying the Convention. See “Consultation on UK Implementation and Ratification of the Hazardous and Noxious Substances (HNS) Convention” (Final stage) April 2005, Annex VIII, p. 125 at <http://www.dft.gov.uk/consultations/archive/2005/pchns/>

³³³ From 1989 to 2004, the total volume of HNS carried in China increased by 30 times and their types increased by 3 times. In 2004, the total national transport volume was about 147 million tons, among which 37 million tons were inbound cargoes. The main cargoes were vegetable oils, ethylene glycol, methyl alcohol, styrene, sulphuric acid, xylene, toluene and its mixture, sodium hydroxide etc. In 2006, China has 27 bulk chemical carriers engaged in international trade, with average gross tonnage of 3,846 tons; 62 chemical carriers operating along Chinese coast, with average gross tonnage of 729 tons. See Xu Cuiming, *China’s Strategy and Resources for emergency response to HNS Accidents*, at http://www.kaiho.mlit.go.jp/shisaku/bousai/em_hns/ch1.pdf

³³⁴ For the HNS incidents along Chinese coasts including the *GG Chemist* in 2005, the *Accord* in 2002, and the *Chung Mu No. 1* in 1995, see Appendix I. Moreover, there were 52 serious accidents caused by ships carrying HNS from 1991 to 2004. Among them, 14 accidents caused more than 100 tons of spillage. See Xu Cuiming, op. cit. p2

Before an integrated legal scheme is set up to deal with the problem relating to the liability and compensation from HNS incidents, the author suggests China should spend time and effort on research and making improvements on the following issues.

The first step would be the collection of data from an HNS cargo risk assessment, more specifically, the number of vessels carrying HNS in Chinese waters and the number of incidents that have occurred. From this, the Harbour Superintendence Administration can predict the likelihood of an incident occurring in Chinese waters. A good example is the Chemical Risk Assessment commissioned by the UK Coastguard Agency in 2000.³³⁵

Secondly, presumably those injured by HNS pollution received from a possible HNS Fund will be much more than their direct recovery from those responsible (where that liability can be enforced) under China's existing legislation.³³⁶ It is important to know the recoverable damages in HNS cases, particularly calculating the difference between national scheme and the HNS Convention/Protocol.³³⁷ If China ratifies the HNS Convention/Protocol, presumably for damages not covered by current national law, there would be the possibility for the claimants to obtain recourse from the HNS Fund.

Thirdly, to analyse current problems relating to the carrier's compulsory insurance. For example whether ships registered in China can afford compulsory insurance required by the HNS Convention?

Fourthly, double check whether the contributions from HNS receivers will cause competitive disadvantages to Chinese industry. Based on the collection of data, if China ratifies the HNS Convention/protocol, it is not difficult to calculate a rough figure as to how much the HNS receivers in China should contribute to the first payment and the

³³⁵ The assessment considered data available for the years 1989-1998. During this period a total of 220 casualties involving chemical tankers occurred worldwide, of these, 38 occurred in UK waters. For the same period, there were a total of 105 casualties involving gas carriers with 13 of these occurring in UK waters. For details see "Consultation on UK Implementation and Ratification of the Hazardous and Noxious Substances (HNS) Convention" (Final stage) April 2005, p. 9, at <http://www.dft.gov.uk/consultations/archive/2005/pchns/>

³³⁶ The current national legislation e.g. Maritime Code 1992 and the Environmental Protection Law 1999

³³⁷ With the support from the Maritime Courts and the High Courts, it is possible to see how many incidents occurred in Chinese waters and to calculate the amount of compensation awarded to the relevant claimants from the data regarding recoverable damage from HNS incidents under current Chinese law. The competent authority could then calculate the total amount of unrecoverable damages relating to dangerous cargoes each year.

annual payment to the HNS Fund.³³⁸ The author suggests there should be a cap of 20% (or less) on the annual contributions payable by a single contracting state to the HNS Funds,³³⁹ since China probably will become one of the heaviest HNS importers in the world.

Last but not least, there needs to be proper training for the relevant staff and guidelines for industry, particularly considering that the knowledge relating to dangerous cargo transportation is quite poor among Chinese manufacturers, shippers, and export agencies. The author admits that in many aspects they are less than professional and need more training.³⁴⁰

In summary, China still needs to see whether ratification of the Convention/ Protocol would cause undue costs or competitive disadvantages. If it would then the Convention won't be adopted: if not, then it might.³⁴¹ And in any case China, like the UK, will do nothing until the Protocol is finalised.

From what has been discussed, the HNS Convention can be summarised as: there are many positive features of the HNS Convention should be acknowledged. Although it might never enter into force, the key aspects of the convention are already open to criticism. The Convention should therefore be viewed as a welcome, but temporary, stage in an on-going process of improvement and reform, and not the end.

³³⁸ It is necessary to predict the amounts of HNS imported into China and how much the receivers must contribute to the different Funds of the HNS convention each year and to predict the increasing speed of importing HNS into China in the next decade. See also Wang Ruijun & Chen deli, "Study on Establishing the Liability System in China as to the HNS Pollution by Ship" (in Chinese), *World Shipping*, Vol. 26, No. 1, Feb. 2003, p.32

³³⁹ We can find a similar design under IOPC Fund Supplementary Protocol 2003. To decide whether to ratify the HNS Convention, the most important deciding element is whether it presents a fair and reasonable scheme of allocation of risks and the share of liability between the shipping industry and the cargo industry in China.

³⁴⁰ In China, many shippers attempt to describe some packaged HNS as normal cargo to avoid the expensive fees and complicated process of passing customs involved in dangerous cargo transportation. Therefore port authorities often send investigation teams to check container ships near the harbor. For example, from January to September 2005, Tianjin Harbour Superintendence Administration sent experts on board of 197 container ships and investigated 36 container packing stations. There were 32 containers with serious problems of packing and were ordered to be repacked, 45 containers with serious problems of stowage and 218 containers with improperly labels in a total of 785 containers checked by experts. See *Dangerous Goods Control & Pollution Prevention Message* (in Chinese), 2005, vol. 11, p. 8. This Message is published internally by Liaoning Maritime Safety Administration (on file with the author).

³⁴¹ Some Chinese scholars suggest to stipulate a national law instead of the ratification of the HNS Convention. For details see Wang Ruijun and Chen Deli, *Study on Establishing the Liability System in China as to the HNS Pollution by Ship* (in Chinese), *World Shipping*, Vol. 26, No. 1, Feb. 2003, p. 18.

The draft Protocol was in fact a free-standing treaty which was intended to complement the HNS Convention. These two instruments are supposed to be read together in a way to provide a workable solution to the problem of implementation of the Convention. The author thinks the draft protocol should be adopted as soon as possible since there are so many good points in it. The most notable ones are: the Protocol simplifies the HNS Convention and it becomes easier to identify contributors to the HNS Fund. Moreover, remedies are supplied in the Protocol to ensure Member States to submit information to the HNS Fund on contracting cargo. Accordingly, the possibility for the HNS Fund to collect the necessary contributions in case of incidents and to pay damages is enhanced.

5.2.3 Limitation of Liability

Where a shipowner incurs a liability by reason of negligent navigation or management of his ship, he may, nevertheless, not be required to pay the full amount because he is entitled to limit his liability according to relevant legislations.³⁴² Practically, the limitation of liability is not only benefiting the shipowner, his insurer but also the claimants.³⁴³

As we have mentioned above,³⁴⁴ the shipowner is entitled to limit liability in respect of any incident up to an aggregate amount calculated under the terms of the HNS Convention.³⁴⁵ However, in order to benefit from this limitation of liability, the shipowner must constitute a fund, an international fund which is established by the Convention.

Unlike CLC claims, HNS claims are not excluded from the 1976 Limitation Convention.³⁴⁶ HNS claims, therefore, will involve two parallel limitation regimes. However, the 1996 Protocols³⁴⁷ to the 1976 Convention will give a State Party the

³⁴² *Marsden on Collisions at Sea*, 13th ed., op. cit., p. 591.

³⁴³ The claimants can be more confident that the shipowner will have been able to obtain insurance cover in respect of liabilities incurred and that there will be insurance funds available to satisfy their claims, in part or not in full.

³⁴⁴ See section 5.2.2.3

³⁴⁵ Article 9(1) of the HNS Convention

³⁴⁶ Article 3(b) of the 1976 Limitation Convention provides that the Convention shall not apply to the following: (b) claims for oil pollution damage within the meaning of the CLC 1969 or any amendment or Protocol thereto, which is in force.

³⁴⁷ On 13 May 2004 the 1996 Protocol to amend the Convention on Limitation of Liability for Maritime Claims 1976 entered into force. It has been ratified by 34 States, representing 35.48% of world merchant shipping (by June 2009).

option to exclude HNS claims from the ambit of the 1996 Protocols.³⁴⁸ For a State does not adopt 1996 Protocols or the damage is outside of the scope of HNS Convention, a shipowner would have the facility of limiting liability in the ordinary way under the 1976 Convention rather than under the specialised limitation regimes under the HNS Convention. Of course, the limit of the former is much lower than that of the latter.

5.2.3.1 Convention on Limitation of Liability for Maritime Claims 1976³⁴⁹

The Convention on Limitation and Liability for Maritime Claims 1976 (LLMC) in certain respects serves a similar function to other regimes pertaining to the carriage of goods by sea, such as Hague Hague-Visby Rules, Hamburg Rules and the Rotterdam Rules. The differences between them are LLMC does not deal with establishing liability which is a separate matter stipulated by other regimes. In addition, LLMC applies by force of international law and not by virtue of contractual arrangements, which the other regimes do.

No doubt that the 1976 Convention has sought to achieve further international acceptance.³⁵⁰ When LLMC 1976 was drawn up, it was clearly necessary to avoid overlap with the CLC 1969. Indeed, oil pollution liabilities were excluded from limitation under Article 3 (b) of the LLMC.³⁵¹ This means oil pollution was to remain

On 13 May 2004, it became applicable in United Kingdom, but China has not ratified it by June 2009.

³⁴⁸ It is likely that any State adopting the HNS Convention will also adopt the 1996 Protocols to the 1976 Limitation Convention so as to take advantage of this option. It will need to do so if it is to avoid the conflict in treaty obligations that would otherwise occur where it sought to impose the higher HNS limits against vessels flying the flag of a State which adheres to the 1976 Limitation Convention but which does not apply the 1996 HNS Convention. See Griggs, P, *Extending the frontiers of liability – the proposed Hazardous Noxious Substances Convention and its effect on ship, cargo and insurance interests* [1996] LMCLQ 145

³⁴⁹ The LLMC 1976 came into force on 1 December, 1986, at the same time it became operational in U.K. and U.K. declared its ratification to be effective also in respect of Hong Kong, but ceased to apply to Hong Kong with effective from 1 July 1997. It does not apply to mainland China and applies only to the Hong Kong Special Administrative Region. By notification dated 5 June 1997 from the People's Republic of China with respect to the Hong Kong Special Administrative Region, it reserves the right in accordance with Article 18 (1) to exclude the application of Article 2(1)(d).

³⁵⁰ It has been ratified by 52 States, representing 49.94% of world merchant shipping (by July 2010).

<http://www.imo.org/home.asp>

³⁵¹ Article 3 (b) of the LLMC excludes from limitation under this Convention: "Claims for oil pollution damage within the meaning of the International Convention on Civil Liability for Oil Pollution Damage dated November 29th 1969 or of any amendment or Protocol thereto which is in force". We can see this wording was apposite to cover not only CLC 1969 but also the Protocols thereto, including the 1992 Protocol which gave rise to the CLC 1992. Liability for oil pollution under CLC 1992 is therefore likewise excluded from the ambit of LLMC 1976.

to limitation in accordance with CLC itself. It should be noted that only the shipowner can incur liability under the channelling provisions of CLC. Oil pollution claims against other parties (e.g. charterers) are excluded by CLC, so the victim must pursue on other legal basis. In a case that a charterer is held liable for oil pollution under his national liability laws and that country is a member state of LLMC, whether charterers can rely on the LLMC to limit their liability? It was not tested until *The Aegean Sea*³⁵² in 1998.

Before discussing the case, we need to clarify that the LLMC 1976 has a wider description of group of persons entitled to limit their liability, which is different from CLC. Article 1 (1) of the LLMC provides that: “shipowners and salvors” may limit their liability in accordance with the rules of the Convention for claims set out in Article 2. Under Article 1(2), the term “shipowner” is defined as “the owner, charterer, manager and operator of a seagoing ship”. In a recent case *The MSC Napoli*,³⁵³ it was held that a slot charterer was within the definition of shipowner in Article 1 of the 1976 Convention and therefore entitled to limit its liability.

We can see the arrangements under the two conventions are very different. For example, the LLMC 1976 provides for rights of limitation for charterers; but the CLC 1969 provides for exclusion of liability of charterers. Bear in mind that the text of Article 3(b) of LLMC itself excludes not only liabilities incurred under CLC, but all claims for oil pollution damage within the meaning of CLC, even if liability arises for it outside the CLC regime, e.g. where the claim was brought against a party other than the shipowner. Here a potential danger exists where Article 3 (b) could produce the result of unlimited liability being incurred for pollution claims in non-CLC states, or even in CLC states when claims for oil pollution are brought against parties other than shipowner.³⁵⁴ In order to guard against this, some states (e.g. UK) try to enact supplemental legislation in their domestic laws to modify the effect of Article 3(b).

³⁵² [1998] 2 Lloyd’s Rep.39

³⁵³ *Metvale Ltd v Monsanto International Sarl (The MSC Napoli)*, [2008] EWHC 3002 (Admlty); [2009] 1 All E.R. (Comm) 1158; [2009] 1 Lloyd’s Rep. 246; [2008] C.L.C. 944.

³⁵⁴ Charles B Anderson & Colin, de la Rue, *Liability of Charterers and Cargo Owners for Pollution from Ships*, 26 Tul. Mar. L.J.1, p.44.

In the UK, Section 153 of the Merchant Shipping Act 1995 sets out the liability of the shipowner for claims governed by CLC. It follows that any liability for oil pollution which is not so incurred is likewise not excluded from the ambit of LLMC in English law.³⁵⁵

In *The Aegean Sea*, the shipowners sought to recover from the charterers, amounts representing the value of claims made against them as well as the value of the vessel, its bunkers, and its freight. The owners claim that they were entitled to implied indemnity because the tanker had been sent to an unsafe port and the loss was sustained as a consequence of complying with the charterer's orders. The English High Court was asked whether charterers were entitled to limit their liability with respect to spill claims brought against them by the ship owners. The court held (by Thomas J.) that the LLMC 1976 gave no right to the charterers to limit their liability in such unsafe port claims brought against them by the shipowners under the charterparty. This was because their acts or omissions in relation to the shipment of the cargo were acts or omissions done in their capacity as charterers not as (or qua) shipowners. The effect of this decision appears to be that if oil pollution claims had been brought directly against the charterer, then limitation would have been possible under the LLMC. However, if the claims are brought against the owner first and the owner seeks to recover from charterers by way of recourse, then limitation is not possible.³⁵⁶

Following the decision of Thomas J in *The Aegean Sea*, in the case of *The CMA Djakarta*,³⁵⁷ David Steel J held that a charterer could only limit his liability to the extent that he was acting as (or 'qua') shipowner which he defined as undertaking an activity 'usually associated with ownership' and further defined as 'to the extent that he operates or manages the vessel'. Accordingly, the charterers were not entitled to limit their liability as against owners in the circumstances of shipment of a dangerous cargo, which was an act done in their capacity as charterers. The charterers appealed.

³⁵⁵ Merchant Shipping Act 1995, Chapter 21 Section 153, sched. 7

³⁵⁶ *The Aegean Sea* [1998] 2 Lloyd's Rep.39, 53-54; [1998] C.L.C. 1090-1091.

³⁵⁷ *CMA CGM SA v Classica Shipping Co Ltd. (The CMA Djakarta)*, [2003] EWHC 641 (Comm)

The English Court of Appeal held³⁵⁸ that the judge had been wrong to approach the issue of limitation by considering whether the charterers acting as owners before they were entitled to limit. To say that a charterer had to be acting as owner was to impose a gloss on the wording of Article 1(2) of the LLMC 1976 and accord it a meaning other than its ordinary meaning. It was conceded that charterers had the same right as shipowners to limit as against cargo owners.³⁵⁹ The decision was that the charterers were entitled to limit their liability in respect of their liability to indemnify the shipowner in respect of cargo claims but not in respect of damage to the ship. From this decision we can draw a conclusion that a charterer's ability to limit will depend on the type of claim that is brought against him rather than the capacity in which he was acting when his liability was incurred.

We can see from the implications of this decision that although it is possible for a wider circle of persons to limit their liability under Article 1 of LLMC, the nature of the claims has become more important than the persons against whom claims are made. It is therefore necessary to further study which types of claims will be subject to limitation under Article 2 of the 1976 Convention.

The extent to which pollution liabilities are subject to limitation³⁶⁰ and the claims for which liability may be limited are listed in Article 2.1 of LLMC 1976 as follows:

- (a) Claims in respect of loss of life or personal injury or loss of or damage to property (including damage to harbour works, basins and waterways and aids to navigation), occurring on board or in direct connection with the operation of the ship or with salvage operations, and consequential loss resulting therefrom;

³⁵⁸ *The CMA Djakarta* [2004] 1 C.L.C. 468; [1 Lloyd's Rep. 460

³⁵⁹ [2004] 1 C.L.C. 468, at 469. It was conceded that a charterer could limit his liability when sued by a cargo-owner for loss of or damage to cargo and if the word 'charterer' was not to be construed as meaning qua shipowner in an action brought by a cargo-owner, it could not be so construed merely because the claimant was not the cargo-owner but the shipowner. But the judge was right that the ordinary meaning of Article 2(1) did not extend the right to limit to a claim for damage to the vessel by reference to the tonnage of which limitation was to be calculated. As we know most claims brought by a shipowner against a charterer, such as breach of promise that dangerous cargo will not be loaded will consist of a claim for damage to the vessel. Therefore in this case charterers' appeal failed except to the extent that they would be entitled to limit their liability to indemnify the shipowners for the shipowners' own liability for cargo claims, to the extent that that liability was discharged by shipowners in a sum exceeding the appropriate limit.

³⁶⁰ For detailed study of LLMC 1976 and its predecessors in respect of oil pollution, see Z. Oya Ozcayir, (1998) Liability for oil pollution and collisions, Part 4 Limitation of Liability, LLP London & Hong Kong, pp299-384; see also Anderson & De La Rue, *Liability of Charterers and Cargo Owners for Pollution from Ships*, 26 Tul. Mar. L.J.1, p.47.

- (b) Claims in respect of loss resulting from delay in the carriage by sea of cargo, passengers or their luggage;
- (c) Claims in respect of other loss resulting from infringement of rights other than contractual rights, occurring in direct connection with the operation of the ship or salvage operations;
- (d) Claims in respect of the raising, removal, destruction or the rendering harmless of a ship which is sunk, wrecked, stranded or abandoned, including anything that is or has been on board such ship;
- (e) Claims in respect of the removal, destruction or the rendering harmless of the cargo of the ship;
- (f) Claims of a person other than the person liable in respect of measures taken in order to avert or minimise loss for which the person liable may limit his liability in accordance with this Convention, and further loss caused by such measures.³⁶¹

It will be seen that no reference is made in Article 2.1 to pollution. Claims for pollution damage may take different forms (e.g., clean-up expenses or economic loss), and only those which can be brought within one or other of the various sub-paragraphs of Article 2.1 will be subject to limitation. For instance, in *The Aegean Sea*,³⁶² it was confirmed that recourse claims in respect of pollution damage and clean-up costs fell within Art.2.1(a) and (c) and claims for pollution caused by bunkers and by a cargo of oil fell within Art. 2.1(d) and (e) respectively in so far as they relate to clean-up or pollution prevention costs.

On the other hand, some types of claims may in some circumstances fall outside the right of limitation under the Convention.³⁶³ For example, in the *CMA Djakarta*,³⁶⁴ the English Court of Appeal held, in respect of a huge loss to the time charterers who had to accept responsibility for cargo, ship damage, salvage expenses and general average liabilities, the LLMC 1976 could only assist them in respect of the cargo liability, and

³⁶¹ LLMC, supra note 227, art. 2, para. 1. See De la Rue & Anderson, *Shipping and the Environment*, 1998, §4, at 643.

³⁶² [1998] 2 Lloyd's Rep.39

³⁶³ See *The Aegean Sea*, [1998] 2 Lloyd's Rep. at 50. This case is about the extent to which different types of pollution claim may fall within article 2.1. A further discussion is set out in De la Rue & Anderson, *Shipping and the Environment*, 1998, pp. 270-274.

³⁶⁴ See *The CMA Djakarta* [2004] EWCA Civ. 114.

not for the other heads of damage. The decision in the *CMA Djakarta* was followed in *The Darfur*,³⁶⁵ where the shipowners were seeking to limit against claims brought by charterers in respect of claims subject to limitation under Article 2.1(a) and (f). It was held by David Steel J. that leaving aside the concessions agreed³⁶⁶ all the items of loss³⁶⁷ were consequential on damage to the vessel and, thus, not limitable. As the judge pointed out that the issue turned on the scope of the claims that were subject to limitation and not the class of persons (shipowners or charterers) entitled to limit.

From what has been discussed above, we can see in general the benefit of limitation is granted for claims arising in connection with the operation of the ship and it may be invoked by any person who is operating the ship. Oil pollution liabilities were excluded from limitation under Article 3 (b) of the LLMC. But when claims for oil pollution are brought against parties other than the shipowner, or claims not governed by CLC, it is likewise not excluded from the ambit of LLMC in English Law under Section 153 of the 1995 Act. In addition, attention has been given to the nature of the claims and the scope of claims which are more important than the persons against whom the claims are made. Indeed, the persons who can invoke limitation are of minor importance, although a wide description of group of persons entitled to limit under Article 1 of the Convention.

5.2.3.2 Limitation under Chinese Maritime Code 1992

Closely following the 1976 Convention,³⁶⁸ the Chinese Maritime Code 1992³⁶⁹

³⁶⁵ *Blue Nile Shipping v Lguana Shipping & Finance Inc (The Darfur)* [2004] EWHC 1506 (Admlty); [2004] 2 Lloyd's Rep 469 (QB: David Steel J).

³⁶⁶ By the time of hearing it had already been agreed that (1) cargo claims against the time charterer by various cargo interests; (2) costs of salvage and settlement of the salvage claims were limitable.

³⁶⁷ The claims included: (1) claims for off-hire during the period that the *Darfur* was out of service; (2) advance made for the payment of stevedoring expenses; (3) insurance against deviation claims and against claims arising while the vessel remained off-hire; (4) costs of transshipment of cargo; (5) costs of time chartering an alternative vessel; (6) claims for loss of profit arising out of loss liner business; (7) claims for management time.

³⁶⁸ Articles 3(c) and 3(d) of the 1976 Convention provides that the Convention shall not apply to nuclear damages: 3(c) claims subject to any international convention or national legislation governing or prohibiting limitation of liability of nuclear damage; (d) claims against the shipowner of a nuclear ship for nuclear damage. Although there is no specific mention of any international convention under Article 3(d), it is generally agreed the pertinent convention is the 1962 Brussels Convention on the Liability of Operators of Nuclear Ships. Furthermore, this Article may also bring pertinent national legislation into play. For example, under English law, in respect of liability of nuclear damage and limitation of such liability, the Nuclear Installation Act 1965 shall apply. See generally, Hill, *Maritime Law*, 4th ed., 1995, p.406.

³⁶⁹ See also section 4.2.2. The Maritime Code was adopted at the 28th Meeting of the Standing Committee of the

unequivocally excludes claims for oil pollution and nuclear damage from the limitation regime by virtue of Article 208 (2)-(3). Since China is a party to the CLC 1969/ 1992 Protocol,³⁷⁰ claims arising thereunder are expressly excluded.³⁷¹ However, China is not a party to the Fund Convention 1971. Because of the limited scope of application of the Fund Convention, some of the advantages of the Convention are not available to Chinese claimants. For example, while Chinese claims for marine oil pollution damage are subject to the CLC limits, the claimants are without recourse to the Fund Convention for any unsatisfied claims because, in such cases, the fund can only be invoked when the oil pollution damage occurred on the land or territorial seas of a state contracting to the Convention.

The lack of further recourse to the Fund Convention might not be a great disadvantage to Chinese claimants with the presence of the TOVALOP³⁷² and CRISTAL³⁷³ before.³⁷⁴ Now with the expiration of both of these voluntary instruments,³⁷⁵ a negative impact is real. With the 1992 Protocols in force,³⁷⁶ it remains to be seen whether China will decide to become party to the Fund Convention.

So far as dangerous cargo liability is concerned, unseaworthiness is certainly regarded as conduct barring limitation liability under Chinese Maritime Code 1992. For example, in *The M/V No.1 CHUNGMU*,³⁷⁷ the claimant shipowner “M/V No.1 CHUNGMU”

Seventh National People's Congress on November 7, 1992, promulgated by Order No. 64 of the President of the People's Republic of China on November 7, 1992, and effective as of July 1, 1993. See the Maritime Code (in English) at <http://www.colaw.cn/findlaw/marine/maritime.htm>

³⁷⁰ China joined the 1969 CLC on 30 January 1980 and the convention became operative to China on 30 April 1980. China ratified the 1992 Protocols on 5th January 1999 and became applicable to both China and Hong Kong on 5th January 2000.

³⁷¹ See Article 208(2) of the Chinese Maritime Code of 1992.

³⁷² TOVALOP stood for a shipping industry agreement entitled “Tanker Owners Voluntary Agreement concerning Liability for Oil Pollution”

³⁷³ CRISTAL – “Contract Regarding an Interim Supplement to Tanker Liability for Oil Pollution”. CRISTAL was conceived as an interim arrangement whilst awaiting the entry into force of the 1971 Fund Convention. Despite the many advantages of the industries’ voluntary agreements (TOVALOP & CRISTAL), they were only temporary arrangements.

³⁷⁴ For discussion on China as a party to the TOVALOP and CRISTAL, see Chen, *Maritime Oil Pollution Damage in the People's Republic of China: the Legal Framework of the Liability System and Compensation Scheme*, 6 U.S.F. Mar. L.J. 449 (1994).

³⁷⁵ With the increasing number of States ratifying either the old or the new CLC/Fund regimes (or a mixture of both), the voluntary agreements (TOVALOP & CRISTAL) became increasingly redundant and their final demise was on 20 February 1997.

³⁷⁶ 1992 CLC came into force on May 30, 1996. China adopted 1992 CLC on January 5, 2000. By April 2008, China has not adopted the Fund Convention/ Protocols.

³⁷⁷ (1996)Guangzhou Maritime Court (No. 76), The case was published (in Chinese) at the website of Chinese Commercial and Maritime Trial involving Foreign Elements (sponsored by Supreme People's Court of PRC)

contracted to ship 3,865,508 k/l of styrene from a Korean Port of Deasan to the Port of Zhanjiang in China. The master on the claimant's ship navigated erroneously and collided with "M/V Chon Stone No.1" (defendant)³⁷⁸ at the port of Zhanjiang on March 9, 1995, thereafter there were 209.1 tons of styrene leaked out and contaminated the sea. The claimant argued he was entitled to limit his liability under Articles 207 and 208 of Maritime Code. It was held by the Maritime Court of Guangzhou³⁷⁹ that the claimant's vessel was unseaworthy (with incompetent crew) and dismissing his claims to limit liability under Article 209 of Maritime Code. As to conduct barring limitation, following the principle of the 1976 Convention, Article 209 of the Chinese Maritime Code 1992 expressly provides that:³⁸⁰

A person liable shall not be entitled to limit his liability in accordance with the provisions of this chapter, if it is provided that the loss resulted from his act or omission done with the intent to cause such loss or recklessly and with knowledge that such loss would probably result.

To interpret this provision, the Civil law 1986 may give some help. Under the Civil law,³⁸¹ in order to establish tort liability, fault on the part of the actor must be shown. Fault can be either intentional or negligent. Intentional conduct is committed by an actor who actually anticipates the adverse consequence of such conduct and intends for it to occur or is indifferent to its occurrence. Negligence refers to the conduct done by an actor who should have or could have known the adverse consequence of such conduct but did not actually foresee it.³⁸² By analogy, an act or omission done with the intent to cause loss or damage or recklessly and with knowledge that such loss or damage would probably result can be regarded as an intentional fault under the Chinese civil law.

Respecting Articles 204, 205 and 206 of Maritime Code 1992, "a person liable" could be the shipowner, manager, salvor or their servants or an insurer. It is clear that a person

<http://www.ccmt.org.cn/hs/case/index.php>

³⁷⁸ The defendant shipowner was Hong'guang Shipping Company S.De. R.L.

³⁷⁹ (1996)Guangzhou Maritime Court (No. 76), the decision was given by Wu Weinan J., Xiong Shaohui J. and Lai Shangbin J. on June 23, 1998.

³⁸⁰ Maritime Code of P.R.C. 1992, Article 209.

³⁸¹ See relevant discussion in section 3.2.1

³⁸² See generally, Jones (ed.), *Basic Principles of Civil Law in China*, (1989) Armonk, N.Y.: M.E. Sharpe, Inc.

liable can limit liability automatically unless evidence produced proves the person is guilty of conduct barring limitation. If the party is guilty of conduct barring limitation he may lose the benefits of insurance as well as the benefits of limitation according to Article 242, which provides that the “insurer shall not be liable for the loss caused by the intentional act of the insured”.

In addition, under Article 210(2) of Chinese Maritime Code 1992, “the limitation of liability for ships with a gross tonnage not exceeding 300 tons and those engaging in transport services between the ports of the People's Republic of China as well as those for other coastal works shall be worked out by the competent authorities of transport and communications under the State Council and implemented after its being submitted to and approved by the State Council.”

On 15 November 1993, the MOC, in pursuance of Article 210(2) of the Maritime Code, approved by the State Council of the PRC, promulgated the Provisions Concerning Limitation of Liability for Small and Coastal Ships (Costal Provisions).³⁸³ That is to say, the limitation of liability for ships with different tonnage is different between the Maritime Code 1992 (only applicable to international sea-going ships³⁸⁴ exceeding 300 gross tons) and the special regulation adopted by MOC (applicable to ships doing domestic transport below 300 gross tons). There may be a conflict of law, but the situation in China is that normally small ships doing domestic transport do not have enough economic strength to undertake limitation under the Maritime Code 1992, since the limitation amount of the Maritime Code is equal to that of the 1976 Limitation Convention.

³⁸³ MOC (2003)-Order (No.5). It came into force on January 1, 1994.

³⁸⁴ An “international ship” means any sea-going ship sailing between a Chinese port or ports and a foreign port or ports, but does not include ships sailing on inland waterways.

5.2.3.3 The 1996 Protocol and Limitation of Liability under English Law³⁸⁵

The 1996 Protocol to the 1976 Convention came into force on 13 May 2004.³⁸⁶ It greatly increases the limits of liability for all categories and sizes of ships whenever they are involved in a maritime incident.³⁸⁷ The 1996 Protocol amends Article 18(1) so as to permit Convention states to exclude limitation in respect of claims arising from the 1996 HNS Convention when it enters into force. Nevertheless, the HNS Convention contains much higher limitation amounts than those under the 1976 Convention (with 1996 Protocol).³⁸⁸

In the U.K., the 1976 Convention was contained in Schedule 4 to the Merchant Shipping Act 1979 and was given the force of law on December 1, 1986.³⁸⁹ The provisions of the Convention, as applicable to the U.K., are now set out in the Merchant Shipping Act 1995 in Part I of Schedule 7 and provisions having effect in connection with the Convention are set out in Part II³⁹⁰ of the same Schedule. Both parts are given the force of law by s. 185 of the MSA 1995.

The U.K. has ratified the 1996 Protocol, pursuant to the authority conferred by the Merchant Shipping Act 1995, section 185(2A).³⁹¹ In addition, except for shipowner,

³⁸⁵ The Merchant Shipping and Maritime Security Act 1997 amends the 1995 Act and provides powers which will enable the revisions made by the Protocol 1996 to become law in the UK. See Dockray, Martin, *Cases and Materials on the Carriage of Goods by Sea*, (2004: 3rd ed.), London : Cavendish Publishing, p. 338

³⁸⁶ It has been ratified by 37 States, representing 42.18 % of world merchant shipping tonnage (by July 2010). See <http://www.imo.org/home.asp>

³⁸⁷ Under Article 6(1), the limit of liability for claims for loss of life or personal injury for ships not exceeding 2,000 gross tonnage is 2 million SDR. For larger ships, the following additional amounts are used in calculating the limitation amount: (1) For each ton from 2,001 to 30,000 tons, 800 SDR; (2) For each ton from 30,001 to 70,000 tons, 600 SDR; (3) For each ton in excess of 70,000, 400 SDR. Under the 1996 LLMC Protocol, the limit of liability for property claims for ships not exceeding 2,000 gross tonnage is 1 million SDR. For larger ships, the following additional amounts are used in calculating the limitation amount. (1) For each ton from 2,001 to 30,000 tons, 400 SDR; (2) For each ton from 30,001 to 70,000 tons, 300 SDR; (3) For each ton in excess of 70,000, 200 SDR

³⁸⁸ For details about the shipowner's limit of liability under the different instruments (LLMC 76, LLMC 96 AND HNS 1996), see "Consultation on UK Implementation and Ratification of the Hazardous and Noxious Substances (HNS) Convention" (Final stage) April 2005, Annex VIII, page 135, at <http://www.dft.gov.uk/consultations/archive/2005/pchns/> (accessed on 4th June 2009). One example is under the LLMC Protocol 1996, a 40,000 gross ton vessel would give a limitation fund amounting to approximately \$21.7 million for property damage. Under the HNS Convention the same vessel would have a limitation amount of approximately \$ 95.7 million.

³⁸⁹ See Merchant Shipping Act 1979, ss. 17, 52; Merchant Shipping Act 1979 (Commencement No. 10) Order 1986 (SI 1986/1052).

³⁹⁰ Merchant Shipping Act 1995, s. 185(2)

³⁹¹ The insertion of subsection (2A) into section 185 of the MSA 1995 by the *Merchant Shipping and Maritime Security Act 1997*, U.K. 1997, c.28 section 15(1), allows amendments to be made in Parts I and II of Schedule 7 to

salvor, charterer and insurer, a right to limit liability also exists under specific statutes in respect of pilots³⁹² and harbour, canal and dock authorities in the U.K.³⁹³

The current situation is: before the HNS Convention is applicable to the UK, shipowners' limitation of liability arising from an incident involving the carriage of HNS is governed by the general rules on limitation under the 1996 Protocol. Under LLMC 1996, the shipowner is entitled to limit his liability depending on the tonnage of the vessel and the type of damage.³⁹⁴ The shipowner must establish a Limitation Fund in the appropriate Court³⁹⁵ and all claims must be pursued against that Fund.³⁹⁶

Nonetheless there is currently no requirement for shipowners of vessels carrying HNS to maintain insurance to meet the limit of liability under LLMC 1996.³⁹⁷ Although most shipowners do maintain insurance, there is no guarantee that insurance would be available to meet the costs arising from an incident.

5.2.3.4 Concluding Remarks

As we know, discussion of liability can not be isolated without limitation. The more strict the liability is, the more necessary to limit it. The LLMC 1976/ 1996 Protocol had great influence on national legislations, e.g. Chinese Maritime Code 1992 and Merchant Shipping Act 1995. Although China (except for Hong Kong) has not ratified the LLMC, the limitation amounts under Maritime Code 1992 are equal to those under the 1976 Convention. The U.K. has ratified the 1996 Protocol with considerably higher limitation amounts. Nonetheless, the limitation amounts under the LLMC (with 1996 Protocol), are still much lower than the limit of the HNS Convention.

the 1995 Act as may be required to give effect to such changes. The Merchant Shipping (Convention on Limitation of Liability for Maritime Claims) (Amendments) Order 1998, SI 1998/1258, implements the 1996 Protocol. This order was made on 19 May 1998 and came into force on 13 May 2004, to be notified in London, Edinburgh and Belfast Gazettes, on which the Protocol applicable to the United Kingdom.

³⁹² The Pilotage Act 1987, U.K. 1987, c. 21, section 22.

³⁹³ MSA 1995, c. 21, section 191. See also Tetley, *International Maritime and Admiralty Law*, op. cit., p.280.

³⁹⁴ Claims fall into two categories: loss of life or personal injury and all other claims (i.e. property damages).

³⁹⁵ In England and Wales this will be the Admiralty Court, in Scotland the Court of Session and in Northern Ireland the High Court, Queen's Bench Division.

³⁹⁶ For details see Section 2.5 of the UK consultant paper at

<http://www.dft.gov.uk/consultations/archive/2005/pchns/ion2ukratificationoftheh1812.pdf>

³⁹⁷ Compulsory insurance under the CLC for vessels carrying persistent oil in bulk, but only provides cover for pollution damage. Non-pollution damages such as fire or explosion involving such cargoes will be covered under the HNS Convention.

From what has been discussed in this chapter, we can see no matter what substance is involved—oil, chemical or other noxious and hazardous substances—marine pollution is an international problem. The risk of a major tanker accident is greater in some areas than in others but pollution can happen almost anywhere and can affect coastlines which are often many miles away from the incident which caused it.

In view of a whole structure of liability regime relating to the carriage of dangerous cargo, since the HNS Convention 1996 might never enter into force, it will be helpful to consider some international conventions under development, such as the Draft Protocol to the HNS Convention and the new UNCITRAL Convention, the TOPIA and STOPIA agreements.

5.3 EC Directive on Environmental Liability

The Commission's thinking on European environmental liability continued to evolve.³⁹⁸ On 30 July 2001, following restructuring within the Directorate General Environment of the European Commission and consideration of many comments to the White Paper, the European Commission issued a brief Working Paper.³⁹⁹ The paper described an entirely public-law regime, dealing only with environmental damage.⁴⁰⁰

Based on studies of different systems like the US Superfund and reports on EU Member States' national environmental liability laws, the Commission proposed in 2002 a Directive on Environmental Liability.⁴⁰¹ The purpose of the proposal was to establish environmental liability with regard to the prevention and remedying of environmental damage in accordance with the polluter-pays principle.⁴⁰² It proposed a strict liability

³⁹⁸ This resulted first in a working paper on environmental liability. For a comment see Bergkamp, *The Commission July 2001 Working Paper on Environmental Liability: Civil or Administrative Law to Prevent and Restore Environmental Harm?* (2001) *Env. Liability* 207-216.

³⁹⁹ Environment Directorate General Working Paper on Prevention and Restoration of Significant Environmental Damage (Environmental Liability).

⁴⁰⁰ Among other things, the Working Paper permanently shifted the direction of what would become the Environmental Liability Directive (ELD) from a civil liability regime to a public law regime that would be enforced by competent authorities. The proposal to introduce civil liability for bodily injury and property damage was dropped. See Fogleman, Valerie, *The Environmental Liability Directive*, *Env. Liability*, (2004) Vol. 12 (3), pp 101-115, at 102

⁴⁰¹ COM (2002) 17 final. Proposal for a Directive on Environmental Liability with Regard to the Prevention and Remedying of Environmental Damage, [2002] OJ C 151 E/132, 25 June 2002

⁴⁰² See http://www.eagle-law.com/papers/brussels2004_en-06.pdf

regime for listed dangerous activities, and a fault liability regime for non-listed activities.

With regard to EU Member States' national legislation, although most Member States have liability rules concerning environmental liability,⁴⁰³ they are often incomplete, especially as far as biodiversity damage is concerned. The Commission thus justified legislation at Community level based on this argument.⁴⁰⁴ Surely, the author thinks it is an important step with positive fallout to stipulate environmental law at EU level. However, what is the real impact of the EU regime will depend significantly on how the member states implement it into national laws.

Finally, EC Directive 2004/35 on environmental liability with regard to prevention and remedying of environmental damage was formally adopted on 21 April 2004 (hereafter ELD).⁴⁰⁵ The Member States were required to implement the Directive into national law by 30 April 2007. Unfortunately, only three Member States could transpose the Directive before the deadline (i.e. Italy, Lithuania and Latvia).

The legal basis of the Directive is Article 175(1) of the EC Treaty.⁴⁰⁶ The Directive aims to establish a framework whereby significant environmental damage would be prevented or restored. Its transposition into English law will not be easy due to the overlapping environmental liability regimes that already exist.⁴⁰⁷ Not only will the transposition of the ELD mean that existing liabilities, some of which originated over 150 years ago, will be supplemented; its transposition may mean revising some of the

⁴⁰³ Except for Spain and Greece.

⁴⁰⁴ Faure & Wang, *op. cit.*, p63.

⁴⁰⁵ [2004] OJ L143/56. The directive itself is not long: it contains 31 considerations (recital) which explain the reasons on which it is based, 21 articles and six annexes. See the text of the ELD at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32004L0035:EN:NOT>

⁴⁰⁶ Directive 2004/35, The first paragraph of the recital. Article 175(1): The Council, acting in accordance with the procedure referred to in Article 251 and after consulting the Economic and Social Committee and the Committee of the Regions, shall decide what action is to be taken by the Community in order to achieve the objectives referred to in Article 174. Article 174, to which Article 175(1) refers, provides as follows: Article 174(1): Community policy on the environment shall contribute to pursuit of the following objectives: preserving, protecting and improving the quality of the environment...

⁴⁰⁷ The U.K. Government try to ensure a speedy progress towards implementation, which was expected in 2008 for England, Wales and Scotland, somewhat later for Northern Ireland. See "Implementation of the Environmental Liability Directive: Government Response to the Committee's Sixth Report of Session 2006-2007" (published 17 Oct. 2007) at <http://www.publications.parliament.uk/pa/cm200607/cmselect/cmenvfru/1058/1058.pdf> See also Fogleman, *The Environmental Liability Directive*, (2004) 12(3) *Environmental Liability*, pp 101-115, at 103.

provisions that currently impose environmental liability under English law, including the Water Resources Act 1991,⁴⁰⁸ the Environmental Protection Act 1990 Part I, II and IIA,⁴⁰⁹ the Wildlife and Countryside Act 1981⁴¹⁰ and the Environmental Permitting (England and Wales) Regulations 2007.

However, the good news is England has compiled by issuing the Environmental Damage (Prevention and Remediation) Regulations 2009 (EDPR England)⁴¹¹ which came into force on 1 March 2009. In Wales the EDPR Regulations 2009 (Wales)⁴¹² came into force on 6th May 2009. There are separate regulations for Scotland⁴¹³ which entered into force in June 2009, and for Northern Ireland⁴¹⁴ which came into operation in July 2009.

In response to criticism from industry, the final text of the European Directive differs substantially from the proposal in the White Paper and from the “traditional” liability conventions.⁴¹⁵ The commission changed policy and the proposed Directive on Environmental Liability is no longer based on civil liability, but public liability.⁴¹⁶

But the final wording of the Directive is, to a very large degree, similar to the Commission’s proposal, such as the exclusion of traditional damage (personal injury and damage to goods),⁴¹⁷ the limitation of the notion of “environmental damage”, the

⁴⁰⁸ As amended by the Environment Act 1995.

⁴⁰⁹ As amended by section 57 of the Environment Act 1995

⁴¹⁰ As amended by Countryside and Rights of Way Act 2000.

⁴¹¹ SI 2009/153. The Regulations were made on January 29, 2009 and came into force on March 1, 2009. As the author understands, the delay is due to the complexity of fitting in the new rules into the existing national laws.

⁴¹² SI 2009 No 995 (W. 81), see the full text at

http://www.opsi.gov.uk/legislation/wales/wsi2009/wsi_20090995_en_1

⁴¹³ The Environmental Liability (Scotland) Regulations 2009 (SSI 266) came into form on 24th June 2009. See the full text at http://www.opsi.gov.uk/legislation/scotland/ssi2009/ssi_20090266_en_1 (accessed on 02/07/2010). The Executive note regarding the Regulatory Impact Assessment of Regulations 2009 (SSI 266) was given by Scottish Government Environmental Quality Directorate on 12th May 2009, see

http://www.opsi.gov.uk/legislation/scotland/ssi2009/en/ssien_20090266_en.pdf (assessed on 02/07/2010).

⁴¹⁴ The Environmental Damage (Prevention and Remediation) Regulations (Northern Ireland) 2009 (SR 252) came into operation on 24th July 2009. See the full text at http://www.opsi.gov.uk/sr/sr2009/nisr_20090252_en_1 (accessed on 02/07/2010).

⁴¹⁵ De La Fayette, *New Approaches for Addressing Damage to the Marine Environment*, IJMCL, Vol. 20, Number 2, (2005) p.212.

⁴¹⁶ Wenneras, Pal, *Permit Defences in Environmental Liability Regimes- Subsidizing Environmental in the EC? Year Book of European Environmental Law*, Vol. 4, (2005) Oxford University Press, pp149-180, at 179.

⁴¹⁷ The traditional damages are excluded from the scope of the Directive because they are, at least to a large extent, already recoverable under the liability laws of the Member States.

exclusion of oil pollution and nuclear damage,⁴¹⁸ the activities covered, the provisions concerning remedial action, the watchdog role for environmental organisations, the absence of mandatory insurance, the exclusive of diffuse pollution, and numerous accessory provisions such as reporting, reviewing of the provisions, and definitions (see the comparison in the table⁴¹⁹).

Issue	White Paper	Commission proposal	Directive 2004/35
1. Traditional damage	included	not included	not included
2. Biotechnology damage	included	not included	not included
3. Water damage	not included	included	included
4. Permit defence	left open	included	left to Member States
5. Alleviating burden of proof	included	not included	included
6. Member States to restore	included	included	not included
7. Oil pollution, nuclear	left open	not included	not included
8. Compulsory insurance	not included	not included	left to Member States
9. NGO action against Member States	included	included	hardly included
10. Injunction rights for NGOs	included	not included	not included

The Directive will impose a strict or fault-based liability—depending on the type of the activities involved and the type of damage caused—for three categories of environmental damages:⁴²⁰

- (a) Biodiversity damage, i.e. damage to species and natural habitats which has significant adverse effects on reaching or maintaining the favourable conservation status of such habitats or species. This definition covers species and habitats mentioned in the EU 1992 Habitats Directive (92/43/EEC)⁴²¹ or the 1979 Birds Directive (79/409/EEC).⁴²² Member

⁴¹⁸ Damages already covered by international agreements and instruments listed in Annex IV, e.g. including the marine pollution and oil spills are not covered insofar as the relevant international instrument is in force in member states concerned.

⁴¹⁹ Kramer, *Discussions on Directive 2004/35 Concerning Environmental Liability*, *Journal for European Environmental & Planning Law*, 2005 (4), pp250-256, at 252

⁴²⁰ “Environmental damage” is defined in Article 2(1), Directive 2004/35.

⁴²¹ Habitats Directive OJ L206/7

⁴²² Conservation of Wild Birds, OJ L103/1

States are permitted to include other species or habitats in the protection.

- (b) Water damage, i.e. damages that significantly affect the ecological, chemical and/ or quantitative status or ecological potential of waters as defined in the Water Framework Directive (2000/60/EC).⁴²³
- (c) Land damage, i.e. land contamination insofar as it creates a significant risk of human health.

From this list, the potential maritime scope of the ELD can be summarized as: it covers environmental damage to marine waters included in the Water Framework Directive's scope of application and to protected species and natural habitats located at sea and covered by the relevant directive.⁴²⁴ Within the same geographical limits, which are mainly limited to coastal waters,⁴²⁵ it is immaterial whether the damage is caused by land or ships, provided that, in the latter case, no coverage is provided by existing international conventions.

As mentioned above, there are two distinct liability regimes. For professional activities listed in Annex III of the ELD,⁴²⁶ liability is generally strict.⁴²⁷ The occupational activities listed in Annex III are all covered by EC environmental law and can be considered environmentally risky activities.⁴²⁸ The carriage by sea of certain dangerous substances is one of the activities in Annex III, i.e. paragraph 8.⁴²⁹ Considering the

⁴²³ Water Framework Directive, OJ 2000 L327/1.

⁴²⁴ See Carbone, *The environmental liability directive and liability for damage to the marine environment*, Journal of International Maritime Law, (2007), Vol. 13 Part 5 pp. 341-355, at 350.

⁴²⁵ Coastal water bodies cover coastal waters up to 1 mile seaward from the baseline from which the breadth of UK territorial waters is measured. See Axel Klaphake, *The assessment and restoration of biodiversity damages*, Journal for European Environmental and Planning Law, vol. 2 (4), July 2005, at 268.

⁴²⁶ For example, (1) waste management operations under Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste; (2) all discharges into the inland surface water under Directive 76/464/EEC on pollution caused by certain dangerous substances; (3) all discharges of substances into groundwater against pollution caused by certain dangerous substances under 80/68/EEC; (4) manufacture, use, storage, processing, filling, release into the environment and outside transport of dangerous substances under Directive 67/548/EEC, dangerous preparations as defined in Directive 1999/45/EC etc.; (5) transport by road, rail, inland waterways, sea or air of dangerous goods or polluting goods as defined either in Annex A to Council Directive 94/55/EC or 96/49/EC or 93/75/EEC and so on.

⁴²⁷ Directive 2004/35, Article 3(1)(a)

⁴²⁸ Annex III lists operators which are regulated by 12 EC directives or regulations or groups of such provisions.

⁴²⁹ Paragraph 8 of Annex III: Transport by road, rail, inland waterways, sea or air of dangerous goods or polluting goods as defined either in Annex A to Council Directive 94/55/EC of 21 November 1994 on the approximation of the laws of the Member States with regards to the transport of dangerous goods by road, or in the Annex to Council Directive 96/49/EC of 23 July 1996 on the approximation of the laws of the Member States with regard to the transport of dangerous goods by rail, or as defined in Council Directive 93/75/EEC of 13 September 1993 concerning minimum requirements for vessel bound for or leaving Community ports and carrying dangerous or polluting goods. As we can see that liability remains fault-based for goods outside this list, however hazardous- a potentially important limitation.

potential maritime scope of the ELD,⁴³⁰ there is a potential overlap with the CLC/Fund and HNS Conventions. The relationship between the ELD and the international conventions will be discussed later.⁴³¹

Regarding other activities (that is, those not listed in Annex III), operators are liable only if there is fault or negligence, and even they only in respect of biodiversity damage.⁴³² In addition, where a defendant is liable under Art. 3(1), he must pay not only for damage caused but also for dealing with “imminent threat” of such damage.⁴³³

Considering the operator’s obligation to carry out environmental restoration or preventive measures, if the operator cannot be found or will not or cannot act (e.g. in the case of damage where the polluter cannot be identified or is insolvent), the public authority may take the necessary measures itself⁴³⁴ or through a third party,⁴³⁵ and recover the cost of prevention, clean-up and restoration from the responsible polluter. This is according to the Commission, was to ensure that the necessary prevention or restoration were met in accordance with the polluter-pays principle.

In the author’s view, this is good and bad. Good because it is definitely an efficient way to deal with pollution problem. Bad because the duty of public authority to perform remediation, while making the authority a surrogate liable party, financial burden for environmental damage still remains largely with the public as taxpayers in the case that the liable person cannot be found. This is link to the weakness of the Directive—an absence of compulsory insurance.

Different from the international maritime conventions, the ELD does not require an

⁴³⁰ See also Carbone, *The environmental liability directive and liability for damage to the marine environment*, *Journal of International Maritime Law*, (2007), Vol. 13 Part 5 pp. 341-355, at 350.

⁴³¹ Section 5.3.2

⁴³² Directive 2004/35, Article 3(1)(b)

⁴³³ Imminent threat is defined in Article 2(9) as a “sufficient likelihood that environmental damage will occur in the near future”. Under Article 5, where environmental damage has not yet occurred but there is an imminent threat of such damage occurring, in that case the operator has to take necessary measures in order to prevent the occurrence of damage.

⁴³⁴ As to the preventive action, see Article 5(4). Under the final text of the directive, the competent authority may itself take the necessary remedial measures (Article 6(2)(e)), but has no obligation whatsoever to do so, which is different from the commission’s proposal.

⁴³⁵ Directive 2004/35, [2004] OJ L143/56, see details in recital 18.

operator to have evidence of compulsory insurance, but leaves it to be decided by Member States and also encourages Member States to develop financial security instruments and markets under Annex III. In order to consider carefully the issue involved in the imposition of financial security requirements for ELD liabilities rather than introducing them immediately, the ELD directs the European Commission to submit a report before 30 April 2010.⁴³⁶ The Commission might then decide to submit proposals for a system of harmonized mandatory financial security.⁴³⁷

Last but not least, the liability regime is non-retroactive; the ELD only applies to environmental damages caused after 30 April 2007.⁴³⁸ Consequently, the whole range of liability, restoration and financing issues relating to already existing contaminated and abandoned sites is not covered. Furthermore, the Directive does not include the traditional damage (personal injury and damage to property), because this is, to a large extent, already recoverable under the liability laws of the Member States. Thus the scope of the Directive is quite narrow. For example, there are over 30,000 cases of damage to environment every year in the UK, only about 1% will be covered by the Directive.⁴³⁹

Since the focus of my thesis is liability issue involving the carriage of dangerous cargo, I am not going to comment on all of the core issues of this Directive, but will only give a brief presentation of the directive and then focus on the relationship between the ELD and the international regime, such as CLC/ Fund and HNS Conventions.

5.3.1 Private Law vs. Public Law

As noted above, the Directive does not deal with the relations between a victim and a private operator or polluter. Rather, it puts the emphasis on the environment: where environmental damage has occurred or is imminent, remedial or preventative action is

⁴³⁶ Article 14(2)

⁴³⁷ For further discussion on the Review scheme of the Directive, see Malhorzata A Nesterowicz, *The application of the environmental liability directive to damage caused by pollution from ships*, [2007] LMCLQ 107, at 116.

⁴³⁸ Klaphake, Axel, *The Assessment and Restoration of Biodiversity Damages—Some remarks on environmental damage under the Directive 2004/35*, J.E.E.P.L. 2005 (4), pp 268-276, at 269.

⁴³⁹ See “Implementation of the EC Directive on Environment Liability: the Environmental Damage (Prevention and Remediation) Regulations 2009”, [2009] Journal of Planning and Environmental Law, 823

necessary to restore the environment. By leaving compensation for “traditional damage” (personal injury and property damage) to the legislation of Member States, the Directive is based on the assumption that differences in the Member States’ legal provisions on these issues can be tolerated in an internal market and that these differences are not so important as to require EC-wide harmonisation.⁴⁴⁰

Furthermore, one of the key lessons from national experience throughout the industrialised world was that civil liability alone, in the sense of private-law actions for cost recovery or injunctive relief, had proved insufficient to secure consistent environmental clean-up, not least because the civil courts had raised all sorts of principled objections to vigorous enforcement by this means, making civil-law rulings highly unpredictable and thereby putting public authority funds at risk. As a result, there was a clear trend at national level to rely extensively on administrative order powers and other public-law obligations to ensure that responsible parties born their share of the liability for repairing the damage they had caused or allowed happened.⁴⁴¹ In the legal systems of the various Member States the role of public law is gradually being recognised, but in what situations and to what extent the public authority can and should intervene, particularly in case of biodiversity damage, is to a large extent still the subject of debate.⁴⁴²

Nevertheless, the ELD centres on the state’s liability to intervene not only to restore but also to prevent environmental damage in the emphasis of EU environmental policy from civil liability in private law to public law.

The Directive requires member states to set up an administrative system to require environmental restoration or preventive measures from an operator.⁴⁴³ The Directive recognises the right of a competent authority to take appropriate action. The basic

⁴⁴⁰ Kramer, *Directive 2004/35/EC on Environmental Liability*, E.L.M. (2004) Vol. 16(1), pp5-13, at 7.

⁴⁴¹ Clarke, Chris, *The Proposed EC Liability Directive: Half-Way Through Co-Decision*, (2003) 12 (3), RECIEL, pp254-268, at 259, for example the shift from Section 107 cost-recovery actions to Section 106 abatement orders in the history of CERCLA enforcement in the USA and the decision in the UK to supplement the cost-recovery provisions in the Water Resources Act 1991 by a works notice procedures, as well as the remedial notice powers under the Part IIA contaminated-land regime. See the UK’s Environmental Protection Act 1990, Part IIA.

⁴⁴² Faure & Wang, *op. cit.*, p64

⁴⁴³ Lee, Maria, *The Changing Aims of Environmental Liability*, (2002) 14 (4), E.L.M. pp189-196, at 190

scheme is that the competent public authority will require the operator who has caused the damage or the threat of damage to take preventive measures and to restore the environment at its own cost.⁴⁴⁴ The obligation placed on the operator to take remedial action was limited to “practicable” steps,⁴⁴⁵ which contains the notion of being limited to financially reasonable steps. Furthermore, the operator was entitled to discuss with the administration the remedial measures to be taken (Article 7(2)); and the administrative authorities were advised not to provide for remedial measures where they considered the costs to be disproportionate.⁴⁴⁶

Overall, the discussions on environmental liability show, although the Directive still refers to “liability”, this is really a very different notion from that anticipated in the White Paper and Green Paper. In spite of the wording in the title and some of the provisions, the Directive is not a liability regime in the classical sense of the word since a right to compensation for private parties is expressly excluded.⁴⁴⁷ The Directive is essentially a public law instrument, putting monitoring and control by the competent authorities at the centre of things, dealing with clean-up costs and natural resources damages and excluding the possibility of recovery of economic damage by private parties.⁴⁴⁸

Nonetheless, it is still arguable that such an administrative approach is more appropriate than the civil liability regime.⁴⁴⁹ Moreover, no guarantee that a public law regime is sufficient to deal with environmental liability and compensation.⁴⁵⁰ Thus there is still room for improvement in this area, such as within the so-called Erika III package in 2005, a proposal for Directive⁴⁵¹ “on the civil liability and financial guarantees of

⁴⁴⁴ Directive 2004/35, Articles 6-8.

⁴⁴⁵ Directive 2004/35, Article 6(1)(a).

⁴⁴⁶ Directive 2004/35, Annex II, No. 1.3.3 (b).

⁴⁴⁷ See Directive 2004/35, Article 3(3) and recitals 11 and 14.

⁴⁴⁸ Which is quite similar to US CERCLA, where claims for “traditional damage” must be based on tort.

⁴⁴⁹ The Commission considered that the issue is not whether the liability regime is desirable, but rather if it is desirable for it to be implemented at EC level. That might explain why the Commission did not provide any further justification for this approach. See Bergkamp, Lucas, *The Proposed Environmental Liability Directive*, [2002] *European Environmental Law Review*, pp 294-314. See also Faure & Wang, *op. cit.*, p64

⁴⁵⁰ At present, the EC has no specific legal regime dealing with civil liability and compensation for pollution damage.

⁴⁵¹ Doc COM (2005) 593 final (23 November 2005).

shipowners” was introduced.⁴⁵² A detailed analysis of the proposal is clearly beyond the scope of this thesis.

5.3.2 Relationship with International Conventions

Although the scope of the Directive 2004/35 is quite broad in respect of the activities which are regulated, there is one main exception which significantly undermines the effectiveness of the liability scheme, namely, the exclusion of accidents regulated by certain listed international conventions. Article 4(2) excludes from the scope of the Directive incidents falling within the scope of the international conventions listed in Annex IV.⁴⁵³ Furthermore, Article 4(4) provides that the same shall apply with respect to nuclear damage regulated by the Treaty establishing the European Atomic Energy Community or by the international conventions listed in Annex V.

All of these conventions are private (compensation) law regimes, allowing for (usually monetary) compensation for all types of “classical damage”. This includes environmental damage in so far as this constitutes damage in the sense of private law.⁴⁵⁴ For example, the traditional damage (personal injury and damage to property) is regulated under the CLC/ Fund and HNS Conventions, while compensation for environmental damage under these conventions is limited to the costs of reasonable restoration measures. This includes preventive measures when there is threat of such damage.⁴⁵⁵ An interesting question is, of course, what the relationship is between the recent directive and the international conventions.

⁴⁵² The proposed directive aims to lay down a set of rules “applicable to certain aspects of the obligations on operators in the maritime transport chain as regards civil liability” (Article 1). It requests every Member State (i) to become a contracting party to the 1996 LLC (Article 4) and (ii) to ensure that every owner of a ship flying its flag or the flag of a third state which enters the waters under its jurisdiction has a financial guarantee for civil liability (Article 5). See also Carbone, Munari and Schiano di Pepe, *The environmental liability directive and liability for damage to the marine environment*, [2008] 1 Env. Liability, p.21.

⁴⁵³ Article IV includes several conventions on oil pollution damage, transport of hazardous substances by sea and carriage of dangerous goods by road, rail and inland waterways. There are five international conventions listed in Annex IV, they are 1992 CLC, 1992 Fund, 2001 Bunker, 1996 HNS and 1989 CRTD conventions. All of them are in civil liability regimes but only the first two came into force. Article 4(2) provides that the Directive applies if the relevant conventions are not in force in the Member States (if they are not members of the 1992 CLC/ Fund) or the relevant international conventions haven’t been ratified by a sufficient number of states to enter into force (i.e. Bunker, HNS and CRTD).

⁴⁵⁴ Oosterveen, Willem, *Some Recent Developments Regarding Liability for Damage Resulting from Oil Pollution—form the perspective of an EU Member State*, *Environmental Law Review*, 2004 6(4), pp223-239, at 234.

⁴⁵⁵ The very limited definition of pollution damage in the CLC 1992, HNS 1996 has been criticized *inter alia*, see the discussion in sections 5.2.1.3 and 5.2.2.3

First of all, it should be noted that the geographical ambit of ELD is very different from that of the international conventions (e.g. CLC⁴⁵⁶). For example, in the United Kingdom, for the purpose of water damage, the ELD will apply to the water out to 1 nautical mile seaward from the baseline around UK (consistent with the Water Framework Directive 2000/60/EC,⁴⁵⁷ and “coastal waters” is expressly included in the definition of “surface water” under the this Directive).⁴⁵⁸ In addition, the scope of application of negligence liability for damage to biodiversity is limited to species and habitats within the Natura 2000 areas⁴⁵⁹ which have been established under the EU 1992 Habitats Directive (92/43/EEC) and the 1979 Birds Directive (79/409/EEC). For the purpose of protected species and natural habitats, the EDL will apply out to 12 nautical miles.⁴⁶⁰ In comparison, the application of 1992 CLC/ Fund conventions has further geographic scope into the sea. These international conventions covers pollution damage suffered in the territory, territorial sea or EEZ or equivalent area of a State Party to the Conventions.⁴⁶¹

At present, the EU Habitats Directive lists 229 habitat types, 1064 animal and plant species, and the Birds Directive identifies 193 vulnerable and threatened bird species.⁴⁶² The so called Natura 2000 network includes over 22,000 individual sites, which covering almost 17% of EU land area as well as 140,000 km² of marine area. In contrast, the purely ecological damage is excluded from the scope of international conventions. That is to say the CLC/ Fund conventions and HNS Convention will not be

⁴⁵⁶ See the geographic scope of CLC in section 5.2.1.2

⁴⁵⁷ Coastal water bodies cover coastal waters up to 1 mile seaward from the baseline from which the breadth of UK territorial waters is measured. See Axel Klaphake, *The assessment and restoration of biodiversity damages*, Journal for European Environmental and Planning Law, vol. 2 (4), July 2005, at 268. See also the Draft Guidance for the ELD Regulations (Northern Island) at http://www.doeni.gov.uk/annex_b_-_draft_guidance.pdf (accessed 14- 07- 2010)

⁴⁵⁸ Article 2 para 1 of the Water Framework Directive 2000/60/EC, the definition of “surface water” is stipulated as: surface water on the landward side of a line, every point of which is at a distance of one nautical mile on the seaward side from the nearest point of the baseline from which the breath of territorial waters is measured, extending where appropriate up to the outer limit of transitional waters. “Transitional waters” are defined by article 2 para 7, as “bodies of surface water in the vicinity of river mouths which are partly saline in character as a result of their proximity to coastal waters but which are substantially influenced by freshwater flows”.

⁴⁵⁹ Natura 2000 is an ecological network of protected areas in the territory of the EU. In May 1992, governments of the EU adopted legislation designed to protect the most seriously threatened habitats and species across Europe. This legislation is called the Habitats Directive and complements the Birds Directive adopted in 1979. These two Directives are the basis of the creation of the Natura 2000 network. See details at <http://www.natura.org/>

⁴⁶⁰ See the Draft Guidance for the ELD Regulations (Northern Island) at http://www.doeni.gov.uk/annex_b_-_draft_guidance.pdf (accessed 14- 07- 2010)

⁴⁶¹ See discussion in section 5.2.1.3

⁴⁶² <http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/07/157&format=HTML> (accessed 20/07/2010)

applied to pure environmental damage, such as biodiversity damage.⁴⁶³

The Commission had proposed a complete exclusion of all incidents covered by these conventions and justified this proposal by arguing that, even though the conventions did not necessarily provide for the same liability regime and were not all ratified by all Member States, they “present the advantage of ensuring a global or regional harmonisation.”⁴⁶⁴ As we know, the Community legislation has managed to keep out of the Directive the most dangerous activities, in respect of which the Environmental Liability Directive was most needed. Particularly in relation to oil pollution damage, since it was arguably the occurrence of the *Erika* and *Prestige* incidents both along the European coast⁴⁶⁵ which gave impetus to get a liability directive moving at a time when the whole idea was drifting aimlessly around Brussels.⁴⁶⁶ However, the exception clauses in Article 4(2) and 4(4) are quite ambiguous in certain respects, which call into question just how far-reaching these provisions really are.

The most important question concerns the scope of the exceptions in Article 4(2) and 4(4)—does the Directive 2004/35 cease to apply altogether where the damaging activity is regulated by one of the listed conventions, or does it only become inapplicable in so far as the damage is regulated, whilst still applying to damage which falls outside the conventions?

As we know many EU Member States (including UK) are parties to these existing regimes (e.g. CLC/Fund 1992) and therefore have treaty obligations accordingly. Article 1(6) of CLC 1992 states “pollution damage... shall be limited to costs of reasonable measures of reinstatement of [the environment] actually undertaken or to be undertaken”. This is clearly a significantly less developed notion of environmental damage than that laid down in the ELD, in particular in respect of “biodiversity

⁴⁶³ See discussions later in this section. For details of the Geographical Scope of CLC/ Fund, see section 5.2.1.3

⁴⁶⁴ Commission explanatory memorandum, COM (2002) 17, no. 6.3

⁴⁶⁵ The Erika accident in 1999 was actively used by the Commission to promote the need for a proposal, see Explanatory Memorandum to the Commission’s Proposal for an Environmental liability Directive (COM (2002) 17), whilst the Prestige catastrophe in November 2002 caused public outcry, which presumably alerted the Parliament and the Council to the need for inter alia a liability directive.

⁴⁶⁶ Wenneras, *A Progressive Interpretation of the Environmental Liability Directive*, J.E.E.P.L. 2005 (4), pp257-267, at 258.

damage”. There is a question, for example in a case where oil tanker runs ashore on the European coast, whether Article 4(2)⁴⁶⁷ should be interpreted as completely excluding the applicability of the Directive, or whether the Directive complements the relevant conventions to the extent that the relevant damage is not covered, e.g. in respect of loss of biodiversity?

As the author understands, Article 4(2) does not clearly exclude the application of ELD in this situation. Indeed, after reading the awkward phrase of Article 4(2) word for word,⁴⁶⁸ we can see the Directive still covering “biodiversity damage”, even if in the situation that other damages are regulated by CLC/ Fund Conventions.

For example, the main sentence of Article 4(2) referring to “damage arising from an incident ...[which]... falls within the scope of any of the International Conventions listed in Annex”, it seems that any damage caused by e.g. an oil pollution incident, and which thus fell within some of the conventions in Annex IV was sufficient to exclude the application of the Directive. However, the inclusion of the words “which liability or compensation falls within the scope” suggests that the Directive only becomes inapplicable to the extent that the international conventions actually impose liability for the damage caused. Therefore, considering “biodiversity damage” which falls outside of the scope of CLC/Fund Conventions, the Directive should still regulate it.

Another question is: how do the channelling provisions of the 1992 CLC interact with the ELD public liabilities on parties connected with an oil spill other than the shipowner? The international regime channels liability to the shipowner. That means claims for pollution damage can be made only against the registered shipowner.⁴⁶⁹ He has strict liability for pollution damage caused by oil spilled from his tanker and he has very few possibilities to exonerate himself.⁴⁷⁰ The CLC prohibits claims against the servants or

⁴⁶⁷ Article 4(2), “This Directive shall not apply to environmental damage or to any imminent threat of such damage arising from an incident in respect of which liability or compensation falls within the scope of any of the International Conventions listed in Annex IV...”

⁴⁶⁸ Ibid., Article 4(2).

⁴⁶⁹ The shipowner is entitled to take recourse action against third parties in accordance with national law.

⁴⁷⁰ He is exempt from liability under the 1992 CLC only if he proves that: (a) the damage resulted from an act of war or a grave natural disaster, or (b) the damage was wholly caused by sabotage by a third party, or (c) the damage was

agents of the owner, members of the crew, the pilot, the charterer (including bareboat charterer), manager or operator of the ship, or any person carrying out salvage operations or preventive measures.⁴⁷¹ However, this does not preclude victims from claiming compensation outside these Conventions from persons other than the shipowner, e.g. under their national civil liability laws.

In addition, a more interesting question arises here: whether these persons (e.g. charterers) who are not liable under the CLC/Fund conventions, either by express exclusion or implicitly, might fall under the definition of “operator” under Article 2 para 6 of the ELD,⁴⁷² and thus face liability pursuant to the ELD? As discussed above, the Directive is essentially a public law instrument, putting monitoring and control by the public authorities at the centre of things, dealing with clean-up costs and natural resources damage and excluding the possibility of recovery of economic damage by private parties. In a case that the damage (e.g. biodiversity damage) falls in the scope and thus covered by the ELD, if the polluter is liable under the Directive, the public authorities need to identify liable polluter (e.g. a bareboat charterer) and determine which remedial measures to be taken. If the pollution has occurred or about to occur, they must require the polluter to take actions to remedy (or prevent) the damage in accordance with the polluter pays principle.⁴⁷³ Consequently, the charterer who is not liable under the channelling provisions of 1992 CLC, may fall under definition of “operator” and be held liable for preventing and remedying the pure environmental damage under the ELD. Moreover, the CLC departs partly from the polluter pays principle on which the Directive is based. Under the CLC/Fund regime, the shipowner still has strict liability for all types of “classical” damage⁴⁷⁴ caused by oil spilled from

wholly caused by the negligence of public authorities in maintaining lights or other navigational aids. For details see discussion in section 5.2.1.3

⁴⁷¹ Article III para 4 of the 1992 CLC

⁴⁷² It provides as follow: “‘operator’ means any natural or legal, private or public person who operates or controls the occupational activity or, where this is provided for in national legislation, to whom decisive economic power over the technical functioning of such an activity has been delegated, including the holder of a permit or authorisation for such an activity or the person registering or notifying such an activity”.

⁴⁷³ “Polluter Pays Principle” is stipulated under Article 1 as well as in recitals 2 and 18 of Directive 2004/35. See also Malgorzata A Nesterowicz, *The application of the Environmental Liability Directive to damage caused by pollution from ships*, [2007] L.M.C.L.Q. 107.

⁴⁷⁴ For example, claims involving personal injuries, damage to property or economic loss. According to the IOPC Fund, liability for environmental damage is limited to measures for reinstatement of the environment, preventive measures and loss of profit directly linked to this damage.

his tanker as a result of the same incident.

In the author's view, if Article 4(2) is interpreted as above, it will result in confusion and conflict between the application of ELD and international conventions, particularly considering the recovery of environmental damage from one single incident will be regulated by two different regimes at the same time. Obviously, this result is far from satisfactory. It is expected that European Court of Justice will solve the problem by case law. Otherwise, it will be left for the Commission to clarify during further reviews⁴⁷⁵ of the Directive by 2014.⁴⁷⁶

In addition, in the case of chemical explosion or bunker pollution, the EU Directive will apply to damage to the marine environment in the EU states in which the maritime liability conventions are not in force (i.e. 1996 HNS and 2001 Bunker conventions). Under the Directive 2004/35, there is a way for the public authority to claim for the birds and flowers, but the public authorities will have difficulty to claim for economic damage threatening their livelihood. Moreover, if the protection of the Directive is chosen, at the same time the protection of the international regimes offered to claimants in respect of all other types of damage (i.e. classical damage) will be entirely lost. In this situation, one solution is that the public authorities can use their general private law regimes in their countries, i.e. sue the liable polluter under national civil liability laws.

As we know, under the HNS Convention 1996, it is possible for claimants (both the authorities and private) to claim for replacement or repair cost for damaged property, loss of life and personal injury, and quantifiable economic losses such as loss of income due to restriction on fishing or reduced custom for hotelier.⁴⁷⁷ Therefore it was considered wiser to accept the existing international regimes in respect of environmental

⁴⁷⁵ Article 18 (1), "Member States shall report to the Commission on the experience gained in the application of this Directive by 30 April 2013 at the latest. The reports shall include the information and data set out in Annex VI". Article 18(2), "on that basis the Commission shall submit a report to the European Parliament and to the Council before 30 April 2014, which shall include any appropriate proposals for amendment".

⁴⁷⁶ Thus the States are free to indicate to the Commission all difficulties whatsoever encountered in the implementation of the Directive. We can see the Community legislator gave the commission the task of investigating certain, particular questions as a matter of routine. Accordingly, the Commission must, notably, examine the application of Article 4 (2) and (4) referring to the exclusion of directive in respect of certain pollutions and activities and the right of the operator to limit its liability in conformity with certain international conventions.

⁴⁷⁷ See details in section 5.2.2.3

damage (after they come into force), in order to preserve the benefits these regimes are offering to (both the authorities and private) claimants in respect of all other types of damage.

5.3.3 Further Discussion and Analysis

From the discussion above, we can see the ELD does not really offer a real civil liability regime, but mainly a public law regime to be enforced by competent authorities, combined with private law aspects as strict liability and fault-based liability.

The approach of the ELD differs from most existing liability conventions in three main respects. Firstly, it does not cover “traditional” types of damage to persons and to property and various kinds of economic loss, but only “environmental” damage, including damage to biodiversity, comprising the cost of preventive measures, clean-up costs and restoration.⁴⁷⁸ Secondly, liability for damage caused by these “hazardous” activities will be strict, while liability for damage caused by other activities will be based on fault. Thirdly, the Directive requires the “operator” to take measures to prevent or to mitigate the damage, to clean up the pollution substance and to restore the environment.⁴⁷⁹ Moreover, the Directive imposes a duty on public authorities to require the operator take these measures.⁴⁸⁰

The fundamental difference in focus regarding the environment leads to three specific differences in relation to natural resources damage. Firstly, contrary to the provisions of ELD, the introduction of equivalent components is not covered in the international maritime liability regime. Secondly, while the ELD encompasses compensation for loss of use of natural resources and for non-use values (such as “existence value”) during the period of rehabilitation or restoration (so-called “interim loss”), the international regime does not. Thirdly, where the original site is so badly damaged that it cannot be restored, the EU regimes provide for the creation or acquisition of an “equivalent” site in a

⁴⁷⁸ The types of damage covered are damage to biodiversity protected at European and national levels; damage to waters as regulated under European legislation; and contaminated land posing a threat to human health, all resulting from occupational activities listed in Annex I

⁴⁷⁹ Article 5(1)

⁴⁸⁰ Article 5(2)(3)(4)

nearby area. In contrast, in the CLC/Fund regime, where the original environment cannot be restored, no compensation is available. Measures taken at a nearby area are only compensable if they contribute to the restoration of the damaged site.

Considering the relationship between the Directive and international maritime conventions, the Directive does not apply to environmental damage within the scope of the CLC, Fund, HNS and Bunkers Conventions, except for the maritime liability conventions are not in force in the Member States. However, from the words in the Directive, it is unclear whether Article 4(2) should be interpreted as completely excluding the application of the Directive; or the Directive only becomes inapplicable in so far as the damage is regulated by international conventions listed in Annex IV, while still applying to damage which falls outside the conventions (e.g. biodiversity).

The author is in favour of the former, given the ELD is intended to complement the international conventions. Otherwise, if both regimes are applicable to one incident, it will result in a conflict between EU members' obligations under the Community law and those under international law. Presumably, for the unrecoverable damages under the international regimes, the claimants can pursue them in national laws.

Unlike the international conventions (e.g. CLC/Fund or HNS), the ELD does not make it compulsory for operator take out insurance, but leaves it to member states to decide.⁴⁸¹ Article 14(2) requires a review by 2010 and by then the commission might propose a system of financial security.⁴⁸² In the author's view, how the Directive affects the protection of environment in Europe, will depend on how the member states implement the Directive into national laws and how the Commission carry out its review, including the issue of mandatory financial security.

Obviously, the transposition of the Directive by member states has been cumbersome.

⁴⁸¹ Article 14(1) suggests that member states encourage the use and development of insurance products or other forms of financial security.

⁴⁸² By the end of April 2010, the Member States are present reports to the Commission on the availability, prices and conditions of insurance and other types of financial security for the purpose of remedying environmental damage. The Commission might then decide to submit proposals for a system of harmonized mandatory financial security. By August 2010, the Commission has not made any formal decision regarding the financial security of ELD.

Until April 2007 (original deadline), only three states (Italy, Lithuania and Latvia) could transpose the Directive. England and Wales were very late to transpose it in March and May 2009.⁴⁸³ Separate regulations for Scotland entered into force in June 2009⁴⁸⁴ and for Northern Ireland in July 2009.⁴⁸⁵ Anyway, after the ELD is transposed into the domestic laws of Member states, we expect to see the environmental insurers will have developed policies to cover the risks imposed by it.

5.4 A case study—the ECJ opinion arising from the Erika spill as to whether France had implemented the Waste Directive, in case C-188/07, June, 2008

The Waste Directive 75/442/EEC⁴⁸⁶ established the fundamental principles for waste management in Europe and it applied horizontally⁴⁸⁷ and created liabilities.⁴⁸⁸ Unlike the Directive 2004/35/EC⁴⁸⁹ discussed above, the Waste Directive 75/442/EEC does not contain any provisions to exclude its application to incidents or activities in respect of which liability or compensation, that fall within the scope of the CLC/Fund regime. Moreover, Article 2(1)(b)(iv)⁴⁹⁰ of the Waste Directive does not exclude oil waste from

⁴⁸³ The Environmental Damage (Prevention and Remediation) Regulations 2009 (SI 2009/153) came into force in March 2009. The Environmental Damage Regulations (Wales) came into force on 6th May 2009, SI 2009 No 995 (W. 81), see the full text at http://www.opsi.gov.uk/legislation/wales/wsi2009/wsi_20090995_en_1. See also “Legislative Comment” at [2009] J.P.L. 7, 849-851

⁴⁸⁴ The Environmental Liability (Scotland) Regulations 2009 (SSI 266) came into force on 24th June 2009. See the full text at http://www.opsi.gov.uk/legislation/scotland/ssi2009/ssi_20090266_en_1 (accessed on 02/07/2010). The Executive note regarding the Regulatory Impact Assessment of Regulations 2009 (SSI 266) was given by Scottish Government Environmental Quality Directorate on 12th May 2009, see http://www.opsi.gov.uk/legislation/scotland/ssi2009/en/ssien_20090266_en.pdf (accessed on 02/07/2010).

⁴⁸⁵ The Environmental Damage (Prevention and Remediation) Regulations (North Ireland) 2009 (SR 252) came into operation on 24th July 2009. See the full text at http://www.opsi.gov.uk/sr/sr2009/nisr_20090252_en_1 (accessed on 02/07/2010).

⁴⁸⁶ Council Directive 75/442/EEC of 15 July 1975 on Waste (OJ 1975 L 194, p. 39) see the full text at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31975L0442:EN:HTML>; and it was amended by Commission Decision 96/350/EC of 24 May 1996 (OJ 1996 L 135, p. 32). The codified version of Directive 75/442/EEC is Directive 2006/12/EC, see the EU framework waste legislation at <http://ec.europa.eu/environment/waste/legislation/a.htm> (accessed on 31/July/2009). The Directive 75/442 was implemented by the UK through the Environmental Protection Act 1990.

⁴⁸⁷ This legislation defines the different categories of waste and how waste should be managed and controlled. It also defines the duties of Waste Collection and Waste Disposal Authorities, and sets out the Duty of Care applicable to all those handling and disposing of waste. It applies from landfill to how to reuse and recycle wastes.

⁴⁸⁸ See further discussion about Directive 75/442/EEC at <http://www.northlincs.gov.uk/NR/rdonlyres/B47A0E15-92B2-4D74-B212-C291E3A4AD95/29995/Appendix2Legislation2.pdf>

⁴⁸⁹ The Directive 2004/35 expressly provides in Article 4(2) that it is not to apply to an incident or activity in respect of which liability or compensation falls within the scope of any of the international conventions listed in Annex IV, which mentions the CLC and Fund Conventions

⁴⁹⁰ Under this provision, waste waters, with the exception of waste in liquid form, are excluded from the scope of the Waste Directive where waste waters are already covered by other legislation. Oil waste does not constitute waste waters since it does not result from the use or consumption of water. In so far as it is (still) liquid at all, it is in fact liquid waste. Therefore, the heavy fuel oil is to be treated as waste for the purpose of the Waste Directive if it is

the scope of the directive. This results into some confusion as to the relationship between EU Waste Directive and international conventions. However, this problem was dealt with by the ECJ in the landmark case *Commune de Mesquer v Total France SA*.⁴⁹¹

The background to this case was concerning the responsibility for the cleanup costs to the environment after the Erika oil spill along the French coast. The municipality of Mesquer, one of the coastal regions directly impacted by the Erika oil spills, had brought proceedings in the French court against the companies in the Total group.⁴⁹² The municipality claimed for reimbursement of the cost of clean up and anti-pollution operations on its coastal territory, based on the Waste Directive 75/442/EEC.⁴⁹³

The claimant argued that the hydrocarbons accidentally spilt at sea constituted waste within the meaning of the Directive. Therefore the companies Total International Ltd and Total France should be liable for the cost of disposal in their capacity as “previous holders” or “producer of the product from which the waste came” respectively.⁴⁹⁴ In order for a French court to give judgment on this matter, the Court de Cassation (France) referred the matter to the ECJ for its interpretation of the applicable provisions in EC law regarding the following issues.

Firstly, whether the heavy fuel oil accidentally spilt at sea following a shipwreck could be classified as waste within the meaning of the Directive (or whether they were to be classified as heavy hydrocarbons within the meaning of the CLC/FUND conventions and so should be covered exclusively by those conventions)?

The Court’s answer was that the heavy oil was spilt at sea must be classified as waste within the meaning of Directive 75/442,⁴⁹⁵ since it was discharged in a tanker accident

discharged in a tanker accident and is mixed with water and sediment

⁴⁹¹ Case C-188/07, European Court of Justice (Grand Chamber) made its decision on 24th June 2008. For details see [2008] 2 Lloyd’s Rep. 672, [2009] Env. L.R. 9, at 109.

⁴⁹² *Commune de Mesquer v Total France SA, Total International Ltd*, (under French Law No 75-633).

⁴⁹³ See footnote 491

⁴⁹⁴ Article 15 of Directive 75/442/EEC on waste provided that, in accordance with the “polluter pays” principle, the cost of disposing of “waste” should be borne by the “holder” and/or “the previous holders or the producer of the product from which the waste came”.

⁴⁹⁵ See ECJ judgment, paras 57 to 59; see also [2008] 2 Lloyd’s Rep. 672, at 673

and was mixed with water and sediment.⁴⁹⁶

Second question: whether the undertakings in the Total Group must bear the cost of oil pollution disposal because they produced the heavy fuel oil spill (the “producer”) and arranged its transportation in the tanker (the “seller” and “carrier”, can be regarded as the holder of waste within the meaning of Art.1(b) and (c) of the Waste Directive)?⁴⁹⁷

In the author’s view, this is a more interesting and challenging question. The real issue is: France is a party to the CLC/ Fund Conventions, and if the ECJ decide the producer remains liability under the Waste Directive even if the spill is within the CLC, that will effectively exclude the application of the international Conventions.

As we discussed previously, under Article III (4) of the CLC “no claim for compensation for pollution damage under this Convention or otherwise may be made against ... any charterer (howsoever described, including a bareboat charterer), manager or operator of the ship... unless the damage resulted from their personal act or omission, committed with the intent to cause damage...” This means liability for oil pollution damage is “channeled” to the owner of the ship, whilst claims against others, in particular against a charterer like Total International Ltd, are precluded.

In the author’s opinion, since the responsibility for costs in connection with oil pollution damage at sea is regulated by the CLC/FUND Conventions, which have been ratified by nearly all EU Member States, it makes common sense that international rules should take precedence over the application of regional legislation, such as art. 15 of the Waste Directive 75/442/EEC.⁴⁹⁸ Otherwise, if both schemes are applicable to the current case

⁴⁹⁶ See ECJ Judgment, paras 63. Such hydrocarbons spilt at sea following a shipwreck, mixed with water and sediment and drifting along the coastline of a Member State until being washed up on shore, must be regarded as substances which their holder did not intend to produce and which he “discarded”, albeit involuntarily, while they are being transported, so that they must be classified as waste under Directive 75/442. See also [2009] Env. L.R. 9, at 127.

⁴⁹⁷ We can specify the question as: Whether, in the event of the sinking of an oil tanker, the producer of the heavy fuel oil spilt at sea, the seller of the fuel or the charterer of the ship carrying the fuel could be required to bear the cost of disposing of the consequent waste, even where the substance spilt at sea was transported by a third party, namely the carrier by sea? See [2008] 2 Lloyd’s Rep. 672, at 673

⁴⁹⁸ Article 15 of the Waste Directive lays down rules governing responsibility for the cost of disposing of waste. Under the first indent, in accordance with the “polluter pays” principle it is the responsibility of the holder who has waste handled by a waste collector or by an undertaking as referred to in art.9. In addition, the second indent mentions the previous holders or the producer of the product from which the waste came. It is therefore possible that Total France is responsible for the costs as producer of the heavy fuel oil, i.e. as producer of the product from which

at the same time, it would result in a conflict between EU members' obligations under the Community law and those under international law.

However, the ECJ took a different view based on: firstly the community was not bound by the CLC/FUND Conventions;⁴⁹⁹ secondly the obligation of a member state to take all the measures necessary to achieve the result prescribed by the Waste Directive 75/442 was a binding obligation.

To begin with, The Court must determine whether in accordance with the "polluter pays" principle,⁵⁰⁰ Total France and possibly Total International Ltd must bear the cost of disposing the oil waste because they fall within the group of persons referred to in art. 15 of the Waste Directive.⁵⁰¹ From the following interpretation of the ECJ, the answer is presumably "Yes" and there is possibility for the Total Group to bear the costs.

The Court considered that the Waste Directive does not preclude the Member States from providing, pursuant to the CLC/Fund Conventions, for limitation or exemption of liability for the benefit of the shipowner and the charterer, or from establishing a fund (IOPC Fund). If, however, the cost of disposing of the waste is not or cannot be borne by that fund⁵⁰² and, in accordance with the limitations and/or exemptions of liability laid down, the national law of a member state, including the law derived from

the waste came. This can apply to Total International Ltd, on the other hand, only if it was the holder or at least the former holder of the oil waste.

⁴⁹⁹ It should be noted that both CLC and FUND conventions have been ratified by most of the EU Member States, but not by the Community. Accordingly, they are not part of community law and not binding on the Community. For details see [2009] Env. L.R. 9, at 129.

⁵⁰⁰ Under Article 8 of Directive 75/442, any "holder of waste" is obliged to have it handled by a private or public waste collector or by an undertaking which carries out the operations listed in Annex II A or B to the Directive, or to recover or dispose of it himself in accordance with the provisions of the Directive (Commission of the European Community v Ireland Case C-494/01 [2005] ERC I-3331, para 179). Directive 75/442 distinguishes the actual recovery or disposal operations, which it makes the responsibility of any "holder of waste", whether producer or possessor, from the financial burden of those operations, which, in accordance with the "polluter pays" principle, it imposes on the persons who cause the waste, whether they are holders or former holders of the waste or even producers of the product from which the waste came (Van de Walle, para 58). The application of the "polluter pays" principle within the meaning of the second sentence of the first subparagraph of article 174(2) EC and article 15 of Directive 75/442 would be frustrated if such persons involved in causing waste escaped their financial obligations as provided for by that Directive, even though the origin of the hydrocarbons which were spilt at sea, albeit unintentionally, and caused pollution of the coastal territory of a member state was clearly established.

⁵⁰¹ In the circumstance of this case, the Waste Directive provides that costs must be borne by the "previous holders" or the "producer of the product from which the waste came" within the meaning of Art. 1(b) and (c). Under Art. 15 of the Directive, the producer and/or seller and carrier may be ordered to bear the cost of disposing the oil waste following a shipping accident if they can be accused of contributing personally to causing the leak of the heavy fuel oil. See also [2008] 2 Lloyd's Rep. 672, at 682.

⁵⁰² Alternatively cannot be borne by the fund because the ceiling for compensation for that accident has been reached.

international agreements, prevents that cost from being borne by the shipowner and the charterer, even though they are to be regarded as “holders” within the meaning of article 1(c) of Directive 75/442. Such a national law will then, in order to ensure that article 15 of that Directive is correctly transposed, have to make provision for that cost to be borne by the “producer of the product from which the waste came”. In accordance with the “polluter pays” principle, however, such a producer cannot be liable to bear that cost unless he has contributed by his conduct, to the risk that the pollution caused by the shipwreck will occur.⁵⁰³

From the ECJ decision, we can draw the conclusion: First, spill oil is waste under the EU Waste Directive. Secondly, the producer of the substance from which the waste came has to pay for the clean-up. Finally, this liability remains in existence even if the spill is within the CLC, i.e. there is no implied exclusion from the Directive of spills covered by the CLC.

Why this decision is so important? Surely it opens the way for the Commune of Mesquer to proceed with its suit for cleanup costs against Total as the producer of the waste,⁵⁰⁴ and will doubtless lead to many other such suits arising from the *Erika* disaster, and other serious oil spills in Europe such as the *Prestige* in 2002. However, it should be borne in mind that under Article III (4) of the CLC, liability for oil pollution damage is “channeled” to the shipowner, whilst claims against a charterer (i.e. Total) are precluded. Most EU member states have ratified the CLC/Fund.⁵⁰⁵ This means the ECJ decision, to certain extent, effectively excluded the application of CLC/ Fund in the EU.

Frankly speaking, the author is not in favour of the ECJ decision. Firstly, the author does not think the court should answer the question relating to the responsibility for costs in connection with the leaked heavy fuel oil, particularly relating to issues of

⁵⁰³ For details see ECJ, Press Release No 39/08; [2008] 2 Lloyd’s Rep. 672, at 674

⁵⁰⁴ It endorses one of the key environmental principles—the “polluter pays principle”. Based on it, the financial liability should be imposed on the producer of the waste for the cost of disposing of waste caused by the sinking of an oil tanker.

⁵⁰⁵ By August 2009, the EU’s membership stands at 27, and with the exception of Austria, Czech Republic, Romania and Slovakia, 23 of them are parties to both 1992 CLC and 1992 Fund Conventions.
http://www.imo.org/includes/blastDataOnly.asp/data_id%3D26103/status-x.xls

liability in the main proceedings. It must be noted that art.15 of the Directive does not establish any rules on liability,⁵⁰⁶ in particular because there are no rules therein governing the selection of the party responsible for bearing the cost.⁵⁰⁷ Secondly, for avoiding a conflict with international regime, the application of Directive 75/442 should be excluded because the CLC/Fund Conventions apply to the Erick.⁵⁰⁸ Thirdly, if possible, the Waste Directive should be revised to clarify that it would not apply to an incident or activity in respect of which liability or compensation fell within the scope of the CLC/FUND Conventions or the HNS Convention/ Protocol.

5.5 Concluding remarks on EU law

In Europe, the environment does not fare well under existing national schemes for civil liability. An enhanced public liability system can address some of these problems but will not, of itself, ensure that environmental damage does not occur nor that finance will always be available to restore the environment when damage does occur.

The Environmental Liability Directive is considered to be one of the most controversial and potentially far-reaching pieces of environmental legislation negotiated by the EU. Considering the carriage of dangerous cargoes, the EU Directive will apply to damage to the marine environment in the EU states in which the international maritime liability conventions are not in force (e.g. HNS Convention 1996). In section 5.3, the author has discussed the relationship between the ELD and international regime and pointed out the scope of Art. 4(2)) should be clarified and need further interpretation.

By July 2010, it is still too early to draw any conclusion as to which extent and what

⁵⁰⁶ Article 15 designates only the group of those who may possibly be responsible for bearing the cost, from whom it is necessary to select the person who is to bear the costs, in accordance with the polluter pays principle. Unfortunately, the Waste Directive does not constitute clear and definitive rules on responsibility for costs. The polluter pays principle can and must be clarified further. This is a priority task for the legislature. For details see [2009] Env. L.R. 9, at 136.

⁵⁰⁷ This was maintained by the United Kingdom at the hearing and the author agrees with this argument.

⁵⁰⁸ Issues of liability and compensation for oil spills have already been covered by the CLC/Fund Conventions and France is party to them. In addition, there are several non-binding Community instruments cited by Total which state that oil pollution damage is subject to the CLC/Fund Conventions. For example, the First Environmental Action Programme [1973] OJ C112, p.1; the Commission proposal for Council directive on civil liability for damage caused by waste [[1989] OJ C251, p.3; the Communication from the Commission to the European Parliament and the Council on the safety of the seaborne oil trade COM(2000) 142 fin., p. 6; and answers to two Parliamentary questions given by the Commission. For details see [2009] Env. L.R. 9, at 132.

timeframe the provisions of ELD and the Directive 2005/35 can be fully transposed into Member States' national laws. However, we have to admit that some positive actions have been taken by the UK as to implementation, e.g. the Environmental Damage (Prevention and Remediation) Regulations 2009 (England, Wales). And separate regulations came into force in Scotland and Northern Ireland in June and July 2009.

Chapter 6 An Important Approach of Establishing Liability—Causation and Remoteness

Surely, liability and compensation will inevitably run into one another.¹ The extent of liability can not be separated from the amount and type of damage recoverable. In the absence of international regulations on the compensation of damages caused by dangerous cargoes,² it is suitable to apply the principles of the law of damages and to supplement them by the existing rules of maritime law.

Once the claimant has established that their loss resulted from a tortious action or a breach of contract by the defendant, the amount of damages that will be recoverable will be assessed by reference to the general principles of causation and remoteness. These principles are applicable to claims both in tort and contract and many of the concepts are exactly the same. Where there are differences, I will deal with the distinct rules separately.

There is a close interrelationship between the chain of causation and the remoteness of damages in English law. The rule of remoteness does not exist in China, so claims in respect of remoteness are not usually admitted, but Chinese maritime courts allow the award of damages for consequential losses on the basis of “proximate cause”.

6.1 Causation in English Law

Assuming the existence of a duty of care, liability will depend upon proof that the defendant’s tort or breach of contract has been a cause of the claimant’s loss.³ The approach of factual causation does not differ whether the claimant is suing for a tort or

¹ It is impossible to distinguish between the type of harm and the extent of the harm. See Ogus, *The Law of Damages*, 1973, London: Butterworths, p. 247.

² It is unlikely to see the, HNS Convention 1996/ Protocol come into force in near future, see <http://www.imo.org/home.asp>

³ As has been indicated, the question of causation arises both in statutory and common law claims (section 3.1).

breach of contract. Nevertheless, nearly all the important cases concern torts.⁴ In respect of the contractual liability, the same principles will apply, irrespective of whether the claim is made under a charterparty or a bill of lading, although the factual context may differ.

As the leading authorities, Hart and Honore, point out,⁵ in practice causation is a disputed issue only when a number of separate actions by different people contributed to the harmful outcome, or where the harm occurred from an unusual set of circumstances.

Casualties arising from the carriage of “dangerous” cargo can give rise to extremely difficult questions of causation.⁶ For example, in *Royal Greek Government v. Minister of Transport*,⁷ charterers ordered shipowners to load coal, admittedly a dangerous cargo because it gave off explosive gases. Subsequently, it proved necessary to carry out repairs to certain fresh-water tanks, during which, a flame or spark ignited the gas, damaging the ship. Was the damage attributed to the order to load the cargo (in which case the shipowner was entitled to be indemnified by the charterer) or did it result from the intervening creation of the spark or flame? The arbitrator held that it was the spark, and not the order, which caused the casualty. The Commercial Judge, after a very elaborate exposition of the legal doctrine of causation, held that since the arbitrator could not be shown to have misdirected himself, the owners’ claim indeed failed. Even a case of this kind, where there are only two rival contenders for the position of “proximate cause” can cause difficulties, but in practice one may find more than two competing causes for the loss. Thus, one may well have any combination of the following:⁸

- (1) “Fault” on the part of the shipper (e.g. failure to disclose the nature of the cargo, or to pack

⁴ This is because of factual causation is usually a disputed issue only in respect of damages for personal injury or property damage, and such damages are generally sought in tort. Causation has plagued courts and scholars more than any other topic in the law of torts. See Fleming, *op. cit.* p 218. Burrows, *Remedies for torts and breach of contract*, 3rd ed., *op. cit.* p. 45

⁵ Hart and Honore, *Causation in the Law* (1985: 2nd edition), chapters 6 and 8.

⁶ See Mustill, *Carrier’s Liability and Insurance*, in Gronfors (editor), *Damage from Goods*, (1978), Akademiforlaget-Gothenburg, p. 80.

⁷ (1949-1950) 83 Ll. L. Rep. 228

⁸ Mustill, *Carrier’s Liability and Insurance*, in Gronfors (editor), *Damage from Goods*, 1978, p. 81.

it properly);

- (2) Fault on the part of the carrier (e.g. failure to educate himself properly in the methods required to carry the cargo, or failure properly to use those methods of which he has knowledge);
- (3) “Non-faulty” acts or omissions of the carrier (e.g. ignorance of the special characteristics of the cargo in circumstances where he could not reasonably have been expected to know of them; this usually results from some breakdown of communication between the shipper and carrier);
- (4) The deliberate and wrongful act of a third party (e.g. sabotage);
- (5) The tortious act of a third party (e.g. simple negligence);
- (6) Bad luck (e.g. other events, unforeseeable and occurring without anyone’s fault at all).

No doubt the list could be extended further. Ultimately, there is no philosophical or legal analysis which provides a reliable guide for ascertaining which of the competing causes is to be regarded as dominant. However the problem may be analysed in an elaborate language, but the decision is intuitive. Furthermore the intuitions of the Judges of different legal systems, or even of different Courts within the same legal systems, will not necessarily be the same.

In this chapter, we will discuss issues particularly relevant to dangerous cargo in common law, including (a) joint causation, e.g. damage to the ship caused by a combination of collision and un-notified dangerous cargo, or partly by negligence on the part of stevedores, or by a storm at sea; (b) questions of proximate cause and foreseeability requirements in dangerous cargo cases; (c) the situation where damage would have occurred anyway but dangerous cargo made it worse; (d) the case where a ship is immobilised because of dangerous cargo on board, but there is some evidence that it might have been immobilised anyway by the decisions of the port authorities; and (e) proof of causation and recovery for loss of a chance.

6.1.1 The Test of Causation: “but-for”

Proof that a wrongful act caused injury or damage is an essential element of a cause of

action in both the contract and tort law.⁹ There must be a factual link between the negligence (or in breach of contract) and the injury (or damage). Normally it is decided by the application of the “but-for test”: but for the defendant’s breach of duty, would the claimant have suffered the loss concerned?

If factual causation is satisfied, the claimant must then show that the defendant should be held legally responsible for the injury or damage. This is referring to proximate or legal causation, whether a superseding cause or a policy consideration should relieve the defendant of liability.

The “but for” test is often entirely adequate in admiralty cases. It reflects the common-sense notion that if the harm would have been done even if the defendant had done no wrong, the defendant cannot be liable for it. But there is one case where it breaks down. This is where there are two concurrent events, each contributing to the harm, but each of which would have been sufficient on its own to cause it. For example, suppose dangerous inflammable cargoes belonging to two different shippers aboard the same vessel both ignite and cause the ship to sink. Logically under the “but-for” test both shippers will fail this test, since either shipper would have caused the damage in any event: this leads to a ridiculous result.

A solution to this awkward situation is to use the substantial cause analysis.¹⁰ The analysis applies in a slightly different case: namely, where there are two events both satisfying the “but-for” test, but there is a need to determine which prevails. For example, in *Royal Greek Government v. Minister of Transport*,¹¹ explosions were due to variety of causes (which included dangerous cargo), but the direct and proximate cause was the act which caused the spark and the explosive atmosphere. The arbitrator held that it was the spark, not the order to load the cargo, which caused the casualty.

⁹ Schoenbaum, *Admiralty and Maritime Law*, (2001) 3rd ed., ST. Paul, Minn., p. 114.

¹⁰ It instructs to find the causation if the defendant’s act or omission played a substantial part in bringing about the injury. A pure “but for” test is insufficient to establish causation. See an American case, *American River Transportation Co. v. Kavo Kaliakra SS*, 148 F.3d 446, 450 (5th Cir. 1998).

¹¹ (1949-1950) 83 Ll. L. Rep. 228

6.1.2 Proximate Cause

“Proximate cause” places limits on liability for damage for which the defendant’s negligence has factually been a cause.¹² In other words the “but-for” was not satisfied, but we allow liability, hence the “but-for” is satisfied, but nevertheless we deny liability. For example, if it is difficult to decide the damages caused by the negligence of the carrier or for undisclosed dangerous cargo, by a causation analysis, it may pinpoint which of the two competing breaches was the proximate cause of the loss. The defendant’s negligence has been established as a causal factor of the damage does not necessarily suffice for legal liability,¹³ unless his default is accounted as a “proximate” cause of the damage.

Considering the carriage of dangerous cargo, there are often competing causes of a loss in a case where “but-for” is made out. In particular, the choice is most often between the dangerous cargo (whether arising from nondisclosure, improperly packing or warning, or whatever) and the carrier’s duties to care for the cargo. Here it needs to be clarified which is the substantial factor of the incident. In practice, if a carrier is in breach of the “care of cargo” provisions HR Art III.2,¹⁴ which are not said to have overriding status, the court is likely to fall back on the argument that the carrier must prove the loss was caused by the nature of dangerous cargo.¹⁵ Where damages are due to two competing causes, i.e. lack of due diligence on care for the cargo and misstated dangerous cargo, leads to the question of: which plays a substantial part in bringing in about the damage? By the substantial cause analysis, we will find the answer.

In *Islamic Investment Co Isa v. Transorient Shipping Ltd (The Nour)*,¹⁶ the vessel, MV Nour, was owned by Islamic, time-chartered to Transorient and voyage sub-contracted to Toepfer. The vessel carried fishmeal from Peru to Taiwan. A direct voyage would

¹² All systems of compensation, however ambitious, have their limits in respect of the class of beneficiaries and the type of relevant losses, in view of the practical need to draw a line somewhere so that the cost will not crush those who have to foot the bill. A practical task of drawing the line is by limiting the defendant’s default must be accounted as a “proximate” cause of the harm and the consequence must not be “remote”.

¹³ John G Fleming, *The Law of Torts*, 9th ed., p. 232.

¹⁴ See the discussion about Art. III 2 in section 4.2.1.5

¹⁵ For a more complex example, where two separate items of dangerous cargo were loaded at different places, one without consent and one with consent of carrier, and caused different damages, see *The Kapitan Sakharov*, above.

¹⁶ [1999] 1 Lloyd’s Rep. 1; 1998 WL 1042536 (CA (Civ Div)).

have taken two months but the vessel deviated to load and discharge further cargo. The fishmeal overheated causing damage and delay so that the actual voyage took four months, including the delay caused by overheating.¹⁷ The shipowners claimed for the hire of the vessel against the time charterer, who joined the voyage charterer as third party.

It was held by Evans L.J., the cause of the self heating of the cargo was inadequate treatment of the Peruvian fishmeal with anti-oxidant.¹⁸ The cause of the overheating was neither excessive ventilation nor the vessel's deviation, but insufficient antioxidants in the cargo.¹⁹ The sub-charterer was responsible for the overheating and consequent damage and delay caused by the non-contractual cargo.²⁰ The Court of Appeal also considered the question whether the sub-charterer was liable for delay in release of the vessel from arrest after discharge of the cargo. It was held, contrary to the judge's decision,²¹ the sub-charterer did prove that there was unreasonable delay by the shipowner,²² so the shipowner was not entitled to recover damages for detention or delay in respect of that period.²³

6.1.3 Joint Causation

When damages are brought in by two causes but are not easy to be separated, this leads to joint causation. Suppose, a ship was registered under the Kampuchean flag, carrying

¹⁷ It took one month to deal with the overheating caused by the fishmeal.

¹⁸ The evidence of owners' and Transorient's experts was accepted that the cause of its self heating was inadequate treatment of the Peruvian fishmeal with anti-oxidant. It had not been effectively treated with anti-oxidant and, specifically, at the time of shipment, significant quantities of fishmeal did not have an anti-oxidant concentration of 100 ppm, but something less than this. The fishmeal did not comply with the IMO Regulations, IMDG Code and the relevant part of the regulations dealing with anti-oxidant treated fishmeal (Class 9: miscellaneous dangerous substances)

¹⁹ [1999] 1 Lloyd's Rep. 1, at 14.

²⁰ Transorient have shown that the cargo shipped by Toepfer did not conform to the contractual description, so Toepfer were in breach of the voyage charter and this breach has resulted in Transorient's losses.

²¹ On July 31, 1996, the judgment of Mr. Justice Tuckey held that the breach of the charterers in shipping Peruvian fishmeal which did not conform with the charterers' obligation caused the overheating of the cargo and consequent damages and delay. He also held that Transorient were liable to Toepfer for breach of the voyage charter by reason of wrongful deviation from the contractual route which extended the voyage by about a month, but that three months was no longer than the voyage might have taken if Transorient had made permitted use of the liberty to deviate. (Toepfer appealed arguing that a period after discharge when the vessel remained under arrest was caused by the shipowners' unreasonable delay for which Toepfer was no liable.)

²² [1999] 1 Lloyd's Rep. 1, at 19, The findings of fact to the effect that the vessel was detained after Jan. 2, not by the cargo breaches but by the shipowners' failure to act reasonably to obtain her release from arrest.

²³ [1999] 1 Lloyd's Rep. 1, at 19, The factual situation as we have found it was that from Jan. 2 she was no longer detained in consequence of having loaded non-contractual cargo, but by the owners' representatives' failure to act reasonably to obtain her release from arrest. Shipowner and time charterer had been responsible for significant delay in obtaining the release of the vessel from arrest and the liability of sub-charterer for damages due to detention or delay would determine at midnight on January 2, 1993.

undisclosed dangerous cargo on board. When the ship visited the Port of Yokohama to discharge 15 containers of shoes and clothes, during the inspection, the Japanese port authority found 3 containers of “Potassium Monopersulfate”²⁴ were under the name of “flour” in the documentation, so the ship was immobilised. Later on, evidence showed that the ship’s crews did not have proper certificates and the defective propellers rendered the vessel unseaworthy, the port authority immobilised the ship under the flag of convenience was not fit to leave the port.²⁵ We can see that there were two joint causes: (1) the cargo wrongly labelled as flour and (2) the unseaworthiness, which resulted in the ship being detained.

In theory, there are two types of joint causation. The first is neither event of itself is sufficient to cause the claimant’s loss, but the combination of different causes are sufficient. The second is when two causes are combined, each will be sufficient to cause the claimant’s loss.²⁶ The latter is less common in dangerous cargo incidents. In practice there is little difference and normally the results are the same. The combination of different causes aggravated the damage and each party would be liable accordingly.

6.1.3.1 Neither Cause Itself is Sufficient to Cause the Damage

Joint causation exists in the situation, for example, where the damage to the ship is caused by a combination of un-notified dangerous cargoes and the negligence on the part of stevedores. If the only cause of the damage was that the carrier was never informed of the danger from the cargo, the shipper would be liable to the carrier for damages caused by the dangerous cargo. However, if the accident took place during embarkation or during the discharge of the goods and the fault of the stevedore triggered the damage, e.g. dropping a container of dangerous cargo on the deck and causing an explosion, the shipper and the stevedore should be jointly and severally liable for all damage. The result will be the same for the case of the packer of the containers, if the

²⁴ UN Number: UN3260, Hazard Class:8, Labels:8 (corrosive), packing group: II.

²⁵ The SOLAS Convention gives the right to port authorities to retain the ship in the harbor till the danger is set aside by appropriate measures, if by inspection the port authorities find the situation is dangerous.

²⁶ Tettenborn, *The Law of Damages*, op. cit., p. 157.

negligence in packing aggravated the fault of the shipper. The packer and shipper are jointly and severally liable for damages caused by the dangerous cargo.

In the event of collision, if the damage arises from circumstances for which the carrying ship is liable, but aggravated by the dangerous cargo, i.e. the carrier's negligence and shipper's undisclosed dangerous cargo are joint causation of the damage, if the damage is not reasonably separable based on the degree of fault of each party, the shipper and carrier should be jointly and severally liable for all damage. Otherwise the carrier pays the damage first and then has a recourse action against the shipper.

Consider a situation where ship A is at fault because she is carrying dangerous cargo on board with inadequate precautions. Later, ship A collides with ship B (which is free of fault); the dangerous cargo catches fire which spreads to ship B. No doubt the carrier of dangerous cargo must pay for the fire damage within the framework of his statutory limitation liability.²⁷ However if the shipper of the dangerous cargo is liable to the carrier for damage caused by his cargo, e.g. the carrier was never informed of the danger and did not know of it, the carrier should be able to claim for an indemnity from the shipper.²⁸ This means while ship A is relieved of part of her burden, the limitation prevents the owner of ship B from fully recovering his loss. In other words, the aggravation of damage caused by the dangerous cargo falls upon the non-carrying vessel B more than upon the carrying vessel A. How can this result be avoided?²⁹ In the author's opinion, one way of avoiding this is to have ship B sue the shipper directly in tort of negligence, then the shipper cannot limit his liability.

With regard to the issue of joint causation, this case may be more interesting if the

²⁷ In most countries, collision damage is determined according to uniform, convention-based rules, under which each owner is liable to the extent that he has been at fault for the damage his ship causes the other ship and her cargo (See 1910 Brussels Convention, para.1). The limitation of liability rules are then applied, either to the balance that most deeply indebted of parties must pay to the other ("single liability"), or to each of the liability amounts calculated to be due from each of the parties separately ("cross liability", as in English law).

²⁸ Tiberghien, *Legal Survey*, in Grønfor (editor), *Damage from Goods*, op. cit., p.23. This article mainly covers the relevant legal issues in Norway.

²⁹ When two ships are involved in a collision and the HNS Convention applies, the vessel owners are held jointly and severally liable for damages resulting from the release of the hazardous and such damage is not reasonably separable (art. 8 para.1). Nothing in this article shall prejudice any right of recourse of an owner against any other (art.8 para.3). But this rule is mainly covering liability to third parties.

carrier of ship A sues for indemnity, the shipper argues that the cause of the loss is really the carrier's fault for not taking adequate precautions. Also the shipper may make the same plea if sued directly in tort by the owners of ship B. In the author's opinion, the fact that the combination of both shipper's undisclosed dangerous cargo and carrier's negligence aggravated the damage, each party should be liable accordingly. For ship B's damage, they should be jointly liable and the shipper's plea can not be used for against ship B's claims in tort.

There is a slightly different issue with regards to the initial fire. There was no issue of joint causation. With regards to the later fire, it was a case of joint causation but the original defendant was not liable. Why not? In the situation of the later fire, see discussions in the following paragraph.

It often happens in practice that damages caused by the separate actions of different people, for each party that is partly liable for the damage, each party must pay part of the damage according to his own fault.³⁰ In *The Kapitan Sakharov*,³¹ undisclosed dangerous goods were shipped in a container and ignited during the voyage. The resultant fire spread to inflammable cargo that had been wrongfully stowed under deck, in a breach of Article III rule 1.³² The shipper was held liable for the part of the damage caused solely by the initial fire but not for the consequent damage that resulted once the fire spread to the inflammable cargo stowed below deck. The Court of Appeal confirmed that for such a defence to operate the shipper need not prove that the carrier's negligence was the dominant cause. Furthermore, such negligence need not be a concurrent cause of the damage, provided it is a co-operating cause. It is enough if it can shown that it is an effective cause, as would be the case where a claim is made against the carrier for breach of its duty under Article III r.1.³³

³⁰ See Fleming, *The Law of Torts*, 9th ed., p. 230. In respect of "apportionable damage", where each of several defendants caused only part of the total damage and it is practically feasible to split up the aggregate of loss and attribute identifiable parts to each of them, liability will ordinarily be confined to that portion for which each is separately responsible.

³¹ [2000] 2 Lloyd's Rep. 255.

³² The shipment of dangerous goods also rendered the ship unseaworthy under Article III R.1. However, unsurprisingly, the Court of Appeal held that the shipowner was able to establish a due diligence defence in respect of this breach.

³³ Baughen & Campbell, *Apportionment of Risk and Carriage of Dangerous Cargo*, (2001) 1 International Maritime Law, p.6.

6.1.3.2 One Cause Regarded as Exclusive

In some cases two simultaneous causes contributed to the claimant's loss, but one cause may be regarded as overwhelmingly more significant. If so the loss may be attributed to that cause exclusively. This can be particularly important where one of the contributing factors is the fault of the claimant himself.³⁴

In an American case of *United States v. M/V Santa Clara*,³⁵ the shipper offered for shipment a cargo of magnesium phosphide, a hazardous substance regulated under the HMR.³⁶ The freight forwarder hired by the shipper properly labelled the container and paid the carrier the hazardous material surcharge, but failed to note the cargo's hazardous nature on the bill of lading.³⁷ During heavy weather, approximately 800 pounds of magnesium phosphide spilled in the hold of the vessel. The stevedores unloaded the drums in Baltimore without comment (suggesting negligence on their part), and it was not until the vessel reached Charleston on the next leg of its voyage that the crew learned of the spillage. By then, the magnesium phosphide had reacted with moisture in the hold to create dangerous phosphine gas. Ultimately, the cleanup cost, along with personal injury, cargo claims, and government fines, totalled approximately \$2.2 million.³⁸

The carrier's bill of lading included a strict liability provision relating to violations of the HMR, the basis on which the carrier sought complete indemnification from the shipper. The shipper, however, argued it could not be held liable as a matter of law for its violation of the HMR unless its failure to warn was a proximate cause of claimed damage.³⁹ While the Court found that the shipper breached its "warranty of

³⁴ Tettenborn, *The Law of Damages*, op. cit., p. 160.

³⁵ *United States v. M/V SANTA CLARA I*, 887 F. Supp 825, 829, 1996 AMC 910 (D.S.C. 1995).

³⁶ Hazardous Materials Regulations, 49 C.F.R. §§171-180 (1994). The HMR specify requirements for the safe transport of hazardous materials in commerce by rail car, aircraft, vessel, and motor vehicle.

³⁷ *Ibid.*

³⁸ *Ibid.*, 830.

³⁹ In the United States, a shipper that fails to meet its duties under the Hazardous Materials Regulations (HMR) 49 C.F.R. §§171-180 (1994), the COGSA 1936, and general maritime law, with regard to a hazardous material cargo, will not be held liable for the damage associated with that cargo unless its breach of duty proximately caused some or all of the damage. See also Edgcomb, *The Trojan Horse Sets Sail: Carrier Defences against HAZMAT Cargoes*, 13 University of San Francisco Maritime Law Journal (U.S.F. Mar. L.J.), 2000-01, p. 32

compliance” in the bill of lading, the court rejected the carrier’s claim that the shipper should be held strictly liable. Instead, the Court found the test to be “whether the damages were in fact foreseeable at the time of the contract considering the remoteness in time and the number of intervening events”.⁴⁰ Specifically, the court held that⁴¹:

It is foreseeable that the failure to label a cargo as dangerous could result in some type of monetary damage to the ship as a result of that failure; however, this court finds that under the circumstances, the number of intervening events is too many and precludes a finding that [shippers] are strictly liable for all damages associated with the magnesium phosphide.

Although the Court denied the carrier’s motion for summary judgment, it did not absolve the shipper from liability. Rather, the court concluded only that the shipper was entitled to present evidence as to whether any intervening negligence by the carrier or stevedores caused or contributed to the release.⁴² If so, the shipper could not be held strictly liable.⁴³

This holding places a continuing duty on carriers to exercise at least ordinary care in properly loading, stowing and carrying cargo, even if it is undisclosed hazardous material.⁴⁴ If damage results from hazardous material cargo due to the negligence of the carrier that is unrelated to the shipper’s failure to warn, the carrier cannot expect to be indemnified by the shipper and will likely be held liable himself. The court should, however, broadly construe a shipper’s duty to warn of the consequences of the hazardous cargo, specifically when the carrier is unaware of the cargo’s hazardous nature. Only if the shipper’s failure to clearly warn the carrier is not related to the damages in any event, the shipper can escape liability.⁴⁵

In *The Fiona*,⁴⁶ the shipper had shipped a cargo that was dangerous because of its tendency to give off light hydrocarbon gases, and was one of the causes of a subsequent

⁴⁰ Ibid., at 834.

⁴¹ Ibid.

⁴² Ibid., at 835.

⁴³ Ibid.

⁴⁴ Ibid., at 836.

⁴⁵ Ibid.

⁴⁶ [1993] 1 Lloyd’s Rep. 257, affirmed by the Court of Appeal at [1994] 2 Lloyd’s Rep. 506.

explosion on board. The other cause was due to the failure of the owner to remove condensate residues from the vessel and in particular failed to carry out a proper line and duct wash before loading commenced. This constituted a breach of their duty under Article III, r.1 to exercise due diligence to make the ship seaworthy. Since the owner's negligence in failing to remove the condensate residues not only had materially contributed to the accident, but more importantly was held to have been the dominant cause of the explosion. Thus the shipowner could not claim his indemnity against the shipper under Article IV r6.⁴⁷

In *Derby Resource A.G. v. Blue Corinth Marine Co. Ltd (The Athenian Harmony) (No.1)*,⁴⁸ the plaintiff cargo receivers sued the shipowner in tort for damage to a cargo of kerosene by contamination.⁴⁹ The shipowners accepted that they were in breach of their duty of care in failing to provide a ship whose lines and tanks were fit to receive the cargo. However they claimed that the plaintiff had failed to show that the loss was caused by that breach of duty, as opposed to the negligence of the surveyors who had failed to stop loading pending the results of a sample analysis.⁵⁰ In fact, the surveyors were misled in their sampling as a result of being given false information by the master about the previous cargoes which had been shipped.⁵¹ It was held that the surveyors could not be blamed. Also loading was not stopped and was not causative of any loss because the composite sample was within specification. There was an unbroken chain of causation from the breach of shipowner's duty of care to the entire damage to the cargo. The cargo damage was therefore caused solely by the shipowner and not by the surveyors or shipper.⁵²

6.1.4 Intervening Cause

The question of causation may involve the consideration of the effect of intervening

⁴⁷ There is under English Law an approach whereby a breach of an overriding obligation is not made subject to Article IV of Hague/ Hague-Visby Rules. The right to an indemnity in Art. IV r.6 considered to be subject to the performance of the carrier's overriding obligation set out in Art.III r.1.

⁴⁸ [1998] 2 Lloyd's Rep. 410.

⁴⁹ It is assumed that the receivers never become, or chose not to become, holders of any bill.

⁵⁰ When the tanks were loaded to a depth of one foot samples were taken for quality analysis by the surveyors but loading did not stop.

⁵¹ The vessel's master told the surveyors that the vessel had carried two cargoes of gas oil since fuel oil was last carried, but that the tanks had been washed according to good practice. This was untrue.

⁵² Although this case is not a dangerous cargo case, it is worthy to be discussed in the joint causation analysis.

acts,⁵³ whether by a claimant or by a third party, occurring between the defendant's breach of duty and the claimant's damage.⁵⁴ The claimant may not recover damages from the defendant where an intervening cause is far more responsible for the damage than is the defendant's breach of duty.⁵⁵

6.1.4.1 Intervening Acts by Claimant

Generally, the *novus actus*⁵⁶ is alleged to break the chain of causation in some subsequent negligence of the claimant vessel in failing to take proper care to prevent, or limit damage.⁵⁷ Some intervening causes are likely to arise in dangerous cargo cases, for instance where the deliberate or reckless act of the claimant (captain's wrong decision) may amount to a new cause relieving the defendant from liability.⁵⁸

Suppose, for example, that on a voyage from Hong Kong to India, a ship is loaded with dangerous chemicals misdescribed by the shipper as cooking materials. In the Malacca Channel, a seafarer notices the relevant container leaking chemicals, but the captain, despite realising that something is wrong, decides to keep it on board until the vessel reached its destination, rather than offloading it at the next port of call. In addition, his owners keep quiet about the incident and do not notify their underwriters or the other cargo owners. The cargo subsequently explodes, causing severe damage. The shipowner's claim to be indemnified by the shipper will, it is suggested, fail: the crass risks taken by the former and his failure to take emergency measures to deal with the leaking chemicals or discharge them in a proper place to prevent further damage constitutes a *novus actus interveniens*.⁵⁹

⁵³ An intervening force is one that actively operates in producing the harm after the actor's negligence act or omission has been committed. See *Restatement of Torts* 2d §441, see also Fleming, *op. cit.*, p246.

⁵⁴ Lunney & Oliphant, *Tort Law—Text and Materials*, 2nd ed., Oxford University Press, p. 188

⁵⁵ Burrows, Andrew, *Remedies for torts and breach of contract*, (2004: 3rd ed.), Oxford University Press, p. 97.

⁵⁶ See foot note 59

⁵⁷ See details at *Marsden on Collisions at Sea*, 13th ed., 2003, p. 512. For examples see *The Metagama* 1928 S.C. (H.L) 22; *The Spontaneity* [1962] 1 Lloyd's Rep. 460; *The Hendrik* [1964] 1 Lloyd's Rep. 371; *The Fritz Thyssen* [1967] 2 Lloyd's Rep. 199; *The Djerada* [1976] 1 Lloyd's Rep. 50; *The Zaglebie Dobrowskie* (No. 2) [1978] 1 Lloyd's Rep. 573.

⁵⁸ Tettenborn, Andrew, *The Law of Damages*, p. 166.

⁵⁹ Latin: a new intervening act (or cause). An act or event that breaks the causal connection between a wrong or crime committed by the defendant and the subsequent happenings and therefore relieves the defendant from responsibility for these happenings.

It should be noted, however, the mere fact that the claimant has acted negligently is not, without more evidence, enough to break the chain of causation.⁶⁰ According to Lord Wright in the well-known case of *The Oropesa*,⁶¹ “to break the chain of causation it must be shown that there is something which is extraneous, something unwarrantable, a new cause which disturbs the sequence of events, something which can be described as either unreasonable or extraneous or extrinsic.” We can see that if it is an entirely unreasonable behaviour e.g. shipowner’s failure to take reasonable steps after noticing the leaking chemicals, there is no doubt it can be regarded as a break in the chain of causation. In short, to satisfy the definition of *novus actus interveniens*, the test of a claimant’s behaviour includes two aspects:⁶² (1) those on board the claimant vessel must have acted voluntarily and with knowledge of the likely consequence; (2) their act must not have been such as should have been foreseen by the defendant as a likely consequence of his own fault.⁶³

6.1.4.2 Intervening Negligence of Third Parties

Sometimes the deliberate or negligent act of a third party may act as a *novus actus interveniens* in the same way as that of the claimant himself,⁶⁴ i.e. the defendant’s negligence forms part of a sequence of events leading to harm of the claimant, but is not the essential cause of it. Where the act of another person, without which the damage would not have occurred, intervenes between the defendant’s negligence and the damage, the court has to decide whether the defendant remains responsible or whether it can be regarded as breaking the causal connection between the act of negligence and the damage.⁶⁵ Clearly, if the intervention was both reasonable and foreseeable the defendant will be liable. If it was both unreasonable and unforeseeable it will constitute a *novus actus interveniens* and it can be regarded as breaking the causal connection between the negligence and the damage.⁶⁶ Thus if the negligence of the defendant

⁶⁰ Although it may amount to contributory negligence leading to apportionment under s. 187 of the Merchant Shipping Act 1995. For example, *The Kazimah* [1967] 2 Lloyd’s Rep. 163 and *The Calliope* [1970] p. 172.

⁶¹ [1943] P 32, at 39.

⁶² *Marsden on Collisions at Sea*, 13th ed., 2003, p. 512.

⁶³ The intervening force must not be a normal result of the defendant’s negligence.

⁶⁴ See *Marsden on Collisions at Sea*, 13th ed., 2003, p. 516; see also Tettenborn, *The Law of Damages*, p. 164.

⁶⁵ Jones, *Textbook on Torts*, 8th ed. (2002), Oxford University Press, p255.

⁶⁶ Michael A. Jones, *Textbook on Torts*, 8th ed. (2002), Oxford University Press, p256.

merely forms part of the historical background for an entirely independent tortious act on the part of a third party, the defendant will escape liability.⁶⁷

Suppose some dangerous cargo is loaded onto a ship, but its packaging (provided by the shipper) is substandard. During the voyage, a group of pirates attacked and rob the ship, and start a fire on the deck before running away. The fire causes in an explosion in the hold of the dangerous cargo which sinks the ship. In this case, it must be arguable that the subsequent pirates' attack broke the causal connection between the insufficiency of packing by the shipper and the total loss. Thus, the carrier's claim to be indemnified by the shipper will (it is submitted) fail: the third parties' act amounted to recklessness sufficient to count as an overriding cause.⁶⁸

6.1.5 The Proof of Causation

With regard to the carriage of dangerous cargo, the claimant⁶⁹ (e.g. shipowner, injured third party or other cargo owners on the same ship) bears the burden of proving that a given loss was the result of the defendant's wrongful acts. However, this point must be qualified where a single loss results from two or more concurrent causes. For example, if the loss and damage is due to the combination of dangerous cargo (not properly notified) and the negligent discharging of cargo by the carrier (e.g. at an intermediary port in order to repair the vessel), the claimant shipper must prove that the defendant carrier's negligence on discharging of cargo contributed to his damage, even if it was not the only cause.⁷⁰

In a slightly different issue, loss has been occasioned by two possible causes of which one involves the defendant's wrong doing, but it is not clear from the evidence which is active. In the author's opinion, it is up to the claimant to prove that that wrong doing is the cause of his damage, rather than the other cause. Without such proof, his claim will fail.

⁶⁷ *Knightley v. Johns* 1982 1 W.L.R. 349.

⁶⁸ See the general discussion about the third party intervening act in Tettenborn, op. cit., p.165.

⁶⁹ The general proposition was finally established in the industrial injury case of *Bonnington Castings Ltd v. Wardlaw* [1956] AC 613, Lord Reid regarding it as "obvious in principle that a pursuer or plaintiff must prove not only negligence or breach of duty but also that such fault caused, or materially contributed to, his injury", at p. 620.

⁷⁰ See the general discussion in Tettenborn, *The Law of Damages*, p. 170.

Suppose drums of chemicals which were badly stowed (a carrier's failure to comply with Art. III r.2 of HR/HVR), break adrift in a storm and were damaged (exception of peril of the sea under Art. IV r. 2(c)). The claimant shipper must prove his loss could have been avoided by the carrier exercising reasonable care in stowing the cargo. There is no peril of the sea, given the fact that the bad weather, though severe, is not unforeseeable. So the two possible causes were not of equal effectiveness and the inadequate stowage is the active cause.

It should be noted that the standard for proof of causation adds another variable, which can be exploited to overcome at least some of the uncertainties. To start with, the law does not demand proof of causation, but only proof of probable causation (more probably than not).⁷¹ For example, if the claimant's loss was consequential damage caused by the defendant shipper's undisclosed dangerous cargo and the causation had been shown on the balance of probabilities, the shipper should be liable for the carrier's loss of chance of avoiding the damage. However, the claimant will not succeed simply on proof that the defendant's act increases the risk of what happened without showing an actual causal link. So the connection between the undisclosed dangerous cargo and the damage to his vessel must be positively shown by the carrier.

6.2 Causation in Chinese Law

6.2.1 Introduction

In Chinese law, the issue of causation is the principal factor in determining liability in both tort and contract law. Causation proves a direct link between the defendant's fault (or breach of contract) and the claimant's loss and damage.⁷² The general rule is that the claimant bears the burden of proving his claim (fault, causation, damage), unless the law imposes a reverse burden of proof, e.g. under Article 4 of the Supreme Court's

⁷¹ Fleming, *The Law of Torts*, 9th ed., p. 232. See also *Gregg v Scott*, [2005] 2 A.C. 176, [2005] Lloyd's Rep. Med. 130, in the appeal of this case (House of Lords), held even if the qualification of future losses was conventionally decided on the evaluation of risks and chances, the plaintiff had to show that the loss was consequential on injury caused by the defendant's negligence. Causation had to be shown on the balance of probabilities.

⁷² Song Chunfeng, *Study on the tort liability in oil pollution incidents*, in Guo Yu (editor), (2006) *Maritime Law Review* (in Chinese), Vol. 12, 47, Peking University Press, at, 57.

If a dangerous cargo liability claim based on strict tort liability, the claimant does not need to prove the defendant's fault. However, it is required to prove that: (1) damage has occurred; and (2) causation between the defect and the damage. The defendant has the burden of proving any statutory defence available to it. For a claim for fault-based tort liability, the claimant bears the burden of proving: (1) the fault of the tortfeasor; (2) damage or injury; (3) causation between the tortious act and the damage. For a claim based on the breach of contractual obligations, the claimant bears the burden of proving: (1) the contract (B/L or Charterparty) between the claimant and the defendant; (2) the plaintiff has to prove a causal connection between the breach of contract and the damage; (3) the defendant's inadequate packing and labelling of dangerous cargo; or his improper notice of dangerous cargo; or carrying dangerous cargo in lack of care etc was in breach of contract.

6.2.2 Chinese Cases

Chinese law does not provide specific tests for proof of causation. From a few decided cases relating to personal injury claims,⁷⁴ it appears the courts require the claimant to show the defendant's conduct was both the proximate cause and the cause in fact, of the claimant's injuries. It is not clear whether the courts applied the "but-for" test in these

⁷³ It was promulgated by the Supreme Court Adjudgment Committee's No. 1201 meeting on 6 December 2001 and came into force on 1 April 2002. It has 83 Articles in total. Under Article 4, there are eight types of specific cases, in which the claimant was exempted from proving fault or causation. For example, Article 4 (2) provides, with regard to ultra-hazardous activity, the defendant has the burden of proving damages caused by the claimant's intentional act ultra-hazardous activity. Article 4(3) provides, with regard to environmental liability, the defendant has the burden of proving any statutory defence available for him, or there is no causation between his wrongful act and damages.

⁷⁴ For example, in *Gao Kequan v. Sheyang Ocean Fishery Company Ltd.*, the claimant was injured on board the vessel of the defendant but recovered soon without going to the hospital. After 40 days, he felt the left leg was painful and went to see a doctor. It was found his left artery near abdomen was blocked. He spent RMB 1,2000 yuan to do the operation and claimed for compensation from the defendant. It was held by Maritime Court of Shanghai-(2001), since the claimant could not prove the defendant's negligence was the proximate cause of his illness, the claim was failed. The claimant appealed. The Provincial Supreme Court of Shanghai dismissed the appeal. This case was reported in Zheng Zhaofang (editor), (2006) *Casebook on Maritime Tort Liability(in Chinese)*, Shanghai People's Press, p. 95. 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 (It provides the employee's burden of proof of causation). In *Yuan Caiyun etc v. Jiangsu Jingjiang Fishery Company Ltd*, the defendant was falling into water and died soon after. It was claimed the collision between the claimant's vessel and the defendant's vessel was caused by the negligence of dropping anchor by the defendant, and it resulted the death of the claimant. Held by Maritime Court of Shanghai, there was no 'cause in fact' in this case. The claimant's evidence was insufficient to prove the collision was caused by the defendant's negligence or due to heavy weather (*force majeure*). Under Article 167 of Maritime Code, 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 was therefore failed. This case was reported in Zheng Zhaofang (editor), op. cit., p. 131.

cases to determine cause in fact. With respect to proximate cause, it appears the courts applied the foreseeability test (e.g. conduct is not a proximate cause of an injury or damage unless the injury or damage was foreseeable at the time). Based on this, the courts may not hold the defendant liable for exposing the claimant to increased risk if they consider the injury was not foreseeable at the time of exposure.

In Shan Dong Wei Fang International Shipping Company Ltd. and Prosperity Ocean International Shipping Company Ltd. v. Fu Yun Iron Pyrites Company Ltd. (The Xing Yun Hai),⁷⁵ the claimants (shipowner and demise charterer) agreed to carry 5,783 tonnes of zinc concentrate from China to Korea on 22 August 1997. The defendant shipper did not produce a certificate of moisture content, but presented a rough estimate of the zinc concentrate's moisture to the claimant. After departing from the load port of Huang Pu, the cargo shifted during heavy weather and the vessel sank with its cargo near Shenzhen. Consequently, bunker oil and lubricating oil escaped and contaminated sea water. The claimants paid for clean-up operation and other relevant fees, then claimed for damages and losses from the defendant on the basis that shipper had not properly disclosed the dangerous cargo before shipment. The defendant argued the claimants could not prove the direct link between the dangerous cargo and the sinking of the vessel and that the real cause of the casualty was the heavy weather.

It was held by the Maritime Court of Guangzhou that the claims failed since there was insufficient evidence to prove the causation between the damages and the defendant's fault. The claimants appealed but the Provincial Supreme Court of Guangdong dismissed the appeal.

It might be thought odd that only one case should be given, but China is not a case-law country and binding value is not given to judicial decisions. The courts have discretion to determine what test should be applied for proof of causation. They are not required to follow another courts' test unless they wish to.

⁷⁵ The first instance before Guangzhou Maritime Court, (1999) Guangzhou-maritime-No.115; on appeal before Guangdong People's High Court, (2001) Commercial Court- No. 92.

6.3 Remoteness of Damage in English Law

The question of legal causation may entail a decision as to what is the appropriate limit to place on the defendant's liability as a matter of policy. The defendant may have factually caused the damage, but the decision may be that the defendant should not have to pay for the full extent of the damage because it is considered too remote.⁷⁶

A principal restriction on compensatory damages is that the loss must not be too remote from the breach of duty.⁷⁷ The tests formulated for deciding this have centred on whether the loss was (in contract) reasonably contemplated or (in tort) reasonably foreseeable by the defendant.⁷⁸

6.3.1 Introduction

The rule of remoteness can be said to be the law's attempt to limit compensatory damages.⁷⁹ A defendant's negligence creates certain risks. If the claimant's damage falls within the risk that is created, it might be seen as appropriate to make the defendant liable for that damage. Conversely, if the damage suffered bears no relation to the risk created or is simply unforeseeable, why should the defendant be liable?⁸⁰ In many cases, there is no substantial difference in the rules of remoteness in contract and tort.⁸¹ The

⁷⁶ Lunney & Oliphant, *Tort Law—Text and Materials*, 2nd ed., Oxford University Press, p. 188.

⁷⁷ Remoteness of damage is one of the principles to limit compensatory damages. There can be said to be five principles limiting compensatory damages (ie which reduce the damages that full adherence to the compensatory aims would dictate) for both torts and breach of contract, and the role played by each can be briefly described as: (1) intervening cause—a claimant cannot succeed if an intervening cause is so much more responsible for the loss than the defendant's breach of duty that it breaks the chain of causation between the breach of duty and the loss; (2) remoteness—a claimant cannot succeed if the loss was too remote from the breach of duty. The tests for remoteness centre on reasonable foreseeability or contemplation of the loss; (3) The SAAMCO principle—in the case of *South Australia Asset Management Corp v. York Montague Ltd*, held that the lender's loss consequent on a fall in the property market was not recoverable from the valuer. This exclusion was justified on the SAAMCO principle that the loss was outside the scope of the duty; (4) duty of mitigate—a claimant cannot succeed if subsequent to the tort or breach of contract he or she could reasonably have avoided the loss; (5) contributory negligence—damages may be reduced where the claimant's negligence has contributed to. i.e. been a part cause of, his loss. But this principle is not applicable to some torts and is inapplicable to breach of contract (other than of a contract duty of care where there is concurrent liability in tort).

⁷⁸ See details at Burrows, *Torts and Breach of Contract*, 3rd ed., 2004, pp. 73-143

⁷⁹ *Ibid.*

⁸⁰ Recent years have seen the development of a new concept—the scope of the duty of care—to limit the defendant's liability. See Lunney & Oliphant, *Tort Law—Text and Materials*, 3rd ed. (2003), p. 236.

⁸¹ The law must be such that in a factual situation where all have the same actual or imputed knowledge. The amount of damages recoverable does not depend on whether, as a matter of legal classification, the plaintiff's cause of action is breach of contract or tort. It may be that the necessary reconciliation is to be found, notwithstanding the strictness of Lord Reid in *Heron II*, in holding that the difference between "reasonable foreseeability" (the test in tort) and "reasonably contemplated" (the test in contract) is semantic not substantial. Certainly Asquith LJ in *Victoria Laundry v Newman Industries*, Lord Pearce in *Heron II* and Scarman LJ in *Parson v Uttley Ingham & Co Ltd* thought so.

formal rules are distinct,⁸² and have been traditionally regarded as having significant differences. This section deals with contract and tort separately.

Generally, the damage arising from carriage of dangerous cargo can be divided into three categories.

(1) Damage caused to the ship or to other merchandise;

The dangerous cargo may cause damage to other merchandise on board as well as to the ship itself. According to the general law of torts, the owners of the other goods may raise contractual claims against the carrier, who is bound to deliver the cargo in the sense in which he received them.⁸³ They might also raise a claim in tort against the owner of the dangerous cargo.

(2) Damage caused to third parties outside the ship

The cargo may also cause damage to third parties unrelated to the cargo or the voyage: an explosion may injure persons in the vicinity of the vessel.

(3) Navigation damage aggravated by the nature of the cargo

The nature of the dangerous cargo may aggravate damage arising from the navigation of the vessel: collision or the stranding of a ship may cause a discharge of containers of chemicals or start a fire and result in an explosion.

So far as the amount and type of damage are concerned, the chain of causation and remoteness of damage are fundamental issues. The principles applied are those of the common law although particular questions might arise in the context of dangerous cargo incidents.⁸⁴

Since the HNS Convention has not come into force and the oil conventions only apply to a limited category of cargoes, without a powerful international regime, damages and

⁸² There are different formal rules between contract and tort. For example, there is a single contract test of remoteness which lays down that losses are too remote if, at the time the contract was made, the defendant did not contemplate and could not reasonably have contemplated that type of loss as a serious possibility. The normal tort test, applicable in standard tort claims where the parties are not in a contractual relationship, is that losses are too remote if at the time of the breach of duty the defendant did not foresee and could not reasonably have foreseen that type of loss as a slight possibility. In addition, where the parties are in a contractual relationship, the above contract test applies even where the claim is being made by the other party of unusual risks. See Burrows, *Torts and Breach of Contract*, 3rd ed., 2004, p. 94. See also Tettenborn, *The Law of Damages*, p. 127.

⁸³ But the carrier may be protected by an exemption under (say) the HR/ HVR.

⁸⁴ *Marsden on Collisions at sea*, 13th ed., at 435.

compensation arising from dangerous cargo incidents are still covered by national laws. Even if (where HNS Convention will apply in the future) principles regarding causation, remoteness of damage and recoverable losses may be governed by the applicable principles of common law⁸⁵ (or relevant provisions of civil law). Therefore, this section will focus on the extent of liability, referring to recoverable damages in common law, i.e. remoteness of damage in contract and in tort. A relevant discussion on remoteness under Chinese law will be given, but before this we need to analyse which types of damages are recoverable.

6.3.2 Recoverable Damages

The types of damages that may be caused by dangerous cargo incidents are varied. The question of the extent to which they may be compensated in common law and in statutory claims,⁸⁶ depends substantially upon the application of rules of remoteness of damage. It is first desirable to discuss the types of damage that may be suffered as a result of dangerous cargo incidents.

Firstly, there is physical damage. Leaking chemicals or other hazardous cargoes may erode containers and vessels, or foul other vessels and their gear, or damage harbours and harbour equipment, or contaminate beaches and coastlines. Commonly, there may be cases of personal injury, such as skin conditions affected by toxic fumes, respiratory problems brought out by contact with poisonous chemicals, the result of fire or explosion caused by dangerous cargo.

Secondly, there is environmental damage. It includes the contaminated beaches and coastlines referred to above. Wild birds, fish and all types of marine flora and fauna may be killed and the stocks seriously depleted.⁸⁷ Such damage may well be regarded as the most important, but it is also extremely difficult to quantify and presents substantial

⁸⁵ *Ibid.*, at 433 where discuss the relationship between CLC 1992 and common law, which is same as the relationship between HNS Convention 1996 and common law.

⁸⁶ For example relevant provisions of the HNS Convention and national legislations.

⁸⁷ Abecassis & Jarashow, *Oil Pollution from Ships—International, United Kingdom and United States Law and Practice*, 2nd ed. (1985), London: Stevens & Sons, §15-100, p. 391.

problems of *locus standi*⁸⁸ to common law.

Thirdly, the main type of damage may be described as economic loss: for example, loss of amenities (such as beaches, marinas, even harbours which must be closed for cleaning and repair), loss of profits by hoteliers, publicans and those in the tourism industry generally, as well as loss of holiday value by holidaymakers themselves. In addition, much of the environmental damage referred to above can have an economic effect:⁸⁹ for instance, fishermen may be unable to fish where they intended to fish or they may find that their catch is less saleable because of its actual or possible tainted condition.

Fourthly, the type of damage is strictly only a subpart of the third: the costs of reinstatement of the environment. The costs of preventive measures and the costs of cleaning the sea and the coast: the use of mechanical means for the retention or removal of spilled oil, the cost of detergent, the expenses of recovering and cleaning affected seabirds, etc., can all be regarded as economic consequences of contamination caused by dangerous cargo. It is noticeable that these expenses may be incurred by a variety of different persons or bodies acting under a variety of powers, obligations and motives, from clean-up expenses incurred by national government acting under statutory powers, to the costs of voluntary organisations devoted to the protection of some aspect of the environment.⁹⁰ The differing types of damages have been a matter for discussion in the international debate for many years. Our concern at this point is to consider how far the common law rules address these matters.

6.3.3 Remoteness of Damage in Contract

Losses suffered by the claimant will be recoverable only if they satisfy the relevant test of remoteness. Although the amount of damages recoverable does not depend on whether, as a matter of legal classification, the plaintiff's cause of action is in breach of

⁸⁸ [Latin]: a place to stand] The right to bring an action or challenge some question. Questions of *locus standi* most often arise in processing for judicial review.

⁸⁹ Abecassis & Jarashow, *op. cit.*, p. 391.

⁹⁰ *Ibid.*

contract or tort, there are important differences in the formulation of the two doctrines.⁹¹ If the action is brought in contract, the rule of remoteness is for limiting damages and avoiding open-ended and disproportionate liability.⁹² Generally, it limits consequences to those of the breach of contract that are reasonably foreseeable.

6.3.3.1 Contractual Measures of Damages

For many years the principle for assessing damages for breach of contract in common law was to be found in *Hadley v. Baxendale*.⁹³ The delivery of a broken mill shaft was delayed and consequently the whole mill was shut down. Loss of profits was not awarded for the following reasons:⁹⁴

Such loss would neither have flowed naturally from the breach of this contract in the great multitude of such cases occurring under ordinary circumstances, nor were the special circumstances, which, perhaps, would have made it a reasonable and natural consequence of such breach of contract, communicated to or known by defendants.

Two rules have evolved from this dictum by Alderson B. in the above case.⁹⁵ First, damages in breach of contract are only those which flow naturally from the breach. Secondly, damages which normally would be too remote may be recovered, if (a) there were special facts surrounding the contract that were brought to the attention of the defendant or (b) the terms of the contract provided for the situation in question.

The two rules were also expressed in another way in *Hadley v. Baxendale*. The damages must be those which arise naturally or are in the reasonable contemplation of the parties.⁹⁶

Where two parties have made a contract which one of them has broken, the damages which the

⁹¹ Baughen, *Shipping Law*, 2nd ed., p.247. See also Ogus, *The Law of Damages*, op. cit., p. 62. In tort, the question is whether the harm was reasonably foreseeable as at the time of the tort. In contract, the test is applied against the background of circumstances existing not at the time of the breach but at the time of making of the contract. It would further appear that there is difference in the degree of likelihood required. The defendant attempting to prove that the harm sustained was too remote has a harder task in tort.

⁹² Tettenborn, *The law of damages*, op. cit., § 6.03

⁹³ (1854) 9 Ex. C.R. 341, 156 E.R. 145.

⁹⁴ *Ibid.*, (1854) 9 Ex. C.R. at 356, 156 E.R. at 151.

⁹⁵ Tetley, *Damages and Economic Loss in Marine Collision: Controlling the Floodgates*, J.M.L.C. Vol. 22, No. 3, July-October, 1991, p. 548.

⁹⁶ *Ibid.*, (1854) 9 Ex. C.R. at 354, 156 E.R. at 151.

other party ought to receive in respect of such breach of contract should be such as may fairly and reasonably be considered either arising naturally, i.e., according to the usual course of things, from such breach of contract itself, or such as may fairly and reasonably be supposed to have been in the contemplation of both parties, at the time they made the contract, as the probable result of the breach of it.

As time went on, “reasonable contemplation” became the primary test. In *Koufos v. C. Czarnikow Ltd.(The Heron II)*,⁹⁷ loss of profits was awarded in the case of a breach of contract (a charterparty) against a vessel owner whose deviation brought about a delay in delivery of a cargo of sugar. The House of Lords held that the vessel owner should have known that the price of the sugar could have fallen due to delay.

Lord Reid held that the remoteness test in tort (reasonable foreseeability) “imposes a much wider liability”⁹⁸ than the remoteness test in contract (probability) for the very good reason that in contract, the plaintiff has an opportunity to bargain with the defendant and can thereby protect himself against risks which might otherwise appear unusual. In tort, on the other hand:

There is no opportunity for the injured party to protect himself in that way, and the tortfeasor cannot reasonably complain if he has to pay for some very unusual but nevertheless foreseeable damage which results from his wrongdoing.

Lord Reid, referring to *Hadley v. Baxendale*, narrowed the remoteness test for contract by holding:⁹⁹

A type of damage which was plainly foreseeable as a real possibility but which would only occur in a small minority of cases cannot be regarded as arising in the usual course of things or be supposed to have been in the contemplation of the parties: the parties are not supposed to contemplate as grounds for the recovery of damage any type of loss or damage which on the knowledge available to the defendant would appear to him as only likely to occur in a small minority of cases.

⁹⁷ [1969] 1 A.C. 350, [1967] 2 Lloyd’s Rep. 457 (H.L.).

⁹⁸ *Ibid.*, at 358; at 464.

⁹⁹ *Ibid.*, at 385, at 464.

Indeed, the decision by Lord Reid in the *Heron II* was reaffirmed in a recent case *The Achilles*,¹⁰⁰ where time charterers were late in redelivery of a vessel. The shipowners had re-chartered the vessel and when it was not redelivered on time the shipowners had new charterers who had agreed an extension of the cancelling date under the new charter, but only on the basis that the new charterers received a reduction in the daily rate of hire. What mattered in this case was whether the types of loss¹⁰¹ claimed by the shipowners were foreseeable? The common intention of reasonable parties to a charterparty of this sort, in the event of a relatively short delay in redelivery, regarding an extraordinary loss, measured over the whole term of the renewed fixture entered into by the shipowner where the charterer had no knowledge of, or control of it, such loss should be regarded as unforeseeable.

It was held¹⁰² by Lord Hoffman that when assessing damages for the late redelivery of a chartered vessel, the court should in the usual case restrict the charterer's liability to the difference between the market rate and the charter rate for the overrun period of 9 days. The shipowners were not entitled to damages calculated by reference to their dealings with the new charterer over the whole period of renewed fixture.

6.3.3.2 Applying the Rule of Remoteness to Dangerous Cargo Cases

In practice, most contractual obligations affecting goods (e.g. the carrier's duties) are duties to take reasonable care. The carrier is bound to deliver the cargoes in the state in which he received them and his liability is based on fault. Under the contract of carriage, the dangerous cargo owner or the owner of other goods on the same vessel may raise contractual claims against the carrier. Most commonly, cargo claims arising from breach

¹⁰⁰ *Transfield Shipping Inc v Mercator Shipping Inc (The Achilles)*, [2008] UKHL 48; [2009] 1 A.C. 61, on appeal from [2007] EWCA Cir 901; [2007] 2 Lloyd's Rep. 555; [2007] 2 C.L.C. 400

¹⁰¹ I.e. the difference between that they would have got from the new charter had the ship been returned in time and what it in fact got with reduced rate of hire

¹⁰² [2009] 1 A.C. 61, at 90

of contracts of carriage may arise from non-delivery, damaged delivery, late delivery,¹⁰³ or a combination of any of these factors.¹⁰⁴ How the damage or loss is felt will depend on how the claimant intends to use the dangerous cargoes. The claimant will either want to resell them¹⁰⁵ or to use them for his own purposes.¹⁰⁶ The general rules about cargo claims will apply to dangerous cargo cases.

Suppose, some undisclosed¹⁰⁷ dangerous cargo is shipped and causes damage. The cause of damage was due to the carrier's lack of due diligence to care for cargo and it is not related to the nature of the cargo in any event. In calculating damages on the value of dangerous cargo, it should be based on the invoice value of the goods, even if it is much lower than the real value of the cargo.

On the other hand, if the shipper does not disclose to the carrier the dangerous nature of the goods and it causes the carrier loss or damage, the carrier may sue the shipper for shipping dangerous cargo. As to the extent of shipper's liability of shipping dangerous cargo under Article IV r.6 of HR/ HVR, it is determined in accordance with the normal principles of remoteness of damage in contract discussed above.¹⁰⁸ Examples have included cost of disinfection and delay,¹⁰⁹ loss of or damage to the vessel,¹¹⁰ and loss of other cargo and loss of life.¹¹¹ It has been suggested that the words "directly and indirectly" extend the rules of causation and hence by implication those of remoteness of damage,¹¹² but no case has applied such an interpretation, for which it is difficult to

¹⁰³ In *The Pegase*, [1981] 1 Lloyd's Rep. 175, due to a delay in the delivery of raw materials, a processing plant lost profits on sales, lost goodwill and incurred expenses in buying in substitute material. The defendant conceded that it would be liable on the basis of interest on the invoice value of the goods. All these items of loss were peculiar to the special circumstances surrounding the plaintiff's business. As the carrier had no actual knowledge of these circumstances, these consequential losses were irrecoverable.

¹⁰⁴ Baughen, *Shipping Law*, 2nd ed., p.249.

¹⁰⁵ If claimant resells the dangerous cargo, there are two ways of assessing a cargo claim. One is by reference to the invoice value of the goods, the other is by reference to their sound arrived value at the date they should have been delivered at the discharged port (i.e. Article IV (5)(b) of the HVR). Whichever basis is used, the salvage value of the cargo must always be deducted in quantifying a claim for damage to cargo.

¹⁰⁶ If the claimant uses the goods itself and the carrier has no imputed knowledge of the intended use by the cargo owner of the goods, then damage for delay will be limited to interest on the value of the goods. In this case, there is no difference either the material's character is dangerous (i.e. chemicals) or they are just normal goods.

¹⁰⁷ Non-declaration of dangerous cargo to the carrier for the purpose of avoiding any carrying/handling surcharges and other import/export tariffs

¹⁰⁸ *Carver on Bills of Lading* (2005: 2nd ed.), London: Sweet & Maxwell, §9-284.

¹⁰⁹ *The Giannis NK* [1998] A.C. 605.

¹¹⁰ *The Fiona* [1994] 2 Lloyd's Rep. 506

¹¹¹ *The Kapitan Sakharov* [2000] 2 Lloyd's Rep. 255.

¹¹² *Ibid*, at 522, *per Hoffmann L.J.* See also Judge Diamond Q.C. in *The Fiona* at first instance, above, at 286-287.

see justification.

6.3.4 Remoteness of Damage in Tort

When one passes from the subject of remoteness of damage in contract to remoteness in tort, a number of difficulties arise.¹¹³ For example, in contract a clear distinction is made between whether the claimant has suffered a breach of contract and what losses he ought to be able to recover; only the latter is determined by foreseeability of loss. However, there is no such uniformity in torts, particularly in tort of negligence, where many of the problems of remoteness arise and no such clear line can be drawn.

In order to claim damages for negligence, the claimant must show that he was reasonably foreseeable as likely to be affected by the defendant's actions,¹¹⁴ and his damage should be a foreseeable result of the defendant's action.¹¹⁵ It should be noted here foreseeability of damage plays a dual role in negligence, determining both whether the defendant is liable at all, and if he is, for how much damage.¹¹⁶ In other words the extent of loss. Remoteness for torts has been primarily discussed judicially in relation to the tort of negligence; but it seems that with the exception of deceit and other torts that have been committed dishonestly or intentionally, the test applied to negligence applies to all other torts.¹¹⁷

6.3.4.1 *The Polemis*: Proximate Cause or Direct Consequence

It is a general principle of the law of tort that entitlement to the recovery of damages depends on how proximate the damage had been to the tortious act, or the "proximate cause" of the damage.¹¹⁸ This evolved into the "direct consequences" test, which arose from *Re Polemis & Furness Withy & Co Ltd*¹¹⁹, where the dropping of a plank into a

¹¹³ Tettenborn, *The Law of Damages*, §6.39, at 140

¹¹⁴ *Ibid.*, §6.43, at 141.

¹¹⁵ *Marsden on Collisions at Sea*, 13th ed., 15-06, p. 550

¹¹⁶ Tettenborn, *The Law of Damages*, §6.42, at 140.

¹¹⁷ Burrows, *Remedies for Torts and Breach of Contract*, 3rd ed., p.77.

¹¹⁸ J.G. Fleming, *The Law of Torts*, 7th ed., 1987, p.181.

¹¹⁹ [1921] 3 K.B. 560.

hold by a stevedore caused a spark, ignited gasoline vapour and resulted in the destruction of the ship by fire.¹²⁰ The Court of Appeal held that this damage was foreseeable and the stevedores were liable for the loss of the ship. Warrington L.J. held:¹²¹

The presence or absence of reasonable anticipation of damage determines the legal quality of the act as negligent or innocent. If it be thus determined to be negligent, then the question whether particular damages are recoverable depends only on the direct consequence of the act.

6.3.4.2 Foreseeability by the Reasonable Man

The wide ambit of recoverability allowed in *Polemis* was questioned in *The Wagon Mound (No. 1)*,¹²² Oil negligently spilt in Sydney harbour unexpectedly caught fire, and the fire damaged the plaintiffs' wharf. This case was upheld by the Privy Council, and Viscount Simonds declared: "the essential factor in determining liability is whether the damage is of such a kind as the reasonable man should have foreseen."¹²³ The defendant escaped liability on the ground that what was foreseeable as a result of the defendant's conduct was damage by fouling, not by fire; in other words, although the damage suffered by the plaintiff was the direct result of the defendant's negligence, nevertheless the defendant escaped because it was a different kind of damage and can not be foreseeable by a reasonable man.

The limitation on liability contained in *The Wagon Mound (No. 1)*, that damage of an essentially unforeseeable kind cannot be recovered in negligence, indubitably forms part of the English law of tort in general,¹²⁴ and hence of damages arising from carriage of dangerous cargoes. If this rule is applied to dangerous cargo cases, it will relate to how wide a class of damage a court is prepared to regard as "foreseeable" in certain circumstances; and to what extent the court is prepared to regard one sort of damage as essentially different from another.

¹²⁰ See Dias, *Negligence—Remoteness: The Polemis Rule* [1961] C.L.J. 23

¹²¹ *Ibid.*, at.574

¹²² [1961] A.C. 388

¹²³ *Ibid.*, at 426, [1961] 1 Lloyd's Rep. at 11.

¹²⁴ *Marsden on Collisions at Sea*, 13th ed., 15-08, p. 551.

6.3.4.3 Foreseeability Depends on the Evidence

The Wagon Mound (No. 2),¹²⁵ however, arguably recalls the *Polemis* test, where a ship in the same harbour was successful in its claim for damages caused by the same burning oil. However, the evidence presented here was slightly different. The plaintiffs' attorneys seemed to have obtained better proof and were able to deduce that the fire was foreseeable to some degree, because the officers on board the *Wagon Mound* testified that they believed the oil could be ignited, albeit with difficulty. Thus the defendant was liable to these plaintiffs. We can see *The Wagon Mound (No. 2)* softened the seeming strictness of *The Wagon Mound (No. 1)* by showing that it was possible to prove foreseeability. The two cases together provide an instructive example supporting the principle that reasonable foreseeability and therefore remoteness, is a question of fact in any particular case.¹²⁶

With regard to the damage from dangerous cargo, physical damage and personal injury caused by the dangerous cargo is in practice always foreseeable and always recoverable.¹²⁷ For example, the cost of cleaning, repair or replacement of contaminated vessels and the cost of cleaning up the harbour and coastline will be recoverable. If profit-earning vessels are affected, then the loss of profits reasonably attributable to them will also be recoverable.¹²⁸ However, pure environmental loss presents particular problems. The basis of the damage suffered is physical: injury to flora and fauna in the wild state. The problem is there is no property associated with wild animals, plants, etc., until they are reduced to possession. Then they become the property of the possessor.¹²⁹ Therefore no tort claim based upon damage to the environment alone can be based upon physical damage caused by dangerous cargo. The plaintiff has no legal grounds to file for pure environmental loss. It therefore follows that any such claim can at best be regarded as a type of claim for economic

¹²⁵ [1967] 1 AC 617

¹²⁶ See Abecassis, D.W. & Jarashow, R.L., *Oil Pollution from Ships—International, United Kingdom and United States Law and Practice*, London: Stevens & Sons, 2nd ed., 1985, 15-100, p. 395.

¹²⁷ Theoretically problems of unforeseeable types of physical damage are hard to envisage.

¹²⁸ *Oil Pollution from Ships*, p.395.

¹²⁹ *R.v. Mallison* (1902) 86 L.T. 600 (where fish caught on the high seas were held to be the property of the owner of the smack by which they were taken); it would appear, however, that there is no property if the fish are merely enclosed in a net: *Yong v. Hichens* (1844) 6 Q.B. 606. On birds see *The Case of Swans* (1592) 7 Co. Rep. 15.

loss—although in most cases such a loss will be hard to quantify.¹³⁰

6.3.4.4 Foreseeability as to the Type of Damage

In *Hughes v. Lord Advocate*,¹³¹ kerosene from unattended lamps had spilled, forming a gas which exploded, burning a young boy. The House of Lords held that it did not matter that burning by explosion was not foreseeable, in as much as personal injury caused by fire was foreseeable. Hence, *Hughes* stands for the proposition that foreseeability need only be to the type of damage and not to the “precise concatenation of circumstances which led to the accident”.¹³²

With respect to the consequences of a dangerous cargo incident, presumably, the foreseeable damages include: (a) damage to the ship and other cargos on board; (b) loss of life or personal injury to those on board and outside the ship; (c) losses or damage by contamination to the environment caused by dangerous cargoes, limited to reasonable measures of reinstatement and (d) costs of preventive measures and further losses or damage caused by the preventive measures.

6.3.4.5 *Vacwell v BDH Chemicals Ltd*: The Extent to which Loss is Unforeseeable

Another interpretation on the rule that damage must be foreseeable is that only its type needs to be expected. Its extent need not be.¹³³ In *Vacwell v BDH Chemicals Ltd.*,¹³⁴ the defendant (the chemical manufacturers) negligently failed to warn the plaintiff (the users) that the dangerous cargo was likely to catch fire if it came into contact with water. A person working in the plaintiffs’ premises dropped an ampoule of it into a bath of water which resulted in a tremendous explosion that destroyed the whole of the

¹³⁰ *Oil Pollution from Ships*, p.395.

¹³¹ [1963] A.C. 837

¹³² *Ibid.*, at 853.

¹³³ *Marsden on Collisions at Sea*, 13th ed., §15-11, p. 553. Considering the extent of recoverable damage in contract, see *Jackson v Royal Bank of Scotland*, [2005] 1 Lloyd’s Rep. 366, at 373. If no cut off point was provided by the contract, there was no arbitrary limit that could be set to the amount of damages once the test of remoteness had been satisfied, *Hadley v Baxendale* 156 E.R. 145 applied.

¹³⁴ [1971] 1 Q.B. 88

plaintiffs' premises. The plaintiffs recovered the whole of their loss, even though the explosion was freakish and unforeseeably severe. Some damage due to combustion was foreseeable, and that was enough.

This principle is significant in dangerous cargo disasters. Any dangerous cargo incident, however slight, is clearly likely to cause some damage (fire, explosion, pollution, etc.). It follows that, prima facie, a liable party will be responsible for all the damage. Indeed, it is not necessary to have a serious incident such as *CMA Djakarta*.¹³⁵ A simple smoking freight container on board can cost the shipowner (and hence any wrongful shipper, forwarders/ NVOCC) hundreds of thousands of pounds in terms of emergency handling, fire fighting, re-routing and cleaning expenses. No matter how serious the incident is and how extensive the damage is, according to the principle in *Vacwell v BDH Chemicals Ltd*, the responsible person has to indemnify the whole loss caused by dangerous cargoes.

6.3.5 Whether Statutory Liability is Subject to Remoteness?

The HNS Convention¹³⁶ generally covers the loss of life or personal injury on board or outside the ship carrying hazardous and noxious substances, loss of or damage to property outside the ship including other ships and their cargoes (damage to own cargo is not covered), loss or damage caused by contamination of the environment,¹³⁷ loss of income in fishing and tourism and the costs of preventive measures.¹³⁸

¹³⁵ [2004] 1 Lloyd's Rep. 460; [2004] EWCA Civ. 114

¹³⁶ Under Article 1 (6) of HNS Convention, "Damage" includes loss of life and personal injuries as well as property damage; and also the costs of preventive measures and further loss or damage caused by preventive measures. Claims for loss or damage by contamination of the environment will be paid "provided that compensation for impairment... other than loss of profit from such impairment shall be limited to costs of reasonable measures of reinstatement".

¹³⁷ So far as the environmental damage, it is similar to the one agreed in the 1984 and 1992 Protocols to the CLC and Fund Conventions. Under Article I (6) of 1969 CLC, "pollution damage" is defined as "loss or damage caused outside the ship carrying oil by contamination resulting from the escape or discharge of oil from the ship, wherever such escape or discharge may occur (1992 CLC added more about environment here), and includes the costs of preventive measures and further loss or damage caused by preventive measures. "Pollution damage" is defined in Article II, rule 3 of 1992 CLC. See discussion in 5.2.1.3.

¹³⁸ Additionally, the cost of reasonable measures taken by any person after an incident to prevent or minimise damage as the cleaning up or removal of HNS from a wreck presenting a pollution hazard can be recovered. See Hawke & Hargreaves, "*Environmental Compensation Schemes: Experience and Prospects*" Vathek Publishing, (2003) Environmental Law Review, 5.1(9).

In practice, the most recurrent issue in relation to dangerous cargo claims is the question of whether, and if so, to what extent, different types of claims are eligible for compensation in accordance with the definition above. There is considerable scope in this area for divergent decisions by national courts, although most cases have normally been resolved by negotiation.¹³⁹ This is the same for oil pollution claims. Here a question arises: whether HNS and other statutory liability (e.g. pollution under CLC), is subject to remoteness considerations at all? Certainly, the answer is yes in the following case.

In *Alegrete Shipping Co Inc v. International Oil Pollution Compensation Fund 1971 (The Sea Empress)*,¹⁴⁰ the vessel grounded and 72,000 tonnes of crude oil spilled into sea, which led to the imposition of a fishing ban. The total claims arising from the incident was substantially in excess of the owner's limitation fund; and by virtue of the top up provisions in s. 175 of the MSA 1995, the 1971 Fund was responsible for all claims above the owner's limit subject to the Fund's own limit.

The processors claimed for losing the profit that would have made from processing whelks supplied by the fishermen. While the fishermen had a direct economic interest in the contaminated waters, the position of the claimant processors is very different. The latter's interest was in landed whelks and they were not engaged in a local activity in the physical area of the contamination. It was held,¹⁴¹ the processors' loss was not caused indirectly by oil pollution and this lack of proximity rendered the claim too remote; the claim failed. As we can see the rule of remoteness is applicable to the statutory liability.

6.4 The Rules on Remoteness of Damage in Chinese

Law

Chinese law does not have the rule of remoteness, while the recoverable damage is generally governed by the rule of proximate cause. In the author's view, the specific scope of recompense for damages according to the "proximate cause" rule is not as clear

¹³⁹ For the relevant discussion on oil pollution, see *Marsden on Collisions at Sea*, 13th ed., at 418.

¹⁴⁰ [2003] 1 C.L.C. 325; [2003] 1 Lloyd's Rep. 327; [2003] EWCA Cir 65

¹⁴¹ [2003] 1 Lloyd's Rep. 327

as the rule of remoteness in English Law. Because there is no case law in China, and different courts usually have different interpretations of “proximate cause”. This issue should be clarified during the revision of Maritime Code and also in the Civil Code Draft.

The general rules contained in the Civil Law 1986 provide for the restoration of damaged property to its original condition or for the payment of compensatory damages.¹⁴² The law also allows for compensation for other serious losses.¹⁴³ Personal injury requires payment of medical expenses, lost earnings, and if the victim dies, contribution to the necessary living expenses of the deceased’s dependents.¹⁴⁴ We can see these are far too general provisions, and not particularly applicable to dangerous cargo cases.

Moreover, no particularly rule in tort referring to “consequential damages”. Also there is no specific legislation to consequential damages in China. The author worried to which level they can be recoverable in practice. Nonetheless, some Chinese scholars believe the language of the law is sufficiently broad to require consequent damages. For example a Chinese scholar states:¹⁴⁵ “complete compensation includes both direct and indirect losses”. The one causing the damage must compensate for the reduction in value of the property. This is direct loss. He must also make compensation for benefits that could actually have been obtained under normal circumstances. This is an indirect loss. Theoretically, the rule of economic loss does not exist in Chinese law and it is unlikely that pure economic loss will be recoverable in practice.¹⁴⁶

In China, no particular legislation refers to compensation for damages caused by

¹⁴² Article 117 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.

¹⁴³ See Article 117.

¹⁴⁴ 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.

¹⁴⁵ Zhang Junhao (editor), *Civil Law Principles* (in Chinese), 3rd ed., 2000, China University of Political Science and Law Press, p. 924.

¹⁴⁶ Of course, this is not really a remoteness point.

dangerous cargo.¹⁴⁷ Theoretically, the compensation in respect of dangerous cargo can be claimed in tort and in contract, which include all direct and indirect damages and expenses resulting from the shipment of dangerous cargoes,¹⁴⁸ such as the loss of life or personal injury, loss of or damage to property, demurrage fees, costs for destroying or discharging of dangerous cargoes, the carrier's recourse for compensation paid to third parties. With regards to the contamination of the environment caused by dangerous cargoes, clean-up costs, preventive measures and further loss or damage caused by the preventive measures should be recoverable. In any event, damages shall be foreseeable by the defendant at the time of the incident. In respect to the damage of natural resources, theoretically, the scope of compensation should be limited to reasonable measures of reinstatement, but Chinese maritime courts do not regularly admit claims on this type. Although China does not have definition of "economic loss", based on the rule of "proximate cause", it is unlikely to see Chinese maritime courts to allow e.g. pollution damage to fishing ponds to be recovered.

6.5 Concluding Remarks

With regard to the damages or costs caused dangerous cargoes and whether the amount and type of damage recoverable, the chain of causation and remoteness of damage are fundamental issues. Although they have been discussed separately in this chapter, in practice, however, the distinction between remoteness and intervening cause is often not drawn and both principles are dealt with under the one head, whether labelled "remoteness" or "legal causation" or "proximate cause".¹⁴⁹

In order to establish dangerous cargo liability, the criterion of proximate cause is foreseeability; the injury or damage must be a reasonably probable consequence of the defendant's act or omission. The rule of remoteness places limits on liability for damage caused by the defendant's breach of duty. All legal systems agree in placing some

¹⁴⁷ However, there is a specific rule on the compensation for oil pollution for domestic transportation in a process of revising by the State Council. Most commonly, the Civil Law 1986 is quoted in maritime trials, but the rules covering compensation are very general and need to be given an interpretation in connection with different types of cases. Considering dangerous cargo incident, the author gives some comments on compensable damages based on some relevant text books in Maritime Law and journal papers, particularly referring to Xu Guoping, (2006), *Study on Compensation Law of Oil Pollution Damage (in Chinese)*, Peking University Press, pp. 89-136, 164-165.

¹⁴⁸ See Article 68 of the Maritime Code.

¹⁴⁹ Burrows, *Remedies for Torts and Breach of Contract*, 2nd ed., p.38.

limitations on the recoverability of damages for both tort and breach of contract. A principal restriction on compensatory damages is that the loss must not be too remote from the breach of duty. The tests formulated for deciding on this have centred on whether the loss (in contract) was reasonably contemplated or (in tort) reasonably foreseeable by the defendant.¹⁵⁰ Although the formal rules are distinct, in many cases there is no substantial difference in the rules of remoteness in contract and tort.

The issue of causation is the principal factor for determining liability in both Chinese and English law. Although China does not have the rule of remoteness, the rules on damages seem to be as extensive as those applied in the UK. In Chinese law, the recoverable damage is based on the rule of “proximate cause” is not as clear as the rule of remoteness in English Law. Without specific legislation on recoverable damages caused by dangerous cargoes, it is expected that Chinese maritime courts can use the relevant legislation on prevention of marine pollution (e.g. oil) for reference.

¹⁵⁰ Ibid., 3rd ed., p. 76.

Chapter 7 Reform of Contractual Liability —the Rotterdam Rules

7.1 Introduction

The United Nations General Assembly adopted Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea on 11 December 2008 and authorised a signing ceremony for the Convention to be held in Rotterdam on 23 September 2009. The new Convention is known as the “Rotterdam Rules” (hereafter RR).¹

Uniformity is the goal of this convention. It is intended to supersede the Hague, Hague-Visby and Hamburg Rules,² by establishing uniform international rules to allocate liability for the risk of the loss of or damage to goods carried by sea. By August 2010, 21 countries had signed “subject to ratification”³ and it remains to be seen whether any of them will ratify the convention. It should be noted that a signatory to this Convention is not under any obligation to ratify it and may refuse ratification for any reason.⁴ The important question is whether this convention will come into force internationally in order to promote uniformity (i.e. ratification by 20 countries is required).

The content of the Convention is comprehensive and complicated, which is outside the scope of this thesis. This Chapter will focus on the shipper’s liability under Chapter 7 of the convention in relation to the carriage of dangerous cargo, as well as dealing with the mechanism for proportionate allocation of liability between the shipper and the carrier, also whether the transfer of obligations from shipper to third parties is possible under

¹ General Assembly 63/122, A/RES/63/122, 2 February 2009, at p.2.

² Article 89 of Rotterdam Rules requires that a State which is a party to the HR/HVR or Hamburg Rules must denounce those Conventions at the same time as it ratifies, accepts, approves or accedes to the Rotterdam Convention

³ See the actual account of states, which have signed the Rotterdam Rules at http://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XI-D-8&chapter=11&lang=en (accessed 20th August 2010)

⁴ Tetley, *A critique of and the Canadian response to the Rotterdam Rules*, in Thomas D.R. (editor), (2009) *A new convention for the carriage of goods by sea—the Rotterdam Rules*, Lawtext, p. 285.

the Convention will be discussed. In addition, effort will be spent on comparing the shipper's obligations under the Rotterdam Rules with existing English and Chinese law.

The shipper's obligations to the carrier are set up in considerable detail in Chapter 7, which are more extensive than in the previous cargo conventions, such as HR/ HVR and Hamburg Rules, although the substance is not especially novel.⁵ Chapter 7 includes Articles 27-34. Shipper's obligations are stipulated in Articles 27-29 and 31-32. The liability regime is to be found in Articles 30 and 33-34. More specifically, two types of liabilities will be discussed below. The first is fault-based liability relating to the preparation and delivery for carriage of goods (Article 27) and in respect of shipper's obligation to provide information, instructions and documents (Article 29). The second is strict liability for losses arising out of the carriage of dangerous cargo (Article 32) and failure to provide timely and accurate contract particulars (Article 31.2).

It should be noted that the obligations imposed on the shipper are mandatory (Article 79).⁶ In contrast the carrier's right to limitation of liability (Article 59), the shipper's liability is not subject to any monetary limitation. Regarding the shipper's obligations incurred under Article 29 or 32, he is not able to limit his liability and no derogations are permitted. An interesting point is that carriers can always defend their right to limitation of liability by arguing that limitation is required so that their liability insurers can assess the risk they are assuming.⁷ Why does this valid argument not apply to the shipper? This will be discussed in section 7.3. Nonetheless, the period of time for suit does apply both to shippers (claims against the carrier) and carriers (claims by the carrier) under Article 62,⁸ unlike the corresponding provision of the Hague-Visby Rules.

⁵ Diamond A., *The Rotterdam Rules*, L.M.C.L.Q. 2009 4(Nov.) pp. 445-536, at 491.

⁶ Article 79.2 (a) renders void any term that directly or indirectly excludes, limits or increases them. Article 79.2 (b) renders void any term that directly or indirectly excludes, limits or increases the liability of the shipper for breach of any its obligations under the convention. The intention of Article 79 is to protect a shipper from onerous clauses inserted by carrier into transport documents. In contrast, the carrier may increase its level of liability as compared with that under the Convention.

⁷ See Diamond, *op. cit.* p. 491

⁸ Under Article 62, the period of time for suit is two years from the time the goods were delivered or should have been delivered. The time bar is procedural, not substantive. It applies both to claims against the carrier and to claims by the carrier.

In addition, both “shipper” (Article 1.8⁹) and “documentary shipper” (Article 1.9), i.e. a party who is not the contracting shipper but who “accept to be named as “shipper” in the transport document”, such as a FOB seller, are liable for breach of the obligations in Chapter 7. Moreover, regarding the mechanism for transfer of obligations from the shipper (Article 58.2), I will discuss whether a third party consignee becomes liable for breach of the shipper’s obligations in respect of undisclosed dangerous cargo.

7.2 Obligations of the shipper

Articles 27, 28 and 29 set out general obligations with regard to the delivery of goods for carriage, cooperation with the carrier and the provision of information, instructions and documents. Under these rules, a shipper will be subject to fault based liability as follows:

Article 27 Delivery for carriage

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 or property.

Article 28 Cooperation of the shipper and the carrier in providing information and instructions

The carrier and the shipper shall respond to requests from each other to provide information and instructions required for the proper handling and carriage of the goods if the information is in the requested party’s possession or the instructions are within the requested party’s reasonable ability to provide and they are not otherwise reasonably available to the requesting party.

Article 29 Shipper’s obligation to provide information, instructions and documents

1. The shipper shall provide to the carrier in a timely manner such information, instructions and documents relating to the goods that are not otherwise reasonably available to the carrier, and that are reasonably necessary:
 - (a) For the proper handling and carriage of the goods, including precautions to be taken by the carrier or a performing party; and
 - (b) For the carrier to comply with law, regulations or other requirements of public authorities in connection with the intended carriage, provided that the carrier notifies the shipper in a timely manner of

⁹ Under Article 1.8, “shipper” is defined as “a person that enters into a contract of carriage with a carrier.”

the information, instructions and documents it requires.

2. Nothing in this article affects any specific obligation to provide certain information, instructions and documents related to the goods pursuant to law, regulations or other requirements of public authorities in connection with the intended carriage.

Articles 27-29 are stipulated reasonably clear and very comprehensively. They can be expressed as a big improvement on previous Conventions (i.e the HR/HVR and Hamburg Rules). Also these rules seem much more extensive than the relevant provisions under the Chinese Maritime Code (MC).

Under Article 66 of the MC (which follows the approach adopted by Article 17 of the Hamburg Rules), the shipper's responsibility is simply described as "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 losses resulting from inadequacy of packing or inaccuracies in the above mentioned information". Moreover, under Article 67 of the MC, the shipper must perform all necessary procedures at the port, customs, quarantine, inspection or other competent authorities with respect to the shipment of the goods. The shipper shall be liable for any damage to the interests of the carrier resulting from the inadequacy or inaccuracy or delay in the delivery of such documents. There is no doubt that Article 67 is detailed and very specific, but mainly relates to procedural issues required by the competent authority at the port of loading. It is stipulated in a very narrow way.

In comparison, the wording of Article 29 of the RR seems to have a broader meaning and will be applied in certain circumstances where the shipper is required to provide information, instructions and documents relating to the goods that are not otherwise reasonably available to the carrier. The information, instructions and documents include precautions to be taken by the carrier or a performing party and also for the carrier's compliance with legal requirements connected with the intended carriage, subject to timely notification by the carrier of what it requires. Accordingly, if Chinese legislators

want to revise and improve Articles 66 and 67 of the Maritime Code, they can use Article 29 as a reference.

In addition, Article 27.2 refers to FIOST clause in Article 13.2, where a shipper has agreed to be subject to the obligations of loading, stowing, trimming or discharging, must perform it “properly and carefully”. It is generally accepted that Article 13.2 has overcome the problems with FIOST terms under previous cargo Conventions and it appears to be successful and satisfactory. As discussed in section 4.3.2.3, at present, it is uncertain in Chinese law whether the parties to the contract of carriage are free to agree to transfer some or all of the carrier’s duties to the shipper or consignee. Chinese legislators should draw their attention on how to stipulate the FIOST term in the Maritime Code. Thus Article 13.2 together with Article 27.2 can be used as references for Chinese legislators while revising the Maritime Code.

Article 31 relates to the obligation of the shipper to provide the information required for the compilation of the contractual particulars. It requires the shipper to provide the specified information, including the names of the shipper, the consignee and “the person to whose order the transport document or electronic transport record is to be issued”. Under Article 31.2, the shipper must indemnify the carrier against loss or damage resulting from inaccurate information. In respect to the breach of this obligation, the shipper will be subject to a strict liability (Article 30.2).

Article 31 Information for compilation of contract particulars

1. The shipper shall provide to the carrier, in a timely manner, accurate information required for the compilation of the contract particulars and the issuance of the transport documents or electronic transport records, including the particulars referred to in article 36, paragraph 1; the name of the party to be identified as the shipper in the contract particulars; the name of the consignee, if any; and the name of the person to whose order the transport document or electronic transport record is to be issued, if any.
2. The shipper is deemed to have guaranteed the accuracy at the time of receipt by the carrier of the information that is provided according to paragraph 1 of this article. The shipper shall indemnify the carrier against loss or damage resulting from the inaccuracy of such information.

The equivalent provision of Article 31 is Article III r. 5 of the Hague Rules, but Article 31 is much wider in respect of the obligation to provide information for the contract

particulars.¹⁰ Under the HV, there is no obligation for the shipper to provide any particulars, instead it is required to provide information as to “marks, numbers, quantity and weight”; the shipper guarantees the accuracy of such information and must indemnify the carrier against all “loss, damage and expenses” caused by that inaccuracy.

Article 32 deals specifically with the shipper’s responsibilities in relation to dangerous goods. A shipper’s duties established under Article 32 are subject to strict liability. The absolute liability of shippers who ship undisclosed dangerous cargo was developed under common law such as in *Brass v Maitland*.¹¹ Subsequently, it was absorbed into the international conventions, namely Article IV r6 of the Hague-Visby Rules which is applied in the UK and Article 13 of the Hamburg Rules which is incorporated into Article 68 of the Chinese Maritime Code. Both at common law and under HR/HVR/Hamburg Rules, the shipper is strictly liable for any losses and damages caused by the shipper’s failure to notify the carrier of the dangerous nature of the cargo. Obviously, Article 32 of the RR embodies some similar strands of policy,¹² but it is drafted quite differently in its wording and there are some differences in its meaning.

Article 32 Special rules on dangerous goods

When goods by their nature or character are, or reasonably 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 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 requirements 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.

Dangerous goods are defined as goods which “by their nature or character are, or reasonably appear likely to become, a danger to persons, property and the environment”.

Noticeably, the concept of danger is extended to include danger to the environment. The

¹⁰ Baughen, *Obligations owed by the shipper to the carrier*, in Thomas D.R., (2009) *A new Convention for the Carriage of Goods by Sea—The Rotterdam Rules*, op. cit., p. 182

¹¹ (1856) 26 LJQB 49

¹² Thomas D. R., *An analysis of the liability regime of carriers and maritime performing parties*, p. 79 and Baughen S., *Obligations owed by the shipper to the carrier*, in Thomas D.R., (2009) *A new Convention for the Carriage of Goods by Sea—The Rotterdam Rules*, op. cit., p. 183

reference to the environment will bring in cargo which is “legally dangerous” in respect of public liability that the carrier may incur in carrying it due to the threat it poses to the environment.¹³ In this aspect, Article 32 is an improvement on previous cargo conventions, given legally dangerous cargo is left to common law, and not covered by HR/HVR and Hamburg rules.

Under Article 32, there are two duties owed by the shipper. One is to inform the carrier of the dangerous nature of the goods in a “timely manner” before they are delivered to the carrier or a performing party. If the shipper is in breach of this duty, provided that the carrier or performing party is not aware of the dangerous nature of the cargo, the shipper is liable for all resulting damage (Article 32(a)). This paragraph is phrased similarly to the indemnity provision in Article IV 6 of the HVR, but neither this paragraph nor Article 30.1 contains reference to “directly and indirectly” (expenses and damages caused by dangerous cargo) which appears in Article IV r6. Suppose after the RR has come into force, this will be left to national laws. In England, regarding the recoverable damages caused by dangerous cargo, the rules of causation and remoteness will apply. In China, the situation is unclear. It is expected the court to apply the rule of proximate causation. Unfortunately, there is no relevant rule of remoteness in Chinese law.

In addition, Article 32.1 has specified that not only the carrier, but also the “maritime performing party”¹⁴ where he is different from the carrier who contracts with the shipper, are entitled to receive notice of the dangerous nature of the cargo from the shipper. This, again follows the Hamburg precedent (Article 13), which has clarified that the shipper’s notice is required to be given to the actual sea carrier. It should be noted that the shipper is not obliged to give notice to the “actual carrier” under Article 68 of Chinese Maritime Code, although Article 68 is effectively Article 13 of the

¹³ Baughen, *Obligations owed by the shipper to the carrier*, in Thomas D.R., (2009) *A new Convention for the Carriage of Goods by Sea—The Rotterdam Rules*, op. cit., p. 183

¹⁴ It is defined in Article 1.7. Under Article 19.1 of the RR, “a maritime performing party is subject to the obligation and liabilities imposed on the carrier under this Convention and is entitled to the carrier’s defences and limit of liability as provided for in this Convention”.

Hamburg Rules,¹⁵ the wording of “actual carrier” is omitted. This omission may result in some confusion in practice, since the shipper may escape from liability for non-disclosure of dangerous cargo to the actual carrier. Accordingly, the author suggests to insert the words “actual carrier” into Article 68. Alternatively, the Chinese legislators may consider redrafting Article 68 in accordance with Article 32 of the RR, if they intend to widen the shipper’s obligations in respect of dangerous cargo.

The other duty owed by the shipper under Article 32 of the RR is to mark or label dangerous goods in accordance with any applicable legal or regulatory requirement relating to any stage of the intended carriage, not just at the port of discharge. Breach of this duty again renders the shipper liable for any resulting damage (Article 32(b)). This paragraph follows the approach adopted by Article 13.1 of the Hamburg Rules in respect of shipper’s responsibility for “marking and labelling” (it is incorporated into Article 68 of the Chinese Maritime Law), but makes it clear that the regime for dangerous cargo extends to compliance with legal requirements. However, as Mr. Baughen pointed out,¹⁶ this provision does not cover the case such as in *Mitchell Cotts & Co Ltd v Stell Brothers & Co Ltd*,¹⁷ where legal requirements that prevent the cargo being unloaded due to lack of permission from the British Government to import cargo, because it was not relating to labelling or marking of the cargo. Presumably, this kind of “legally dangerous” cargo would fall in Article 29 which is subject to fault based liability rather than a strict liability under Article 32.

As we discussed in Chapter 5, during the development of the international conventions, the definition of dangerous cargo has evolved and extended from danger to ship and cargo (property damage), to include danger to life (personal injury), and finally to include danger to the environment (environmental damage). We can see based on Article 32, a carrier who is liable for pollution damage may consequently have a right of recourse against a shipper in respect of damages caused by undisclosed dangerous

¹⁵ See discussion in section 4.2.2.2. The “actual carrier” is defined in the Maritime Code and the shipper’s obligations under Maritime Code are largely Hamburg-based.

¹⁶ *Ibid.*

¹⁷ [1916] 2 KB 610

cargo.

From what has been discussed above, we can see the shipper's existing duty under HR/HVR/Hamburg rules not to load undeclared dangerous cargo is widened by Article 32 of the RR. Moreover, the shipper effectively has a duty to load cargo in a safe and sound condition (Article 27.1) and to provide information at any time on request relating to the goods and their proper handling (Article 28). This will have a significant economic impact for countries that heavily depend on export (e.g. China), where the majority of cases involve the shippers' responsibilities relating to the shipment of dangerous cargo. This will be one of the major issues of concern the Chinese legislation authorities will have in respect to the ratification of the RR.

7.3 The liability regime

The liability regime is to be found in Articles 30 and 33-34. In respect to a claim by the carrier against the shipper, Article 30 is the central provision which sets out the basis of the shipper's liability to the carrier, including provisions to deal with the apportionment of liability (Article 30.3) and the burden of proof (Article 30.1 and 30.2).

Article 30 Basis of shipper's liability to the carrier

1. The shipper is liable for loss or damage sustained by the carrier if the carrier proves that such loss or damage was caused by a breach of the shipper's obligations under this Convention.
2. 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 or to the fault of any person referred to in article 34.
3. When the shipper is relieved of part of its liability pursuant to this article, the shipper is liable only for that part of the loss or damage that is attributable to its fault or to the fault of any person referred to in article 34.

Article 30.1 establishes the basic rules that the shipper is liable if the carrier proves that the shipper was in breach of its obligations under the Convention. As discussed above, the shipper's main obligations are set out in Articles 27, 29, 31 and 32. Article 30.2 sets out the rules for the shipper to be "relieved of all or part of its liability", "if the cause or one of the causes of the loss or damage is not attributed to its fault". However, this does

not apply to the two obligations based on strict liability under Articles 31.2 (accurate contract particulars) and Article 32 (dangerous cargo). Although Article 30.2 does not say so expressly, the burden of proof is on the shipper¹⁸ to prove the absence of fault.

An interesting situation arises: whether the shipper's liability for "loss or damage" under Article 30.1 including economic loss due to delay suffered by the carrier can be claimed under the Convention? As the author understands, it is very unlikely that the meaning of "loss or damage" extends so far as to include "delay". Actually, the word "delay" was purposely deleted from the previous draft, as part of the compromised package agreed at the 19th session of the Working Group III. The reason was: considering the shipper's potentially very high exposure to liability for economic loss due to delay, it would be necessary to introduce a limit of liability to the shipper. In view of the difficulty of finding an appropriate limit for the shipper, a decision was made to simply delete the word "delay".¹⁹ As we can see the RR specifically provides for the carrier's liability for delay (Articles 17, 20) and his limitation of liability for loss caused by delay (Article 60), but not for the shipper. Accordingly, the shipper's liability for delay is left to be governed by national laws. In respect to whether a carrier's economic loss due to delay would be recoverable, in England the ordinary rules on causation and remoteness would be applied; in China, the rule of proximate causation would apply.

Article 30.3 provides for proportionate allocation of liability in cases where "the shipper is relieved of part of its liability" under Article 30.2. The shipper is only liable for the part of the loss attributed to his fault. The wording of Article 30.3 mirrors Article 17.6 (carrier's liability).²⁰ An interesting situation arises here: if there are two contributory causes of the carrier's loss: (1) a breach by the shipper regarding undisclosed dangerous cargo under Article 32; (2) unseaworthiness of the vessel, can the carrier recover his

¹⁸ See relevant discussion in Diamond, *The Rotterdam Rules*, L.M.C.L.Q. 2009 4(Nov.) pp. 445-536, at 494; see also Baughen, *Obligations owed by the shipper to the carrier*, op. cit. 185.

¹⁹ See paragraph 180 (b) of Working Group III 19 A/CN.9/621, and paras 177-184 and 233-243. See also Baughen, op. cit. 184, Diamond, op. cit. 493.

²⁰ Article 30.3 refers part of the loss attributed to "fault" of the shipper, whereas Article 17.6 refers to part of the loss attributed to the "event or circumstances" on which the carrier relies. See also Asariotis R., *Loss due to a combination of causes: burden of proof and commercial risk allocation*, op. cit. p. 162.

loss?

In England, following the decisions in *The Fiona*²¹ and *The Kapitan Sakharov*,²² it has been established: where both a breach of the carrier's seaworthiness obligation and a breach of the shipper's obligation relating the shipment of dangerous goods contribute to a loss, the shipowner will only be entitled to rely on the indemnity provided in Article IV r.6 to the extent that damage is clearly attributable to the dangerous nature of the goods. Where the unseaworthiness was at least a necessary contributing factor to the loss, the carrier will have to bear the whole responsibility in the absence of evidence identifying dangerous goods as the sole cause for (part of) the loss.

Regarding the burden of proof in relation to the cause of loss in the above cases, it rests with the carrier under Hague-Visby rules. In *The Kapitan Sakharov*, where a carrier who has sustained losses in connection with the carriage of dangerous cargo brings a claim against cargo interests under Art IV r 6, the burden of proof was on the carrier to establish that a specific part of the damage or loss was caused by the dangerous cargo. In the absence of evidence on the relevant proportion of loss due to dangerous cargo and unseaworthiness, the carrier cannot claim indemnity and will be held liable for the whole loss such as in *The Fiona*.

Finally, it is interesting to see how the new Rotterdam Rules deal with the issue of contributing fault between the shipper and carrier. In cases where the damage and loss is due to a combination of causes, the carrier (based on Art 17(6)) and the shipper (based on Art 30(2)) can be relieved of part or all of the liability if the cause or one of the causes of the loss is not attributable to one or both parties.²³ To relieve part or all of the liability, the shipper or the carrier has the burden of proving the apportionment of loss he is not responsible for. If the shipper's liability is not based on fault (e.g. strict liability under Art 32), the above analysis is not applicable.

²¹ *The Fiona* [1994] 2 Lloyd's Rep 506

²² *The Kapitan Sakharov* [2000] 2 Lloyd's Rep. 255.

²³ See Asariotis, *Burden of proof and allocation of liability for loss due to a combination of causes under the new Rotterdam Rules*, (2008)14 JIML, p 537; see also Baughen, *Obligations of the shipper to the carrier*, (2008)14 JIML,563; and Diamond, *The next sea carriage Convention*, [2008] LMCLQ 135

It should be noted, in contrast to HR/HVR, the carrier's seaworthiness obligation is a continuous one, applying throughout the carriage.²⁴ Moreover, the initial burden is on the claimant²⁵ to prove the unseaworthiness of the ship under Art 17 (5) of RR. Accordingly, if the cargo claimant can make a prima facie case of unseaworthiness as a cause and the carrier is unable to disprove either causality or negligence, the carrier would be liable, but for only part of the loss, with proportional liability assessed by a court under Art 17(6).²⁶

In addition, Art 17(6) simply provides for proportional liability of the carrier in cases where courts find the carrier partly liable under Art 17 (2)-(5), but it is silent on the burden of proof in relation to establishing the respective proportions of loss due to different contributory causes. Actually, Art 17(6) does not provide any clear guidance on how to justify apportionment and how to assess proportional liability. As a result, courts in different jurisdictions are likely to adopt their own methods and practices in making the relevant allocation, which is not good to the legal certainty. It is suggested²⁷ to redraft Art 17 (6) to include the method of apportionment of the loss.

We can see the RR is remarkably different from the HR/HVR where the carrier is liable in full for a breach of Art III r1, unless he can prove the relevant proportion of loss due to a different cause (e.g. shipper's liability under Art IV r6). Furthermore, under HR/HVR, the carrier bears the initial burden of proving the exercise of due diligence, otherwise he will be liable for unseaworthiness.

Compared with HR/HVR, although there is a considerable improvement on the obligations of the shipper to the carrier under RR,²⁸ the apportionment of liability under Art 30(3) will not apply to the shipper if his liability is strict (e.g. dangerous cargo

²⁴ Article 14 of Rotterdam Rules.

²⁵ See also Tetley, *Some general criticisms of the Rotterdam Rules*, (2008)14 JIML, p628.

²⁶ See Asariotis, *op. cit.*, p. 546.

²⁷ See Tetley, *A critique of and the Canadian response to the Rotterdam Rules*, in Thomas D. R. (editor) (2009) *A new convention for the carriage of goods by sea—the Rotterdam Rules*, Lawtext Publishing Limited, p. 293, see also Diamond, *op. cit.*, 152 and Asariotis, *op. cit.*, p. 543

²⁸ See chapter 7 of the RR Obligations of the shipper to the carrier of the Rotterdam Rules, see also Diamond, *op. cit.*, 159 and Baughen, *op. cit.*, 559.

liability under Art 32). Considering a combination of causes (dangerous cargo and unseaworthiness), there are no special rules in the RR that allow the shipper to be relieved of part of his liability in dangerous cargo incidents. Presumably, the shipper is liable in full under Art 32.

Obviously, after the RR has come into force, it will depend on the courts to interpret and apply Articles 17(5), 30(2) and 32. A possible interpretation is where loss is due to a combination of causes (unseaworthiness and dangerous cargo) and so the shipper is liable in full, unless he can prove that unseaworthiness and lack of due diligence by the carrier is a contributing cause. However, without a specific rule included in RR, it is not easy to justify an apportionment of loss between the shipper and the carrier.

7.4 Whether a shipper's liability can be transferred to a third party

The Rotterdam Rules regulate transfer of liability under Article 58, but only applies to negotiable transport documents and negotiable electronic transport records. Under Article 58, r.2,²⁹ the B/L holder assumes the liabilities if he “exercise any right under the contract of carriage”. However, it does not then assume the same liabilities as if it had been the original party (i.e. shipper) to the contract. It only assumes any liabilities “imposed on it under the contract of carriage” and then only “to the extent that such liabilities are incorporated in or ascertainable from” the bill of lading.

The obligations under Article 32 in respect of undisclosed dangerous cargo are imposed only on the shipper and the documentary shipper. The only way to impose the liability on other parties (e.g. a B/L holder) would be through an express clause in the negotiable transport document or its electronic equivalent. However, such a clause would be regarded as an attempt to increase the obligation under the convention of the “consignee, controlling party, holder” and would be rendered void under Article 79.2.³⁰ Accordingly,

²⁹ Article 58.2 provides: “A holder that is not the shipper and that 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”.

³⁰ Article 79.2 provides: “Unless otherwise provided in this Convention, any term in a contract of carriage is void to

a shipper's obligations regarding undisclosed dangerous cargo would not be transferred to a third party, and a B/L holder would not be liable to the carrier for damages for shipping a dangerous cargo under Articles 58.2 and 79.2.

In England it is clear that the shipper's liability under Article IV rule 6 does not transfer to a third party under COGSA 1992, although the Law Commission thought it did. The Law Commission specifically rejected any provision preventing the transmissibility of this liability to third party at 3.22 of Law Com No. 196 (1991). Nonetheless, from the following case law, we can see that neither the intermediate bill of lading holder nor their sub buyer would undertake the liability transferred from the original shipper.

In *The Aegean Sea*,³¹ Thomas J expressly indorsed the same view given by the authors of *Scrutton* that "shipper" in Article IV rule 6 cannot be read as including a lawful holder of the bill of lading to whom rights and liabilities are transferred under COGSA 1992, and that therefore such a holder is not subject to the shipper's Hague Rule liabilities in respect of dangerous cargo.³² In the appeal in *The Giannis NK*, Hirst L.J. noted that at common law the shipper would have remained liable, notwithstanding endorsement of the bill of lading.

In *The Berge Sisar*,³³ where the liability of an intermediate party who had called for samples from the cargo prior to delivery and on the basis of their analysis had decided not to take delivery but to resell the cargo. In due course they obtained the bill of lading which they then passed on to their sub-buyer. This temporary possession of the bill gave the intermediate buyer rights of suit under section 2(1) of COGSA 1992, of which they

the extent that it:

(a) Directly or indirectly excludes, limits or increases the obligations under this Convention of the shipper, consignee, controlling party, holder or documentary shipper; or

(b) Directly or indirectly excludes, limits or increases the liability of the shipper, consignee, controlling party, holder or documentary shipper for breach of any of its obligations under this Convention".

See also Baughen, *Obligations owed by the shipper to the carrier*, in Thomas D.R. (editor), (2009) *A new Convention for the Carriage of Goods by Sea—The Rotterdam Rules*, op. cit., p. 188.

³¹ [1998] 2 Lloyd's Rep. 39, 70.

³² Mildon, David & Scorey, David, *Liabilities of Transferees of Bills of Lading*, The International Journal of Shipping Law (IJS�), part 2, 1999, pp94-104, at 96.

³³ *Sub nom. Borealis AB v. Stargas Limited and others and Bergesen* [2001] 2 WLR 1118; [2002] 2 AC 205; Treitel, *Bills of Lading: Liabilities of Transferee-The Berge Sisar* [2001] LMCLQ 344

were divested under section 2(5) when they passed on the bill to their sub-buyer.

The House of Lords held that at the time the intermediate buyer made the request they were not in a position to make a “demand” for delivery as they lacked the bill of lading and so lacked the authority to make such a demand. It would be preferable to have been that a request for samples prior to delivery could not amount to a “demand for delivery”.³⁴ The decision given by the House of Lords in *The Berge Sisar* is clear that neither the intermediate bill of lading holder nor their sub buyer would undertake the liability transferred from the original shipper.

In China, there is no particular provision in dealing with the “transfer of rights and liabilities” to a bill of lading holder, who is not an original party to the contract of carriage under the Maritime Code. The starting point is simply freedom of contract: as the Maritime Code, Art.78 r.1 states: “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”. Here the B/L holder includes transferees, and Art. 78 r.2³⁵ refers to certain responsibilities (i.e. demurrage, dead freight and other expenses) might be transferred from the shipper under specific clause of B/L. But, the provision does not help us to understand, with regard to the shipment of dangerous cargo, whether the shipper’s liability can be transferred to a third party (e.g. consignee). Nonetheless, some general legislation might help, such as the General Principles of Civil Law and the Contract Law 1999.³⁶

Under Contract Law 1999, Article 88 “Upon consent by the other party, one party may concurrently transfers his/her rights and obligations under a contract to a third person”. This means the obligations under a contract can be transferred under Chinese law, but there are strict conditions to do it.

³⁴ Baughen & Campbell, op. cit. p. 9.

³⁵ Article 78 rule 2, 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”

³⁶ Contract Law of People’s Republic of China was adopted at the Second Session of the Ninth National People’s Congress on March 15, 1999. See the English version of Contract Law at <http://www.chinaiprlaw.com/english/laws/laws2.htm>

Firstly, there must be an agreement from the transferee. Some Chinese scholars³⁷ think it is necessary to have a contract between the third party and the original contracting party with an express agreement by the third party to take the responsibility under the contract. Although there is a lack of Chinese legislation on this issue, surely this must be necessary as a matter of logic. Secondly, according to Article 84 of Contract Law,³⁸ it is subject to the carrier's consent that the shipper's obligation can be transferred to a B/L holder. Thirdly, according to Article 86,³⁹ if the obligation is exclusively personal to the original shipper, it cannot be transferred to a B/L holder. Fourthly, according to Articles 79 and 89,⁴⁰ in light of the nature of the contract, some rights and obligations cannot be transferred.

In the light of what I have said above, none of the conditions can be satisfied in the case of dangerous cargo. For instance, it is very unlikely to see the B/L holder would agree on taking all shipper's obligations on dangerous cargo, before knowing the exactly amount of damages could occur. Moreover, it is impossible to get the consent from the carrier in advance as to which transferee will take the responsibility (instead of the shipper) since the B/L can be transferred many times while the cargo on board during the voyage. Furthermore, considering the nature of the carriage contract, it is not realistic for the transferee to get hold of all information about the dangerous nature of cargo before cargo's delivery. Accordingly, the obligation to notify the carrier, as discussed in English law, can be regarded as an exclusively personal duty of the original shipper and a third party cannot substitute for the shipper.

In China, as a general proposition, a shipper's duty of notice cannot be transferred and

³⁷ Zhang Junhao, Liu Xinwen & Yao Xinhua (ed.) *Civil Law Principle* (in Chinese), (2000: 3rd edition) China University of Political Science and Law Press, p. 701.

³⁸ Under Article 84 of the Contract Law "Where the obligor delegates its obligations under a contract in whole or in part to a third person, such delegation is subject to consent by the obligee".

³⁹ Under Article 86, "Where the obligor delegates an obligation, the new obligor shall assume any incidental obligation associated with the main obligation, except where such incidental obligation is exclusively personal to the original obligor".

⁴⁰ Article 79 of the Contract Law, The obligee may assign its rights under a contract in whole or in part to a third person, except where such assignment is prohibited: (i) in light of the nature of the contract; (ii) by agreement between the parties; (iii) by law. Article 89, Where a party concurrently assigns its rights and delegates its obligations, the provisions in Article 79, Articles 81 to 83, and Articles 85 to 87 apply

the transferees will not become liable with regard to the shipment of dangerous cargo,⁴¹ same as that in England. However, the general rules in the Contract Law and the Civil law are not specifically designed for applying to maritime cases, and cannot be construed as “transfer the shipper’s contractual rights and liabilities to a B/L holder” particularly in the case of dangerous cargo. There is no doubt that the Chinese legislators have not touched the topic on transfer of rights and liabilities under the Maritime Code. This issue should be clarified during the revision of the Code, but how to stipulate it? When and how the consignee assumes liability is a very difficult question, and was not answered satisfactorily either in the UK Bill of Lading Act 1855 or in the UK Carriage of Goods by Sea Act 1992.

In addition, to what extent should the liabilities of the B/L holder be subject to? The author believes the extent should at least be narrowed down to “such liabilities have to be incorporated in or ascertainable from the B/L”. The relevant issue is regulated under Article 58, r.2 of the RR, and it can be used as a reference for Chinese legislators during the revision of Maritime Code.

7.5 Conclusion

From what has been discussed above, we can see the Convention has set out some extremely comprehensive rules in regard to the obligations of the shipper to the carrier. Most of them are reasonably clear and can be regarded as a big improvement on previous cargo conventions, such as Articles 27, 28 and 29 covering a shipper’s general obligations as regards delivery of the goods for carriage, cooperation with the carrier and the provision of information, instruction and documents. There is no doubt that liability for breach of Article 32 and Article 31.2 is strict, whereas the shipper’s other liabilities in Chapter 7 are based on fault. Moreover, the obligations imposed on the shipper are mandatory. Article 79.2 (a) renders void any term that directly or indirectly excludes, limits or increase them; this is quite different from the position under Article V of the Hague-Visby rules. Finally, Article 13.2 (FIOSST term) appears to be

⁴¹ See Zhouchao, *Shipper’s duty of notice and related liability in shipment of dangerous goods by sea* (in Chinese), [2005] Journal of Political Science and Law, Vol. 22, Issue 4, p. 32.

satisfactory and successful, and the shipper's obligations relating to FIOST term are referred in Article 27.2. These provisions can be incorporated into Chinese law or used as references for Chinese legislators during the revision of the Maritime Code.

However, some provisions are far from clear, particularly in respect of the rules dealing with the allocation of liability for loss due to a combination of causes (e.g. dangerous cargo and unseaworthiness), there are no special rules in the RR that allow the shipper to be relieved of part of his liability in dangerous cargo incidents. In this respect, the RR is remarkably different from the HR/HVR where the carrier is liable in full for a breach of Art III r1, unless he can prove the relevant proportion of loss due to a different cause. In the event that the Rotterdam Rules become law in the United Kingdom and China, it will depend on the courts to interpret and apply Articles 17(5), 30(2) and 32.

In addition, it is still uncertain whether claims for economic loss due to delay suffered by the carrier fall under the convention. If it does not, presumably it will be left to be governed by national law. In England the ordinary rules on causation and remoteness would apply; in China, the rule of proximate causation would apply.

Finally, the author must admit that the unnecessary complexity has in many cases been introduced in the Rotterdam Rules. In the near future, it is unlikely to see China to ratify the Convention, although it may well be ratified by the US, then followed by the UK. Only if it has been ratified by a great majority of the UN member states, it is possible to achieve the goal of "uniformity" and supersede the Hague, Hague-Visby and Hamburg Rules.

Chapter 8 Final Conclusions

This thesis started from the point that the danger in dangerous cargoes was not necessarily something in the goods themselves, but might well lie in the way they were packaged, looked after or transported (1.2), thus the problem of various parties' liabilities arising from the carriage of dangerous cargo is unclear. Given the degree of complexity of transport law is unusually high, it is necessary to sort and organise the materials in a suitable manner that is the basis for further research. Considering the multi-dimensional nature of this problem (in contract, tort and statute law), I will summarise the conclusions from the comparative analyses of the following issues: (1) the substance, the packing and handling; (2) the scheme of liability; (3) the channelling of liability; and (4) the type of recoverable damage.

8.1 Dangerous Cargo, the Packing and Handling

In this thesis, we have used a broader definition for dangerous cargo (1.1). Although English and Chinese law have different approaches (1.1.1 & 1.1.2), the concept of dangerous cargo is effectively the same (1.2.1.4), except for “legally” dangerous cargoes (4.2.1.1) which is only covered by English common law. In practice, for a carrier to enquire about information on dangerous cargoes, whether they are in China or in England is to refer to the IMDG Code.

In the U.K., the restrictions on goods which a charterer or cargo-owner may ship are imposed by the common law, the terms of contract and statute. At common law, the shipper has strict liability, unless the shipowner knew or should have known of the danger. However, common law or contractual provisions must obviously give way to overlapping statutory provisions (e.g. Hague-Visby Rules). If the statutory provision is inapplicable, the common law indemnity will continue to apply, thus the shipper may be strictly liable for the shipment of “legally” dangerous cargo at common law (4.2.1.1). Moreover, the common law indemnity may be implied into charterparty (4.5.4) depending on the specific terms of the particular charterparty.

In China, dangerous cargoes are regarded as a category, the extent of which is developed by statutory regulation based on a substantial list (e.g. national standards under *GB 6944/GB12268*) or the IMDG Code. Unlike English common law, China does not recognise *stare decisis* and generally the strict liability is not applicable to “legally” dangerous cargoes, given Article 68 of Maritime Code is limited to physically dangerous cargoes.

Under the HNS Convention, the definition of HNS is by reference to existing lists of substances in seven separate IMO instruments (5.2.2.3). Many countries are reluctant to ratify this convention. To remove the obstacles of ratification, the IMO approved a draft Protocol to the 1996 HNS Convention in early 2009 (5.2.2.5). The Protocol simplifies the HNS Convention and makes it easier to identify contributors to the HNS Fund.

Neither China nor the U.K. has ratified the HNS Convention (5.2.2.6), due to different reasons. The UK had strong intentions to ratify the Convention, but was concerned over the details of certain aspects of the compensation scheme. Currently the UK is in the process of waiting for the Protocol to address those concerns (5.2.2.5). In contrast, China has so far not had much interest in the HNS Convention, but this may change. China still needs to see whether the ratification of the Convention/ Protocol would as a whole, be beneficial to China. Nonetheless, if it would cause undue costs or competitive disadvantages, then the Convention would not be ratified by China. In any case China, like the UK, will do nothing until the Protocol is finalised.

8.2 Scheme of Liability

With regard to the liability scheme for the carriage of dangerous cargo by sea, China and England adopt different approaches, but the practical results are the same so far as the decision on who is liable is concerned. China relies heavily on statute, particularly the Maritime Code, and is supplemented by limited application of tort law (e.g. Articles 106, 123 of the Civil law). In England, it is mainly contract law, plus fairly rigorous application of tort law. As a common law country, legislation is less important except for claims for compensation for pollution.

It should be noted that the shipper must use reasonable care to warn all those who assist in the transportation of dangerous cargo (3.1.2.2), and this liability is strict at English common law, Chinese Maritime Code and HR/ HVR/Hamburg Rules/ Rotterdam Rules. It is extremely important for the carrier to get all information regarding characteristics of dangerous cargoes and their handling. Such information, if effective, must be presented in an intelligible way to the right persons (e.g. the ship's master) and at the right time (before shipment). In essence, the object of giving notice is to provide the carrier with the opportunity to either refuse to carry the cargo, or to take necessary precautions to protect his vessel and other cargoes on board. The methods of precaution include supplying a seaworthy vessel, proper handling and care for the cargoes (4.3). The carrier's duties of care on cargo increase somewhat proportionally to the notice given by shippers of the dangers associated with the shipment of dangerous cargoes (3.1.2.3).

In addition, there are significant differences of tort law between England and China. In England, "duty of care" is an important issue in negligence. With the restriction of the extent of duty, it is unlikely to impose a duty of care on the defendant, to not cause pollution-related loss in the absence of physical damage (pure economic loss). In contrast, China knows no concept of "duty of care". Therefore there is no relevant restriction on the "extent of duty". Theoretically, for pure economic loss, recovery is possible under Article 106 of Civil Law where the defendant's negligence causes the damages. In practice, to avoid a deluge of potential claims for compensation, Chinese maritime courts would require the defendant's fault is a proximate cause of the economic loss (3.2.1, 6.2). Therefore, the practical result is the same; both countries have difficulties with regard to awarding damages for "pure economic loss".

Both China and England have a potential strict liability rule under general law (tort or strict product liability), but it is not very important since it is not often applied to dangerous cargo cases. As a result, the strict liability is still most likely to be based on the HNS convention and oil pollution conventions.

At English common law, the application of strict liability in *Rylands* is restricted to foreseeable damage and “escape” from defendant’s property (or control). If a shipowner is unaware of any dangerous cargoes on his ship, it is unlikely for him to foresee any resulting damage. Therefore in the majority of cases, the *Rylands* rule¹ effectively does not apply to dangerous cargo incidents. Moreover, the Law Commission has rejected the approach to extend the rule in *Rylands* to ultra-hazardous activities. The author argued that the rule in *Rylands* should be extended to ultra-hazardous activities, particularly considering the environmental legislation is not yet integrated and sufficient (3.1.3).

In contrast, Article 123 of the Chinese Civil Law is clearly applicable to ultra-hazardous activities. Theoretically, if the carriage of dangerous cargo is regarded as an “ultra-hazardous activity”, the shipowner has strict liability for any resulting damages. The disadvantage is that this provision is far too general and is very difficult to be applicable in real maritime cases, given that the Chinese Maritime Code does not have any specific provisions regarding strict liability for ultra-hazardous activities. Also there is no relevant principle of remoteness of damage in Chinese tort law.

Moreover, both China and England have legislations on product liability. In practice, however, they are rarely to be applied to marine claims for damage and pollution caused by dangerous cargo, given their regulatory restrictions. Under Chinese Product Quality Law (PQL), the strict product liability is not applicable to sellers, unless the seller fails to identify the producer.² Otherwise, a seller will only be liable for injury or damage caused by a defective product if his fault contributed to the defect. This is the same as English law. However, an important difference is the commercial property is recoverable under PQL but not in the Consumer Protection Act 1987 (3.1.4, 3.2.5).

Furthermore, there is a big difference of vicarious liability in two countries. In England, a carrier could be liable in tort of negligence for lack of due care of the dangerous cargo

¹ The requirement of “foreseeable damage” was discussed in the case of *Cambridge Water* in section 3.1.3

² Article 42 of the PQL

himself, his agents or his servants (3.1.5.2), or he has an overriding obligation if unseaworthiness caused the damage. In contrast, Chinese law has not introduced an occupant's or vicarious liability. That means it is uncertain what liability the carrier has with regard to the tortious actions that its employees commit during the course of employment but outside of the navigation and management of the vessel.³ Nor is it clear what the carrier's liability is with regard to any tortious action of a third party committed against the navigation and management of the vessel. It is expected that Chinese court would somehow hold the carrier liable to any tortious action that its employees commit during the course of employment.

From what has been discussed in Chapter 3, we can see tort rules on liability are not clear-cut or easy to apply. They often lead to complicated legal questions and the solutions are often doubtful. The need for an all-embracing solution is strong, but the need for differentiation is stronger and inevitably leads to considerable difficulties. Conversely, freedom of contract seems to be meaningful and may offer a method of keeping a reasonable degree of flexibility. The terms of contract of carriage not only clarify the responsibilities between the carrier and the shipper, but also ensures they are under the protection of exceptions and limitations of liability provisions (4.3.1.5; 5.2.3). In certain circumstances, in England it even extends the protection to third party beneficiaries (4.6). A comparison of the contractual liability between Chinese and English law has been evaluated in sections 4.2.2.3 and 4.3.2.4.

In China, the liability of the carrier to the shipper under the Maritime Code is HVR-based, which is the same as in England. However, considering the liability of the shipper to the carrier, the relevant provisions under the Maritime Code are largely Hamburg-based which have made more specific provisions, but haven't fundamentally changed the scheme of liability for dangerous cargoes under HR/ HVR. They all have very similar provisions in dealing with dangerous cargoes, which largely supersede the

³ Under Article 51 of the Maritime Code 1992, negligence of the shipmaster, seamen, pilot or other employees of the carrier in the navigation and management of ship is a common ground for the carrier to claim exemption. This exemption has at least two elements: first, the person committing the negligent act must be a pilot or an employee of the carrier; and secondly, the negligence which has caused loss or damage to goods must be committed for the purpose of, or in the process of, navigating and managing the vessel.

common law rules related to shipper's obligation to give notice.

Nevertheless there are still differences between the two countries. For example, unlike English law, there is not any equivalent provision of the Maritime Code to Article III r8 of the HR/HVR (prohibiting the carrier from reducing certain liabilities). Also, whether the carrier is relieved of liability based on the FIOST clause inserted in B/L has been interpreted in different way. In China, the FIOST term has not been stipulated or clarified by Chinese Maritime Code (4.3.2.3). In England, it is clearly interpreted in case law that the parties to the contract of carriage are free to agree to transfer some or all of the carrier's duties to the shipper or consignee.

In addition, the legal term of "actual carrier" under Chinese Maritime Code,⁴ which is largely Hamburg based, has resulted in confusion relating to the shipper's notice to the carrier. It is not clear whether the shipper's notice to the "carrier" also includes the actual carrier. The author suggests the wording of "actual carrier" should be added to Article 68. Also in practice, the shipper's agent or carrier's agent often act for their principal while dealing with the transportation of dangerous cargo. These persons are usually involved in the day-to-day business near the harbour. Unfortunately, in the Maritime Code, there is a lack of clarification of the status of the agent's rights and liability relating to the carriage of dangerous cargo, and as such Article 68 needs to be clarified. In comparison, in England the shipper's liability to notify the carrier is under Article IV r6 of HVR, which is specified to apply to "the carrier, master or agent of the carrier", and this provision is very clearly promulgated.

Frankly, the author admits that there is a lack of coherence among the different chapters of the Maritime Code. This is due to the fact that the Chinese legislative authority tried to "pick and mix" all the good aspects of the HR/HVR and Hamburg Rules. A negative impact of this attitude is real. The author suggests during the revision of the Maritime Code, different chapters need further coordination and it would be better to have the

⁴ Under Article 42 of Maritime Code, "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. This definition is same as that in Article 1 of Hamburg Rules.

revised Code based on one of the above international conventions or the new Rotterdam Rules. Compared with HR/HVR, there is a considerable improvement on the obligations of the shipper to the carrier under the Rotterdam Rules (Chapter 7).

8.3 Channelling of Liability

Neither England nor China makes particular effort to channel liability under its national law. Most commonly, “channelling of liability” would be found in the international liability conventions such as HNS Convention 1996, CLC Convention/ 1992 Protocol and the Bunker Convention 2001.

How to “channel the liability” is always a tough question, given the many difficulties that arise from the variety of liability systems in the world. Furthermore, the various parties involved in the transportation of dangerous cargo may have potential liabilities, e.g. where dangerous cargo caused damages to other cargoes on board is more complicated than the basic shipper-carrier relation; or damage from the dangerous cargo affects longshoremen or other employees (3.1.5); or where dangerous cargo damage has a wide area of impact to the environment, there is the possibility for many parties to be involved, such as the owners of contaminated fishing ponds, hotel owners’ loss of income due to pollution, owners of the polluted coasts (3.1.2.4), people injured by explosions of dangerous cargo, damaged to a harbour by a burning tanker (3.1.4). Therefore, it is extremely difficult to single out one responsible party for all damages.

One way to create order is to use the method of recourse actions (4.7) and channel the liability either by so-called legal channelling or by economic channelling. This means it would be governed by the application of adequate criteria such as the achievement of an economically adequate distribution of loss; the securing of prompt distribution of compensation; the victim’s access to an effective jurisdiction. One condition is that the liability has to be strict, not based on fault (5.2.2.2). Following these guidelines, there is a possibility to channel all liabilities to either to the shipper, carrier or manufacturer. It is argued that the shipowner is the sensible all-embracing solution for the problem of recoverable damages both under the CLC (5.2.1) and HNS Convention (5.2.2.3), but

saving the recourse action against the responsible parties.

8.4 The Type of Recoverable Damage

Chapter 8 addressed the issue of the recoverable damage (6.3.2) which is closely connected to the liable person who caused the damage. The rule relating to recoverable damage has become far more important than ever. In the past, on the occasions where dangerous cargo disasters have occurred, the types of recoverable damages in focus were explosions or fire. Later on, other damages attracted the interests of courts and practical lawyers, especially for the more unusual types of damage that involve huge sums of money in compensation. For example, damage caused by seizure and delay (4.2.1.1), like contraband, or when a whole business is affected e.g. a contaminated seaside resort. While dangerous cargo incidents result in much damage, the effect is not only to a few persons but in fact to the whole environment (6.3.2). This leads us to the discussion of economic loss (3.1.2.4), which is used as a necessary limiting factor to avoid “opening the floodgates” to a deluge of potential claims.

In England, with regards to the damages caused by the inherent nature of dangerous cargoes, the amount and type of damage recoverable will be assessed by reference to the general principles of causation and remoteness of damage applicable to claims in tort and contract. Although, in practice the distinction between remoteness and causation is often not drawn and both principles are dealt with under the one head, either labelled as “remoteness”, “legal causation” or “proximate cause”. Casualties involving the carriage of “dangerous” cargo can give rise to extremely difficult questions of causation. In practice one may find more than two competing causes for the resulting damage (6.1). It is important to provide a reliable guide for ascertaining which can be regarded as the dominant cause. Moreover, the defendant may have factually caused the damage, but the decision may be that he should not pay for the full extent of the damage because it is considered too remote. Therefore, the rule of remoteness is a way for the law to attempt to limit compensatory damages (6.3).

In contrast, China does not have the rule of remoteness, but the recoverable damages

under the rule of “proximate cause” and also damages shall be foreseeable by the defendant at the time of the incident. With respect to the damage of natural resources, theoretically the scope of compensation should be limited to reasonable measures of reinstatement, but Chinese maritime courts do not regularly admit claims of this type. In short, although very different rules are applied in England and China, theoretically the recoverable damages in China are as extensive as those applied in England. However, frankly speaking, there is still a big gap regarding the type of damages recoverable, given that the economic strengths of China and England are very different.

In conclusion, the various parties’ liabilities in respect of the carriage of dangerous cargoes are complex. There is no all-embracing solution to the legal problems in this field. Compared with the not clear-cut tort rules in China and England, the freedom of contract seems to be more meaningful and applicable in practice. However, neither England nor China makes particular effort to channel liability under its national laws, instead the “channelling of liability” would be found in the HNS Convention 1996 and oil pollution conventions. For different reasons, neither China nor the U.K. has ratified the HNS Convention. Both countries are waiting for the Draft Protocol which is expected to be finalised in 2010.

This thesis analyses and evaluates the liability regime for the carriage of dangerous cargo in English and Chinese law by providing suggestions for existing problems in each country. Further research on this topic should be conducted along the new development of international conventions and other difficult issues discussed in this thesis.

Appendix I Examples of incidents involving HNS¹

Location and year	Vessel	HNS	Quantity involved	Incident consequences
Halifax, Canada, 1917	Montblanc	Explosives	2,600 tons	Explosion, 3000 killed 9000 injured
Texas City, 1947	Grandcamp	Ammonium Nitrate	2,200 tons	Fire and explosion, 468 killed, 2nd vessel caught fire and exploded
Italian Coast, 1974	Cavtat	Tetraethyl lead Tetramethyl lead	150 tons in drums 120 tons in drums	Collision and sinking
Landskrona Sweden, 1976	Rene 16	Ammonia	180 tons	Hose rupture, 2 dead showered by ammonia
North Sea, 1979	Sindbad	Chlorine	52 one ton flasks	Flasks lost at sea due to rough weather
Adriatic coast, 1984	Brigitta Montanari	Vinyl chloride	1300 tons	Sinking
Mogadishu port, 1985	Ariadne	62 IMDG-classed chemicals	Over 750 tons in teus	Grounded, fires, local population at risk. Sunk
North Sea, 1987	Herald of Free Enterprise	Undeclared ro-ro freight packages	Over 500 tons	Capsized, hazards to salvage divers
Cape Finisterre, 1987	Cason	Mixed dangerous cargo in packages	1,000 tons	Fire and grounding, 23 crew members perished
Dutch Coast, 1988	Anna Boere	Acrylonitrile, Dodecylbenzene	547 tons 500 tons	Collision and sinking
Italian Coast, 1991	Alessandro Primo	Acrylonitrile, Dichloroethane	550 tons 1000 tons	Sinking
Greek Islands 1994	Tus	Sodium hydroxide	4,200 tons	Grounding
Chinese coast 1995	Chung Mu No.1	Styrene	310 tons	Collision

¹ Table has been compiled by the author from various sources, including Internet such as <http://www.dft.gov.uk/consultations/archive/2005/pchns/>; <http://folk.uio.no/erikro/WWW/HNS/correspondence/UK3.doc>; conference papers e.g. <http://www.hnsconvention.org/en/2%20Incidents%20involving%20HNS%20-%20Karen%20Purnell.pdf>; http://www.kaiho.mlit.go.jp/shisaku/bousai/em_hns/ch1.pdf; Books such as Xu Guoping, (2006), *Study on Compensation Law of Oil Pollution Damage (in Chinese)*, Peking University Press; Journal papers such as Peermohamed, Faz and Emery, Renaud Barbier, *Dangerous Cargo*, (2002), 16(7) P & I International. For comprehensive list see bibliography.

English Channel, 1995	Grape 1	Xylene	4000 tons	Sinking
North Scottish Coast, 1999	Multitank Ascania	Vinyl acetate	1750 tons	Fire, left abandoned, threat to villages
Thames Estuary, 1999	Ever Decent	Sodium cyanide, potassium cyanide	Various teus in vicinity	Collision with pax ship, fire, extensive fire fighting, coastal threat
English Channel, 2000	Iveoli Sun	Styrene, methyl ethyl ketone, isopropyl alcohol	4000 tons, 1027 tons, 997 tons	Sank under tow, sunken cargo recovered following year
North Sea, 2001	AB Bilbao	Ferro silicon	3300 tons	Cargo hold explosion
Parangua, Brazil, 2001	Norma	Naphtha	1800m ³	Grounding, escape of part of cargo
Farne Islands, UK 2001	Rosebank	Fertilizer	1326 tons	Fire broke out in the paint store
Bristol Channel, 2001	Dutch Navigator	Hydrofluorosilicic acid	Two damaged ISO tanks	Damaged in hold during storm
South Africa, Sept 2002	Jolly Rubino	Fungicides, phenol, voronate, ethyl acetate, methyl isobutyl ketone	Various tons in containers	Eng room fire spread to ship, abandoned, then grounded. Fire, oil and chemical incident
Japan, October 2002	Eiwa Maru	Xylene	500 tons	Sank after collision with container ship
Yangtze River, China, Oct. 2002	Accord	Poly-glycol mono-methyl ether acetate, methyl methacrylate	300,950 tons	Stranding
Karachi, Pakistan, 2003	Tasman Spirit	Iranian light crude oil vapour	30,000 tons	Grounding
Virginia, USA, Feb. 2004	Bow Mariner	Methyl tertiary butyl ether/crude ethanol Methanol	Vapours+ 11,571 (CIE)	Explosion/ sinking
Paranagua, Brazil	Vicuna	Methanol	4,000 tons	Explosion
Ho Chi Minh Vietnam 2005	Kasco	Gas oil	350 tons	Collision
Off Shanghai, China, 2005	GG Chemist	Toluene	64 tons	Collision
Hsinchu, Taiwan, 2005	Samho Brother	Benzene	3,136 tons	Collision
Cherbourg, France, 2006	ECE	Phosphoric acid	10,361 tons	Collision

Appendix II Maritime Code of the People's Republic China

(Adopted at the 28th Meeting of the Standing Committee of the Seventh National People's Congress on November 7, 1992, promulgated by Order No. 64 of the President of the People's Republic of China on November 7, 1992, and effective as of July 1, 1993).

See the full text of Maritime Code at <http://www.colaw.cn/findlaw/marine/maritime.htm> (in English, accessed on 18th August 2010).

Chapter IV Contract of Carriage of Goods by Sea

Section 1 Basic Principles

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 or 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 abovementioned 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.

Section 4 Transport Documents

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 good 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.

Section 5 Delivery of Goods

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 good 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 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 charters out and the charterer charters 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 General Principles of the Civil Law of the People's Republic of China

Adopted on April 12, 1986; See the full text of Civil Law at <http://en.chinacourt.org/public/detail.php?id=2696> (accessed on 18th August 2010)

Chapter VI Civil Liability

Section 1 General Stipulations

Article 106 Citizens and legal persons who breach a contract or fail to fulfil other obligations shall bear civil liability. Citizens and legal persons who through their fault encroach upon state or collective property or the property or person of other people shall bear civil liability. Civil liability shall still be borne even in the absence of fault, if the law so stipulates.

Article 107 Civil liability shall not be borne for failure to perform a contract or damage to a third party if it is caused by force majeure, except as otherwise provided by law.

Article 108 Debts shall be cleared. If a debtor is unable to repay his debt immediately, he may repay by installments with the consent of the creditor or a ruling by a people's court. If a debtor is capable of repaying his debt but refuses to do so, repayment shall be compelled by the decision of a people's court.

Article 109 If a person suffers damages from preventing or stopping encroachment on state or collective property, or the property or person of a third party, the infringer shall bear responsibility for compensation, and the beneficiary may also give appropriate compensation.

Article 110 Citizens or legal persons who bear civil liability shall also be held for administrative responsibility if necessary. If the acts committed by citizens and legal persons constitute crimes, criminal responsibility of their legal representatives shall be investigated in accordance with the law.

Section 2 Civil Liability for Breach of Contract

Article 111 If a party fails to fulfil its contractual obligations or violates the term of a contract while fulfilling the obligations, the other party shall have the right to demand fulfillment or the taking of remedial measures and claim compensation for its losses.

Article 112 The party that breaches a contract shall be liable for compensation equal to the losses consequently suffered by the other party.

The parties may specify in a contract that if one party breaches the contract it shall pay the other party a certain amount of breach of contract damages; they may also specify in the contract the method of assessing the compensation for any losses resulting from a breach of contract.

Article 113 If both parties breach the contract, each party shall bear its respective civil liability.

Article 114 If one party is suffering losses owing to the other party's breach of contract, it shall take prompt measures to prevent the losses from increasing; if it does not promptly do so, it shall not have the right to claim compensation for the additional losses.

Article 115 A party's right to claim compensation for losses shall not be affected by the alteration or termination of a contract.

Article 116 If a party fails to fulfil its contractual obligations on account of a higher authority, it shall first compensate for the losses of the other party or take other remedial measures as contractually agreed and then the higher authority shall be responsible for settling the losses it sustained.

Section 3 Civil Liability for Infringement of Rights

Article 117 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 therefrom, the infringer shall compensate for those losses as well.

Article 118 If the rights of authorship (copyrights), patent rights, rights to exclusive use of trademarks, rights of discovery, rights of invention or rights for scientific and technological research achievements of citizens or legal persons are infringed upon by such means as plagiarism, alteration or imitation, they shall have the right to demand that the infringement be stopped, its ill effects be eliminated and the damages be compensated for.

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.

Article 120 If a citizen's right of personal name, portrait, reputation or honour is infringed upon, he shall have the right to demand that the infringement be stopped, his reputation be rehabilitated, the ill effects be eliminated and an apology be made; he may also demand compensation for losses.

The above paragraph shall also apply to infringements upon a legal person's right of name, reputation or honour.

Article 121 If a state organ or its personnel, while executing its duties, encroaches upon the lawful rights and interests of a citizen or legal person and causes damage, it shall bear civil liability.

Article 122 If a substandard product causes property damage or physical injury to others, the manufacturer or seller shall bear civil liability according to law. If the transporter or storekeeper is responsible for the matter, the manufacturer or seller shall have the right to demand compensation for its losses.

Article 123 If any person causes damage to other people by engaging in operations that are greatly hazardous to the surroundings, such as operations conducted high aboveground, or those involving high pressure, high voltage, combustibles, explosives, highly toxic or radioactive substances or high-speed

means of transport, he shall bear civil liability; however, if it can be proven that the damage was deliberately caused by the victim, he shall not bear civil liability.

Article 124 Any person who pollutes the environment and causes damage to others in violation of state provisions for environmental protection and the prevention of pollution shall bear civil liability in accordance with the law.

Article 125 Any constructor who engages in excavation, repairs or installation of underground facilities in a public place, on a roadside or in a passageway without setting up clear signs and adopting safety measures and thereby causes damage to others shall bear civil liability.

Article 126 If a building or any other installation or an object placed or hung on a structure collapses, detaches or drops down and causes damage to others, its owner or manager shall bear civil liability, unless he can prove himself not at fault.

Article 127 If a domesticated animal causes harm to any person, its keeper or manager shall bear civil liability. If the harm occurs through the fault of the victim, the keeper or manager shall not bear civil liability; if the harm occurs through the fault of a third party, the third party shall bear civil liability.

Article 128 A person who causes harm in exercising justifiable defence shall not bear civil liability. If justifiable defence exceeds the limits of necessity and undue harm is caused, an appropriate amount of civil liability shall be borne.

Article 129 If harm occurs through emergency actions taken to avoid danger, the person who gave rise to the danger shall bear civil liability. If the danger arose from natural causes, the person who took the emergency actions may either be exempt from civil liability or bear civil liability to an appropriate extent. If the emergency measures taken are improper or exceed the limits of necessity and undue harm is caused, the person who took the emergency action shall bear civil liability to an appropriate extent.

Article 130 If two or more persons jointly infringe upon another person's rights and cause him damage, they shall bear joint liability.

Article 131 If a victim is also at fault for causing the damage, the civil liability of the infringer may be reduced.

Article 132 If none of the parties is at fault in causing damage, they may share civil liability according to the actual circumstances.

Article 133 If a person without or with limited capacity for civil conduct causes damage to others, his guardian shall bear civil liability. If the guardian has done his duty of guardianship, his civil liability may be appropriately reduced.

If a person who has property but is without or with limited capacity for civil conduct causes damage to others, the expenses of compensation shall be paid from his property. Shortfalls in such expenses shall be appropriately compensated for by the guardian unless the guardian is a unit.

Section 4 Methods of Bearing Civil Liability

Article 134 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 of 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. When hearing civil cases, a people's court, in addition to applying the above stipulations, may serve admonitions, order the offender to sign a pledge of repentance, and confiscate the property used in carrying out illegal activities and the illegal income obtained therefrom.

It may also impose fines or detentions as stipulated by law.

Appendix IV The Marine Environmental Protection Law of the People's Republic of China

(Adopted at the 24th Session of the Standing Committee of the Fifth National People's Congress on August 23, 1982 and effective as of March 1, 1983, and revised at the 13th Session of the Standing Committee of the Ninth National People's Congress on December 25, 1999)

See the full text of MEPL 1999 at <http://www.chinamining.org/Policies/2006-07-18/1153190362d5.html> (In English; accessed on 10-08-2010)

Chapter 4 Prevention and Control of Pollution Damage to the Marine Environment by Land-based Pollutants

Article 39 It is prohibited to transport and transfer dangerous wastes through the internal waters and territorial sea of the People's Republic of China. The transportation and transfer of dangerous wastes through other sea areas under the jurisdiction of the People's Republic of China shall be consent in written by the competent authorities being in charge of environment protection under the State Council in advance

Chapter 7 Prevention and Control of Pollution Damage to the Marine Environment by Dumping of Wastes

Article 55 No unit is permitted, without approval of the State competent authority being in charge of marine affairs, to dump any wastes into the sea areas under the jurisdiction of the People's Republic of China. Units that need to dump wastes may conduct dumping wastes into the sea only after they have submitted an application in written form to the State competent authority being in charge of marine affairs, and the State competent authority being in charge of marine affairs has examined and approved the application and issued a permit. Wastes outside the boundaries of the People's Republic of China are prohibited to dump into the sea areas under the jurisdiction of the People's Republic of China

Article 56 The State competent authority being in charge of marine affairs shall, in accordance with the toxicity of the wastes, the content of poisonous substances and the degree of impact on marine environment, formulate assessing procedures and standards regarding dumping of wastes into the sea. Dumping of wastes into the sea shall be managed in accordance with the categories and quantities of the wastes. The list of wastes permitted to dump into the sea shall be work out by the State competent authority being in charge of marine affairs, and commented by the competent authority being in charge of environment protection directly under the State Council, and then submit to the State Council for approval

Article 57 The State competent authority being in charge of marine affairs shall, in accordance with scientific, rational, economic and safety principles, select and map out ocean dumping zones and submit it

to the competent authority being in charge of environmental protection directly under the State Council for comment, and then submit to the State Council for approval. Temporary ocean dumping zones may be approved by the State competent authority being in charge of marine affairs and shall be submitted to the competent authority being in charge of environmental protection directly under the State Council for registration. The State competent authority being in charge of marine affairs must, in selecting and mapping out ocean dumping zones, and before approving temporary ocean dumping zones, ask the State competent authority being in charge of maritime affairs and fisheries for comment

Article 58 The State competent authority being in charge of marine affairs shall supervise and manage the use of ocean dumping zones, and organize environmental monitoring of the ocean dumping zones. Upon confirming that a dumping zone is no longer suitable to be used, the State competent authority being in charge of marine affairs shall close it down to stop all dumping activities in the ocean dumping zone and report to the State Council for the registration

Article 59 Units granted to dump wastes must carry out in accordance with the time limit and conditions set down in the permit and carry out dumping in the designated area. After the wastes have been loaded, the department issuing a grant shall check and verify

Article 60 Units granted to dump wastes shall record down the details of dumping and submit a written report to the department issuing a grant after dumping. The vessels loading wastes must report to the competent authority being in charge of maritime affairs of the departure port

Article 61 The incineration of wastes at the sea is forbidden. Disposal of wastes with radioactivity and other substances that are radioactive at the sea is forbidden. Exemption density of radioactivity in the waste shall be determined by the State Council

Chapter 8 Prevention and Control of Pollution Damage to the Marine Environment by Vessels and Their Related Operations

Article 62 No vessels and their related operations shall, in the sea areas under the jurisdiction of the People's Republic of China, discharge pollutants, wastes, ballast water, vessel garbage and other harmful substances into the sea in violation of the provisions of this law. Those who engage in the business of collection of pollutants, wastes, garbage from vessel, and the operation of vessel cabin cleaning and washing must possess corresponding capacities of pollutant collection and treatment.

Article 63 Vessels must, in accordance with relevant regulations, possess certificates and documents for the prevention of pollution to marine environment and make factual records in conducting pollutant discharging and other operations.

Article 64 Vessels must be equipped with corresponding pollution prevention facilities and equipment. For vessels loaded cargoes containing pollution damages, its structures and equipment shall be able to prevent or reduce pollution to the marine environment by the loaded cargoes.

Article 65 Vessels shall comply with the provisions provided in the marine traffic law and regulations and prevent maritime accidents of collision, running on rocks, stranding, fire or explosion, etc. To cause pollution to the marine environment

Article66 The State shall perfect and put into practice responsibility system of civil liability compensation for oil pollution by vessel, and shall establish insurance system of oil pollution by vessel, compensation fund system of 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. Specific measures for the implementation of insurance of oil pollution by vessel, and the system of compensation fund of oil pollution by vessel shall be formulated by the State Council respectively

Article67 For vessels loaded cargoes with pollution damage sailing in and out of the port, the carrier, owner of the cargo or his agent must apply and report to the competent authority being in charge of maritime affairs in advance. The vessels may sail in and out of the port, and transit berthing or conduct loading and unloading operations only after obtaining approval

Article68 Vouchers, packages, marks and limits of quantity etc. Of cargoes with pollution damage delivered to the vessels for shipping must be in conformity with relevant regulations governing the cargoes to be shipped. In case it is necessary for shipping cargoes without distinct pollution danger, assessment should be made in advance in accordance with relevant regulations. In loading and unloading oil, toxic and harmful cargoes, the parties of the vessel and the port should comply with relevant operation rules and regulations of safety and pollution prevention

Article69 Ports, docks, loading and unloading spots and shipyards must, in accordance with relevant regulations, are fitted with enough facilities to accommodate and deal with vessel-induced pollutants and wastes, and shall keep these facilities in good conditions. Ports, docks, loading and unloading spots and shipyards must draw up contingency plans for oil-spill pollution and shall be equipped with corresponding contingency equipment and devices to deal with oil-spill pollution

Article70 The following operation shall, in accordance with relevant regulations, be submitted to relevant department for approval or consent in advance: 1. Vessels using incinerators in the port waters; 2. Vessels conducting such operations as cabin washing, cabin cleaning, gas discharging, ballast water and residual oil discharging, oily water collecting, gunwale rust-eradicating and painting, etc. In the port waters; 3. Use of oil eliminating chemicals in the vessels, docks and facilities; 4. Vessels cleaning decks contaminated by pollutants, toxic and harmful substances; 5. Vessels undertaking operations of ship-to-ship transfer of bulk liquid cargoes with pollution damages; 6. Engaging in ship dismembering in the sea, ship salvaging, ship repairing and other surface and under-water operations

Article71 If vessels occur maritime incidents causing or being likely to result in major pollution damages to the marine environment, the State competent authority being in charge of maritime affairs shall have the power to take compulsory measures to avoid or decrease pollution damage. If vessels and facilities occur maritime incidents at the high sea resulting in consequences of major pollution damage or threat to the sea areas under the jurisdiction of the People's Republic of China, the State competent authority being in charge of maritime affairs shall have the power to take corresponding measures necessary for pollution damages which have caused or are likely to cause

Article72 Any vessels shall have the obligation to supervise pollution at the sea and, upon discovering pollution accidents at the sea, or act of violation of the provisions of this law, must immediately report to the departments invested by this law with power of marine environment supervision and administration

near. Civil aviation vehicles, upon discovering discharging of pollutants or pollution accidents at the sea, must report to the civil aviation air traffic control unit in the vicinity in time. The unit shall, upon receiving such report, immediately notify the departments invested by this law with power of marine environment supervision and administration

Chapter9 Legal Liabilities

Article73 Those who, in violation of the provisions of this law, commits any of the following acts, shall be ordered to remedy the damage within a fixed time and be fined by the competent authorities invested with the power of marine environment supervision and administration in accordance with this law; (1) Discharging pollutants or other substances into the sea to be prohibited to discharge by this law into sea areas; (2) Discharging pollutants into the sea not in conformity with the provisions of this law, or discharging pollutants in excess of standards; (3) Dumping wastes in the sea without permit of dumping; (4) Failing to take proper treatment measures immediately in case an accident or any other contingent event causes pollution to the marine environment; Those who commits any of the following acts in the above (1) and (3), shall be fined not less than RMB30,000 yuan but no more than RMB200,000 yuan, in the above (2) and (4), not less than RMB20,000 yuan but no more than RMB100,000 yuan;

Article74 Those who, in violation of the provisions of this law, commits any of the following acts, shall be warned or fined by the competent authorities invested by law with the power of marine environment supervision and administration in accordance with this law: (1) Failing to report in accordance with relevant provisions, or even refusing to report on matters relating to the discharge of pollutants or resorting to trickery and fraud in filing a report; (2) Failing to report in accordance with relevant provisions in case an accident or any other incident occurs; (3) Failing to make records of dumping in accordance with relevant provisions or failing to submit a report of dumping in accordance with relevant provisions; (4) Refusing to report of filing a false report on matters relating to the transportation of cargoes with pollution damages by vessels. Those who commits any of the following acts in the above (1) and (3), shall be fined no more than RMB20,000 yuan, in the above (2) and (4), no more than RMB50,000 yuan.

Article75 Those who, in violation of the provisions of Paragraph 2 of Article 19 of this law, refuses an inspection on the spot or resorts to trickery and fraud on inspection, shall be warned and fined no more than RMB20,000 yuan by the departments invested with the power of marine environment supervision and administration in accordance with this law.

Article76 Those who, in violation of the provisions of this law, causes damage to marine ecosystems such as coral reefs, mangroves, etc., marine fishery resources and marine protected areas, shall be ordered to remedy the damage within a fixed time and take remedial measures, and be fined not less than RMB10,000 yuan but no more than RMB100,000 yuan by the departments invested with the power of marine environment supervision and administration in accordance with this law. In case those who has benefited from such illegal activity the income shall be confiscated by the departments concerned.

Article77 Those who, in violation of the provisions of Paragraphs 1 and 3 of Article30 of this law, installs pollutant discharging outlet into the sea, shall be ordered to have the outlet shut down and fined not less than RMB20,000 yuan and no more than RMB100,000 yuan by the competent authorities in charge of environment protection under the local People's Government at or above the County level

Article78 Those who, in violation of the provisions of Paragraph 3 of Article32 of this law, dismantles or sets aside environment protection installations without authorization, shall be ordered to have the installations rebuilt and put into use, and fines not less than RMB10,000 yuan and no more than RMB100,000 yuan by the competent authorities in charge of environment protection under the local People's Government at or above the County level

Article79 Those who, in violation of the provisions of Paragraph 2 of Article39 of this law, transfers dangerous wastes through the sea areas under the jurisdiction of the People's Republic of China, shall be ordered to have the vessel illegally transporting dangerous wastes withdrawn and sailed outside the sea areas under the jurisdiction of the People's Republic of China, and fined not less than RMB50,000 yuan and no more than RMB500,000 yuan by the State competent authority being in charge of maritime affairs.

Article80 Those who, in violation of the provisions of Paragraph 1 of Article 43 of this law, builds coastal construction project without examined and approved environmental impact assessment, shall be ordered to stop such illegal construction and take remedial measures by the competent authorities in charge of environment protection under the local People's Government at or above the County level, and fined not less than RMB50,000 yuan and no more than RMB200,000 yuan, or be ordered to have it removed within a fixed time by the local People's Government at or above the County level in the light of the limits of authorization of administration.

Article81 Those who, in violation of the provisions of Article 44 of this law, puts into operation or use of coastal construction project, if failing to complete the construction of environment protection installations or environment protection installations failing to be up to the requirements, shall be ordered to stop the production and use of the project and fined not less than RMB20,000 yuan and no more than RMB100,000 yuan by the competent authorities in charge of environment protection.

Article82 Those who, in violation of the provisions of Article 45 of this law, builds new industrial construction project that causes serious pollution to the marine environment, shall be ordered to have such project shut down by the People's Government at or above the County level in the light of the limits of authorization of administration.

Article83 Those who, in violation of the provisions of Paragraph 1 of Article 47 and Article 48 of this law, builds marine construction project, or put marine construction project into operation and use if failing to complete the construction of environment protection installations or environment protection installations failing to be up to the requirements, shall be ordered to stop construction or stop the production and use of the project, and fined not less than RMB50,000 yuan and no more than RMB200,000 yuan by the competent authorities in charge of marine affairs.

Article84 Those who, in violation of the provisions of Article 49 of this law, uses materials containing radioactive substance in excess of standards or toxic and harmful substances easy to dissolve in the water, shall be fined no more than RMB50,000 yuan and be ordered to stop the operation of the construction project until pollution damage in eliminated by the competent authorities in charge of marine affairs

Article85 Those who, in violation of the provisions of this law, undertakes offshore oil exploration and exploitation to cause pollution damage to the marine environment, shall be warned and fined not less than RMB20,000 yuan and no more than RMB200,000 yuan by the State competent authority being in charge

of marine affairs.

Article86 Those who, in violation of the provisions of this law, conducts dumping of wastes, failing to comply with the stipulations of permit, or conducts dumping of wastes in the ocean dumping zone already closed down, shall be warned and fined not less than RMB30,000 yuan and no more than RMB200,000 yuan by the competent authorities in charge of marine affairs. In case a serious circumstance occurs, the permit may be suspended or revoked by the competent authorities in charge of marine affairs.

Article87 Those who, in violation of the provisions of Paragraph 3 of Article55 of this law, transports wastes from outside the boundaries of the People's Republic of China to be dumped in the sea areas under the jurisdiction of the People's Republic of China, shall be warned and be fined not less than RMB100,000 yuan and no more than RMB1,000,000 yuan, in the light of the consequences of pollution damage caused or being likely to cause, by the State competent authority being in charge of marine affairs.

Article88 Those who, in violation of the provisions of this law, commits any of the following acts, shall be warned or fined by the departments invested by this law with the power of marine environment supervision and administration: (1) Ports, docks, loading and unloading spots and vessels failing to be equipped with pollution prevention facilities and devices; (2) Vessels failing to obtain pollution prevention certificate and pollution prevention document, or failing to take records of pollutant discharge in accordance with relevant provisions; (3) Engaging in ship dismantling at water surface and port water area, refitting of old vessel, salvaging, and other surface and underwater operations, which cause pollution damage to the marine environment; (4) Cargoes carried by vessels failing to meet pollution prevention and transportation requirements. Those who commits any of the following mentioned in the above (1) and (4), shall be fined not less than RMB20,000 yuan and no more than RMB100,000 yuan, in the above (2), no more than RMB20,000 yuan, in the above (3), not less than RMB50,000 yuan and no more than RMB100,000 yuan.

Article89 Vessels, oil platforms as well as ports, docks, loading and unloading spots, if failing to formulate contingency plans for oil-spill in violation of the provisions of this law, shall be warned or be ordered to remedy within a fixed time by the departments invested with the power of marine environment supervision and administration in accordance with the provisions of this law.

Article90 Those who causes pollution damage to the marine environment shall eliminate the damage and compensate the losses; in case of pollution damage to the marine environment resulting entirely from the intentional act or fault of a third party, third party shall eliminate the damage and be liable for the compensation. If the State suffers heavy losses from the damages 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 damages.

Article91 Any unit, in violation of the provisions of this law, causes pollution accident to the marine environment, shall be fined in accordance with the damage and losses incurred by the department invested by this law with the power of marine environment supervision and administration. If the manager and other staff directly responsible for such accident are personnel employed by the governmental departments, they shall be imposed administrative penalties by law. The amount of fine

mentioned in the above clause shall be determined according to 30 per cent of the direct losses, but no more than RMB300,000 yuan. Those who causes serious consequences of heavy losses of public and private property or human injuries and deaths of persons by major marine environment pollution accident, shall be investigated and imposed upon criminal responsibility by law

Article92 Those who causes pollution damage may be exempted from the liability if the pollution damage to the marine environment by any of the following circumstances can not be avoided, despite of prompt and reasonable measures taken: (1) War; (2) Natural calamities of force majeure; (3) Negligence of other wrongful acts in the exercise of functions of competent authorities responsible for the maintenance of light-towers or other navigational aids

Article93 In the violation of the provisions of Articles21 and 22 of this law, administrative penalties relating to the payment of pollutant discharge fees, and dumping fees, and pollution removal within a fixed time shall be formulated by the State Council

Article94 Any person in charge of marine environment supervision and administration who abuses his power, neglects his duty or engaged in malpractice for personal gains to result in pollution damage to the marine environment, shall be given administrative penalties by law. If the circumstance constitutes a crime, he shall be investigated and affixed for criminal responsibility by law

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