

**PROBLEMS AND PROSPECTS
FOR THE DEVELOPMENT OF THE
COMPENSATION MECHANISM FOR OIL
POLLUTION DAMAGE IN CHINA**

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MASTER OF PHILOSOPHY

2015

**PROBLEMS AND PROSPECTS
FOR THE DEVELOPMENT OF THE
COMPENSATION MECHANISM FOR OIL
POLLUTION DAMAGE IN CHINA**

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**A Thesis Submitted in Partial Fulfilment
of the Requirements of the University of Greenwich
for the Degree of Master of Philosophy**

**Greenwich Maritime Institute
University of Greenwich
London
February 2015**

ACKNOWLEDGMENTS

This study was conducted between March 2008 and February 2015 for a M. Phil degree in Greenwich Maritime Institute (hereinafter referred to as ‘GMI’) of University of Greenwich. I would like to express my sincerest gratitude to my supervisors, Dr. Minghua Zhao, former assistant director of ‘GMI’ of University of Greenwich, Professor Chris Bellamy, former director of ‘GMI’ of University of Greenwich, Professor Jason Chuah, head of academic law of the Law School of City University London. It was them who guided me through the process of this project. I thank them very much for their faith in me to conduct the study, for their encouragement and their critical reading of my numerous drafts with incomparable patience, care and insight. Without their detailed comments during my research and writing, this final draft would not be achieved, for which I wish to sincerely thank them indeed.

I wish to give my thanks and love to my wife and my daughter too, for their wholehearted belief, love and support, which motivated me to carry out my study. In addition, I am also grateful to my parents, my father-in-law and mother-in-law for their constant and enormous support for my study. My gratitude is beyond words.

Furthermore, I am grateful, particularly to the information officer of the International Tanker Owners Pollution Federation Limited (hereinafter referred to as ‘ITOPF’) library, Dr Karen Purnell, Managing Director of ‘ITOPF’, Ms Deborah Ansell, and the International oil pollution Compensation Fund (hereinafter referred to as ‘IOPC Fund’) library; Miss Christine Geffert. It was their hospitality and help that made this research less problematic.

Last but not least, I also wish to give my special thanks to Dr Chao Wu, legal director of P&I Club; Mrs Cuiming Xu, Mr. Hailiang E and Mr. Chuncang Zhang, who work in Maritime Safety Administration (hereinafter referred to as ‘MSA’) China; Professor Hongjun Shan, Professor Lixin Han, who work in Dalian Maritime University (hereinafter referred to as ‘DMU’) in China; and Professor Michael G. Faure, Academic Director of the Maastricht European Institute for Translational Legal Research (hereinafter referred to as ‘METRO’), Dr Hui Wang, Institute of Environmental and Energy Law. It was their

professional guidance support and encouragement that made this dissertation successful completion.

The effective date of this study's completion was February 2015. Unless otherwise indicated, the references were made before that time. I will additionally remain responsible for any errors in the text.

ABSTRACT

The increasing seaborne transport of oil constitutes a growing pollution risk to the seas and oceans. Large spills of oil from vessel's sources in small areas have caused considerable environmental and economic concerns. Therefore, most public attention is focused on these accidents. Although the record of the tanker industry has improved dramatically in recent years, there are still occurrences when the press and television screens are dominated by pictures of a stricken tanker releasing oil into the sea and the accompanying pictures of oiled *flora* and *fauna* (plant and wildlife). Addressing the global issue of oil pollution damage to the ocean environment is a challenge faced by all human beings.

Research conducted by the International Tanker Owners Pollution Federation Limited (hereinafter referred to as 'ITOPF') has shown that, in recent years, almost all continents have suffered severe damage due to oil spilling from vessels source. In response, the international community has negotiated a series of conventions on the oil pollution prevention. The most important international conventions focussed on oil pollution damage from vessels sources are the International Convention on Civil Liability for Oil Pollution Damage 1969 (hereinafter referred to as 'CLC 1969') and the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage 1971 (hereinafter referred to as 'Fund Convention 1971'). Although the international community, exemplified by the International Maritime Organization (hereinafter referred to as 'IMO'), has amended these two international conventions many times, after repeatedly facing large and disastrous oil pollution accidents, the current financing mechanisms under these international conventions seemed still inadequate to provide compensation for the victims of oil pollution damage.

The problem of oil pollution is not limited to Europe and United States of America. With increasing demand for oil in Asia, the seaborne oil trade has soared in Asia as well. This is mainly because of the increased demand for oil in Japan and China. With its fast developing economy over the last two decades, China has turned from an oil exporter to an oil importer

since 1993. The increased demand for oil transport has made most Asian states vulnerable to oil spills.

China acceded to the 'CLC 1969' and the 1976 Protocol on January 30th, 1980. The latter entered into force in China on April 29th, 1980. The 'CLC 1992' had been in effect in China since January 5th, 2000. However, owing to lack of specialized municipal laws governing the oil pollution accidents in China, Chinese oil pollution trials are still facing severe challenges in the judicial field. This situation has led to much more confusion on the application of laws in Chinese maritime courts. The most obvious features are that different maritime courts in China invoke different municipal laws or regulations in adjudicating fairly similar oil pollution cases.

China is a participant in the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage 1971 (hereinafter referred to as 'Fund Convention 1971') and 1992. Due to historical and political reasons, however, the 'Fund Convention 1971' and 1992 are only applicable to the Hong Kong Special Administrative Region (hereinafter referred to as 'Hong Kong SAR'). They do not cover the Chinese mainland so far. In the new revised Marine Environment Protection Law of P.R.C 2000 (hereinafter referred to as 'MEPL 2000'), which became effective since April 1st 2000 in China and a scheme of joint liability between ship-owners and cargo industries has been set up. However, although the Regulations on Administration of Prevention and Control of Pollution to the Marine Environment by Vessel came into force from March 1st, 2010, and the Regulations on Levy and Usage Management Relating to Vessels Sources Oil Pollution Compensation Fund came into force from July 1st 2012 as well, claimants in China who suffer oil pollution damage from vessels sources still find it is very difficult to receive adequate compensation or indemnities from a compensation or indemnification fund. The fundamental reason probably is that the Chinese oil pollution liability regime which lacks specific provisions and implementing rules and therefore cannot really play an effective role in China today.

This thesis first examines international conventions including the 'International Convention on Civil Liability for Oil Pollution Damage', the 'International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage' and

the ‘Oil Pollution Act 1990’ in USA. A historical review illuminates how liability without ‘fault’ and the oil owner contribution compensation fund developed into its current state and questions whether its existence is still justified in today’s law. And then, the study compares current international and regional oil pollution regimes in other jurisdictions by using the comparative methodology. The study seeks to get a clear view of what lessons can China draw from international conventions and ‘Oil Pollution Act 1990’ of United States of America, and how? This study also emphatically analyses the Chinese legislation on oil pollution and examines the civil liability and compensation in Chinese legal system. Current Chinese laws in oil pollution damage are rather primitive and are so far based on very few judicial decisions. This is totally incompatible with the recent rapid increase of economy and maritime litigants in China. The study of problems of current Chinese law on the civil liability and compensation regime for oil pollution damage highlights the pitfalls that might arise for litigants and indicates where the law should be amended and try to find problems with the current legislation and compensation regime for oil pollution damage in China.

The research draws conclusions on the comparative studies of oil pollution compensation in different legal systems and puts forward proposals for the remodelling of Chinese law of oil pollution compensation with a view to making it compatible with the rest of the world. As the increasingly involved in the world economy and international trade, China needs to make its legal system ever more open to the rest of the world. It is a matter of urgency for China to remodel some areas of its current maritime and environmental laws and establish a national compensation regime so as to be in line with international commercial practices and customs. This will reduce legal cost for both Chinese and foreign litigants and bring about certainty and consistency in court decisions and attempt to identify what avenues are open to enable the reform of oil pollution compensation in Chinese oil pollution laws.

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ABBREVIATIONS

International Regime

- 1 BBL/D Barrel per day, is a measurement used to describe the amount of crude oil (measured in barrels) produced or consumed by an entity in one day.
- 2 Bunker Convention International Convention On Civil Liability for Bunker Oil Pollution Damage 2001, Adoption: March 23rd, 2001 (Remark: China acceded to the bunker convention on November 17th, 2008, and entered into force in China on March 9th, 2009)
- 3 ‘CLC 1969’ International Convention on Civil Liability for Oil Pollution Damage 1969 (November 29th, 1969)
- 4 ‘CLC 1992’ Protocol to amend the International Convention on Civil Liability for Oil Pollution Damage 1992 (November 27th, 1992)
- 5 ‘CMI’ Committee Maritime International
- 6 COLRRG’s International Regulations for Preventing Collisions at Sea 1972
- 7 ‘CRISTAL’ Contract Regarding an Interim Supplement to Tanker Liability for Oil Pollution
- 8 ‘Fund Convention 1971’ International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage 1971
- 9 ‘Fund Convention 1992’ Protocol to amend the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage 1992 (November 27th, 1992)
- 10 Fund Convention 2003 Protocol of 2003 to the International Convention on the Establishment of an International Fund for Compensation Protocol

	for Oil Pollution Damage 1992
11 HNS Convention	International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea (May 3rd, 1996)
12 ICS	International Chamber of Shipping
13 IEA	International Energy Agency
14 'IOPC Fund'	International Oil Pollution Compensation Fund
15 IMCO	Intergovernmental Maritime Consultative Organization
16 IMO	International Maritime Organization. (A convention was adopted in Geneva in 1948 establishing IMO, originally called the International Maritime Consultative Organization (IMCO). The name was changed to IMO in 1982. The convention entered into force in 1958. IMO has 162 member states. IMO promotes maritime safety and ensures international cooperation in regulation of international commercial navigation. In recent years, IMO has dedicated a considerable part of its activities to the problem of marine pollution.)
17 INTERTANKO	International Association of Independent Tanker Owners
18 ITIA	International Tanker Indemnity Association
19 ISM	International Safety Management Code
20 ITOPF	International Tanker Owners Pollution Federation Limited
21 LLMC 1957	Relating to the Limitation of the Liability of Owners of Seagoing Ships which was signed in Brussels in 1957 and came into force in 1968.
22 MARPOL 73/78 Convention	International Convention for the Prevention of Pollution from Ships (November 2nd, 1973), and Protocol (February 17th, 1978) which entered into force on October 2nd, 1983
23 MSC	Maritime Safety Committee
24 OILPOL Convention	International Convention for the Prevention of Pollution of the Sea by Oil (May 12th, 1954)

25	OPCLR	Oil Pollution Liability Regime
26	OPRC Convention	International Convention on Oil Pollution Preparedness, Response and Cooperation (November 30th, 1990)
27	P&I Club	Protection and Indemnity Club
28	SDR	Special Drawing Rights
29	SOLAS	International Convention for the Safety of Life at Sea (Entered into force on May 25th, 1980)
30	STCW Convention	Convention on Standards of Training, Certification and Watch keeping of Seafarers (July 7th, 1978)
31	STOPIA	Small Tanker Oil Pollution Indemnity Agreement
32	The Supplementary Fund	The International Oil Pollution Compensation Supplementary Fund, 2003
33	'TOVALOP'	The Tanker Owner's Voluntary Agreement concerning Liability for Oil Pollution (January 7th, 1969)
34	TOPIA	Tanker Oil Pollution Indemnity Agreement
35	TSA	TOVALOP Standing Agreement
36	TSPP	1978 International Conference on Tanker Safety and Pollution Prevention
37	UN	United Nations
38	UNCLOS	United Nations Conventions on the Law of the Sea
39	WTO	World Trade Organization

EU Regime

1	COPE	Fund for Compensation for Oil Pollution in European Water
2	EEC	European Economic Community
3	EU	European Union
4	GMI	Greenwich Maritime Institute
5	METRO	Maastricht European Institute for Translational Legal Research
6	UK	United Kingdom

American Regime

1	CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act, 1984
2	COFRs	Certificates of Financial Responsibility
3	CWA 1977	Clean Water Act, 1977
4	DWPA 1974	Deep Water Port Act of 1974
5	EPA	Environmental Protection Agency (USA)
6	FOSCs	Federal on Scene Coordinators
7	FWPCA 1948	Federal Water Pollution Control Act, 1948
8	FWPCA 1972	Federal Water Pollution Control Act, 1972
9	IAGA	Institute for the Analysis of Global Security
10	IOHSA	Intervention on High Seas Act
11	NPFC	National Pollution Fund Centre
12	NRD	Natural Resources Damage
13	NRDAs	Natural Resources Damage Assessment
14	OCSLA 1978	Outer Continental Shelf Lands Act, 1978
15	OPA 1924	Oil Pollution Act 1924
16	OPA 1990	Oil Pollution Act 1990 (August 18th, 1990)
17	OSLTF	Oil Spills Liability Trust Fund
18	TAPAA 1973	Trans-Alaska Pipeline Authorization Act of 1973
19	USCG	United States Coast Guard
20	USD	US Dollar
21	WQIA 1970	Federal Water Quality Improvement Act, 1970

China Regime

1	APCPMEV 2010	Regulations on Administration of Prevention and Control of Pollution to the Marine Environment by Vessels. (Remark: 'APCPMEV 2010' decree of the State Council of the People's Republic of China (No.561), promulgated
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		by the State Council on September 9th, 2009)
2	ARPSP	Administrative Rules and Regulation concerning the Protection of the Marine Environment
3	CCCCPC	Central Committee of the Communist Party of China
4	'CMC 1992'	China Maritime Code, 1992, it was adopted on November 7th, 1992, and entered into force as of July 1st, 1993
5	DMU	Dalian Maritime University
6	EEZACS	Law on the Exclusive Economic Zone and the Continental Shelf, 1998
7	'EPL 1979'	Environmental Protection Law of China, 1979
8	EPOOEE	Regulations concerning Environmental Protection in Offshore Oil Exploration and Exploitation, 1983
9	General Principles 1986	General Principles of Civil Law, 1986, it was adopted on April 12th, 1986, and entered into force as of January 1st, 1987
10	Liability Limitation Regulation	Regulation of Limitation of Liability for Maritime Claims relating to the Ships with a Gross Tonnage not exceeding 300 Gross Tonne and those Engaging in Transport Services between the Ports of China as well as those for other Coastal Operation
11	MEPC	Ministry of Environmental Protection of P.R.C
12	MEPL 1982	Marine Environmental Protection Law (August 23rd, 1982) (Remark: the 'MEPL 1982' adopted at the 24th meeting of the Standing Committee of the Fifth National People's Congress on August 23rd, 1982)
13	MEPL 1999	Marine Environmental Protection Law (December 25th, 1999) (Remark: 'MEPL 1999' was amend at the 13th meeting of the Standing Committee of the Ninth National People's Congress on December 25th, 1999, promulgated by order No. 26 of the President of the People's Republic of China on December 25th, 1999.
14	MEPL 2000	Marine Environmental Protection Law (April 1st, 2000)

(Remark: Adopted at the 24th meeting of the Standing Committee of the Fifth National People's Congress on August 23rd, 1982, amend at the 13th meeting of the Standing Committee of the Ninth National People's Congress on December 25th, 1999, promulgated by order No. 26 of the President of the People's Republic of China on December 25th, 1999, and effective as of April 1st, 2000)

15	MOT	Ministry of Transport of the People's Republic of China
16	MSA	Maritime Safety Administration
17	NDRC	National Development and Reform Commission
18	NPC	National People's Congress
19	P.R.C	People's Republic of China
20	RAPCMEV Amendments	The Amendments to Regulations on Administration of Prevention and Control to the Marine Environment by Vessels, 1983
21	RAPCMEV 2010	Regulations on Administration of Prevention and Control to Marine Environment by Vessels, 2010
22	RCPPVSW	Regulations on the Control over Prevention of Pollution by Vessels in Sea Waters, 1983
23	RCPPVSW-Amendments	The Amendments to Regulations on the Control over Prevention of Pollution by Vessels in Sea Waters, 1983
24	Regulation of COPC Fund	Regulations on Levy and Usage Management relating to Vessels Sources Oil Pollution Compensation Fund
25	RMB	Ren Min Bi (Chinese Currency)
26	SAR	Special Administrative Region
27	SEPA	State Environment Protection Administration
28	SOA	State Oceanic Administration of P.R.C

Others

1	AIS	Automatic Identification System
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2	DWT	Deadweight Tonne
3	EEZ	Exclusive Economic Zone
4	GDP	Gross Domestic Product
5	GT	Gross Tonnage
6	KM	Kilometer
7	Km ²	Square Kilometer
8	PSC	Port State Control
9	ULCC	Ultra Large Crude Carrier
10	VLCC	Very Large Crude Carrier
11	VTS	Vessel Traffic Service

GLOSSARY

- 1 BBL/D

Barrel is used as a measure of crude oil and other petroleum products. 1 barrel equals 42 US gallons or 158.9873 liters. Alternatively, oil is often measured in cubic meters or in tonnes. Barrel per day (abbreviated bp/d, bbl/d, bp/d, or b/d) is a measurement used to describe the amount of crude oil (measured in barrels) produced or consumed by an entity in one day.
- 2 Bareboat Charter

A Bareboat Charter is an arrangement for the chartering or hiring of a ship or boat, whereby no crew or provisions are included as part of the agreement; instead, the people who rent the vessel from the owner are responsible for taking care of such things. In a Bareboat Charter, no administration or technical maintenance is included as part of the agreement. The charterer obtains possession and full control of the vessel along with the legal and financial responsibility for it. The charterer pays for all operating expenses, including fuel, crew, port expenses and P&I and hull insurance.
- 3 Compensation

Amount of money a wrongdoer is required to pay to a victim (or the victim's beneficiary) as a compensation for the damage or injury caused by his or her actions or inactions. Such damages vary with the kind of damage or injury sustained by the victim.
- 4 Damage

Damages means injury to natural resources, to real or personal property, loss of subsistence using of natural resources, loss of governmental revenues, loss of profits or earning capacity, and increased cost of additional public services. Damages also

include the cost of assessing these injuries. These damages are defined in 33 U.S.C § 2702(b) (2).

- 5 Discharge Discharge means any emission (other than natural seepage), intentional or unintentional, and includes, but is not limited to spilling, leaking, pumping, pouring, emitting, or dumping.
- 6 DWT DWT represents for deadweight tonnage, which is the cargo capacity of the vessel (how many tonnes it can be carried out its overall weight). Another often used term is GRT which is the gross registered tonnes, and it is a measure of the volume of space occupied by the vessel.
- 7 Ex-post and Ex-ante *Ex-post* translated from Latin means ‘after the event’. The use of historical returns has traditionally been the most common way to predict the probability of incurring a loss on any given day. *Ex-ante* is the opposite of *Ex-post*, which means ‘before the event’.
- 8 Fund Claims Manual Fund Claim Manual is designed by ‘IOPC Fund’ to assist claimants by giving a general overview of the Fund’s obligation to pay compensation. It does not address legal issues in detail and should not be seen as an authoritative interpretation of relevant international conventions.

The Manual is divided into three sections: Section one briefly describes the compensation system and how the 1992 Fund works; Section two contains general information on how claims for compensation should be submitted. It sets out the 1992 Fund’s policy on handling claims and paying compensation; Section three provides more specific information to assist claimants in presenting their claims and is

divided into five parts, each dealing with one of the main categories of claim covered by the compensation system, namely: 1) Pollution prevention measures and oil clean up; 2) Property damage; 3) Economic losses in the fisheries, Mari culture and fish processing sectors; 4) Economic losses in the tourism and related sectors; 5) Environmental damage and post-spills studies.

9 Accident

‘CLC 1969’:

‘Accident’ means any occurrence, or series of occurrences having the same origin, which causes pollution damage.

‘CLC 1992’:

‘Accident’ means any occurrence, or series of occurrences having the same origin, which causes pollution damage or creates a grave and imminent threat of causing such damage.

Bunker Convention:

‘Any occurrence or series of occurrences having the same origin, which causes pollution damage or creates a grave and imminent threat of causing such damage.’

10 MARPOL 73/78

MARPOL 73/78 is a 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. The MARPOL 73 was adopted on November 2nd, 1973 at IMO and covered pollution by oil, chemicals and 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 to 1977. (measures relating to tanker design and operation were also incorporated into a protocol of 1978 relating to the 1974 Convention on the Safety of Life at Sea, 1974). As the 1973 MARPOL convention had not yet entered into force, the 1978 MARPOL protocol absorbed the parent convention. The combined instrument is referred to as the International Convention for the Prevention of Marine Pollution from Ships, 1973, as modified by the protocol of 1978 relating thereto (MARPOL 73/78), and it entered into force on October 2nd, 1983

11 Miles

Unless otherwise stated, the ‘mile’ in this text is nautical mile.

12 Oil Pollution
Damage

‘CLC 1969’:

‘Oil pollution damage’ means 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, and includes the costs of preventive measures and further loss or damages caused by preventive measures.

‘CLC 1992’:

‘Oil 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 from such impairment shall be limited to costs of reasonable measures of reinstatement actually undertaken or to be undertaken; (b) The costs of preventive measures and further

loss or damage caused by preventive measures.

Bunker Convention:

Article I (9) in bunker convention defines ‘pollution damage’ as follows: (a) loss and damage caused outside the ship by contamination resulting from the escape or discharge of bunker from the ship, wherever such escape or discharge may occur, provided that compensation for impairment of environmental other than loss of profit from such impairment shall be limited to costs of reasonable measures of reinstatement actually undertaken or to be undertaken, and (b) The cost of preventive measures and further loss or damage caused by preventive measure.

13 Persistent Oil

‘CLC 1969’:

‘Oil’ means any persistent oil such as crude oil, fuel oil, heavy diesel oil, lubricating oil and whale oil, whether carried on board a ship as cargo or in the bunkers of such a ship.

‘CLC 1992’:

‘Oil’ means any persistent hydrocarbon mineral oil such as crude oil, fuel oil, heavy diesel oil and lubricating oil, whether carried on board a ship as cargo or in the bunkers of such a ship.

14 Preventive Measure

‘CLC 1969’:

‘Preventive measures’ means any reasonable measures taken by any person after an accident has occurred to prevent or minimize pollution damage.

‘CLC 1992’:

‘Preventive measures’ means any reasonable measures taken by any person after an accident has occurred to prevent or

minimize pollution damage.

Bunker Convention:

Article 1 (7) defines ‘preventive measure’ as follows ‘any reasonable measure taken by any person after an accident has occurred to prevent or minimize pollution damage.’

15 Pure Economic Loss ‘Pure Economic Loss’ means financial loss that does not result from property damage or personal injury.

16 P&I Club P&I Clubs are organized in an international group of P&I Clubs, which provides liability insurance for over 95% of the world’s ocean going merchant fleet. They expand the insurance capacity via pooling agreements or re-insurance. The purpose of this international group is to provide a wider spread of risks so that larger claims can be met and commercial reinsurance is viable. So, while each individual club meets claims of up to US \$ 5 million, the next \$25 million of any claim is spread among all members of the international group, and that part of any claim between \$ 30 million and \$2.03 billion is reinsured commercially. Beyond that the international group would, hypothetically, meet the rest of any catastrophe claim up to a final limit of \$4.25 billion. However, as rightly pointed out in the literature, the capacity of the insurance market is impressive, but not infinite.

17 Ship-owner ‘CLC 1969’:
Art. I (3) in ‘CLC 1969’ defines owner as follows: ‘owner’ means the person or persons registered as the owner of the ship or, in the absence of registration, the person or persons owning the ship. However, in the case of a ship owned by a state and operated by a company which in that state is registered as the

ship's operator, 'owner' shall mean such company.

'CLC 1992':

'Owner' means the person or persons registered as the owner of the ship or, in the absence of registration, the person or persons owning the ship. However in the case of a ship owned by a state and operated by a company which in that state is registered as the ship's operator, 'owner' shall mean such company.

18 Strict liability

Civil (tort): Liability incurred for causing damage to life, limb, or property by a hazardous activity or a defective product, without having to prove that the defendant was negligent or directly at fault. It arises not from any wrongdoing but from the fact of the activity or product being inherently hazardous or defective.

Criminal: Liability imposed by a statute without the necessity of proving criminal intent (see '*mens rea*'), and intended to absolutely forbid certain acts such as preparation and sale of adulterated or contaminated food. Also called absolute liability or liability without fault.

19 Time Charter

A time charter is the hiring of a vessel for a specific period of time; the owner still manages the vessel but the charterer selects the ports and directs the vessel where to go. The charterer pays for all fuel the vessel consumes, port charges, commissions, and a daily hire to the owner of the vessel.

20 Ton or Tonne

Ton or tonne is unit of measure. In the United Kingdom, the ton is defined as 2,240 pounds (1,016 kg), and also called imperial ton. From 1965 the United Kingdom embarked upon

a programmer of metrication and gradually introduced metric units, including the tonne. The tonne is defined as 2,205 pounds (1,000 kg). Unless otherwise stated, tonne in this text is a metric tonne.

21 Vessel (Ship)

‘CLC 1969’:

‘Ship’ means any seagoing vessel and any seaborne craft of any type whatsoever, actually carrying oil in bulk as cargo.

‘CLC 1992’:

‘Ship’ means any seagoing 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.

Bunker Convention:

‘Ship’ as any seagoing vessel and seaborne craft, or any type whatever.

‘TOVALOP’:

Clause I (m) defines ship as follows: any seagoing vessel and any seaborne craft of any type whatever designed and constructed for carrying oil in bulk as cargo, whether or not it is actually carrying oil at the time of the accident.

22 Voyage Charter

A voyage charter is the hiring of a vessel and crew for a voyage between a load port and a discharge port. The charterer pays the vessel owner on a per-ton or lump-sum basis. The owner pays the port costs (excluding stevedoring), fuel costs and crew

costs. The payment for the use of the vessel is known as freight. A voyage charter specifies a period, known as lay time, for unloading the cargo. If lay time is exceeded, the charterer must pay demurrage. If lay time is saved, the charter party may require the ship-owner to pay dispatch to the charterer.

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No	Name	Title and company	Education	Interview date	Stakeholder	Note
1	Mr Jianbin Zhang	Managing director of 'MSA' Shenzhen	College graduate	Dec 12nd, 2011, London	Regulation	
2	Mr Jihong Wang	Director of the department of navigable waters management of 'MSA' Guangdong	Postgraduate or equivalent	Dec 12nd, 2011, London	Safety management	
3	Mr Hongjun Shan	Head of law school of Dalian Maritime University	PhD	Oct 16th, 2011, Dalian China	Regulation	
4	Mr Gongchen Liu	Former managing director of 'MSA' Beijing	Postgraduate or equivalent	Oct 18th, 2012, Beijing	Safety management	
5	Mr Aiping Chen	Managing director of 'MSA' Beijing	Postgraduate or equivalent	June 21st, 2013, London	Safety management	

CHAPTER ONE

INTRODUCTION

1.1. Background

In recent years, almost all continents have suffered severe damage due to oil spilling from vessel sources (Eger, Faure and Zhang (ed.) 2007: 272). Two of the best known probably occurred in Europe, namely, the ‘*Torrey Canyon*’ oil spilt off the south coast of England in 1969 (more details to be discussed in chapter two 2.1.1. ‘*Torrey Canyon (1967) Oil Pollution in England*’) and the other was the ‘*Amoco Cadiz*’ oil spilt in Brittany in 1978 (more details to be discussed in chapter two 2.1.1. ‘*Amoco Cadiz (1978) Oil Pollution in France*’). In response to the growing threat of oil pollution, international communities began to negotiate a series of international conventions on the oil pollution prevention since 1950s. The Oil Pollution Convention 1954 (hereinafter referred to as ‘OILPOL 1954’) which came into effect on July 26th, 1958 was the first international treaty that tried to protect the sea from oil pollution caused by oil tankers. The thrust of ‘OILPOL 1954’ was to prohibit to the dumping of oily waters within ‘specified prohibited zones’ and in ‘special areas’ where the danger to the environment was especially acute (United Nation Economic and Social Commission for Asia and the Pacific n.d., (UNESCO), 2010). Although after this convention entered into the force in 1958, the International Maritime Organization (hereinafter referred to as ‘IMO’) amended it many times and imposed even stricter standards on it in following years. For example, the most important amendment was the amendment for ‘OILPOL 1954’ in 1971, which was addressed for new guidelines for to apply to new oil tankers. The new ‘International Convention for the Prevention of Pollution from Ships 1973’ and his 1978 Protocol (hereinafter referred to as ‘MARPOL 73/78’) which entered into force on Oct 2nd, 1983 still superseded the ‘OILPOL 1954’. Strictly speaking, the international community was just beginning to realize the environmental impairment from the increasingly amount of industrialized community at that time (IMO n.d., 2010).

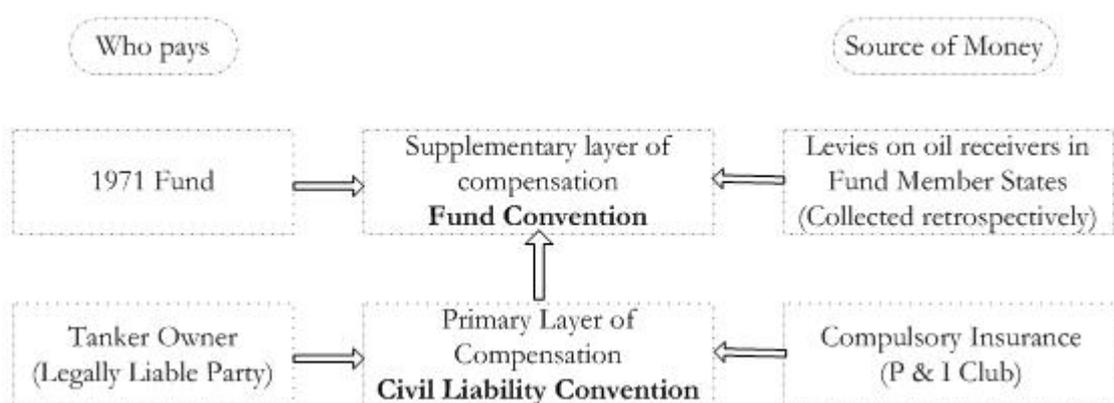
Modern international oil pollution conventions began with the '*Torrey Canyon*' accident which occurred on February 19th, 1967. The American owned and Italian crewed Liberian 'super tanker' (by the standards of those days) '*Torrey Canyon*' ran aground in severe weather conditions on the Seven Stones Reef (location at 50° 02' N, 006° 07' E) which is located at the western end of the English Channel and it lies eighteen nautical miles to the west of Land's End and eight nautical miles southern of the Isles of Scilly. The entire cargo of 860,000 barrels of crude oil was spilt into 100 nautical miles of the British and the French coastline (Chemgaroo n.d., 2010). Although this was not the first oil pollution accident in the world, the extent of the damage and its accompanying public impact made prompt action unavoidable.

Following the '*Torrey Canyon*' accident, a series of international conventions related to dealing with oil pollution prevention and oil pollution compensation at different stages formed spontaneously (Blanco-Bazan 2000:3). Depending on the purpose and function of these international conventions, they can be roughly divided into two types. On one hand, safety regulations designed to prevent oil spills from vessel sources, which works '*ex-ante*' (before the event), such as, 'MARPOL 73/78.' On the other hand, international conventions aimed at formulating responsibilities and liabilities of polluters from oil pollution damage which happened '*ex-post*' (after the event), such as, the International Convention on Civil Liability for Oil Pollution Damage 1969 (hereinafter referred to as 'CLC 1969') and the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage 1971 (hereinafter referred to as 'Fund Convention 1971'). In view of the limitation of this research, this research only focuses on the '*ex-post*' (after the event) in the following.

'CLC 1969' and 'Fund Convention 1971' were first international compensation regimes for oil pollution damage under auspices of the International Maritime Organization (hereinafter referred to as 'IMO'). The goal of these two conventions was to provide civil liability and compensation for oil pollution damage caused by oil spills from oil tankers (Eger, Faure and Zhang (ed.) 2007: 272). The 'CLC 1969' and 'Fund Convention 1971' exclusively imposed 'strict' and 'limitation' of liability (the so-called 'financial caps') on ship-owners without 'negligence' and compulsory insurance for owners of tanker was required. Moreover, the

International Oil Pollution Compensation Fund of 1971 (hereinafter referred to as ‘IOPC Fund 1971’) financed by oil industries set up as another level of oil pollution compensation to spread costs of oil pollution damage between tanker owners and oil industries. The ‘IOPC Fund 1971’ as the second layer provides the compensation for oil pollution damage to the extent that the protection afforded by ‘CLC 1969’ is inadequate. These two international conventions are quite different from the traditional tort law or maritime principles, and therefore were considered as a great revolution at that time. Based on the study of the ‘CLC 1969’ and the ‘Fund Convention 1971’, the author draws the following diagram which can easily understand the relationship of ‘CLC 1969’ and ‘Fund Convention 1971’. From figure 1.1, the structure of these two conventions succinctly lined out contributes to the oil pollution damage from different parties (more details to be further analysed in chapter three).

Figure 1.1. The Function of two international conventions in dealing with oil pollution damage



Source: It was drawn by author based on the understanding of ‘CLC’ and ‘Fund Convention’.

During the 1970s, the operation of the ‘CLC 1969’ and the ‘Fund Convention 1971’ seemed to reduce the gross volume of oil spills as expected (IOPC Fund n.d., 2003:57). However, other two major oil pollution accidents occurred in the next few years – the ‘Amoco Cadiz’ on March 16th, 1978 (more details to be discussed in chapter two 2.1.1. ‘Amoco Cadiz’ (1978) Oil pollution in France) and the ‘Tanio’ (1980) on March 7th, 1980, which occurred

off the coast of Brittany in France completely changed this situation in one night (ITOPF n.d., 2012). These two major oil pollution accidents showed that the 'CLC 1969' and the 'Fund Convention 1971' still had a number of potential defects in light of the latest accidents. For example, the limitation of liability was not enough to cover oil pollution damage under normal circumstances and so on. As a result, the 'CLC 1969' and the 'Fund Convention 1971' were modified in 1984 and again in 1992. These two amends were mainly to increase the liability limitation and to expand the scope of the 'IOPC Fund'. A further series of oil spills accidents with '*Erika*' in 1999 (more details to be discussed in chapter two 2.1.1. '*Erika*' (1999) oil pollution in France) resulted in the 2000 revision with updated liability limitation. The most recent amendment took place in 2003 when a supplementary fund was established to provide the third level of oil pollution compensation in addition to the 'CLC 1992' and the existing fund. (Eger, Faure and Zhang (ed.) 2007: 272) (more details to be discussed in chapter three).

On March 24th, 1989, the crude oil tanker '*Exxon Valdez*' (more details to be discussed in section 2.1.1. of chapter two '*Exxon Valdez (1989) oil pollution in the USA*') grounded off the coast of Alaska and about 37,000 tonnes of crude oil spilled into Prince William Sound. This oil pollution accident caused one of the most severe ecological disasters in American history. Although the quantity of oil spilt, in comparison with other disasters, was not immense, however, the combination of the cold arctic weather, the delicate nature of the surrounding natural environment and, above all, the very extensive television coverage meant that this accident had a particularly severe impact on the public perception at that time. The United States of America, as a powerful shipping country which has a huge demand for oil import, discovered that the 'CLC 1969' and its 1984 protocols (hereinafter referred to as 'CLC 1984 protocols') could not provide them with sufficient cover against the large oil pollution disaster. In particular, they found that the liability limitation in 'CLC 1984 protocols' were still too low to compensate for the oil clean-up costs incurred. As a result, they determined to enact their own comprehensive law instead of accession to international conventions. This was the generation of the 'Oil Pollution Act 1990' (hereinafter referred to as 'OPA 1990'), which largely deviated from the principles established in international conventions (Boyd 2006:141) (more details to be discussed in chapter four).

Obviously, the problem of oil pollution damage does not limited in Europe and the United States of America. Facing the increasing demand for oil import in Asia, seaborne oil imports and exports, especially oil imports, have increased enormously to that continent. One reason is from Japan, as a major oil import country, Japan has become the biggest oil contributing state to the 'IOPC Fund' in recent years. Another reason is that China, with the strong economic growth since 1989, Chinese energy demand, especially for oil imports, is surging rapidly. According to Chinese customs statistics, China had turned from an oil exporter to an oil importer since 1993 (Salameh 1995:133). These increasing demands for oil transport on the sea have made a number of Asian states become likely victims of serious oil spills inevitably (more details to be discussed in section 2.2. and 2.3. of chapter two).

China acceded to the 'CLC 1969' and its '1976 protocol' on January 30th, 1980 and they entered into force in China on April 29th, 1980. At the same time, the 'CLC 1992' was effective in China since January 5th, 2000. Although China was one of member states of the 'CLC 1969' and the 'CLC 1992' already, neither of these international conventions had been legislated into Chinese municipal laws for the purpose of governing oil pollution accidents in China so far. These two international conventions can be adopted only when there are 'foreign elements' involved. In cases of purely domestic oil pollution accidents occurred in China, whether applicable laws being Chinese municipal laws or 'CLC' are still inconclusive, both in the theoretical field or / and in judicial practice. Therefore, Chinese oil pollution trials are facing severe challenges as a consequence. The most obvious feature is that different maritime courts in China apply different regulations or different municipal laws in adjudicating fairly similar oil pollution cases. This situation caused great confusion regarding the application of Chinese laws or international conventions in the field of justice (more details to be discussed in section 5.3. of chapter five).

China is one of member states of the fund convention ('Fund Convention 1971/1992'), but due to some historical and political reasons (more details to be discussed in section 5.3. and 5.4. of chapter five), the fund convention was only applicable to the Hong Kong Special Administrative Region (hereinafter referred to as 'Hong Kong SAR'), it does not apply to the Chinese mainland. Although in the newly revised Marine Environment Protection Law of the People's Republic of China 2000 (hereinafter referred to as 'MEPL 2000'), a scheme of joint liability between ship-owners and oil industries was established, and Regulations on

the Administration of Prevention and Control of Pollution to the Marine Environment by Vessel Sources 2010 (hereinafter referred to as ‘APCPMEV 2010’) was implemented on March 1st, 2010, which dovetails with the ‘MEPL 2000’ laying down the principles and outlining the Chinese marine pollution legal system. Furthermore, at the same time, the Regulations on Levy and Usage Management relating to the Oil Pollution Compensation Fund from Vessel Source (hereinafter referred to as ‘Regulation of COPC Fund’) also become effective since July 1st, 2012. However, due to detailed requirements under the ‘APCPMEV 2010’ and ‘Regulation of COPC Fund’ having not been clearly revealed, the claimants who suffered oil pollution damage from vessel source still find it is very difficult to obtain compensation from compensation or indemnification fund regarding the oil pollution damage in China.

1.2. Research questions

After researching major oil pollution compensation regimes over the world, the author finds that, nowadays, most coastal countries took three different methods in designing their own ‘Oil Pollution Civil Liability Regime’ (hereinafter referred to as ‘OPCLRs’), which were:

- 1) To become one of member states of both the ‘CLC’ and the ‘Fund Convention’ and to follow the stipulations in their entirety. Such as the United Kingdom and most of the European countries;
- 2) To accession of international conventions only for the purpose of ‘foreign elements’ oil pollution accidents, and to formulate its own municipal law for the purpose of all other kinds of oil pollution accidents, as was the case in Canada;
- 3) Instead of joining international conventions, directly to formulate its own comprehensive municipal laws to govern all kinds of oil pollution accidents in her waters, as was the case in the United States of America.

1.2.1. Research question one

Both the ‘CLC 1992’ and the ‘Fund Convention 1992’ are principal international conventions in dealing with the civil liability and the oil pollution compensation in respect of oil pollution damages from vessel sources. These two international conventions have been globally recognized in the most recent period. According to IOPC annual report 2013, there were 111 member states totally in both of the ‘CLC 1992’ and the ‘Fund Convention 1992’ until August 1st, 2013, and 29 member states to the supplementary fund protocol, and over 800 oil companies or / and oil industries made contributions to the ‘IOPC Fund’ at 2013 (IOPC Funds n.d., 2013). Undoubtedly, the liability and compensation regime for oil pollution damage demonstrated by provisions and legal practices of the ‘CLC 1992’ and the ‘Fund Convention 1992’ were deeply rooted in the world shipping industry. Based on China is one of member states of the ‘CLC 1992’ and the ‘Hong Kong SAR’ is member of the ‘Fund Convention 1992’, there are no doubt that legal practices and provisions in these two international conventions should be continue to have the inerasable impact on Chinese legislatives and the legal practice in succession in the field of civil liability and oil pollution compensation from vessel source in China. So, the first research question is: **How and what lessons can China take from international conventions?**

1.2.2. Research question two

The USA ‘OPCLR’ is tougher than both the international ‘OPCLR’ and the China ‘OPCLR’. The principal goal of the USA ‘OPCLR’ is to achieve zero oil discharging in waters of the United States of America. In other words, the primary purpose of the USA ‘OPCLR’ is to prevent oil pollution accidents from happening. Based on this goal, the United States of America has formulated a very detailed, comprehensive and tougher ‘OPCLR’, namely, ‘OPA 1990’, to against the oil pollution damage and provide oil pollution compensation fund in the United States waters. Even if ‘OPA 1990’ is continually experiencing criticisms, the decrease of grave oil pollution accidents after ‘OPA 1990’ enforcement has been strongly demonstrated that the USA ‘OPCLR’ should be one of successful systems over the world (Kiern 1999:3). The positive influence of ‘OPA 1990’ had also been noted and appraised by international shipping industries in the most recent period. The Chairman of the ‘International Association of Independent Tanker Owners’ (hereinafter referred to as ‘INTERTANKO’) once attributed the worldwide

improvements in tanker safety to ‘OPA 1990’ and the tougher American rules. He also noted that certain tanker owners were acting in their own self-interest by picking the best crews for their tankers (Kiern 1999:3). So, the second research question is: **How and what lessons can China take from the United States of America’s advanced experience?**

1.2.3. Research question three to six

As noted above, the current China ‘OPCLR’ is a kind of two-fold path in a piecemeal fashion. With regard to the oil pollution damage related foreign elements case, the claimant has to invoke provisions of ‘CLC 1992’ to claim against the ship-owner of the ship involved first. But due to Chinese mainland being not member state of the ‘Fund Convention 1992’ until now, the claimant still cannot claim the oil pollution compensation against the ‘IOPC Fund’ directly. Conversely, regarding to the oil pollution case related to pure Chinese domestic elements, the claimants can only cite the piecemeal and general rules of municipal laws and regulations to claim against the responsible party as well. Although both the ‘Amendments to Regulations on the Administration of Prevention and Control to Marine Environment from vessel sources, 1983’ (hereinafter referred to as ‘RCPVSW-amendments’) and the ‘Regulation of COPC Fund’ do also took into force since July 1st, 2012, However, inherent defects of Chinese ‘OPCLR’ still cannot be corrected immediately.

First of all, the ‘Regulation of the COPC Fund’ is only available to oil pollution damage from vessel sources; it is not available to oil pollution damages from non-vessel sources, such as those damages caused by offshore platform at sea or storage facility onshore. So the third research question is: **How can the ‘Regulation of COPC Fund’ are extended to cover the oil pollution from non-vessel sources?**

Secondly, in contrast with the increasing risk of oil pollution occurring in China, Chinese legislations for oil pollution damage from vessel sources do not contain a specific legal regime to introduce ‘strict liability’ for ship-owners and a system of compulsory insurance for oil tankers to all tonnage sailing in Chinese waters. Furthermore, there has been no particular legislation that specifically deals with marine oil pollution issues, even no

successful judicial practices made by Chinese maritime courts until now. There are only a patchwork of articles in laws or regulations (more details to be discussed in section 6.1 and 6.2 of chapter six) which are inadequate and do not catch up the changing situations to confront the rapid economic development in China in the present as well as in the future. So, the fourth research question is: **How can a special legal regime imposing liability on ship-owners and a system of compulsory insurance for oil tankers be introduced?**

Thirdly, it is important to note that oil pollution from vessel source can also occur in the inland waters. Although the Chinese government enhances the control for the inland river navigation, due to more various vessels sailing on inland waters, and the increasing number of ships may cause fearful oil pollution in this area. These kinds of oil pollution have already caused detrimental effect on the daily lives of the local residents along the inland waters. However, due to details of the legal system to compensate victims for oil pollution damages caused by leaking oil tanks in the inland waters being still not regulations in current Chinese laws and regulations so far. At the same time, it also lacks of legal support in maritime practice too (more details to be discussed in section 6.3 of chapter six). So the fifth research question is: **Should a system of regulation be introduced to cover oil pollution in Chinese inland waters? And, if so, how and what form?**

The sixth aspect is the emergency response in the regulation of ‘COPC Fund’. In reviewing the new regulation of the ‘COPC Fund’, you can find that the new Chinese regulation of ‘COPC Fund’ does not cover the emergency preventive measures and oil clean-up activities in advance. It would be detrimental for the competent authorities to obtain emergency funds in order to take prompt emergency actions for oil pollution damage caused by vessel source once the responsible parties have no cash flow or are insolvent. So, the sixth research question is: **How can the regulation of the ‘COPC Fund’ be extended to cover emergency preventive measures and oil clean-up activities in advance?**

‘OPA 1990’ is a kind of comprehensive oil pollution law, and has proved to be a successful model over the world. For the purpose of formulating comprehensive oil pollution law in China, it will be very helpful to borrow lessons from ‘OPA 1990’. In view of the fact that both ‘CLC 1992’ and ‘Fund Convention 1992’ have acquired global supports and shipping industries which have already formed many uniform interpretations.

For the same purpose, it is also helpful for us to gain experiences from these two international conventions at the same time.

With all above facts and reasons in mind, in order to closely explore the detailed *pros* and *cons* (advantages and disadvantages) of these three ‘OPCLRs’, the author determines to use comparative study of the international, the United States of America and the Chinese ‘OPCLRs’ as the topic and the theme of this M.Phil. research. Additionally, this dissertation will surely be of great significance for those who want to simultaneously and deeply learn the three ‘OPCLRs’ in the future.

1.3. Methodology

This research is aimed to analyse problems of the oil pollution liability and compensation in the current regime of ‘CLC’, ‘Fund Convention’, USA ‘OPA 1990’ and China’s oil pollution legislation. This research uses a comparative study and aims to find a suitable model to establish the Chinese national compensation regime for oil pollution damage in China.

First of all, this research examines the history and development of the ‘CLC’ and ‘Fund Convention’ for oil pollution damage. In particular, attention is paid to the limitation of liability and the compensation to oil pollution damage. Under this background, the dissertation analyses the rationality of the mechanism and the complexity of the regime in chronological order, and finds out the deficiency and limitation of its original existence. A historical review illuminates how liability without ‘fault’ and the oil owner contribution compensation fund developed into their current state and whether their existence is still justified in today’s law too.

Secondly, this research compares the current international and regional oil pollution regime in other jurisdictions. The author specifically focuses on examining whether the whole liability system is designed based on the public interest? And whether it can reduce overall social costs of dealing with oil pollution accidents by efficient using of available resources, or whether the system is only built as a distributor to risk and costs in the oil pollution

damage. A comparative study of these three different legal frameworks also provides some guidance regarding the oil pollution compensation regime in the future.

Furthermore, this study also reflects on Chinese legislation on oil pollution damage and examines the civil liability and compensation in the Chinese legal system. The current Chinese law in regard to oil pollution damage in China is rather primitive and there are not enough judicial decisions on it. This is totally incompatible with Chinese economy and maritime litigants in China. The study of problems of current Chinese law regarding the civil liability and the oil pollution compensation regime for oil pollution damage will highlight the pitfalls that might arise for litigants and indicate where the law should be amended, and aim to find problems of the current Chinese legislation and the compensation regime for oil pollution damage in China.

In addition to literature review and research, as part of both methodologies above, interviews with key stakeholders were also conducted in this research. These were semi-structured and the outline questions are included in the appendence attached. This study listed several key questions to define areas which the author will be explored, and then three unstructured questions let interviewers or interviewees to diverge in order to pursue questions or response which the author wants to understand in more detail. Through the interview which conducted to key stakeholders, problems of current Chinese oil pollution law on the civil liability, the compensation regime and how to remodel current 'Chinese Maritime Code', 'Environmental Protection Laws' and how to establish a comprehensive Chinese national compensation regime for oil pollution damage are highlighted.

This research draws conclusions on comparative studies for oil pollution compensation regime in different legal systems, and put forward proposals for the remodelling of the Chinese law of oil pollution compensation, with a view to make it compatible with the rest of the world. Becoming increasingly involved in the world economy and international trade, China needs to make its national legal system ever more open to the rest of the world. It is a matter of urgency for China to remodel some areas of its current maritime and environmental laws and establish a national compensation regime, so as to be in line with international commercial practices and customs. This will reduce legal costs for both

Chinese and foreign litigants and bring about certainty and consistency in court decisions. Finally, this research tries to identify what avenues are open to enable the reform of oil pollution compensation regime in Chinese oil pollution law as the end.

1.4. Structure

This dissertation examines the specific regime of the liability and the compensation for oil pollution damage, with special emphasis on Chinese problems and prospects for the development of the compensation mechanism for the oil pollution damage in China. To achieve this purpose, the thesis presented here was structured into seven chapters as follows.

Chapter one, as presented here, serves as an introduction to the thesis. It provides the background of research; highlights key research questions and also notes methodologies and the structural framework of the thesis.

Chapter two investigates the oil pollution damage from vessel sources. First, the author statistically examines the oil pollution damage around the world and international actions. Focus on China, after studying current status of China's oil pollution and legislation, the regression analysis shows that, in accordance with international practices and experiences, establishing its own national oil pollution regime is likely to be the best option to China in the future.

In chapter three, the theme of research investigates the legal history and the evolution of international conventions and voluntary agreement on oil pollution damage. This is actually a historical review on the origin and their development. A legal history is first analysed, and the role of voluntary industrial schemes are addressed hereafter. This part of research examines international conventions or rules in chronological order so as to reveal how the regime has evolved into its current status and how the current system on civil liability and compensation for marine oil pollution was designed. Following the evolutionary line, the discussion is proceed on the base of case law and scrutinize the accidents of litigation in both civil liability and compensation for oil pollution damage. The underlying thread connecting

all chapters in this part is the research for the nature of the civil liability and the compensation for oil pollution damage, and finds the motivations behind it. By examining the evolutions of the civil liability and oil pollution compensation regime, it can find how the legal rules in the conventions were adapted to different contexts. At the end of the study of this part, the work rationalises all the previous discussions and diagnosis problems of the current international and regional oil pollution regime.

Chapter four examines the common practice for oil pollution damage in the United States of America. This chapter adopts a legal comparative approach throughout critically investigating the 'OPA 1990'. In this case, this research concludes with the divergence between different approaches to civil liability and compensation for oil pollution damage in different jurisdictions.

In chapter five, the aim of research investigates the legal history and the evolution of liability and compensation for oil pollution damage from vessel sources in Chinese laws, as well as reasons and analysis why China did not ratify the 'Fund Convention' in the Chinese mainland. This chapter is comprised of a historical review on the origin and development of liability and oil pollution compensation in Chinese environmental and maritime law. It also includes an analysis of the legal history and addresses the model pertaining to international conventions transforming into Chinese municipal laws. This chapter begins with introducing the law and practice of oil pollution compensation regime in China. As it was not everyone familiarises the Chinese legal system, so the introduction includes a brief summary of the Chinese legal method and the judicial system. And then, the discussion evaluates and analyses current and potential difficulties of 'strict liability' and liability limitation in Chinese law. The analysis is made against the background of Chinese 'MPEL' and the *Maritime Code of P.R.C 1992* (hereinafter referred to as 'CMC 1992') since marine civil liability is a special branch of civil liability which is also regulated by the 'MPEL' and 'CMC 1992'.

In chapter six, the theme of research continues to examine current problems in China. There is a particular focus on the critical study of the liability limitation, compulsory insurance and oil pollution claim. To the end of this chapter, shortcomings of the Chinese legal framework are highlighted. At the same time, this work constructs a new classification of the term in oil

pollution compensation regime and investigates the possibility of more flexible remedies for oil pollution damage.

Chapter seven aims to investigate the necessity and possibility of remodelling of Chinese law in the oil pollution compensation regime. This section interprets the implications of similarities and differences between international conventions, 'OPA 1990' and Chinese laws. Based on previous researching from chapter three to chapter six, conclusions focus on the possibility of remodelling some areas of current Chinese maritime and environmental laws and establish a national compensation regime so as China to be in line with international commercial practices and customs. Finally, a proposal for amendments to the Chinese law is put forward. To conclude, recommendations are made for establishing a Chinese national oil pollution compensation regime as the great significance for this thesis at the end.

1.5. Outcomes

As a result of this research, following points are made clear:

- 1) Whether the oil pollution compensation regime is still justified in a modern marine community;
- 2) Whether the purpose of oil pollution liability and compensation could be fulfilled by some other mechanism in the oil pollution compensation regime;
- 3) What are problems with the current Chinese legislation and compensation regime for oil pollution damage;
- 4) Whether the oil pollution compensation regime reformed in other jurisdictions has cured defects of Chinese oil pollution compensation regime;
- 5) What are the avenues open to the reform of oil pollution compensation regime in Chinese oil pollution law.

1.6. Limit of the dissertation

- 1) According to different stages when conventions will intervene, oil pollution problems may involve conventions on prevention of, response to and compensation for oil pollution. Moreover, different conventions existing due to the nature of the vessel (tanker / non-tanker) and the nature of the oil (persistent / non-persistent). This dissertation is limited to conventions, particularly, dealing with the civil liability and the compensation for oil pollution damage, i.e. the regime established through the 'CLC' and 'Fund Convention'. Therefore, oil pollution which has arisen from bunker spills regulated under the 'Bunker Convention', and accidents involving non-persistent oil or other hazardous substance regulated under the 'HNS Convention' have not been discussed in this dissertation;

- 2) Concerning criminal liability for oil discharge, both the European Union (hereinafter referred to as 'EU') and the 'OPA 1990' have provisions on criminal sanctions for oil discharge. However, this dissertation will be restricted to discuss the civil liability, and will not address the criminal liability aspect. At the same time, the prevention to oil pollution is also beyond the scope of this discussion;

- 3) Moreover, pollution outside the geographic scope of application of these conventions or those occurring on the high sea which does not threaten to cause damage to any states, (may be under other intervention conventions), and the extent to which public authority may claim compensation for damage to the marine environment, independently of any quantifiable costs of restoration will also not be addressed here too.

CHAPTER TWO

OIL POLLUTION DAMAGE

FROM VESSEL SOURCES, THE INTERNATIONAL ACTIONS AND KEY RELEVANT ISSUES IN CHINA

The increasing transport of oil by sea creates a growing oil pollution risk to the ocean and the sea. Large spills of oil discharge from tankers in small areas have caused considerable environmental and economic concerns, and the direct consequence is the public's attention is quickly attracted by such accidents according to media reports. Although the record of the tanker industry has improved dramatically in recent years, there are still occasions when press and television screens are dominated by pictures of a stricken tanker releasing oil into the sea and accompanying pictures of oiled *flora* and *fauna* (plant and wildlife) (Wu 1996: 1). What and how to address these global issues of oil pollution damage to the ocean environment is a challenge faced by all human beings.

This chapter reviews some high-profile oil pollution cases around the world and examines the damage of these accidents cause to the key stakeholders, with a brief summary note on actions by the international community by way of international conventions. The discussion focuses on an examination of the key issues concerning oil pollution in Chinese waters. Finally, the conclusion provides discussions on policy implications of the oil pollution from vessel sources in China.

To achieve this purpose, this chapter has been structured as follows: after the brief introduction of oil transportation around the world, the section 2.1. focus on the oil pollution damage from vessel sources, which is considered to be unavoidable due to large fleet of oil tankers sailing from states to states and massing oil cargoes being shipped by sea in the worldwide. As a result of international communities combat against oil pollution damage, international communities negotiated a series of international conventions relating to oil pollution prevention. In the section 2.2., this thesis highlights international actions regarding

to this worldwide hot topic. The ‘CLC’ and the ‘IOPC Fund’ as two specialised international conventions are examined firstly, and then voluntary schemes like ‘CRISTAL’ in 1969 and ‘TOVALOP’ in 1971 are reviewed too. Although these two voluntary schemes were terminated on February 20th, 1997, due to these two voluntary schemes representing another important mode for oil pollution processing, they still have considerable influence in the history of oil pollution compensation system. From the section 2.3 to 2.6., discussions analyse the Chinese economic and oil demand, oil shipping and oil pollution in Chinese waters. In the section 2.7., the author draws a conclusion; China is facing serious oil pollution threats in the current circumstance, China, as one of the fastest growing shipping countries, established her own oil pollution compensation regime referring to ‘CLC’, ‘IOPC Fund’, and ‘OPA 1990’ will be the best choice for her in the future.

2.1. Oil pollution from vessel sources around the world

Oil pollution damage to the marine environment probably started when oil was first used as fuel, and such problems increased with the carriage of oil by sea. Since the Second World War in 1939, oil has become the main source of energy throughout the world (De La Rue and Charles 1998: 10). To satisfy the growing demand of oil transport by sea, larger oil tankers were built increasingly.

The first oil tanker in the world appeared in the late 19th century to carry kerosene for lighting. In 1952, the international largest tanker was of 28,000 Dead Weight Tonne (hereinafter referred to as ‘DWT¹’). In 1959, tankers of 100,000 DWT came into service, and by 1966, there have been tankers of 200,000 launched to the sea (Intertanko 2010:6). Moreover, increasing amount of modern oil tankers was widely and rapidly prompted since then. In the 1960s, the very large crude carrier (hereinafter referred to as ‘VLCCs’) between 200,000 and 320,000 DWT were widely employed. In the 1970s, the ultra large crude carrier (hereinafter referred to as ‘ULCCs’) in more than of 320,000 DWT had been introduced to the public (Intertanko 2010: 6).

¹ ‘DWT’ represents for deadweight tonnage, which is the cargo capacity of the vessel. Another often used term is GRT which is the gross registered tons, and it is a measure of the volume of space occupied by the vessel.

Meanwhile, with a large fleet of oil tankers running in global and a huge volume of oil cargoes shipping worldwide at sea, regulations with higher safety standards were imposed too, such as the 'OILPOL 1954' and the 'MARPOL 73/78' playing an important role in the international community. However, no matter how much effort the international community and oil industries contribute to environmental protection, the oil spills still constitutes a growing pollution risk to seas and oceans, and has indeed caused huge damage to the marine environment. The following oil pollution accidents highlighted the good example for them. Studies have shown that the main reason for the oil pollution damage from vessel sources is not only associated with human factors, but also related to the inherent risk of oil shipping industry (more details to be discussed in section 2.1.3. of chapter two).

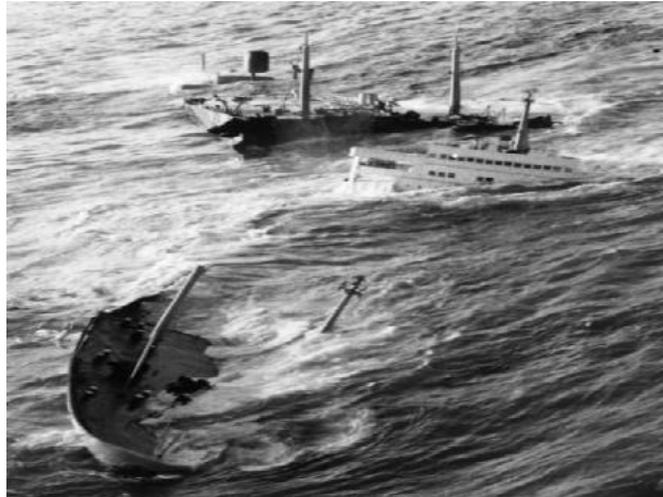
2.1.1. Major oil pollution cases in the world

As an introduction to this chapter, a highlight of the following cases can give clear pictures of some selected high profile oil pollution cases from vessel sources around the world.

2.1.1.1. 'Torrey Canyon' (1967) oil pollution in England

As noted in chapter one 1.1. On March 18th, 1967, The Liberian M/T '*Torrey Canyon*' carrying 20,000 tonnes of crude oil struck Pollard's Rock on the Seven Stones reef, between the Scilly Isles and Cornwall on the south-west coast of England (See photograph 2.1). About 860,000 barrels of crude oil spilled from the oil tanker, and leaded to 30 nautical miles long and ten nautical miles wide oil pollution between England and France. This oil pollution killed most of marine lives along the south coast of Britain and the Normandy shore of France. England and France spent about £ 6.2 million to deal with the pollution at that time, and blighted the region for many years after (Zhang 2009:4).

Photograph 2.1. 'Torrey Canyon' (1967) Oil pollution accident occurred in England and France



Source: *Torrey Canyon oil spills 1967*

2.1.1.2. 'Amoco Cadiz' (1978) oil pollution in France

The 'Amoco Cadiz,' which was a crude oil tanker of 234,000 DWT, grounded on Portsall Rocks off the Brittany coast of France on March 16th, 1978. It split into two parts (See photograph 2.2) and 1,619,000 barrels (about 227,000 tonnes) of crude oil spilled into the sea. The oil spills polluted approximately 200 nautical miles of the Brittany coastline, and the total cost for oil clean-up and business losses exceeded 100 million dollars (Michael 1996: 225).

Photograph 2.2. 'Amoco Cadiz' (1978) oil pollution in France



Source: *Amoco Cadiz oil spills 1978*

2.1.1.3. ‘Exxon Valdez’ (1989) oil pollution in USA

On March 24th, 1989, the ULCC ‘*Exxon Valdez*,’ which belonged to Exxon Particular Co. USA, struck Bligh Reef in Prince William Sound, Alaska (See photograph 2.3). More than 37,000 tonnes of Alaska North Slope crude oil spilled from the oil tanker. This was the largest oil pollution accident in the USA history. The oil clean-up cost and oil pollution damages summed up to £ 0.8 million (at that time), causing a big shock in the oil industry in Untied States of America.

Photograph 2.3. ‘*Exxon Valdez*’ (1989) oil pollution in USA



Source from: (With Friendship 2009)

2.1.1.4. ‘Sea Empress’ (1996) oil pollution in the United Kingdom

The crude oil tanker ‘*Sea Empress*’ grounded on mid channel rocks at St Ann’s Head on the route to Pembroke, the south-west coast of Wales in February 1996, about 72,000 tonnes of crude oil spilled into sea, and over 100 kilometres (hereinafter referred to as ‘km’) of outstanding Pembrokeshire national park coastline was heavily polluted by oil (See photograph 2.4). Conservation and fishery ecosystems, together with areas of recreational importance were dangerously affected. This became the United Kingdom’s third largest oil spills at the time (Dyrynda 2001:1).

Photograph 2.4. 'Sea Empress' (1996) oil pollution in the United Kingdom



Source from: (Hirsch 1999:1)

2.1.1.5. 'Erika' (1999) oil pollution in France

On December 12th, 1999, M/T 'Erika' broke in two parts off the coast of Brittany, France (See photograph 2.5). Approximately 19,800 tonnes of heavy fuel oil spilled into sea. From June through to September at 2000, efforts to pump the remaining oil to the surface were carried out. The clean-up operation took place along about 400 km of prime tourist coastline and tens of thousands of sea birds were killed by this oil pollution, over 250,000 tonnes of oily waste was cleaned up from the coast (IOPC Funds 2006:41).

Photograph 2.5 'Erika' (1999) oil pollution in France



Source from: (Theguardian 2008:1)

2.1.1.6. *'Prestige'* (2002) oil pollution in Spain, France and England

On November 13th, 2002, Greek operated Bahamas registered oil tanker, *'Prestige'* with 77, 000 tonnes of heavy fuel oil on-board, broke in two off the coast of Galicia, Spain. The oil tanker spilt an unknown but substantial quantity of her cargo into the seas. The stern section sank to the depth of 3,830 metres and the bow section to the depth of 3,500 metres (See photograph 2.6). Each estimated to contain 900 tonnes of fuel oil and 13,800 tonnes of oil cargo respectively (IOPC Funds 2006:45).

Vessels from ten European countries including Spain were putted in the offshore oil clean-up operation. This accident caused heavy oil pollution along the coastline from Vigo in Spain to Brest in France, and over 141,000 tonnes of oily waste from the Spanish coastline and 18,300 tonnes in France were recovered. Additionally, the evidence of additional intermittent light contamination was found from France to the Dover Channel on the English coast too (ITOPF 2010:2).

Photograph 2.6. *'Prestige'* (2002) oil pollution in Spain, France and England



Source from: (The Times 2012:1)

From the map following (See next page Map 2.1.), it showed that majority of continents in the world have suffered severe damage due to oil spilling from ocean-going oil tankers, especially in Europe and America.

Map 2.1. Regional distributions of major oil pollution accidents around the world



Source from: (IOPC Funds Accidents)

2.1.2. Oil pollution damage to marine environment

Often portrayed by the media as ‘Environmental disasters’, the impact of oil pollution damage to the marine environment is extensive with dire consequences predicted for the survival of marine *‘flora’ and ‘fauna’* (plants and wildlife). The short-term environmental impact of a major accident is severe, it causes serious distress, not only destroying the ecosystem but also bringing the disaster to the people living near the contaminated coastline. Following an oil spill, images of oiled birds, deepen the perception of permanent and widespread environmental damage, with inevitable loss of marine resources (See photograph 2.7). Given highly charged emotional reactions usually associated with oil spills, it is difficult to gain a balanced view of the realities of spills effects and subsequent recovery (ITOPF 2012: 2). So, the question regarding how to address this global issue of oil pollution damage to the ocean environment is a challenge faced by all shipping industries and international communities.

Photograph 2.7. Oil pollution damage to marine environment



Source from: (Trenwith 2013:1)

2.1.3. Trend analysis on oil spills from vessel sources in the world

Over last 40 years, data on oil spills from oil tankers over the world has been collected by the ‘International Tanker Owners Pollution Federation Limited’ (hereinafter refer to as ‘ITOPF’) which originally established and funded by world’s ship owners. Based on their data, statistics has shown that there was a significant decline in major oil spills from oil tankers (which the tanker’s gross tonnage was over 700 MT) since the 1970’s. and the statistics reveal levels dropping from about 25 per year to just over 3 accidents over the last few years, it is far below the averages for previous decades, although the volume of oil transported around the world continues to increase since 1970 (Renken 2010: 1).

The table 2.1 and figure 2.1 below were taken from ITOPF database of oil spills from tankers, barges and combined carriers, which includes all reported accidental spillages, excepting those resulting from acts of war from 1970 to 2009 and from 1970 to 2011. From the table below, it can be seen that the number of oil spills from oil tankers per year has been steady decline over past twenty years.

Table 2.1. Number and quantity of oil spills from 1970 to 2009

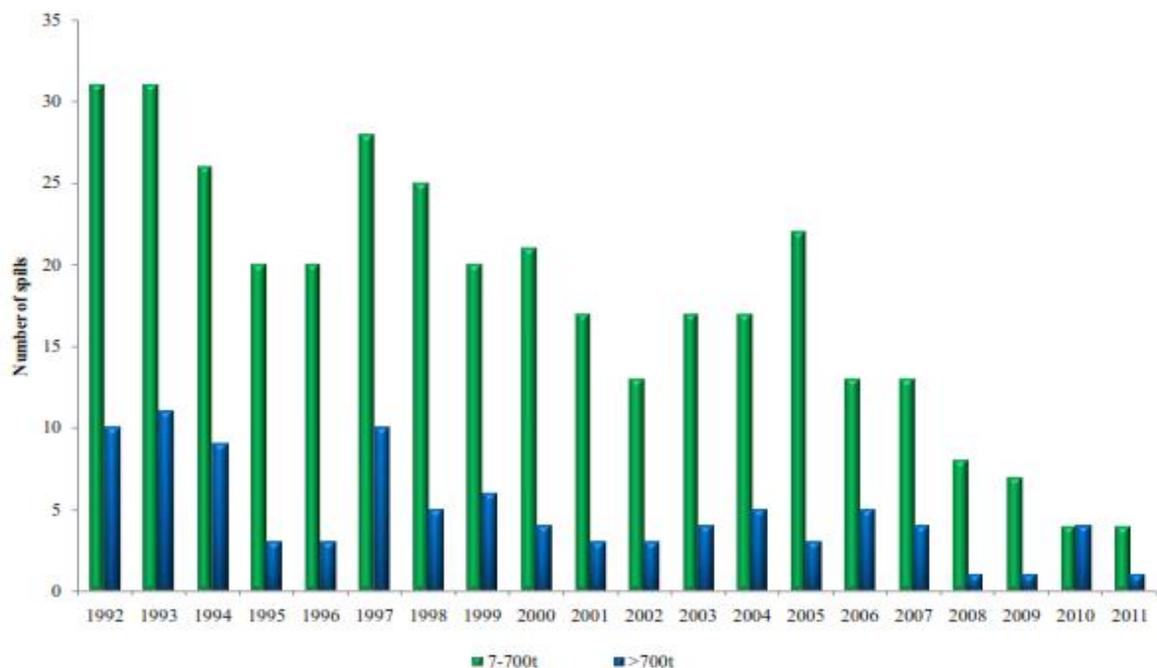
Year	7-700 T	>700 T	Total	Quantity (T)	Year	7-700 T	>700 T	Total	Quantity (T)
1970	6	29	35	330,000	1990	51	14	65	61,000
1971	18	14	32	138,000	1991	29	7	36	430,000
1972	48	27	75	297,000	1992	31	10	41	172,000
1973	27	32	59	164,000	1993	31	11	42	139,000
1974	89	28	117	175,000	1994	26	9	35	130,000
1975	95	22	117	357,000	1995	20	3	23	12,000
1976	67	26	93	364,000	1996	20	3	23	80,000
1977	68	17	85	291,000	1997	28	10	38	72,000
1978	58	23	81	386,000	1998	25	5	30	13,000
1979	60	34	94	640,000	1999	19	6	25	29,000
1970s Total	536	252	788	3,142,000	2000s Total	280	78	358	1,138,000
1980	52	13	65	206,000	2000	19	4	23	14,000
1981	54	7	61	48,000	2001	16	3	19	8,000
1982	45	4	49	12,000	2002	12	3	15	67,000
1983	52	13	65	384,000	2003	15	4	19	42,000
1984	25	8	33	28,000	2004	16	5	21	15,000
1985	31	8	39	85,000	2005	21	3	24	17,000

1986	27	7	34	19,000	2006	11	4	15	13,000
1987	27	10	37	30,000	2007	10	4	14	18,000
1988	11	10	21	190,000	2008	7	1	8	2,000
1989	32	13	45	174,000	2009	3	0	3	100
1980s Total	356	93	449	1,176,000	2010s Total	130	31	161	196,100

Source from: (ITOPF 2011:23)

During the period from 1992 to 2011, 'ITOPF' had recorded 452 tanker accidents in total which the quantity of oil spilt was 7 tonnes or more. Among them, 79% of oil pollution was oil spills between 7 to 700 tonnes in size, and the other 21% of oil pollution were oil spills larger than 700 tonnes. From the figure 2.1 and figure 2.2 below, it can be found that the average number of oil spills from 7 to 700 tonne declined by 3.5 times (25.6 to 7.2 oil spills per year) from 1992 to 2011, and the average number of oil spills over 700 tonnes had declined by approximately 3 times (7.2 to 2.2 oil spills per year) at the same period (ITOPF 2011:24).

Figure 2.1. Number of tanker spills 7 tonnes and over from 1970 to 2011

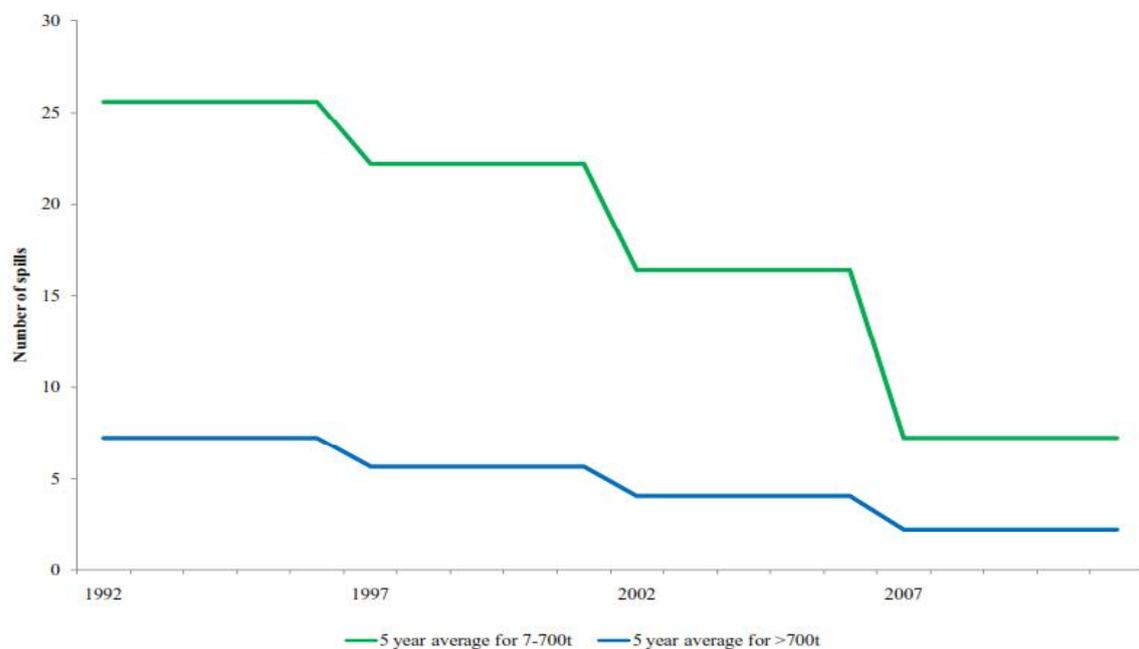


Source from: (ITOPF 2011:24)

Meanwhile, according to the 'ITOPF' recorded, there were about 870,000 tonnes of oil spilled into sea since 1992 to 2011, the quantity of oil spills from 1992 to 2011 was

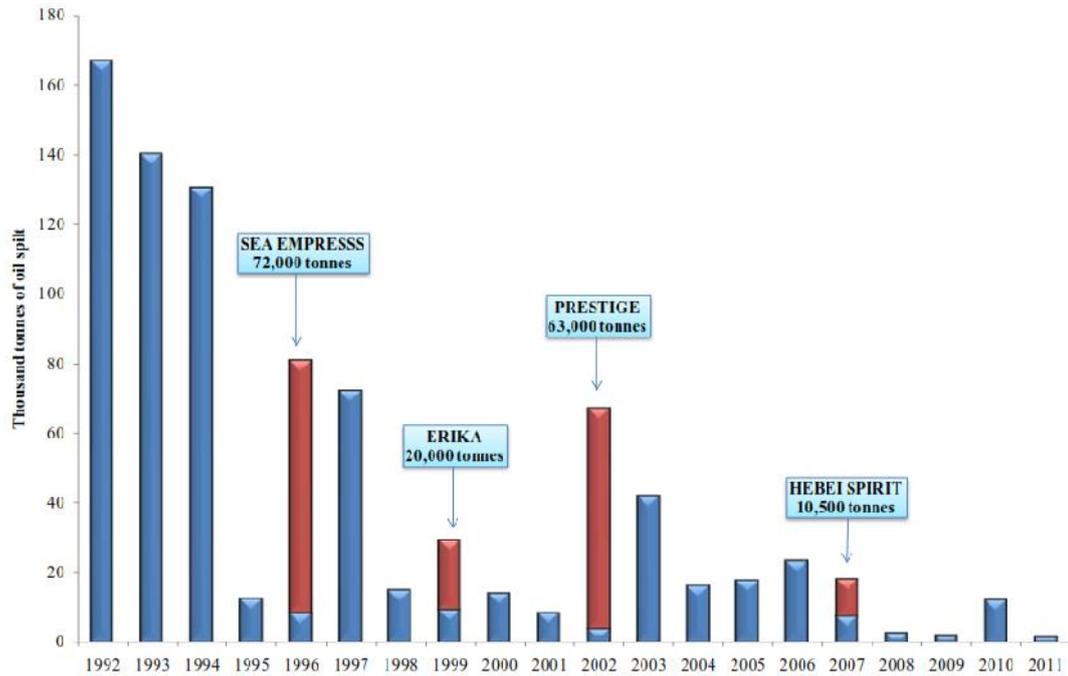
equivalent to only 15% of the total oil spills since 1970 (about 5.7 million tonnes). Figure 2.3 shows the quantity of oil spilt at each year (including 7 tonnes and over, from tankers, including significant spills) since 1992, which together with Figure 2.4. demonstrates the significant declined in the quantity of oil spilt at the period of 1992 to 2011. Refer to the Figure 2.4., it also can be seen that the quantity of oil spilt at five-year average from 2007 to 2011 reduced almost 15 times than the quantity of oil spilt from 1992 to 1997 (ITOPF 2011:25).

Figure 2.2. Five year average for frequency of oil spills 7 tonnes and over from tankers from 1992 to 2011



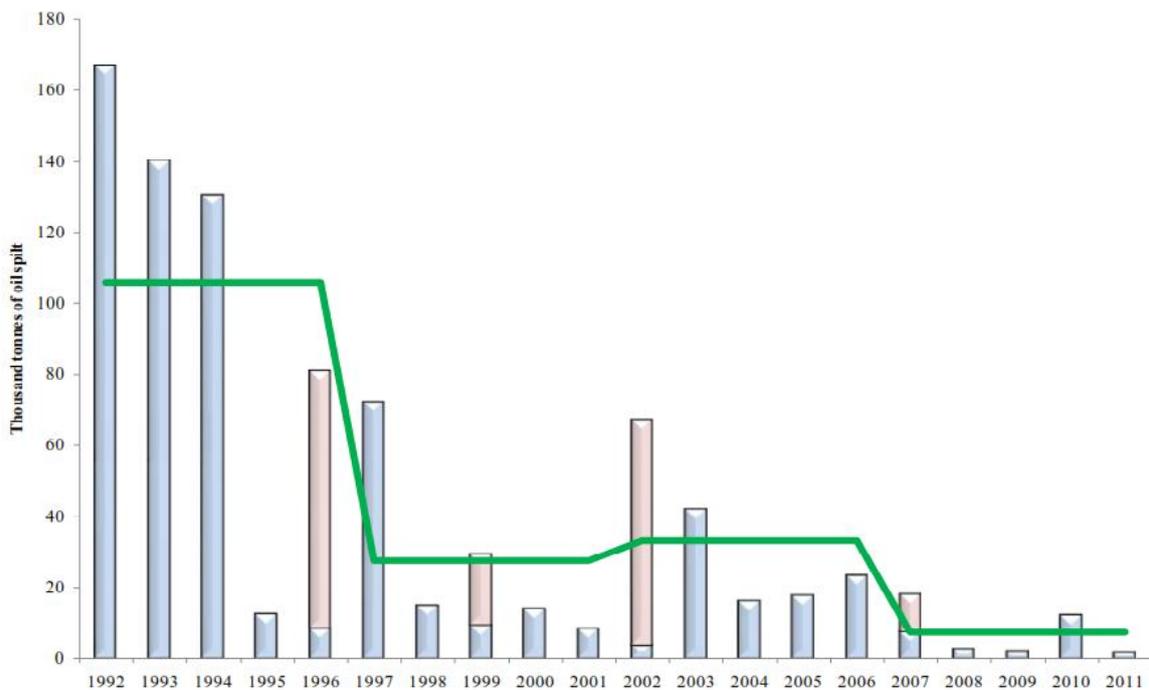
Source from: (ITOPF 2011:26)

Figure 2.3. Quantity of oil spilt, 7 tonnes and over, from tankers, including significant spills from 1992 to 2011



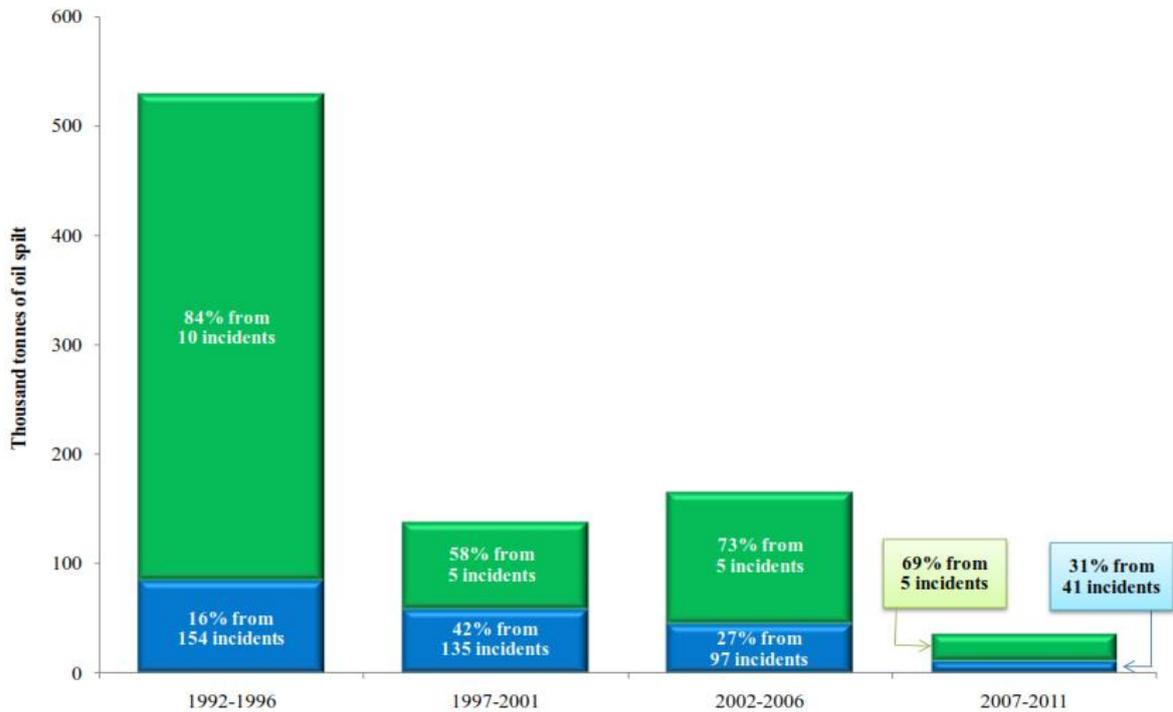
Source from: (ITOPF 2011:27)

Figure 2.4. Five year average of the quantity of oil spilt, 7 tonnes and over, from tankers, from 1992 to 2011



Source from: (ITOPF 2011:26)

Figure 2.5. Oil spills 7 tonnes and over from tankers showing the influence of a relatively small number of comparatively large spills on the overall figure from 1992 to 2011



Source from: (ITOPF 2011:27)

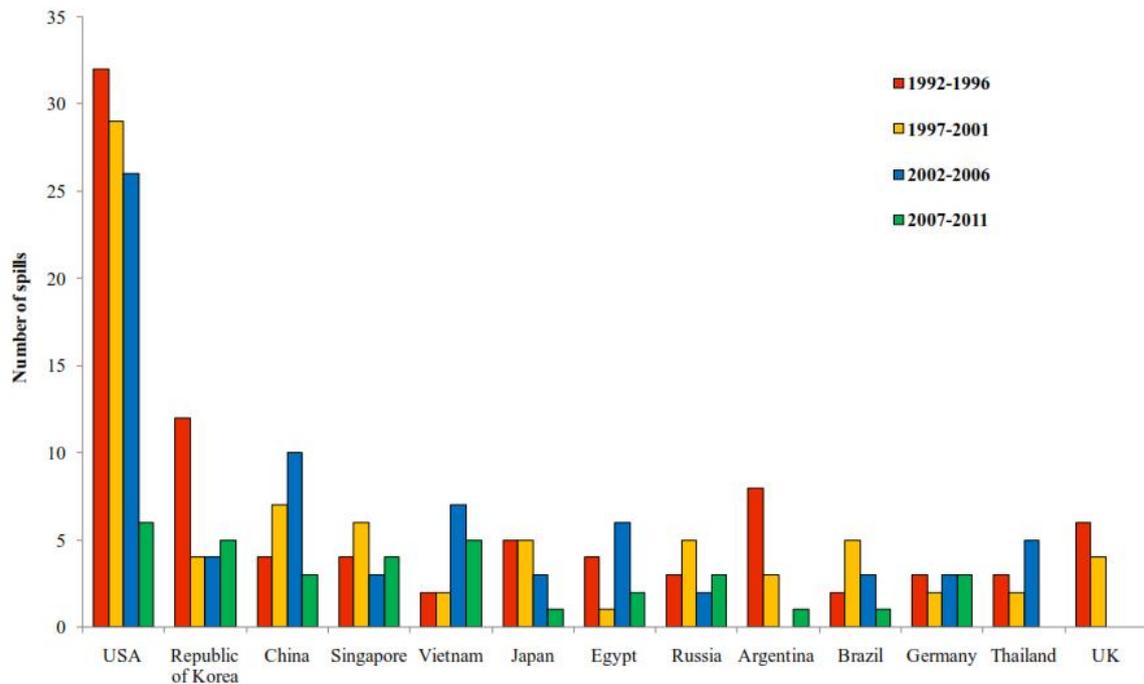
Examined quantities of oil spilt at the period from 1992 to 2011, it is consistently shown that several large oil spills cases accounted for a high percentage of oil spilt at that period. Especially, during the time from 1992 to 1996, approximate 529,000 tonnes of oil spilt resulted from 164 large oil spilt accidents, and 84% was caused by just 10 huge oil pollution accidents. Furthermore, during the period from 2007 to 2011, this trend continues, and of the approximate 36,000 tonnes of oil spilt from 46 accidents, 69% of oil spills were just responded by 5 major accidents (See figure 2.5).

2.1.4. Oil spills accidents analysis by countries

During 1992 to 2011, 'ITOPF' recorded 452 tanker oil spills over 7 tonnes in 76 different countries around the world. Figure 2.6 shows the number of oil spills by countries which experiencing 10 or more oil spills in total over last twenty years period. The decline in the

number of oil spills in these countries can be seen, with the lowest figures for the period from 2007 to 2011, particularly notable, as mentioned by Musk, Susannah (2012:3).

Figure 2.6. Number of tanker oil spills by countries (countries that experienced 10 or more tanker oil spills from 1992 to 2011)



Source from: (ITOPF 2011:27)

From the Figure 2.6 above, it also can be seen that the United States of America experienced the highest-reported frequency of oil pollution accidents, with 21% (93 accidents) of the 452 accidents, from 1992 to 2011. However, these figures still show that the number of oil spills occurring in the USA waters has reduced considerably at the same time, with the number of oil spills from 2007 to 2011, reducing five times than the same record from 1992 to 1996. The reduction in the number of oil spills was a good example and ample evidence of the implementation and enforcement of the ‘OPA 1990’ in the United States of America since 1990 (Mark 2000:2).

South Korea and People’s Republic of China were ranked the second and the third highest frequency of oil spilt in the world, with 6% (25 accidents) and 5% (24 accidents) at the period from 1992 to 2011 respectively. Compared with the situation in the United States of

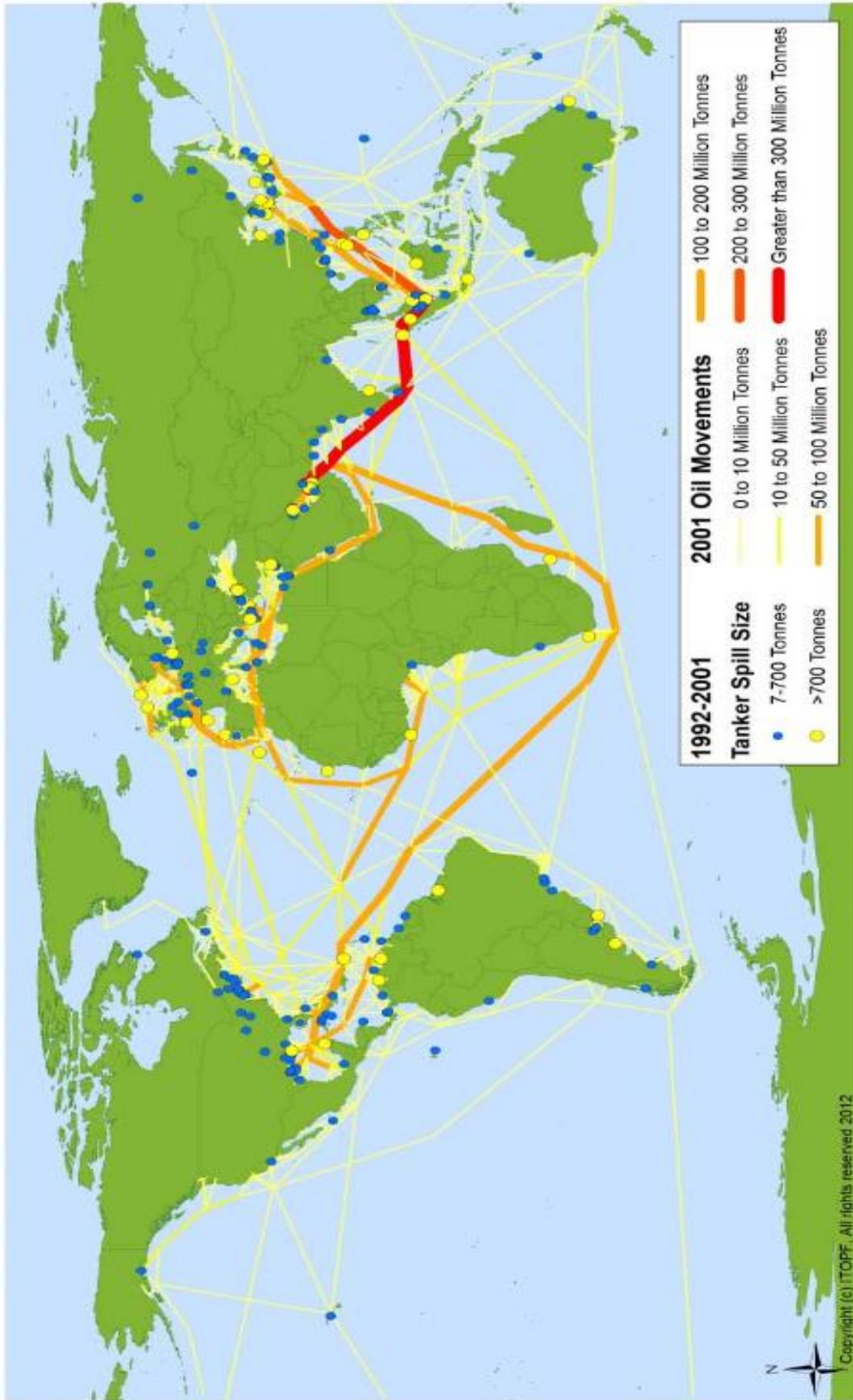
America, the number of oil spills in South Korea at the period from 1992 to 1996 and from 1997 to 2001 has greatly reduced by a third and remained at a total of 4 and 5 spills in the subsequent five-year periods. But the number of oil spills in China did not show a progressive decline at the same time, it has fluctuated between 3 and 11 spills within these five-year periods. The situation in China shows that, with the fast economic growing and strong oil demanding in China, China is facing serious oil pollution threat in the near future. (Mark 2000:2).

Outside of the United States of America, the largest numbers of oil tanker spills (14 or more) are recorded in Asia over the past 20 years as following. Map 2.2 at next page, indicates high volumes of oil tanker traffic present. Singapore is one of the busiest shipping route and shipping call port in the world. In contrast with Singapore only had 17 oil pollution accidents in this period, ranging from 3 to 6 oil spills accidents in each five-year period, this illustrates again that the enforcement of national legislation, such as the 'Prevention of Pollution of the Sea Act 1999' and using of navigational technology, including 'Vessel Traffic Information Service' (hereinafter refer to as 'VTIS'), played a key role in the oil spills prevention protection in Singapore (Mark 2000:3).

The number of oil spills in Vietnam showed a peak during the period from 2002 to 2006. The main reason is that the average rate of port traffic in years among 2003 to 2006 in Vietnam has been growth at 137% than the last period.

Other countries, such as, Japan, Brazil, Russia, Egypt, Germany, Thailand and the United Kingdom have experienced a higher number of oil spills (average 10 or more) in the past twenty years. Studied the 'ITOPF' database and found that almost 60% of oil spills in total in these countries occurring from 1992 to 2011. Comparing the oil tanker traffic data against the location of these spills in 2011 (see map 2.2.), it was evident that most accidents happened near busy shipping routes, this could be a factor affecting the frequency of oil spills in these areas (ISL 2010:321).

Map 2.2. Oil tanker traffic and tanker spills 7 tonnes and over (from 1992 to 2011)



Source from: Lloyds MIU APEX data 2011 (Lloyds, 2011)

2.1.5. Causes analysis of oil pollution from vessel sources

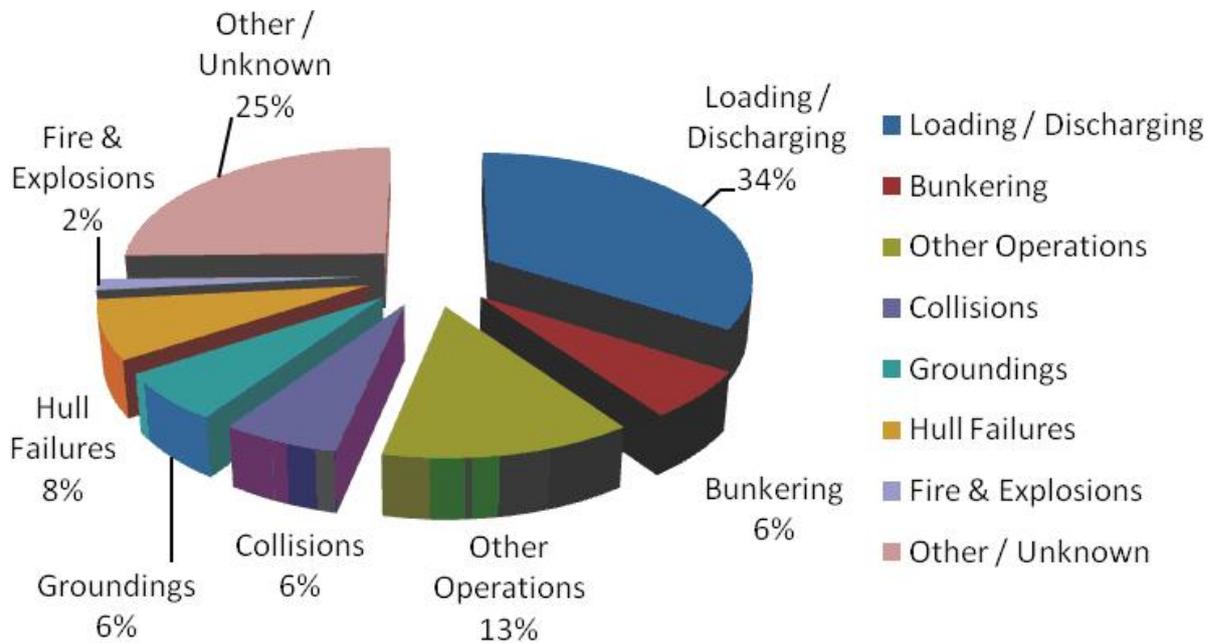
Although factors involved in causing oil spills are varied, each of them have a significant effect on the total volume of oil spilt, see table 2.2, taken from the ‘ITOPF’ database (ITOPF 2012:1). The table shows an overview of the cause of oil spills in each spills size group. In order to explore the accident of oil spills at the different sizes in terms of the primary event or operation in progress at the time of the oil spills, the author divided the possible causes into three categories: ‘Operation’ (oil pollution mainly occurs in ports and harbours), ‘Accidents’ (oil spills occurs while the vessel is en route), and ‘Other/unknown’ (oil spills where relevant details are not available).

Table 2.2. Accidents of spills by cause, (<7 tonnes, 7 to 700, and >700 tonnes) from 1970 to 2010

Items \ Categories	<7 Tonnes		7 to 700 Tonnes		>700 Tonnes		Total
	No. of spills	% of spills	No. of spills	% of spills	No. of spills	% of spills	Total
OPERATION							5501
Loading / Discharging	3157	40.24%	385	28.84%	37	8.04%	3579
Bunkering	562	7.16%	33	2.47%	1	0.22%	596
Other Operations	1250	15.93%	61	4.57%	15	3.26%	1326
							57.06%
ACCIDENTS							2018
Collisions	180	2.29%	337	25.24%	132	28.70%	649
Groundings	237	3.02%	269	20.15%	160	34.78%	666
Hull Failures	198	2.52%	57	4.27%	55	11.96%	310
Equipment Failures	202	2.57%	39	2.92%	4	0.87%	245
Fire and Explosions	84	1.07%	33	2.47%	34	7.39%	151
							20.93%
Other / Unknown	1975	25.18%	121	9.06%	22	4.78%	2118
							21.97%
TOTAL	7845	100.00%	1335	100.00%	460	100.00%	9640

Source from: (Zhang 2009:2)

Figure 2.7. Causes of oil spills from 1970 to 2010



Source from: (Illustrated by the candidate as per table 2.2 data)

From table 2.2 and figure 2.7 above, these results show that:

- 1) Most small oil spills (<7 MT) are due to vessel operational activities, such as loading and / or discharging, bunkering, ship's repairing within port or at oil terminals. This kind of oil spills accounts for a total of 63.33% of oil pollution accidents;
- 2) There are 81% of operational spills involving quantities of less than seven tonnes oil pollution;
- 3) There are 25.24% of large oil spills by collisions or groundings which fall within the 7 to 700 MT size category and 28.7% in the > 700 MT size category respectively;
- 4) There are 34.78% of large oil spills direct caused by vessel groundings;
- 5) Collisions and groundings generally result in much larger spills, with quantities in excess of 700 tonnes being at least 63.48% of such accidents;
- 6) Accidents, where no information available / cause unknown available, are noted as 'Other / Unknown'.

2.2. International actions

As a result of international combats against oil pollution, the international community negotiated a series of international conventions relating to oil pollution prevention since 1960s. Depending on the purpose and operation of these international conventions, a distinction can be divided into two kinds. First one was safety regulations designed to prevent oil spills which work ‘*ex-ante*’ (before the fact), and second was conventions designed to provide contingency plans to respond efficiently to oil spills and take charge the responsibilities and the compensation to polluters or coastal states which operate ‘*ex-post*’ (after the fact).

Preventive measures are mainly regulations setting up technical standards, operation conditions, professional criteria for crews and licensing techniques, etc. With the development of modern technology, these preventive measures seem to be more and more technical and regulatory in nature. Remedial measures are designed to make the polluter liable and provide compensation for the oil spills victims, so as to relieve or minimise the oil pollution damage to the society as a whole. Given the limitation of this paper, following sections mainly focus on remedial measures in two international conventions and two other voluntary agreements concerning the liability and the compensation for oil pollution as follows.

2.2.1. International conventions

With the prompt development of oil transportation on the sea, the ascending potential damage to marine environment by oil pollution was recognised by the international community from last century. As the direct result of the concerns, the international community has negotiated a series of international conventions on the oil pollution prevention since 1960s. The most important conventions, focussed on oil pollution liability and compensation from vessel sources, are resulted in the following two international conventions, which were the ‘CLC’ and the ‘Fund Convention’.

In 1967, the Liberian-registered super tanker ‘*Torrey Canyon*’ ran aground while entering

the English Channel. Her entire cargo of 860,000 barrels of crude oil poured into 100 miles of British and the French coastline. '*Torrey Canyon*' grounding was the biggest oil pollution accident ever recorded up to that time in the history. The accident raised bitter criticisms of the measures, then, in place to prevent oil pollution from ships. Also, the accident exposed deficiencies in the existing system for providing the civil liability and the compensation regarding the oil pollution accidents at sea. The oil clean-up costs alone incurred by the British and the French government totalled approximately 18 million US Dollar (hereinafter referred to as 'USD'). Interestingly, the United States district court, for the southern district of New York, granted the tanker owner's petition for limitation of liability and thereby, based on the market valuation of one salvaged lifeboat approved a 50 dollars liability limitation. Eventually, the litigation to recover oil clean-up costs was settled out of the court in the sum of \$ 3 million (Zhang 2009:3).

Essentially, the '*Torrey Canyon*' accident brought about the adoption of the International Convention for the Prevention of Oil Pollution from Ships 1973/1978 (hereinafter refer to as 'MARPOL 73/78'), plus other protocols within the field of both liability and compensation. Two of the best known are 'CLC 1969' and 'Fund Convention 1971'.

'CLC 1969' was signed in 1969 under the auspices of 'IMO'. 'CLC 1969' significantly increased the size of the liability limitation in oil pollution accidents. However, in the event of major oil pollution accidents, the enlarged 'CLC 1969' liability limitation still could not be adequate to fully cover the damage in the oil pollution accident. Therefore, the 'Fund Convention 1971' was established to provide additional compensation for oil pollution damage from vessel source at sea. The 'Fund Convention' was to share the cost of oil pollution damage from oil industries with ship owners. This additional funding sourced from profits gained from oil transport by sea. Following this, the 'IOPC Fund 1971' was established in accordance with 'Fund Convention 1971' accordingly. 'IOPC Fund 1971' was funded by contributions from oil industries. The 'Fund Convention 1971' was aimed to provide the second level compensation for oil pollution damage as the limitation offered by 'CLC 1969' was inadequate.

Since 'CLC 1969' was a product of compromise between ship-owners and oil industries, 'CLC 1969' lefts numerous issues unsolved and to be interpreted by national laws of

member states. For example, under 'CLC 1969', the victim's right to claim damages for lost earnings or profits (that was so called 'pure economic loss') was open to interpretation by individual national laws of member states. Therefore, the international community need to take necessary action to make the required improvements. In 1984, another international conference was convened in London with the purpose of revising 'CLC 1969'. The definition of pollution from oil spilling were amended to include preventive measures to be taken before the accident; raise the ceiling of liability limitation; broaden the geographical scope of the convention; create a simplified procedure for future revision of financial limit, etc. However, these protocols never entered into force as the United States of America discovered that the 'CLC 1969' and its 1984 protocol could not provide them with sufficient cover against big oil pollution damages. Particularly, they found the liability limitation of 'CLC 1984 Protocols' was still too weak to compensate for oil clean-up costs incurred, as a result, they were determined to enact their own comprehensive law directly. The withdrawal of United States of America from the planned ratification of the protocols caused some countries to distrust the system demonstrated by both 'CLC 1969' and its 1984 protocols, 'Fund Convention 1971' and its 1984 Protocols.

In 1992, a further international conference hold in London and produced a protocol that adopted those changes previously proposed and entered into force as of May 30th, 1996. This was the generation of 'CLC 1992'. 'CLC 1992' not only introduced the increased limitation of liability, but also created a simplified procedure for the future revision of the liability limitation. The protocols of 'Fund Convention 1971' were also revised in 1992, known as the 'Fund Convention 1992'. The liability limitation under 'Fund Convention 1992' for one accident was increased to 135 million 'Special Drawing Rights' (hereinafter referred to as 'SDR').

Further to the oil pollution accidents involving the '*Nakhodka*' in Japan, the '*Erika*' in France and the '*Prestige*' in Spain, the adequacy of 'CLC 1992' and 'Fund Convention 1992' was once again highlighted. Due to the gravity of accidents and large scale damages incurred, a further review of the protocols resulted in the adoption of the protocol of 2003 to the 'Fund Convention 1992' (hereinafter referred to as the '2003 Protocol') resulting in the establishment of the International Oil Pollution Compensation Supplementary Fund 2003 (hereinafter referred to as the 'Supplementary Fund') (IMO 2013:1). The 'Supplementary

Fund' largely increased the amount of limit at per accident under 'Fund Convention 1992' (more details to be discussed in chapter three).

2.2.2. Two voluntary agreements

Before 'CLC 1969' and 'Fund Convention 1971' came into force, World's leading tanker and oil companies established two private schemes respectively, which broadly mirrored relevant provisions of 'CLC 1969' and 'Fund Convention 1971'. One was the Tanker Owners' Voluntary Agreement concerning Liability for Oil Pollution (hereinafter referred to as 'TOVALOP') coming into force since October of 1969. The second was the Contract Regarding an Interim Supplement to Tanker Liability for Oil Pollution (hereinafter referred to as 'CRISTL') coming into force from April of 1971. As 'TOVALOP' covered over 95% of world's oil tankers, this scheme was of great benefit to victims who suffered oil pollution damage in these countries where it was not member state of 'CLC 1969'. Since 'CRISTAL' could operate in conjunction with 'CLC 1969' in cases where the 'Fund Convention 1971' was not applicable, this scheme provided additional compensation and relieved the ship-owner of part of his liability. However, due to increasing numbers of member states of 'CLC 1969' and 'Fund Convention 1971', further, due to the continued existence of two schemes might discourage further ratifications, in 1995, the boards administering two schemes decided to end these two schemes in February 1997 (Churchill and Alan 1999: 361).

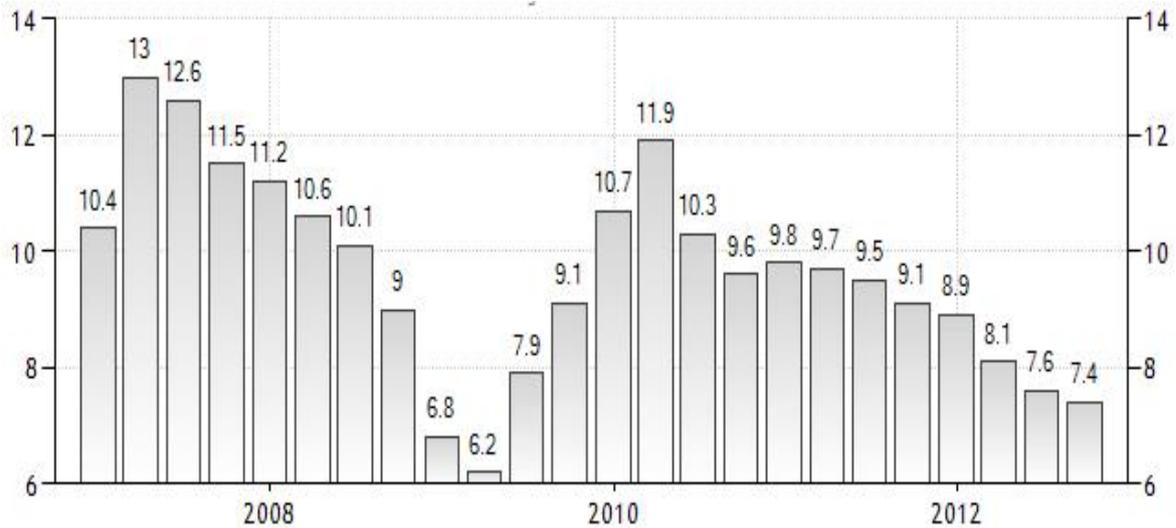
From the above, it can be found that these international actions largely departed from principles of traditional tort law or / and maritime law, and were considered great revolutionary at the time (more details to be discussed in chapter three).

2.3. Chinese economic and oil consumption in China

With 1.3 billion people as at 2012, China is the most populous country in the world and its economy developed rapidly in the last three decades. The annual growth rate of Chinese 'Gross Domestic Product' (hereinafter referred to as 'GDP') was eight per cent in 2012 and just keeping an average growth rate of ten per cent from 2000 to 2010. According to

‘International Energy Agency’ (hereinafter referred to as ‘IEA’) report in 2012, China was the second largest oil consumer country in the world in 2012, just behind the United States of America (U.S. Energy Information Administration 2012:2).

Figure 2.8. China GDP annual growth rate (per cent change in GDP)



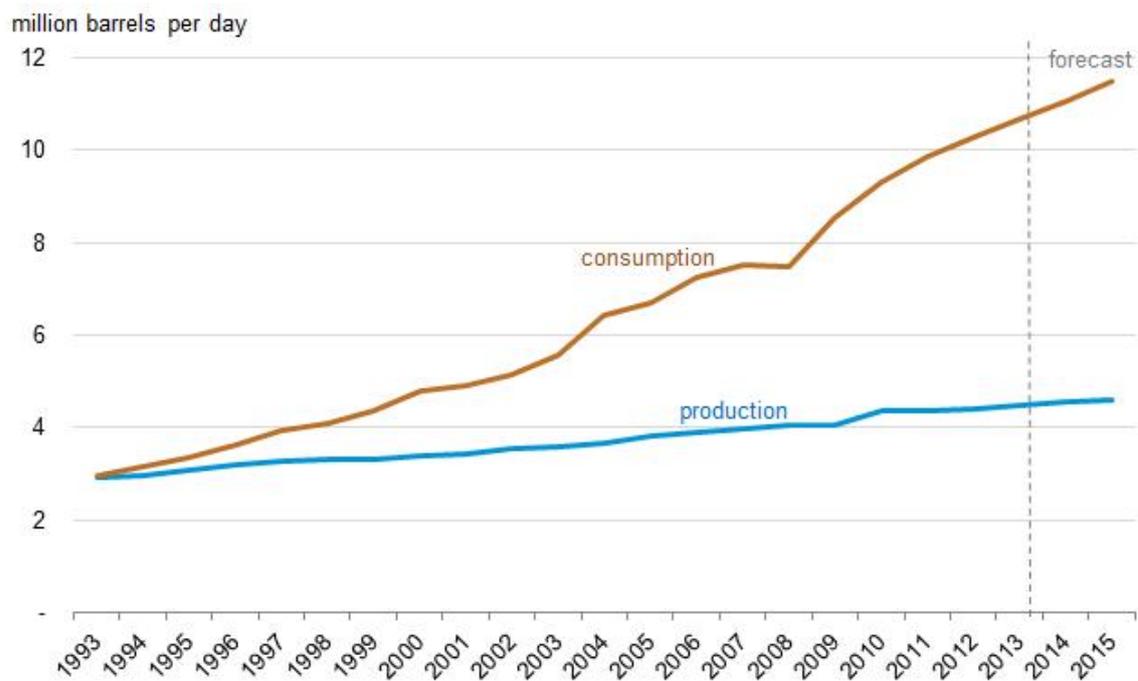
Source from: www.tradingeconomics.com, National Bureau of Statistics of China

2.3.1. Oil consumption in China

Under the background of sustainable growth of economy, China has a huge demand for energy, especially for oil demand in China, is surging rapidly. The main reason is that the popularity of private cars in China. It signified the age of bicycle in China was gone forever after taking part in the ‘World Trade Organization’ (hereinafter referred to as ‘WTO’). ‘Institute for the Analysis of Global Security’ (hereinafter referred to as ‘IAGA’) reported that the number of vehicles in 2010 was 90 times as many as in 1990, with an increasing of 19% per year. Forecasts indicated that China could exceed the total number of cars in the U.S.A by 2015. (*Fuelling the dragon: China's race into the oil market* 2011). At the same time, this sharp increase in vehicle sales could also be contributed to keep the lower price of gasoline in China. At one third of the retail prices in Europe, Chinese gasoline prices now rank among the lowest in the world of oil importing countries. Gasoline in Europe and Japan is highly taxed by their governments to discourage the use of gasoline (Institute for the Analysis of Global Security 2010:2).

According to the *Oil and Gas Journal* reported as of January 2014, Chinese oil consumption has shown a little bit reduction after a high record of 14% in 2009 as impact of the most recent global financial and economic downturn. However, although it showed a slower trend for oil demand growth in China, China still made up nearly a third of global oil demand growth in 2013. As per U.S. ‘Energy Information Administration’ (hereinafter referred to as ‘EIA’) estimated, China consumed an estimated 10.7 million bbl/d of oil in 2013, over 4%, about 380 thousand bbl/d, compared to 2012. (U.S. Energy Information Administration 2014:2)

Figure 2.9. Chinese oil production and consumption from 1993 to 2015



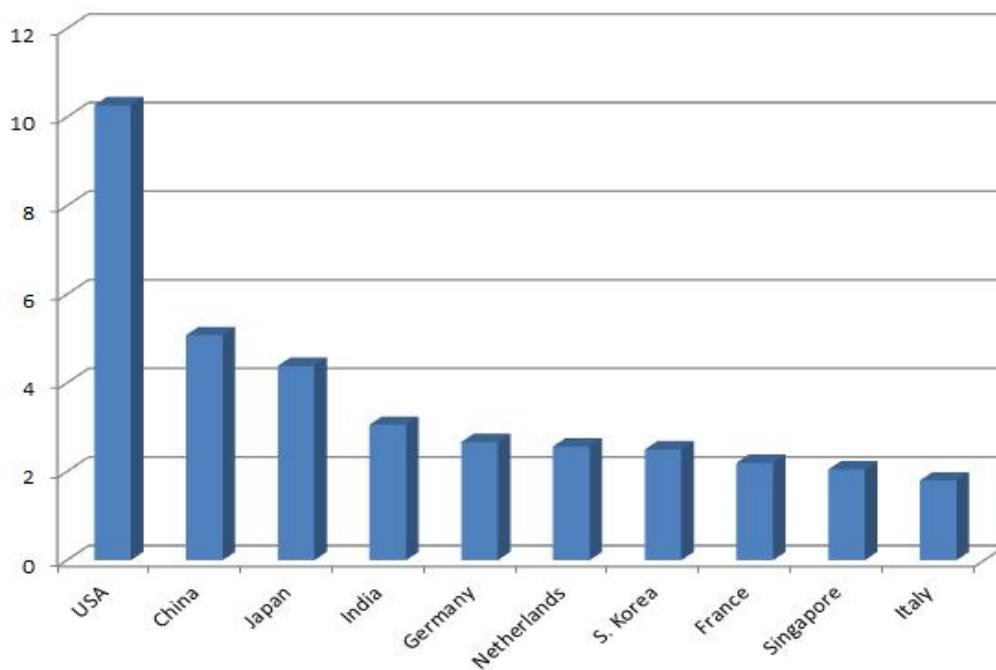
Source from (U.S. Energy Information Administration 2014:2)

2.3.2. Oil imports in China

From ‘EIA’ last update research report at February 4th, 2014, ‘EIA’ stated that, China became the second largest net oil import country in the world since 2009, just behind the United States of America. The quantity of net oil imports in China reached to 6.2 million

bbl/d in 2013. At the same time, it was also worth that China actually became the largest oil net import country in the world from the fourth quarter of 2013. The oil demand growth of China, in particular petroleum products, hinges on several factors, including: domestic economic growth and trade; power generation; transportation sector shifts; refining capabilities, etc. Forecast by 'EIA' indicates that the sustainable moderate growth of China's oil consumption through 2014 reach to approximately 11.1 million bbl/d, and its net oil imports reach to 6.6 million bbl/d, compared to 5.5 million bbl/d for the United States of America. It can be expected that China likely to surpass the United States of America in net oil imports on an annual basis by 2014 (U.S. Energy Information Administration 2014:2).

Figure 2.10 Top ten net oil importers 2012 (million barrels per day)

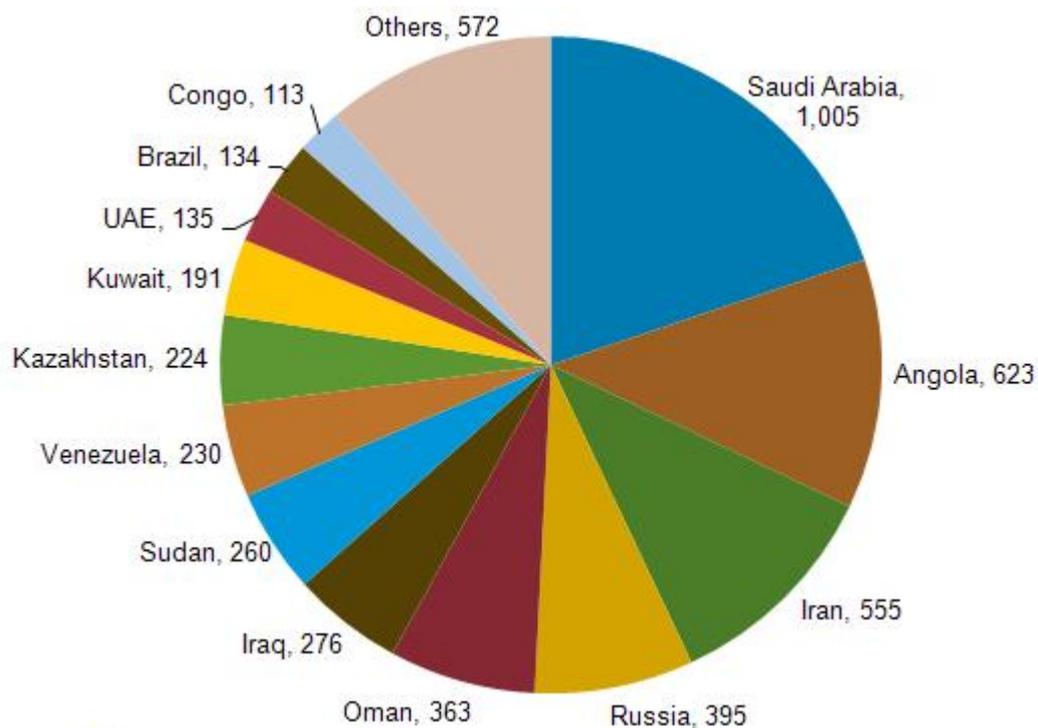


No.	1	2	3	4	5
Country	USA	China	Japan	India	Germany
Amount	10.27	5.08	4.39	3.06	2.67
No.	6	7	8	9	10
Country	Netherlands	S. Korea	France	Singapore	Italy
Amount	2.57	2.5	2.2	2.05	1.8

Source from EIA short term energy outlook (April 2013)

Research by EIA reports, the largest source of China's crude oil imports remains from the Middle East, although in recent years, African countries, particularly Angola, have increased their contributions to China. As part of Chinese energy supply security policy, China's national oil companies are attempting to expand supply sources in different regions through long term contracts and overseas investments. For example, The Middle East supplied 2.6 million bbl/d (51 per cent) in 2011. Other regions exporting to China include Africa with 1.2 million bbl/d (24 per cent), Asia-pacific region with 173,000 bbl/d (3 per cent), and 1.1 million bbl/d (22 per cent) from other countries at the same year. Among them, two largest sources for crude oil imports to China are Saudi Arabia and Angola, combined they contribute almost one-third of China's total crude oil imports. Sudan and South Sudan were also significant oil exporters to China, until political conflicts between two African nations over their oil resources caused closure of production at the start of 2012. China's imports from Sudan and South Sudan plummeted from 260,000 bbl/d in 2011 to zero by April 2012 (See figure 2.11) (U.S. Energy Information Administration 2013:2).

Figure 2.11. China's crude oil import by source 2011 (unit: thousand bbl/d)



Source from: FACTS global energy

Furthermore, China's 10th 5-Year Plan (2001 to 2005) had launched in 2001, Chinese government decided to establish their national strategic oil reserve program to help to shield China from potential oil supply disruptions. This system was administered by Chinese government, and designed to be built in three stages. Since 2004, China started to establish over four locations being the first phase of the national strategic oil reserve program. In the first phase, a total of 103 million barrels of storage capacity has been completed by early 2009 at four sites; this would be amount to approximately 25 days of net oil imports based on 2008 estimates of Chinese oil demand. In the second phase, more than double capacity at 8 sites are under construction. Ultimately, by 2016, phase 3 is expected to bring the total strategic oil reserve capacity to approximately 500 million barrels in China.

Apart from the strategic reserves of crude oil, China still has the storage capacity for approximately 300 million barrels of commercial crude oil. According to Chinese government report, Chinese government also plans to create a strategic refined oil stockpile operated by a subsidiary of 'National Development and Reform Commission' (hereinafter referred to as 'NDRC'), for 80 million barrels, in the future. (Asia Tradehub 2013:1)

2.4. Oil shipping and oil pollution in Chinese waters

China has an extensive coastline of 18,000 km and vast inland navigable waters of 100,000 square kilometres (hereinafter referred to as km²). The lengthy coastline is from the border of North Korea to Vietnam (See map 2.3. at next the page). At the same time, the shipping industry in China has been developing rapidly in past two decades. As per statistics from 'Ministry of Transport of the People's Republic of China' (hereinafter referred to as 'MOT'), there are over 50 international seaports located along the Chinese coastline which trade and transport in global. Along Chinese coastline, Taiwan Strait is an important oil transport corridor. South China Sea is the main route of oil transport from Middle East to China, Japan and South Korea. The Yangtze River is the longest river in China, and it has navigable waters by ocean-going tankers up to a thousand miles from its mouth. Pearl River is the third longest river in China, the Pearl River flows through the majority of Guangdong, Guangxi, Yunnan and Guizhou province, and it is the main shipping route from seaport to the inland in southern China. (U.S. Energy Information Administration 2011:2).

It was known that up to 90 percent of China's imported crude oil would continue to be transported by sea, even if the oil pipelines from Kazakhstan and Russia to China has fully established and it will come into service in next few years. In fact, it was estimated that at least 80 percent of imported oil would still be moved by sea (see table 2.3. at next the page).

Without a doubt, the rapid rises of oil movement along the Chinese coastline inevitably led to a surging growth in maritime traffic. Collisions between vessels and accidents due to oil tanker's grounding, explosion, fire and oil leaking is also on the parallel increase. The direct result is that oil pollution is very difficult to be avoided, especially, with more and more 'VLCCs' come into operation.

Map 2.3. Chinese coastline and the vast inland navigable waters



Source from (Enviro 2009:1)

Table 2.3. Oil: Inter-area movements 2012 (Million tonnes)

From \ To	USA	Canada	Mexico	S. and C. America	Europe	Africa	Australasia	China	India	Japan	Singapore	Other Asia Pacific	Rest of World	Total
USA	-	7.8	23.7	44.8	28.8	3.7	0.2	6.0	0.9	4.9	5.8	0.9	1.0	128.6
Canada	46.5	-	-	0.2	2.7	+	+	1.5	+	0.6	†	+1	†	151.4
Mexico	51.4	1.2	-	1.0	9.4	-	-	1.1	3.8	+	0.1	0.1	-	68.1
S. and C. America	98.3	0.7	0.7	-	20.9	0.4	-	31.5	22.7	1.6	10.9	2.2	0.1	190.1
Europe	26.7	6.1	2.6	8	-	22.8	0.2	1	0.3	0.9	10.8	13.7	12	105
Former Soviet Union	26.4	0.2	-	1.3	286.5	3.1	1.3	59.7	2.5	9.3	6.8	17	10.2	424.3
Middle East	108	7.7	0.6	6.1	112.2	21.1	6.6	144.4	123.1	176.1	55.4	218	0.3	979.6
North Africa	16.8	7.5	-	4.3	78.3	-	1.3	11	4.5	0.9	0.4	3.4	0.8	129.1
West Africa	42.9	4.2	-	9.6	65.5	-	5.9	51.6	27.3	4.9	0.1	15.5	-	227.4
E and S. Africa	0.1	-	-	0.4	†	-	†	3	0.2	0.6	0.6	0.1	-	5
Australasia	0.3	-	-	0.4	†	†	-	7.7	0.2	3	2.6	7.2	†	21.4
China	0.2	0.1	-	5.5	0.6	1	†	-	0.5	0.5	2.5	14.9	1.3	27.1
India	1.9	0.1	-	4.3	8.1	8.5	0.2	0.5	-	2.9	10.1	11.9	16.3	64.7
Japan	-	0.1	0.1	0.1	0.1	-	1.6	1.8	0.1	-	3.4	3.2	†	10.6
Singapore	0.1	0.1	-	0.1	1.1	0.6	11.2	6.7	1.5	0.4	-	49.5	0.3	71.5
Other Asia Pacific	5.2	-	0.1	1.2	3.4	1.2	18.4	26.8	5.1	28.4	34.5	-	1	125.3
Unidentified *	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total imports	524.5	35.8	27.9	87.3	617.7	62.4	46.9	354.2	192.6	234.9	144	357.6	43.4	2729.1

Source from BP website 2013

According to Mr Zhang's research, as per the statistics from the 'MOT' of China in 2006, as many as 4.6 million vessels (including barge and small cargo vessels) entered or departed from China's ports, averaging 12,700 each day. Among them, there were 162,949 tankers of all sizes sailing into and out of the Chinese ports, averaging 446 each day (Zhang 2008:1).

Moreover, with more and more numbers of single hull and low quality oil tankers are navigating along Chinese coast, Chinese oil tankers' technical conditions, crew manning, and communication systems are far below international standards. Therefore, it is inevitably for vessels to lead to more and more oil pollution occurrences in Chinese coastal waters in such scale and conditions. Accidents of oil spillage along China's coast or with the involvement of Chinese ships keep making the headlines in Chinese, oversea and shipping industrial newspapers. From the following typical cases, it can be understood the seriousness of oil pollution problem in China.

2.4.1. ‘Minrangong 2’ v ‘East Sea 209’ (1999)

On March 23rd, 1999, a Chinese tanker ‘*Minrangong 2*’ collided with another oil tanker ‘*East Sea 209*’ in ballast, about 1,032,067 litres of fuel oil as cargo in ‘*Minrangong 2*’ spilled into the water in the region of Guangzhou and caused serious oil pollution at the mouth of Pearl River. (China Maritime Trial n.d. 2007:1)

2.4.2. ‘DeHang 298’ v ‘Bow Cecil’ (2000)

On November 14th, 2000, one Chinese oil tanker called ‘*Dehang 298*’ collided with one Norwegian chemical tanker call ‘*Bow Cecil*’ at the mouth of Pearl River. This accident made ‘*Dehang 298*’ eventually sank with five crew members missing and 230 cubic metres of fuel oil spilled into the sea (see photograph 2.8). ‘Maritime Safety Administration of P.R.C’ (hereinafter referred to as ‘MSA’) took prompt action to clean-up the oil spills after the accident. The total expense for the oil clean-up cost estimated to about 6.5 million Yuan Ren Min Bi (hereinafter referred to as ‘RMB’). Accident investigation found that the owner of ‘*Dehang 298*’ was a private shipping company, single vessel without financial capacity to pay compensation. In comparison, ‘*Bow Cecil*’ was found not liable for the collision; therefore, ‘*Bow Cecil*’ did not be held liable for the cleaning up costs too. Finally, Chinese government had to pay all the oil clean-up cost by himself due to China lacking special law to govern the oil pollution compensation regime in P.R.C. (Zhou 2008:2)

Photograph 2.8. ‘*DeHang 298*’ v ‘*Bow Cecil*’ (2000)



Source from: (Li 2000).

2.4.3. *'Chang Yang' v 'Zhejiang Xinhou 0375'* (2003)

On August 5th, 2003, M/V *'Chang Yang'* was struck by small boat *'Zhejiang Xinhou 0375'* when she berthed in the Huangpu River, near Wujing thermoelectric power plant. About 85 tonnes of heavy oil spilled into Huangpu River, polluting 150,000 square metres of water and land (see photograph 2.9). Both the water supply to the power plant and the municipal water system of Shanghai were under serious threat (Liu 2005: 3).

Photograph 2.9. *'Chang Yang' v 'Zhejiang Xinhou 0375'* (2003)



Source adopted from (People daily 2003).

2.4.4. *'MSC Ilona' v 'Hyundai Advance'* (2004)

On October 7th, 2004, German registered container vessel *'MSC Ilona'* collided with Panamanian registered container vessel *'Hyundai Advance'* in South China Sea, which located in 15 km east from the mouth of Pearl River. This accident caused about 1,268 tonnes of fuel oil into the sea. The spills spread to an area of up to 16 km long and 600 metres wide, it seriously damage the oceanic environment in the waters off Guangdong province. The cost of emergency response to the accident and oil clean-up

expense reached to 120 million Yuan RMB (about US\$ 14.5 million) (European Maritime Safety Agency 2004:2).

Photograph 2.10. 'MSC Ilona' v 'Hyundai Advance' (2004)



Source from: (Containershippingnl, 2004)

From the map 2.4 at the next page and the table 2.4 next to map 2.4, it can be found that there were 2,653 reported oil spills occurring along the Chinese coasts and inland waters from 1973 to 2010. There were more than 37,544 metric tonnes of oil had been spilled into coastal waters and inland waters at the same period, averaging 3.5 days each case. These included 69 major accidents², there was average of 2 major cases in each year. There were totally more than 34,189 tonnes of oil spilt into the sea, it was an average of 551 tonnes in each major case (*China holds the largest exercise of oil spills control 2010: 1*). Oil pollution from vessel source is becoming one of serious problems in China. Although continual improvements to strengthen safety management within the shipping industry are made by the Chinese government, however, accidents of oil pollution is still very difficult to avoid for a long time in the near future in China due to the high-risk nature of the shipping business.

² Based on the requirement of Chinese 'MSA', 50 or over 50 ton of oil spill per accident is major accident

Map 2.4 Regional distributions for oil pollution in Chinese coastal water



Source from: (ITOPF Attended Accidents 2011)

Table 2.4. Statistics of oil pollution occurred in Chinese coastal waters from 1973 to 2010

Items	Number	Average
Total oil pollution accidents	2,653	1 accident per 3.5 day
Total amount of oil spills	37,544 tonnes	551 tonnes per accident
over 50 tonnes oil spills per accident	69	2 accident per year
Over 50 tonnes oil spills caused by domestic tankers	41(66.1%)	1.4 accidents per year

Source from: (ITOPF 2011)

2.5. Oil clean-up in China

In contrast with the increasing risk of oil pollution from vessel sources in China, Chinese oil clean-up method and Chinese oil pollution compensation system still remains underdeveloped comparing with international practices. The most obviously example is there is neither professional oil clean-up equipment, nor professional organisation for oil clean-up in Chinese mainland. As a result, most of oil pollution accidents in China did not carry out oil clean-up effectively in past few years.

The author had interview with Mr Jianbin Zhang, managing director of ‘MSA’ Shenzhen, on Dec 12th, 2011 in London, Mr Zhang said that:

According to the statistics, the rate of oil clean-up to the small oil pollution accident with oil spills not more than 50 tonnes was just about 7 percent in China. However, compare with the major oil pollution accident which oil spills more than 50 tonnes, the rate of oil clean-up to the major oil pollution accident was up to 39 percent.....

As lack of efficient oil clean-up method in China, the most immediate effect was more and more environmental damage caused by oil pollution occurred and more and more substantial economic loss happened in China in the past. The author also had an interview with Mr Gongchen Liu, the former managing director of ‘MSA’ Beijing, on Oct 18th, 2012 in Beijing, Mr Liu frankly said that:

In the majority oil pollution cases, adequate clean-up measures were not taken, and even if some measures had been taken by the government, due to a lack of sufficient financial support, the clean-up measure were very inefficient and inadequate. The invariable consequence of this was oil left to drift in all directions, and causing irreversible damage to the fisheries, cultivation industry and the marine environment’.

Moreover, as a result of the failings of the oil pollution compensation regime in China, clean up teams for middle and small-scale oil pollution accidents occurring in Chinese waters were very difficult to obtain compensation or were not sufficiently compensated. As a consequence, it had significant effects on the oil clean-up.

As per the statistical data from Chinese ‘MSA’ which Mr Liu declared in his research in 2004, compensation for oil pollution in China was only 1.6 thousand RMB per tonne for small accidents and 13.6 thousand RMB per tonne for major accidents in 2004. An examination of the 46 full-fledged compensation data from the ‘IOPC Fund’ indicates that the average cost of oil pollution clean-up was 2,090 GBP per tonne at same time. It was 17 times higher compared to China's oil clean-up costs. The highest cost of the oil pollution clean-up was 11,505 GBP per tonne; it was 11 times higher than the largest cost of the oil pollution clean-up in China (Liu 2004: 3).

Photograph 2.11. Oil pollution clean-up in Dalian China at 2011



Source from: (Sina 2010).

Also in the author's interview with Mr Jihong Wang, director of maritime department of 'MSA' Guangdong on Dec 12th, 2011 in London, Mr Wang said that:

China did not established an emergency centre to deal with large-scale oil spills until now, when the emergency situation occur, the common practice was non-professional organizations was temporary organize together to participate in the emergency system under the command of the government, after that, disband again.....

2.6. Oil pollution compensation in China

Compared with the increasing risk of oil pollution in China, the liability and compensation regime for oil pollution damage from vessel sources in China was also remaining underdeveloped. researching the current Chinese law and legislation, it can be found that there is neither compulsory insurance requirement for ship's owners whose ships engaged in domestic trade, nor a special fund providing to supplement to compensation from the oil industry until now (Zhang 2007: 2).

2.6.1. The existing oil pollution compensation regime in China

China consented to the 'CLC 1969' in 1990 and the 'CLC 1992 Protocol' in 1999. Currently, all Chinese ocean-going vessels which carry more than 2000 tonnes of oil cargo in bulk and engaged in the international trade, are compulsorily to insure their oil pollution liability via insurance company. At the same time, China is also member state of 'Fund Convention', due to Hong Kong still remaining different system of law from the mainland of P.R.C when Hong Kong transferred from the United Kingdom to China on July 1st, 1997, the 'Fund Convention' only applies to 'Hong Kong SAR', it does not apply to mainland of the P.R.C. So when major oil pollution occurs, it is impossible to ensure that victims can be compensated sufficiently.

Lee, in his study in 2007, examined the 'MSA' statistics and found that, there were approximately a total of 29 major cases of oil pollution accidents occurred in Chinese coastal waters since 1973 to 2007. Among them, seven oil pollution accidents were caused by foreign tankers. All of them were fully compensated by compensation system, including the oil clean-up cost. The average compensation to the 7 cases was 8.28 million RMB, the maximum amount of compensation was up to 17.75 million RMB. In contrast, 22 oil pollution accidents were caused by domestic tankers, only 9 of them were reimbursed by compensation, the average compensation was about 1.53 million RMB, and the highest compensation was only 5.5 million RMB. Furthermore, the compensation ratio was 38%, and the amount of compensation covers 30% of the loss only (Lee 2007:3).

The main reason why compensation paid by international tankers was high and sufficient was that China is a member state of the 'CLC 1969' and 'CLC 1992'. Two international conventions required all vessels loading 2,000 tonnes or more of oil cargo must own compulsory insurance, while the Chinese vessel sailing in domestic routes does not have same similar requirement, and this would inevitably lead to low compensation ratios and inadequate oil pollution compensation at all.

2.6.2. Inadequate compensation analysis for oil pollution damage in China

Due to China's political and economic system, there are a variety of reasons related the inadequate compensation for oil pollution in China. As per my research and interview with the concerned parties, the following five questions should be the primary consideration regarding this issue, although the more discussion will be provided in chapter five and chapter six in detail.

2.6.2.1. Chinese municipal law does not have specific provisions which related to oil pollution damage from vessels

The author interviewed Mr Hongjun Shan, the professor and the head of Law School of Dalian Maritime University on Oct 16th, 2012 in Dalian China, he said:

The existing Chinese laws that regulate the liability limitation and compensation for oil pollution damage from vessel sources mainly include the *General Principle of Civil Law of P.R.C 1986* (hereinafter referred to as ‘General Principles 1986’), the *Maritime Code of P.R.C 1992* (hereinafter referred to as ‘CMC 1992’) and the *Maritime Environmental Protection Law of P.R.C 2000* (hereinafter referred to as ‘MEPL 2000’). The ‘General Principles 1986’, as the general civil law in China, provides that accidents relating to pollution damage are ‘within the category of typical acts of special infringement of rights, to which the strict liability limitation and the principle of reverse burden of proof shall apply’. It further provides ways to indemnify against such damages, including restoration of damage property³ to its original condition or reimbursement of monetary loss. The ‘CMC 1992’, as a special law, which prevails on general laws⁴, provides a right for ship-owners and salvors to limit liability for maritime claims under the regime of ‘global limitation’. The global limitation regime in the ‘CMC 1992’, however, does not apply to oil pollution damage. In contrast, the special limitation regimes adopted in the international convention on oil pollution compensation to which China is partly applied to liability arising from oil pollution damages. This means only owners whose tankers are engaged in international trade are entitled to limit its liability under the ‘CLC 1992.’ There are no other special laws in this regard, which apply to compensation for oil pollution damages by ships for domestic trade.

Furthermore, although China has ratified the ‘CLC 1992’ on January 5th, 1999, this international convention has not been transformed into domestic legislation in the P.R.C, as discussed by Hu and Yang (2006: 195-196). In terms of maritime law, most of laws in the P.R.C stipulate that for the case of foreign elements, the direct application of international conventions take priority over municipal law, e.g. ‘CMC 1992’, the ‘General Principles 1986’ and the Maritime Special Procedure Law.

³ This property is referred to private property, public property, including the ecosystem.

⁴ The law of the People’s Republic of China on Legislation, article 83 reads ‘if the special provisions and general provisions of laws are inconsistent, the special provisions apply’

2.6.2.2. Ship-owners bankruptcy

Since the reform and opening of China in 1986, the Chinese shipping industry developed rapidly and the number of shipping enterprises had gone up to more than 6,000 at the end of 2013. Among them, up to 60% of these vessels were owned by private shipping enterprises. According to accident statistics in Chinese waters during 1988 to 2007, accidents occurred by vessels from private companies were up to 96%. In this regard, most owners operate single-ship only. The registered capital of the company was limited, and owners did not pay attention to accumulate funds to expand the scale of the company business. Therefore, in the event of oil spills, insufficient compensation could be covered. From the same perspective, if the ship-owner declares bankruptcy because of the vessels' poor condition or the low auction value in the shipping industry. The direct result is ship-owners cannot affording the high cost of compensation would inevitably.

2.6.2.3. Liability beyond the ship-owner's liability limitation under 'CLC'

The limitation of liability to the ship-owner had been established through 'CLC' which had been ratified by Chinese government. Even if the oil pollution damage is in excess of the ship-owner's liability, the ship-owner can only limit within the limitation of liability. Liability beyond the ship-owner's limitation of liability would not be covered via 'CLC 1969' or 'CLC 1992'. Based on the trend of the 'CLC' and 'Fund Convention', the liability limitation of the ship-owner will be further increased with economic development. Therefore, generally speaking, the oil clean-up cost and the oil pollution damage should be adequately covered by the liability limitation. However, in some extreme situations, due to the sensitive of the oil pollution and great damage to the ocean environmental from the oil leaking, oil pollution compensation and / or oil clean-up costs sometime can exceed the liability limitation under 'CLC' and 'Fund Convention'.

'IOPC Fund', founded by the 'Fund Convention' and financed by the oil industry as the second level of oil pollution compensation, provides compensation for oil pollution damages to the extent that the protection afforded by 'CLC' is inadequate in member states. Although the P.R.C is a member state of the 'Fund Convention 1992', due to political and

historical reasons, when the transfer of sovereignty of Hong Kong from the United Kingdom to China in 1997, the 'Fund Convention 1992' is only applicable to 'Hong Kong SAR' and it did not apply to the Chinese mainland. Therefore, with regard to any excess above the limit amount stipulated by 'CLC', the victims have no remedy to against the guilty parties in the mainland of P.R.C.

2.6.2.4. Accident tanker missing or escape

With the rapid development of Chinese economy, thousands of oil tankers sailing along Chinese coastline or inbound / outbound different ports day and night. Although, Chinese government takes a variety of techniques, for example, 'Automatic Identification System' (hereinafter to as 'AIS'), 'Vessel Traffic Services' (hereinafter to as 'VTS'), strengthens to monitor vessel's movement, based on the nature of the shipping industry and the characteristics of ocean shipping, it is still impossible for the coastal state to monitor all tankers sailing along its coastline at any time. As a result, in the event where the accident tanker cannot be found or the accident tanker escapes from the accident area, the potential liability party cannot be caught and take their responsibility for the oil clean-up cost and environmental damage to the coast state and victims. This is another reason for the inadequate compensation for oil pollution damage in China.

2.7. Conclusion

Both Chinese government and shipping industries have taken significant steps in improving safety, reducing the risks of oil pollution accidents. However, accidents still continue to occur one by one, so there is no room for each coastal state to complacency. For the reason that prevention of oil spills should be the highest priority in China, effective contingency planning and improved legal system is also urgent priority.

Environmental protection is the national policy in China now. The Chinese government has been emphasising the protection of marine environment. Although more than a decade ago, experts and scholars try to focus on resolving the issue of oil pollution in China according to international advanced experience. Based on the above analysis, we can still find that:

1. China is facing a serious oil pollution threat now, but China still has a long way to go to perfect her legislation concerning oil pollution damage in the future. Through the above study, in my opinion, China, as one of the fastest growing shipping countries, establishes her own oil pollution compensation regime referring to 'CLC', 'IOPC Fund' and 'OPA 1990' will be the best choice for her in the future. Such regime shall cover the strict liability to the ship owners, compulsory insurance for oil pollution damage and channeling rule against the liability insurer. Furthermore, special competent administrative authorities, like the U.S. Coast Guard in the USA, should be set up too. This kind of independent organizations can provide professional equipment and advanced technology to deal with the problems related to marine environmental pollution and can take joint action to protect oil pollution damage to the marine environment at the first time.
2. However, how to set up such legal regime in China? What kind of lesson and what kind of experience can China learn from international conventions and 'OPA 1990'? How to regulate the legal trial with respect to the oil pollution damage in China? There are still some core questions need to bear in mind in subsequent research.

CHAPTER THREE

OIL POLLUTION COMPENSATION REGIMES

AT THE INTERNATIONAL LEVEL

Protection of environment, especially the marine environment, has emerged as an important consideration for the international community during past 40 to 50 years. However, prior to 1969, there were no other international conventions or regulations that specifically addressing the liability and compensation which suffered damages as a result of oil pollution from oil tankers, except the liability for oil pollution damage was only based on the principle of ‘fault’, and the liability was limited to the tanker’s liability tonnage with limit of liability was strictly restricted by the ‘Relating to the Limitation of the Liability of Owners of Seagoing Ships 1957’ (hereinafter referred to as ‘LLMC 1957’). If the country was not the member state to this international convention, liability was only covered and limited to the total value of both vessel and cargo combined. If an accident occurred outside a state’s jurisdiction, ‘LLMC 1957’ was powerless to address the question of liability and compensation also (Ozcayir 2000:2).

The ‘*Torrey Canyon*’ disaster occurred in the southwest coast of the United Kingdom on March 18th, 1967 constituted a turning point for this situation since then. After that, the international community found that currently existing policies and rules were not sufficient to cover coastal states severely damage by major oil pollution accidents (Faure and Wang 2005: 2). Therefore, in order to make sure the liability of oil pollution damage was adequate and the compensation was available to all concern parties which were suffered by oil pollution damage from vessel source, the ‘IMO’ decided to develop international standardized in these areas. The ‘CLC 1969’ and ‘Fund Convention 1971’, as two international conventions which were produced by ‘IMO’, were the most representative two international agreements at that time. These two international conventions became the basis of the oil pollution liability regime in the next following years. (IOPC Funds 2003:17).

At the same time, when the '*Torrey Canyon*' accident happened, shipping companies and oil industries were concerned that negotiations between governments at the international level would last long. While governments were working with 'IMCO' to find an international legal solution, certain industries had noted that the serious problem of oil pollution from vessel sources was not only threatened to coastal states, but also more seriously to industry's business interests. Instead of waiting for international conventions to be implemented worldwide, shipping companies and oil industries decided to take action to produce two private schemes unilaterally, that was the generation of the 'TOVALOP' in 1969 and 'CRISTAL' in 1971 (Wu 1996: 101). Although these two voluntary schemes had been terminated on February 20th, 1997 respectively, their role and influence are still of considerable importance.

Precisely, 'CLC 1969' and 'Fund Convention 1971' were drafted with the aims to prevent the likelihood of oil pollution damage happening and to provide adequate compensation in case of major oil pollution occurred. However, large scale of oil pollution accidents still clearly showed that these two international conventions were apparently not able to provide adequate compensation to oil pollution damage also. For this reason, a series of amendments for these two international conventions were made constantly, but the question still arises as to whether the legal framework in place is effective operation or not for dealing with major oil pollution damage in the future.

This chapter uses historical review to examine important features of these two international conventions regulating the civil liability and the compensation for oil pollution damage, in particular, the limitation of the liability of the tanker owner and the additional compensation provided through the 'IOPC Fund'. Following the investigation of legal history and the evolution of liability and compensation for oil pollution damage from tankers, the discussion and conclusion will be processed at the end on the base of case law.

Hence, this chapter is structured as follows: after brief introduction, two international conventions will be critically examined. Through the historical approach, rationality and complexity of the 'CLC' and the 'Fund Convention' are critically analysed. Furthermore, voluntary schemes, like 'CRISTAL' in 1969 and 'TOVALOP' in 1971, although terminated on February 20th, 1997, as per these two voluntary schemes still have

considerable importance in oil pollution compensation history, are critically analysed too. Finally, brief discussions and recommendations to the Chinese oil pollution compensation regime are formulated at the end of the chapter.

3.1. International conventions

Today, international regimes that specifically addressed the liability and oil pollution compensation as a result of oil pollution damage are mainly regulated through the following two international conventions, the ‘CLC’, and the ‘Fund Convention’.

3.1.1. 1969/1971 regime for ‘CLC’ and ‘Fund Convention’

Modern international oil pollution legal regime began with the ‘*Torrey Canyon*’ accident in 1967, although it was not the first oil pollution accident, its scope of damage and the accompanying publicity made prompt action unavoidable (Wu 2006:3).

On March 18th, 1967, the Liberia flagged M/T ‘*Torrey Canyon*’ grounded and sank off the south coast of England. About 119,000 tonnes of crude oil on-board was spilled. This caused huge damage to the ocean environment along the British and the French coast, and in turn, the fishing and tourism industries suffered grave losses too. (Zhang 2009:1).

The case of the M/T ‘*Torrey Canyon*’ created a huge shock around the world, and vividly illuminated the inadequacies of the traditional legal principle in dealing with problems concerning the oil pollution liability and the oil pollution compensation at that time. Main problems were: the traditional liability regime for the marine case in most countries before 1969 was based on the ‘fault’. This system imposed a heavy burden on claimants to prove that the damage arose from the ship-owner’s ‘fault’ or ‘negligence’. At the same time, different national legal systems almost had the same approach regarding the liability from the ordinary civil law to the oil pollution compensation system. The judgement of the liability to the oil pollution damage was based on the subjective ‘fault’ of the party causing to the damage; it was not on the objective consequences of the act. Based on this kind of

liability system, in the case of an oil pollution accident taking place without the ship-owner being at 'fault', the victims will be completely deprived of legal remedies.

Furthermore, in connection with the responsible party for the oil pollution costs, there is still existence an ambiguity with regard to the legal basis, limitation of liability and the scope of oil pollution compensation. It was unclear as to which courts had jurisdiction to govern disputes related to the oil pollution accident once happening. At the same time, how to distribute the financial burden to the oil pollution damage between tanker-owners and oil industries was another knotty question to the international community. Because the traditional maritime law limited tanker-owner's liability within a limited range, and oil cargo owners were not expected to share in the burdens. So, a new international regime was urgently needed to cope with those problems in the future.

To address the unreasonable problems of marine oil pollution liability and oil pollution compensation above, an international regime was elaborated under the auspices of the 'IMCO' (now 'IMO') with the help of the Committee Maritime International (hereinafter referred to as 'CMI') to provide compensation for pollution damage caused by oil spills from tankers. This is to ensure that adequate liability and compensation are available to all parties who suffer damage caused by pollution resulting from the escape or discharge of oil from tankers. The framework for this kind of regime was originally the 'CLC 1969' and the 'Fund Convention 1971', which set up strict liability (so called 'financial caps') to tanker-owners that caused oil pollution damage and the second tier compensation contributed by oil industries as basic principles in the following years, (IOPC Funds 2003:13).

3.1.1.1. CLC convention 1969

In the process of 'CLC' drafting, the introduction of the 'strict liability' to the tanker owner for the oil pollution damage was not easy to accept and made reservations by most legal experts and international community at that time (Wu 1996:38). The debates concerning the liability to tanker-owners regarding the oil pollution damage was mainly focused and targeted on the following questions and discussions largely centred on a couple of key issues. For instance, was the risk of oil pollution created by nature of the cargo itself or

because of the special form of transportation of cargo shipping? Who was the best placed to take preventive measures to limit further damage in the case of an incidence? And who has financial capable to pay the oil clean-up cost and oil pollution compensation for oil pollution damage? Who is the ultimate beneficiary of oil transportation and thus to bear the subsequent consequences and liabilities?

However, none of these debates and controversies was sufficient to gain the support of the majority of delegations and then the opinions of delegations were polarised. The countries which had a large tanker fleet were in favour of a liability imposed on part of the cargo. Their main arguments were: it was the cargo that caused the type of damage at which the convention was aimed; oil pollution was a risk attached to the cargo, not to the tanker. Meanwhile, the strong oil industry countries supported the liability to be imposed on tanker-owners or tanker operators. The main points were that tanker-owners or tanker operators were the person who used the tanker for his own purpose and who ensured that the tanker was properly equipped and managed; tanker-owners or tanker operators had complete control over the ship, tanker-owners or tanker operators should take responsibility for all the cargo and vessel (Wu 1999: 53). It was not until once the Belgian delegation submitted a proposal for an international compensation fund and the oil industry provided additional contributions to the tanker owner's liability, tanker-owners finally accepted the 'strict liabilities' with a slight majority as a final solution to this problem (Faure and Wang 2005:18).

The replacement of the traditional 'fault' based liability by a 'strict liability' may now sound common place after the development of environmental law, but it could certainly be considered as extraordinary and innovative when the 'CLC 1969' accordingly came into being in 1969.

3.1.1.1.1. Strict liability

The 'CLC 1969' placed the 'strict liability' without 'fault' for oil pollution damage on the owner of the oil polluting tanker. But, as a compromise measure, the 'CLC 1969' limited the oil tanker's liability within an amount that was approximately double the limitation set under the 'LLMC 1957'. This limit was fixed and concerned about the available capacity of

the insurance industry in 1969. The 'CLC 1969' stated with seagoing tankers carrying more than 2000 tonnes of oil as cargo in bulk were required to maintain compulsory insurance to against the potential oil pollution risk with respect to oil pollution damage. Without compulsory insurance, the 'strict liability' to tanker-owners would not be effectively enforced in cases of tanker-owners cannot meet the financial amount of the oil pollution damage which suffered from the oil spills from oil tankers.

Typically, based on the 'CLC1969', the owner of tanker will be entitled to limit its liability to a certain degree based on the gross tonnage of the tanker which involved in the oil pollution accident. That means the owner of tanker will be entitled to limit its liability to an aggregate amount of 2,000 francs for each tonne of the ship's tonnage in respect of at any of one accident under this convention. However, this aggregate amount should not more than 210 million francs in each case.

The civil liability under 'CLC1969' was based on the principle of 'strict liability'. It means, the owner of the tanker, which spilled oil, was an offense, no matter whether or not he was actually in the 'fault', subject to very few exceptions. In some specific cases, if the tanker owner can bring himself within one of these three limited defences set out in two conventions, liability would not depend on proof of negligence. These three defenses are:

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 (Article III.2 of the 'CLC 1969').

Furthermore,

If the owner of tanker proves that the pollution damage resulted wholly or partially either from an act or omission done with intent to cause damage by the person who suffered the damage or from the negligence of that person, the owner may be

exonerated wholly or partially from his liability to such person (Article III.3 of the 'CLC 1969').

The absence of one of these causes means that the tanker owner will be liable for the 'pollution damage' from an accident.

3.1.1.1.2. Channel rule

'CLC 1969' provides that the responsibility is 'channelled' to the tanker owner, instead of others. The tanker owner's responsibility does not include any potential liability of the other actions which involved in the oil spills. Claims suffered by oil pollution damage under the 'CLC 1969' can only be made against the registered owner of the tanker which accuses the oil spills or the oil pollution liability insurer, this does not preclude victims from claiming compensation outside the conventions from persons other than the owner and liability insurer. For example, the convention prohibits making such claims against the servants or agents of the tanker, as well as claims against crew members on-board, the pilot, the charterer, including bareboat charter⁵, manager or / and operator of the tanker, or any other third parties carrying out salvage operations or taking preventive measures, this also including oil clean-up organization. The last aspect will provide considerable reassurance to oil pollution responders and it can also encourage the oil pollution responders to take with a high degree of certainty of compensation for the costs of technically justified oil clean-up measures. The 'Fund Convention 1971' should also facilitate prompt response to these persons lose that protection if the damage is due to their personal act or omission, committed with the intention to cause such kind of damage, or recklessly and with the knowledge that such damage would probably be the result. The channelling of the 'strict liability' to the registered tanker owner is accompanied by the protection of other potential defendants who are not liable under this convention, even if it was proved to be negligent at last.

3.1.1.1.3. Compulsory insurance

⁵ Bareboat Charter is an arrangement for the Chartering or hiring of a ship or boat, whereby no crew or provisions are included as part of the agreement; instead, the people who rent the vessel from the owner are responsible for taking care of such things. In a bareboat Charter no administration or technical maintenance is included as part of the agreement. The Charterer obtains possession and full control of the vessel along with the legal and financial responsibility for it. The Charterer pays for all operating expenses, including fuel, crew, port expenses and P&I and hull insurance.

VII.8 of the 'CLC 1969' states that the owner of oil tanker carrying not less than 2,000 tonnes of persistent oil as cargo in bulk has responsibility to maintain insurance to cover his liability under the 'CLC 1969'. As the channel rule, the victims may also bring legal action directly against the insurer. The 'CLC 1969' stipulates that all tankers carrying more than 2,000 tonnes of persistent oil as cargo in bulk must prove the availability of insurance or other form of financial security to cover their oil pollution liability. As proof of the available financial security on-board, all tankers carrying more than 2,000 tonnes of persistent oil as cargo in bulk must carry on-board a certificate from the competent authority of the flag state or other state signatory to the convention to attest the insurance coverage or other financial security satisfies the requirements of the convention when tanker entering or leaving a port or terminal installation in the member state of the convention, such certificate is required for the tanker flying a flag of a state which is not the member state of the convention too. By providing the evidence of oil pollution compulsory insurance, claims suffered from oil pollution damage under the 'CLC 1969' has right to directly against the insurer of the owner's liability for oil pollution damage (VII.8 of the 'CLC 1969'). The insurer can directly bear the tanker owner's liability on behalf, but at the same time, the insurer can also limit his liability based on the tanker owner's limitation, without consideration of whether the tanker owner can do so. In addition, the insurer has a further defence to direct liability to the tanker owner based on willful misconduct of the owner (IOPC Funds 2012:3).

Most tanker owners arrange their oil pollution compulsory insurance with 'Protection and Indemnity Association' (hereinafter referred to as 'P&I Club'). The goal of insurance under the 'CLC 1969' was to ensure that tanker owners have appropriate levels of insurance to cover their potential liability for the oil pollution damage. However, a critical argument on how to set the optimal level of insurance still remains not only in the theory, but also in the practice operations (more discussions will be analysed in section 3.3.3).

3.1.1.2. Fund convention 1971

Although the 'CLC 1969' tried to provide a unified international mechanism to make sure tanker owner's oil pollution liability can be covered by compulsory insurance via P&I Club and / or other insurance company, it still did not make all concern parties satisfaction

during the 'IMO' conference in 1969, in particular, 'strict liability' and 'financial contribution' still were hot topics among delegations. Some states felt that the liability limitation adopted by 'CLC 1969' was likely to be not adequate to cope with the large oil spills, specifically, in case of oil pollution damage involving large oil tanker accident (IMO 1998:2). Following the mandate conferred by the 'IMO' conference in 1969, considering most suggestion and proposal from member states, the legal committee of 'IMO' prepared a draft agreement (that was so called 'Fund Convention 1971') to balance the different views from different parties, and submitted to diplomatic conference convened in Brussels for consideration on December 1971. This international conference adopted the 'Fund Convention 1971', and furthermore, the 'Fund Convention 1971' set up another international organization which was 'IOPC Fund' to administer the system of compensation created by 'Fund Convention 1971' (Osuga 1996:2).

Since the liability limitation set up under 'CLC 1969', it was considered that the 'CLC 1969' can hardly cover all lost which victims suffered in case of the major oil pollution accident, the 'Fund Convention 1971' thus addressed the further compensation to oil pollution damage by vesting obligations on the oil industries as well. That means 'Fund Convention 1971' does not impose oil pollution compensation on individual cargo owners, but provides the additional compensation for the oil pollution damage to be paid by an intergovernmental body known as the 'IOPC Fund' to which contributors were from the oil receivers in member state. The purpose of 'Fund Convention' and 'IOPC Fund' establishment was to cover the damage which was not covered by the 'CLC 1969'.

The 'Fund Convention 1971' created a new idea to reimburse by the second level supplement insufficient compensation to oil pollution victims. In return for limiting liability of ship owners in order to readjust tanker owners' traditional sole burden, the 'Fund Convention 1971' implemented a supplementary scheme based on compensation rather than on liability. Therefore, most scholars hold that the combination of the 'CLC 1969' and the 'Fund Convention 1971' lead to a sharing of costs of oil pollution damage between tanker owners and oil industries (Faure and Wang 2005:12). Tanker owners are strictly liable under the 'CLC 1969,' whereas contributions to the 'IOPC Fund' come from oil industries.

3.1.1.2.1. Administration of ‘IOPC Fund’

The main responsibility of ‘IOPC Fund’ is to administrate the regime of compensation fund created by the ‘Fund Convention 1971’. All member states of ‘Fund Convention 1971’ would automatically be the member state of ‘IOPC Fund 1971’ if they were the member state of ‘Fund Convention 1971’ already. The secretariat of ‘IOPC Fund’ is located in London and is responsible for the overall management of the Funds, including maintaining a sound system of internal control that supports the achievement of the Fund’s policies aims and objectives and safeguards its assets. Furthermore, the same entity will also apply to the secretariat of the ‘Fund Convention 1992’ and ‘2003 Supplementary Fund’ (IOPC Funds 2012:2).

3.1.1.2.2. Contributions to the ‘IOPC Fund’

The principal role of the ‘IOPC Fund’ is to provide additional compensation to those who suffered oil pollution damage in member states who cannot obtain full indemnify for the oil pollution damage from the tanker owner under the ‘CLC’ convention. All the compensation expenses and the administrative cost of the ‘IOPC Fund’ are financed by contributions levied on any oil companies (private or public) who have received in the relevant calendar year more than 150,000 tonnes of crude oil and / or heavy fuel oil (that is so call contributing oil) in ports or terminal installation in the member state of ‘IOPC Fund’, as well as oil imports from other countries, or receipts after coastal movements of crude oil and heavy fuel oil. This is particularly significant in the case of some countries, such as Japan. The levy of contributions depends on reports of the amount of crude oil and / or heavy fuel oil by individual contributors, which the governments of member states are obliged to submit to IOPC Fund’s secretariat annually (IOPC Funds 2012).

3.1.1.2.3. ‘CLC’ and ‘Fund Convention’ insufficient to pay

As the author mentioned before, the principal role of the ‘IOPC Fund’ is to provide additional compensation to victims when the limitation of liability from tanker owners was not enough to cover the oil pollution damage under normal circumstances and so on. Frankly speaking, under these two international conventions, 80 percent of oil pollution damage can be treated satisfactorily, but once the major oil pollution accident occurring,

‘CLC’ and ‘Fund Convention’ still cannot cover everything which suffered from the damage. As per ‘Claims Manual’ description from ‘IOPC Fund’, when the total of all approved oil pollution claims exceeds the ceiling of the compensation available under the ‘CLC 1969’ and the ‘Fund Convention 1971’, the compensation paid to each claimant will be reduced proportionately. That means, all claimants will be treated equally and no class of claim has high priority than others. Concerns in the early stages of this kind of accident can be arise in payments being made at a fixed percentage to the approved claims first, and then the final adjustment will be allocated again once the total claims become clearer, this kind of situation most likely happened once major oil pollution accident occurred. It can be expected that this kind of situation is unlikely to arise again in states which opt to ratify the ‘2003 Supplementary Fund Protocol’ in the future (IOPC Funds 2012).

3.1.1.2.4. Scope of compensation – admissible claims

Any concern parties who suffered oil pollution damage in member states of ‘Fund Convention 1971’ may make a claim for oil pollution compensation. If the damage is caused by states which is only the member to the ‘CLC 1969’, claims can only be made against the tanker owner and his oil pollution insurer according to ‘channel rule’ set in ‘CLC 1969’, they cannot make any claim for oil pollution compensation under ‘Fund Convention 1971’. As qualified claimants for oil pollution damage under ‘Fund Convention 1971’, all claims to oil pollution damage must fall within the definition of oil pollution damage or preventive measures under the ‘CLC 1969’ and ‘Fund Convention 1971’. A uniform interpretation of the definition and a common understanding of what constitutes play a guiding role to all potential claimants for the oil pollution damage and are essential for the efficient functioning of two international conventions in the practical operation. For this reason, the secretariat of ‘Fund Convention’ supported by the governments of member states of the ‘Fund Convention 1971’ established clear policies and guidelines (that was so call ‘Claims Manual’) for claimants using. For more information regarding to the ‘Claims Manual’, it can be easily found via ‘IOPC Fund’ website and are available to download individually or can be viewed collectively as a PDF flip-book. A practical guide presenting claims against the ‘IOPC Fund’ can be found in the update ‘Claims Manual’, what types of claims are considered admissible and how to present a claim is described in ‘Claims Manual’ too. Strongly recommend all those

potentially involved in this area of activity obtain a copy of the 'Claims Manual' from 'IOPC Fund' if necessary.

To be entitled to oil pollution compensation under 'Fund Convention 1971', the oil pollution damage must result in an actual and / or quantifiable economic loss. The claimant must have evidence to show the amount of his or her loss or damage by providing accounting records or other appropriate evidence. A claim of the oil pollution accident can fall under one of the following five types of oil pollution damage: damage to property; preventive measures (including costs of oil clean-up operation at sea and on shore); economic losses by fishermen or those engaged in Mari culture; economic loss in the tourism sector; reinstatement / restoration of impaired environments (IOPC Funds 2012).

3.1.2. 1984/1992 regime

During the 1970s, the operation of the 'CLC 1969' and the 'Fund Convention 1971' seemed to decline the gross volume of oil spilled as expected (IOPC Fund 2006:57). However, when two major oil pollution accidents occurred, the '*Amoco Cadiz*' in 1978 grounded on Portsall Rocks off the Brittany coast of France (Gillis 2010:1) and the '*Tanio*' in 1980 off the coast of Brittany in France (AccidentNews n.d. 2010:2), it emerged that the 'CLC 1969' and the 'Fund Convention 1971' had a series of shortcomings urgently need to resolve in the future. In particular, with regards to current financing mechanisms which did not seem to be effective and adequate to provide compensation in case of large catastrophes happening (IOPC Funds 2003:57), the financial limit under the old regime were facing with great challenge both in theory or / and the practical operation for the oil pollution compensation.

3.1.2.1. 1984 protocols

After the disasters of the '*Amoco Cadiz*' 1978 and the '*Tanio*' in 1980, it was recognised that the liability limit under the 'CLC 1969' and the 'Fund Convention 1971' were too low to provide adequate compensation in the event of major oil pollution accident occurring. At the same time, sustained inflation led to a substantial erosion of the liability limit and the ceiling of compensation too. Consequences are brought to insufficient compensation for damages caused in major oil pollution accident.

After seeking the views from member states, the international community thought it was a good opportunity to revise these two international conventions to enhance the protection of victims from oil pollution damage, to encourage more and more states to participate in the international regime. For the purpose of preparing to modify these two international conventions, the 'IMO' legal committee convened to examine liability limit on tanker owners and revisited the issue of allocating the burden of oil pollution compensation between tanker owners and cargo industries in London in 1983. Research by Miss Xia CHEN on her '*Limitation of liability for maritime claims: A study of US law, Chinese law and international conventions 2001*', she found that when applying the liability limit under the 'CLC 1969' and 'Fund Convention 1971', approximately 1,700 oil pollution cases covering from 1970 to 1982 share of total oil pollution costs which would have been by the tanker owner rose from 47% to 68%. The main reason which tanker owner opposed altering the existing balance between tanker owners and oil industries was based on the consideration of low freight at that time (Chen 2001:140). From the tanker owner's perspective, the burden on oil cargo owners could be alleviated by reducing the share of the contribution by the way of incentive to make sure more and more member states ratified the existing 'Fund Convention'.

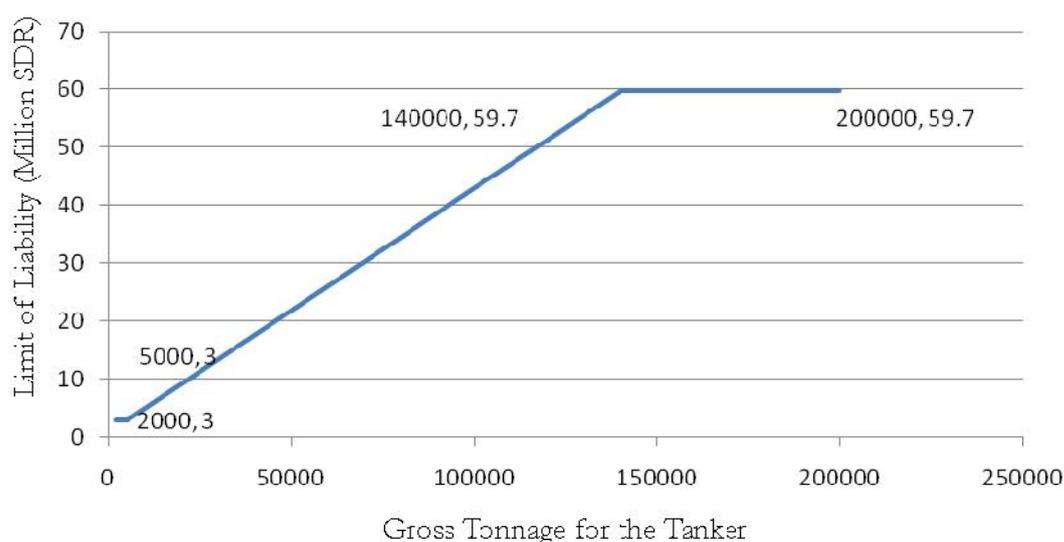
Furthermore, a diplomatic conference held in London in 1984 again, under the auspices of 'IMO', two protocols amending the 'CLC 1969' and 'Fund Convention 1971' was adopted. These two protocols proposed to provide higher levels of oil pollution compensation and expand a wider scope of claim application than original two international conventions. Since Japan, the largest contributor to the 'IOPC Fund' in the last couple of years and the biggest oil industry in the world, felt that Japanese oil companies had carried a disproportionately large financial burden of contribution under the 'Fund Convention 1971'. As one of the negotiation considerations, Japan threatened that, in the absence of an offer by the USA to share the financial burden, Japan would abort to ratify these two protocols as retaliation (Chen 2001:141). According to the statistics from 'IOPC Fund', oil receivers in Japan had provided £20 million contributions in total to 'IOPC Fund', while only £5 million of oil pollution compensation benefited for the damages caused in Japanese territory for the first 12 years of the 'IOPC Fund' (Appendix A of Annual report of IOPC Fund 2012).

In March 1989, the tanker ‘*Exxon Valdez*’ grounded off the coast of Alaska and led to the most severe ecological disaster in American history. As a powerful shipping country and important oil import state, the USA discovered that ‘CLC 1969’ and its ‘1984 Protocols’ did not provide them with sufficient cover against oil pollution damages in their territory, most importantly, they found that the limit of the 1984 Protocols were still too low to cover the potential oil pollution damage in American waters (see table 3.1 and figure 3.1). As a result, the United States of America decided to abandon the accession to international conventions, but it was determined to enact their own comprehensive regime instead. The ‘OPA 1990’ of the United States of America was adopted in 1990, which deviates largely from the principles established in international conventions, this effectively closed the door to USA participation in the international scheme (Joransson 1993:77).

Table 3.1. The compensation limit originally agreed in 1984:

Kind of Ships	Limit of Liability
For a ship 5,000 (GT)	liability is limited to 3 million SDR (about US\$ 3.8 million)
For a ship 5,000 - 140,000 (GT)	liability is limited to 3 million SDR + 420 SDR (about US\$ 538) for each additional unit of tonnage
For a ship >over 140,000 (GT)	liability is limited to 59.7 million SDR (about US\$ 76.5 million)

Figure 3.1. Compensation limit in Fund Convention 1984



Source from: Excel drawing by the author as per table 3.1 data.

In the meantime, modifying original conventions, specifically, increasing the limit of oil pollution compensation agreed in the 1984 protocols urgently need to implement. This can be demonstrated by another series of further major accidents. Accordingly, there was a growing sentiment, especially among the European member states of the 'IOPC Fund', insisted that that further amendment must be done to bring the substance of these proposals into force as soon as possible, so that to make sure to keep the international system up to date and avoid the threat of further regional schemes (Joransson 1993:78). This led to the birth of the 1992 Protocols of 'CLC'.

3.1.2.2. The 1992 protocols

The unilateralism of the USA to participate in the '1984 Protocols' has been an enormous drag on international efforts to control oil pollution by tankers. As an alternative measure, 'IMO' has to consider other ways to bring the '1984 Protocols' into the effect without USA participation. 'IMO' drafted new protocols to amend these two former international conventions that were identical to the '1984 Protocols' in 1992, except the requirements for the entry into force of the protocols. The main purpose of new motion was to facilitate the fulfilment of requirements for '1984 Protocols' effective (Chen 2001:142). This new idea was effectively dispensing with USA acceptance of the protocols as a prerequisite to make the convention entered into force.

The '1984 Protocols' fall into serious doubts by the USA decision to proceed unilaterally with 'OPA 1990'. The 'CLC 1969' and the 'Fund Convention 1971' encountered some problems during the 20 years application also. In addition to the problem of insufficient compensation from two conventions, two other factors also restrict the effective functioning of two international conventions. First, 'IOPC Fund' refused to cover the environmental damage from oil pollution damage, it was not conducive to the long-standing protection of the marine environment; secondly, two international conventions lacked of effective sanctions to the oil pollution protection, it was conducive to strengthen the marine environmental protection from a legal perspective.

In the process of revising two international conventions, France played an important role in promoting conventions as amended due to suffering the greatest exposure to the risks of oil pollution in the previous few years. It was the French delegation proposed to increase the amount of compensation available from the 'IOPC Fund' and extend the cover of application of these two conventions. During the diplomatic conference held in London in 1984, the French delegation stated that some items in the 'CLC 1969' and 'Fund Convention 1971' need to be redefined to give a broader scope to the convention (Chen 2001:142).

Correspondingly, the Japanese delegation seeks to cap the limit of the sharing of the contribution payable by the single member state of 'Fund Convention'. It was because that the Japanese delegation felt the oil industry in Japan had already borne an excessively large sharing of the total contribution levied by the provision of the 'IOPC Fund'. Since Japan became the largest contributor to 'IOPC Fund' at that time, the Japanese proposal regarding to cap the contribution to an individual member state was accepted by most member states, as they all feared that in case of Japan aborted the existing international convention, the possible distortion of oil pollution compensation managed by 'IOPC Fund' would become a reality. In a sense, capping the contribution to an individual member state would confer advantages on Japanese oil companies relative to those in other member states (Chen 2001:143).

Italy, which was pushing for a complete restoration of the polluted marine environment in the wake of the '*Haven*' oil spills 1991, desired to broaden the interpretation of oil pollution damage in two international conventions. After debating by delegations, the Italian proposal to expand the definition of oil pollution damage was rejected. The main reason was that, Italy was a smaller oil import / export country, Italy's participation to 'IOPC Fund' was not produce a critical impact to the international regime, particularly the consideration regarding to expand liability under the Italian proposal (Chen 2001:143).

3.1.2.2.1. CLC 1992

Through several revisions and debated by delegations, the '1992 Protocols' adopted on November 27th, 1992 and entry into force on May 30th, 1996. In comparison with the old regime of 'CLC 1969' and 'Fund Convention 1971', the '1992 Protocols' substantial

increased the limitation of liability under the ‘CLC’ and ceiling of compensation under the ‘Fund Convention’.

- 1) For a ship not exceeding 5.000 gross tonnage: liability is limited to 3 million SDR (about US\$ 3.8 million)
- 2) For a ship 5.000 to 140.000 gross tonnage: liability is limited to 3 million SDR + 420 SDR (about US\$ 538) for each additional unit of tonnage
- 3) For a ship over 140.000 gross tonnage: liability is limited to 59,7 million SDR (about US\$ 76.5 million)

(Article VI of ‘CLC 1992 Protocols’)

The ‘CLC 1992’ sought to provide uniform international rules and procedures for determining questions of liability and to provide primary compensation for oil pollution damage. However, the fundamental two tiers structure of the international regime remained untouched. That means the basic principle of a joint contribution by the oil industry and ‘strict liability’ from tanker owners remained in existence. To compare with ‘1984 Protocols’, the ‘1992 Protocols’ were almost identical in substance to the ‘1984 Protocols’ except the entry into force provision. The main adjustment was that the necessary condition for the entry into the force of the convention eliminated the need for USA participation.

Furthermore, the ‘Fund Convention 1992’ extended its liability to tankers in ballast when there is an escape of bunker oil and to the so-called ‘pure threat’. Where there is a ‘grave and imminent threat’ of causing oil pollution damage, preventive measures are both fall within the scope of the ‘1992 Protocols’, but not within the ‘Fund Convention 1971’ (Article II of ‘CLC 1992 Protocols’).

At the same time, the ‘CLC 1992’ extended the oil pollution damage from persistent oil by tankers from ‘territory’ (including to the territorial sea) to the ‘Exclusive Economic Zone’ (hereinafter referred to as ‘EEZ’) or the equivalent area in member states. To redefine the ‘Pollution damage’ included the cost of ‘preventive measures’ which were reasonable and effective to prevent or minimise the oil pollution damage as well as any loss or damage caused by ‘preventive measures’. Furthermore, the expense incurred for ‘prevention

measures' were also can be recovered even if there was no oil pollution occurred as long as it was shown that it was a grave and the imminent threat of oil pollution damage. Damage caused by non-persistent oil, such as spills of gasoline, kerosene and light diesel oil and so on still excluded by new conventions. Finally, the '1992 Protocols' covered all tankers which actually carry oil in bulk as cargo, i.e. generally laden tankers, and to spills of bunker oil from unloaded tankers under certain circumstances. The '1992 Protocols' did not cover the spills of bunker oil from other ships, such as, the passenger vessel and the dry cargo bulk (Jacobsson 2005: 34).

Briefly, the 'CLC 1992' will apply the oil pollution damage occurred in the following area:

- 1) Oil pollution damage in the territory sea of a contracting state caused by a vessel of a contracting state;
- 2) Oil pollution damage in the territory sea of a contracting state caused by a vessel of a non-contracting state.

The 'CLC 1992' does not apply the oil pollution damage occurred in the following area:

- 1) Oil pollution damage in the territory sea of a non-contracting state caused by a vessel of non-contracting state;
- 2) Oil pollution damage in the territory sea of a non-contracting state caused by a vessel of contracting state.

(Article III (ii) of 'CLC 1992 Protocols')

3.1.2.2.2. Fund convention 1992

Exactly as the original 'CLC 1969' and 'Fund Convention 1971', 'Fund Convention 1992' also provided oil pollution compensation to victims once the liability from tanker owner under the 'CLC 1992' was insufficient as the second level. In some extremely special circumstances, 'IOPC Fund 1992' maybe was a unique oil pollution compensator in one oil pollution case, such as, in the case of tanker owner cannot be identified, oil tanker uninsured, tanker company falls into bankruptcy, or if the tanker owner was exonerated from liability under 'CLC 1992' and etc.

According to Article 4.2 of 'Fund Convention 1992', the 'Fund Convention 1992' shall incur no obligation in the following cases if:

- (a) It proves that the pollution damage resulted from an act of war, hostilities, civil war or insurrection or was caused by oil which has escaped or been discharged from a warship or other ship owned or operated by a state and used, at the time of the incident, only on government non-commercial service; or
- (b) The claimant cannot prove that the damage resulted from an incident involving one or more ships.

If the 'Fund' proves that the pollution damage resulted wholly or partially either from an act or omission done with the intent to cause damage by the person who suffered the damage or from the negligence of that person, the 'Fund' may be exonerated wholly or partially from its obligation to pay compensation to such person. The 'Fund' shall in any event be exonerated to the extent that the tanker owner may have been exonerated under Article III, paragraph 3, of the 'CLC 1992'. However, there shall be no such exoneration of the 'Fund' with regard to preventive measures (Article 4.2/3 of 'Fund Convention 1992').

Claims under 'CLC 1992' can be brought against the tanker owner or his P&I insurer according to channelling rule. Claims under 'Fund Convention 1992' should submit claims for compensation to the secretariat of the 'IOPC Fund 1992' directly. Although it was necessary to inform all concern parties the existence of the claim in writing. As per normal practice, it was not necessary for the claimant to submit full supporting documentation to tanker owners, P&I insurer and the 'IOPC Fund 1992'.

Once the amount of approved claims for oil pollution damage exceeded the aggregate amount of compensation available under the 'CLC 1992' and 'Fund Convention 1992', the compensation available to each claimant should be distributed proportionately. All claimants will be treated equally and there was no high priority among claimants. That means all the available compensation to each claimant under the 'IOPC Fund 1992' will be reduced in such a manner that the proportion between any established claim and the

amount of compensation actually recovered by the claimant under ‘Fund Convention 1992’ shall be the same for all claimants (Article 4.5 of ‘Fund Convention 1992’). This situation most likely happened in cases of the major oil pollution accident occurring.

Although it was individual oil owner companies to make the contribution to the ‘IOPC Fund 1992’ rather than member state’s governments, it was still very important to stress that there was no regular levy on such contribution which would lead to the establishment of such a huge fund. Instead, the management of ‘IOPC Fund 1992’, which was composed by member states of ‘Fund Convention 1992’, decided the total amount of the ‘IOPC Fund 1992’ should be levied annually to cover the daily operating expenses of the ‘IOPC Fund 1992’ and the anticipated payment of oil pollution compensation in respect of major oil pollution accidents. The secretariat of ‘IOPC Fund 1992’ then calculated the required levy per tonne of contributing oil based on the total quantity of contributing oil received in member states of ‘Fund Convention 1992’. The approved contribution rate in UK pound sterling multiplied by the quantity of oil received at the contribution year was the total contribution amount paid by that contributor at the specify year. The fluctuation of the contribution at each year varied in the compensation payments made by the ‘IOPC Fund 1992’ at the last calculated year (Joransson 1993:81).

According to ‘IOPC Fund’ annual report at 2012, the contributing fund to ‘Fund Convention 1992’ was decided 3.3 GBP by the ‘1992 Fund Administrative Council’ at the October 2013 meeting of governing bodies based on oil received in the calendar year 2012, contributing oil received in the calendar year 2012 in the territories of 55 states which were members of the ‘Fund Convention 1992’ listed as following) (IOPC Funds 2013:17).

Table 3.2 Contributions to the ‘IOPC Fund’ in 2013

No	Fund member state	Proportion	No	Fund member state	Proportion
1	Japan	16.10%	7	France	4.70%
2	India	13.12%	8	Spain	4.65%
3	Republic of Korea	8.91%	9	Canada	3.85%
4	Netherlands	8.15%	10	United Kingdom	3.81%
5	Italy	7.25%	11	Germany	2.11%

6	Singapore	6.68%	12	Other	20.67%
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(Contributions to the 1992 Fund in 2013)

3.1.3. Winding up of the 1969/1971 regime

The international compensation regime for oil pollution damage was set up four decades ago by the ‘CLC 1969’ and the ‘Fund Convention 1971’. When the ‘Fund Convention 1992 Protocol’ entered into force since May 30th, 1996, some member states of the ‘1992 Protocols’ began to terminate the party of the ‘CLC 1969’ and the ‘Fund Convention 1971’ due to the compulsory mechanism which established in the ‘1992 Protocols’ for denunciation of the old regime. However, for the time being, the two regimes still co-exist until May 24th, 2002, since there are a number of states still were parties to the ‘CLC 1969’ and the ‘Fund Convention 1971,’ which have not yet ratified the ‘Fund Convention 1992’.

On May 24th, 2002, in view of the most member states with major fund contributors had left the ‘Fund Convention 1971’ to join the ‘Fund Convention 1992 Protocols’. Therefore, even if the old regime were still not abolished, due to the former regime lost financial source, this kind of fund was very difficult to operate effectively. As a result, those who remained in the ‘Fund Convention 1971’ will inevitably face serious oil pollution compensation disadvantages. Either the ‘Fund Convention 1971’ would be unable to cover the adequate compensation to victims since not enough fund contribution levied by member states, or rest of member states would be required to levy more proportion of the contribution than before (Blanco-Bazan 2000:4).

In order to avoid these devastating consequences damaging the interests of member states, the ‘IMO’ and the ‘IOPC Fund’ secretariat have been working actively to encourage member states to accede to the ‘1992 Protocols’ and to denounce the ‘CLC 1969’ and the ‘Fund Convention 1971’ immediately (Blanco-Bazan 2000:5). The ‘Fund Convention 1971’ ceased to be in force on May 24th, 2002. After that, the ‘Fund Convention 1971’ did not apply to any accidents occurring after that date. It also stipulated that the maximum amount of payable compensation by the ‘Fund Convention 1971’ per accident was 60 million SDR, including the amount paid under the ‘CLC 1969’ after May 24th, 2002.

3.1.4. The 2000 amendments and protocol for supplementary compensation fund

With the rapid development of the world economy, international legal regimes with regard to the damage caused by oil pollution accident were also rapidly evolving. The new '1992 Protocols' showed that the new regime still had the inadequacy with respect to the oil pollution compensation, in particular, the ceiling of oil pollution compensation under the 'Fund Convention 1992' still cannot fully cover the requirement of oil pollution compensation, especially in the face of the major oil pollution accident occurring, and needed to further amend it again. Following the '*Nakhodka*' (1997), '*Erika*' (1999) and '*Prestige*' (2002) accident in Japan, France and Spain, it had a 50% increase of the amounts available under the 'CLC' and the 'Fund Conventions' was reconsidered by 'IMO' legal committee in October 2000 respectively. In the process of further amending to the international regime of the oil pollution compensation mechanism, the Europe commission played a central and leading role on several major issues.

First, concerning the inadequate limit of the liability and oil pollution compensation under the international regime, the Europe commission sought to establish a separate European community compensation fund, it was the so-called 'Compensation Fund for Oil Pollution in Europe' (hereinafter referred to as 'COPE') in order to meet the growing demand for oil pollution compensation in EU. If these motion to be successful, it will be the third tier of oil pollution compensation (up to one billion Euros) in response to the shortfall of the international oil pollution compensation regime in Europe⁶.

Second, concerning the improper balance of responsibilities and their exposure to liability between tanker owners and oil industries, the traditional practice of tanker owners' unbreakable liability limitation had been severely restricted the international regime to play its due role. At the same time, the European commission more directly criticized the flag states, classification societies, etc. (who is responsible for verifying the seaworthiness of

⁶ See in this respect the amended proposal for a regulation of the European Parliament and of the Council on the Establishment of a Fund for the Compensation of Oil Pollution Damage in European Waters and Related Measures, OJ C227 E/487 of 24 September 2002.

vessels) did not play its due role in the area of maritime safety. The European commission recommended that the 'CLC 1992' should be amended to weaken the right of liability limitation from the tanker owners. On the other hand, the international community should develop stricter rules to standardize flag states and classification societies' responsibilities at the same time.

In 2000, the 'IMO' held a international conference and adopted two resolutions to increase the limit of liability and cap of compensation under the 1992 Protocols by 50 percent using the 'tacit amendment procedure' laid down in the convention. The 'tacit amendment' stated that 'unless not less than one quarter of member states which were contracting states to the respective convention on the date of the adoption of these amendments (October 18th, 2000) made it clear that they did not accept these amendments before May 1st, 2002, these tacit amendments would enter into force on November 1st, 2003.

The compensation limit sets by the 2000 amendments was, therefore, as follows as of November 2003.

- 1) For a ship not exceeding 5,000 gross tonnage: liability was limited to 4.51 million SDR, approximately 5.78 million US\$ (under the 1992 Protocol, the limit was 3 million SDR)
- 2) For a ship 5000 to 140,000 gross tonnage: liability was limited to 4.51 million SDR (US\$ 5.78 million) plus 631 SDR (US\$ 807) for each additional gross tonne over 5,000 (under the 1992 Protocol, the limit was 3 million SDR plus 420 SDR for each additional gross tonne)
- 3) For a ship over 140,000 gross tonnage: liability was limited to 89.77 million SDR, approximately US\$ 115 million (under 1992 Protocol, the limit was 59.7 SDR)

(Article VI of 'CLC 1992 Protocol' 2000 amendments)

In the meantime, the proposal of establishing the third tier of the oil pollution compensation fund to make up inadequate of the second tier from 'IOPC Fund' which originated by the European commission was put on the agenda by 'IMO' as well (International Chamber of Shipping 2002:2).

3.1.5. The 2003 amendment and protocol for supplementary compensation fund

The proposal of a third tier of compensation originally developed by the European Commission was confirmed by the 'IMO' at the London diplomatic conference from May 12th to 16th in 2003. It was adopted on the May 16th, 2003, and entry into force on the March 3rd, 2005. The 2003 protocol on the 'Establishment of a Supplementary Fund for Oil Pollution Damage' established a supplementary fund of 750 million SDR (at the time of adoption, this corresponded to approximately €20 million or US\$1,000 million). The supplementary fund will not replace the existing 'Fund Convention 1992', but only will make additional compensation be available to victims in the states of ratifying the protocol (IOPC Funds 2013:1). The creation of this new fund will improve the compensation to oil pollution victims by comparison with the previous situation.

Under the 'Supplementary Fund 2003', the total amount available for compensation for each accident was 750 million SDR, including the amounts payable under the '1992 Protocols'. The 'Supplementary Fund 2003' was also financed by contributions via oil receivers in member states which ratify the new protocol on the same basis as contributions to the 'Fund Convention 1992'. However, the contribution system for the 'Supplementary Fund 2003' was slightly different from the 'IOPC Fund 1992' at the same time. First, the 'Supplementary Fund 2003' only required the member states which contributed at least 1 million tonnes of contributing oil at each year to pay contributions instead of more than 150,000 tonnes of contributing oil in one calendar year under 'Fund Convention 1992'. This might be considered as a basic member fee. Secondly, the 'Supplementary Fund 2003' contained a provision that was so-called 'capping'. The 'capping' caps all the amount of contributions payable by any single state in one calendar year which should not exceed 20 percent of total contributions levied at any one time (IOPC Funds 2013).

Table 3.3. Summarises the compensation limit in the international regime.

Ship tonnage	CLC 1969	CLC 1992	Amendment 2000	
5000 tonne	133 SDR/tonne (215 USD/tonne)	3 million SDR (4.9 million USD)	4.5 million SDR (7.3 million USD)	

>5000 tonne	133 SDR/tonne (215 USD/tonne)	3 million +420SDR/tonne (4.9 million+680 USD/tonne)	4.5 million+631SDR/tonne (7.3 million +1021USD/tonne)	
Overall limit	14 million SDR (22.7 million USD)	59.7 million SDR (96.6 million USD)	89.8 million SDR (145.3 million USD)	
	Fund 1971	Fund 1992	Fund 2000	Supplementary Fund 2003
Maximum per accident	60 million SDR (97.1 million USD)	135 million SDR (218.5 million USD)	203 million SDR (328.5 million USD)	750 million SDR (1213.8 million USD)

Source: Compiled by the writer from the three conventions

3.1.6. Recent developments

When the new oil pollution accident happens, the evolution of the international oil pollution compensation regime would never stop at one stage. On the occasion of the new 2000 amendments had just been adopted, especially as a result of the ‘*Erika*’ disaster in 1999, another major oil pollution disaster caused by the tanker ‘*Prestige*’ in 2002 brought a new challenge to the international regime again. According to estimates at that time, the compensation available under the current regime for the disaster of the ‘*Prestige*’ was about €171,410,000. Obviously, the amount of compensation under the current mechanism was very difficult to fully cover the actual damage caused by this accident. Therefore the European commission was once more arguing whether the new amendment of 2000 had already been outdated before it entered into force in November 2003. The discussion or arguing with regard to higher limit or even unlimited liability to tanker owner’s responsibility once again came to the agenda within the European commission.

Current international oil pollution compensation mechanisms by combination of channelling of liability and the limitation of liability provided an effective shield to the unscrupulous operators or tank owners. However, strictly channeling rule and stringent restrictions for breaking limitation of liability would undoubtedly contribute to the case quick settlement. These specific benefits to the claimants who do not have adequate financial support to sustain a long period and costly litigation to identify who will be liable and once the responsible party is identified, whether this party can limit the right to limit liability.

Unfortunately, the author finds that there were still no specific proposals have been suggested to change the current international oil pollution compensation regime until now after doing plenty of research. In the foreseeable future, the author thinks that was impossible to change the existing financial aspect in the international regime. A preferable possible might be to focus on appropriate modifications to the international convention on maritime safety, such as 'SOLAS' and 'MARPOL', to promote great vigilance under the flag state and the port state's safety inspection to address problems of substandard ships and their operators. It was obviously for us to find that the European commission immediately took action to advocate all member states of European commission supporting proposals aimed at restricting the right of tanker owners to limit their liability once the accident was due to their actual fault after the '*Prestige*' accident occurred. Secondly, the channeling of liability regarding the oil pollution accident had been criticized by the European commission who advocated once again that the potential responsible party was not only including the registered tanker owner, the directly oil pollution insurer should also cover other parties, in particular the charterer, the operator and the actual ship's manager. Because, the key question was the vessel was actual controlled by them, they must take jointly and severally liability to the oil pollution damage.

In sum, as we can see from the development of community rules concerning civil liability and compensation for oil pollution damage, the European commission was working as a driving force in the international arena to promote a more stringent marine environment policy (especially as far as civil liability and compensation for oil pollution were concerned). Moreover, it has also recognized the ineffectiveness of previous EU law and it strives to keep community legislations updated or to introduce new EU legislation in order to keep the community law in line with international regimes. However, in one day, once the European commission wants to achieve this goal, there is still a long way to go.

3.2. Voluntary schemes: TOVALOP and CRISTAL

The '*Torrey Canyon*' oil pollution accident in the English Channel in 1967 was always regarded as the key milestone for the improvement of the international oil pollution compensation regime. This accident led to the creation by the 'ITOPF' of 'TOVALOP',

and after that, the cargo owners founded 'CRISTAL' in 1971. Both the 'TOVALOP' and 'CRISTAL' relate to issues of civil liability and oil pollution compensation arrangement.

3.2.1. TOVALOP and its development

'TOVALOP' was an acronym for an agreement entitled 'Tanker Owners Voluntary Agreement Concerning Liability for Oil Pollution'. On January 7th, 1969, seven oil company ship owners (Note: seven oil company ship owners were: BP, Gulf Oil, Mobil Oil, Shell International Marine, Standard Oil of California, Marine Affiliates of Standard Oil and Texaco) signed the 'TOVALOP'. It came into force on October 6th, 1969, by which 50 per cent of the world's tanker fleet became members ('TOVALOP' Clause III (A)) (White 1993:59). Originally, 'TOVALOP' was created as a stopgap while the 'CLC 1969' was being implemented.

After the 'CLC 1969' came into force in 1975, there has been a voice whether the 'TOVALOP' was still necessary in theory and practice? At the same time, the so-called 'TOVALOP' standing agreement (hereinafter referred to as 'TSA') was established in 1978. In that year, the 'CLC 1969' and 'Fund Convention 1971' became fully effective to all member states in the international community; the 'TSA' was only applied when the 'CLC 1969' did not cover. Therefore, for a long period of time, 'TOVALOP' and its 'TSA' had been considered an important supplement to the international regime. 'TOVALOP' and 'TSA' as a voluntary and mutual assistance organization from tanker owners and oil companies, this agreement has its unique advantages and flexibility. One of main advantages was that it covered the reimbursement of the precautions taken in case of the threat from oil pollution. It was slightly different with provisions of international conventions. It also covered the oil pollution from oil tankers in ballast, which were also excluded by the prevailing 'CLC' and 'Fund Convention'. Another advantage was the claim procedure under the agreement was quite quick and inexpensive compared to international conventions (White 1993:59).

3.2.1.1. Liability adopted by the agreement

Based on the 1978 revision, the nature of liability in the ‘TSA’ was almost the same as that in the ‘CLC 1969’. However, due to the ‘TSA’ being a voluntary agreement, the liability created by ‘TSA’ was not only that a legal liability, but also merely a financial responsibility.

3.2.1.1.1. No fault liability as in the ‘CLC’

‘Strict liability’ with no fault was endued on the ship-owner or the bareboat charterer under the ‘TOVALOP’. Clause V of ‘TOVALOP’ was concerned with the basis of liability:

The participating tanker involved in an accident agrees to assume responsibility (hereunder) in respect of pollution damage caused by oil which has escaped or which has been discharged from the tanker, and the cost of threat removal measures taken as a result of the accident (Clause V of ‘TOVALOP’).

In order to obtain compensation for oil pollution damage or costs of preventive measures under the ‘TSA’, the damage must be caused by oil spilled from an oil tanker entered in the ‘TSA’, or there must be a threat of an oil spills requiring preventive measure to be taken, irrespective of whether there is any fault involved.

Like the ‘CLC’, ‘TOVALOP’ also provided for the joint and several liabilities when a number of ships were involved and the pollution damage cannot be reasonably be apportioned.

3.2.1.1.2 Cases of exoneration as in the ‘TOVALOP’

The ‘TOVALOP’ member may be relieved of his compensation obligations in the same situations of exoneration as those laid down in the ‘CLC 1969’, namely, cause in which pollution damage result from:

An act of war, hostilities, civil war, insurrection; An act of god or a natural phenomenon of an exceptional, inevitable and irresistible character; An act or

omission done with intent to cause damage by a third party; Negligence or the 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. (Revised 'CRISTAL' 1978, Clause IV(C), and the same in the 'TSA' Clause IV (B)).

In addition, if the oil pollution damage, or the circumstance, which gave rise to threat removal measures, resulted wholly or partially from the negligence of the person who sustained the pollution damage or who took threat removal measures, the ship-owner shall be exonerated wholly or partially with regard to such a person (Revised 'CRISTAL' 1987, Clause IV(D)).

Furthermore, a fundamental difference between the 'TSA' and the 'CLC' were very interesting too. In the English version, the 'TSA' creates a 'responsibility', the ship-owner being 'responsible'; whereas the 'CLC' creates 'liability', the ship-owner being 'liable'. This difference in terminology is deliberate. The definition in black's law dictionary clearly distinguishes the nuances in these two regimes. 'Liable' means 'bound or obliged in law or equity', whilst 'responsible' means 'able to pay a sum for which he is or may become liable or to discharge an obligation which he may be under'. In French, two texts talk about 'responsibility' with no distinction. In fact, the use of 'responsibility' as opposed to 'liability' is in keeping with the legal status of voluntary agreements (Coben 1987:534).

3.2.1.2. Limit of responsibility

In June 1978, the limit of responsibility to the ship-owner under 'TSA' was increased from \$ 100 per gross tonner or \$10 million in total, whichever is less, to \$ 160 per limitation tonnes or \$16.8 million in total, whichever is less. This figure does not differ greatly from the limitation amount prescribed in the 'CLC'.

Nevertheless, on the problem of the right to limitation of responsibility, there is a great disparity between the 'CLC 1969' and the 'TSA' is that the right to limitation in the latter is upheld, there are no situation in which the ship-owner is deprived of his limit of responsibility. Under the term of the convention, however, the ship-owner loses his right to

limit if there is fault or privities on his part. At the same time, the application of 'TSA' limit in all circumstances is required for insurance purposes too (Abecassis 1985:308).

It could be argued that claimants would resort to litigation for compensation not paid under the 'TOVALOP'. However, this is not possible, since 'TSA', clause VIII (D) stated that:

Unless otherwise agreed in writing, any payment to a person by or on behalf of a participating owner shall be in full settlement of all said person's claims against the participating owner, the tanker involved, its master, officers and crew, its charterer(s), manager or operator and their respective officers, agents, employees, and affiliates and underwriters, which arise out of the accident. (Clause VIII (D) of 'TSA')

This means that, by accepting compensation under 'TSA', claimants automatically recognize the ship's right to limitation. As becoming a party member to 'TOVALOP', each member must maintain his financial capability to meet his obligations under the term of the agreement ('TOVALOP' standing agreement, Clause II (B) (3)). This cover can be arranged through the P&I Club or 'International Tanker Indemnity Association' (hereinafter referred to as 'ITIA') which was set up for this purpose by a member of the 'TOVALOP' initiators.

3.2.1.3. Further developments of 'TOVALOP' after 1969

In 1972, the 'TOVALOP' agreement was amended to extend compensation to costs incurred in situations in which there was only a threat of an oil spills, but no actual pollution (Remond 1989:10). When the 'CLC 1969' came into force in 1975, the question arose as to whether 'TOVALOP' was still necessary to exist. The members remarked that with respect to states which were not the party to the 'CLC 1969', namely 40 per cent of the world's tanker tonnage, 'TOVALOP' still served a purpose. Since, without it, they would again be subject to divergent national laws because the 'CLC 1969' only applied to oil pollution damage sustained on the territory of member states (Dubais 1976: 375).

After three years of discussion between oil companies and 'P&I Club' insuring tankers, the decision was made to amend 'TOVALOP' substantially in order to keep in line with the

‘CLC 1969’, and ‘CRISTAL’ with the ‘Fund Convention 1971’. Why ‘TOVALOP’ and ‘CRISTAL’ was constantly being revised, the main consideration was to bring the voluntary agreement into line with the international regime, and make sure that the same universal level of liability applied to all tanker owners in the world. This alignment was, above all, beneficial to ship-owners and their insurers who could ascertain the extent of their liability when there was an escape of oil.

Consequently, in 1978, the liability regime under ‘TOVALOP’ membership was radically transformed into ‘strict liability’. The right to compensation was granted to any individuals suffering oil pollution damage. The limit were increased and modeled on those of the ‘CLC 1969’, and the time limit for the presentation of claims was extended (Clark 1978:572). These changes made to ‘TOVALOP’ throughout its history were evidence of the extreme flexibility of the voluntary regime and its industrial members.

3.2.2. Compensation under the voluntary agreement

As with the relationship between the ‘TOVALOP’ and the ‘CLC 1969’, ‘CRISTAL’ was conceived as an interim arrangement whilst awaiting the entry into the force of the ‘Fund Convention 1971’.

‘CRISTAL’ was signed on January 14th, 1971 between several oil companies. At the same time, a special company was set up, in order to administer this agreement, entitled ‘Oil Companies Institute for Marine Pollution Compensation Limited’ (hereafter referred to as ‘Institute’). According to the plan, the agreement will enter into force since April 1st, 1971, at that time, the oil companies which receiving more than 50 per cent of the world’s crude and fuel oil in volume at their installations by sea transporting had become signatories. Today, it would appear that oil received by ‘CRISTAL’ members represents more than 90 per cent of oil cargoes transported around the world.

3.2.2.1. ‘CRISTAL’s complex compensation mechanism

Since ‘CRISTAL’ applies to accidents taking place on the territory of any states, it could intervene in two different situations: one situation was the oil pollution case was applicable to ‘CLC 1969’ and another situation was that the oil pollution case did not covered by ‘CLC 1969’ at all.

In specific terms, in the case in which the ‘CLC 1969’ did apply, ‘CRISTAL’ would compensate the victims (pollution damage and costs of preventive measures) and the ship-owner (costs of preventive measures), if they did not able to obtain full compensation from: The limitation fund set up by the ship owner or his insurer in accordance with the ‘CLC’; Another liable person or ship; And any other source of compensation available under convention or law (Revised ‘CRISTAL’ 1978, Clause IV (E) (1), (2)).

In a case, where the ‘CLC 1969’ did not apply, but ‘TOVALOP’ or national law was applied, ‘CRISTAL’ compensates the pollution victims (pollution damage and costs of preventive measures or threat removal measures) and the ship-owner (costs of preventive measures or threat removal measures) if they have exhausted all possible means to obtain full compensation from: The fund set up by the ship owner or his insurer under ‘TOVALOP’ or another applicable law; Another liable person or ship; Any other source of compensation available under convention or law (Revised ‘CRISTAL’ 1978, Clause IV (F) (1), (2)).

In all cases, the ‘Institute’ was exonerated from its obligation to compensate if the accident was due to: Act of war and other hostilities; Act of god; Intentional act of a third party; Negligence of a government or other authority responsible for the maintenance of navigation aids (Revised ‘CRISTAL’ 1978, Clause IV (C), also these were the same in the ‘TSA’, Clause IV (B)).

In addition, if the oil pollution damage or circumstances generating the threat of a discharge resulted wholly or partially from the negligence of the person who had suffered or taken threat removal measures, the institute may be exonerated from all or part of its obligation to compensate that person. Nevertheless, this last case of exoneration was not applicable to costs of preventive measures taken by the polluting tanker owner before or after the oil spills,

even if his negligence was at the root of the pollution accident (Revised 'CRISTAL' 1978, Clause IV (D)).

3.2.2.2. Maximum compensation available under the 'CRISTAL' fund

Total maximum compensation under the 'CRISTAL' fund can reach at \$ 36 million per accident before 1987. This maximum amount covered all kind of liability and compensation from ship's owners and other liable parties (1987:534) (Revised 'CRISTAL' 1978, Clause IV (I)). The contract specified that an accident giving rise to pollution, involving several tankers, would not change the financial limit liability of the institute.

Compared with the 'IOPC Fund', the maximum amount of compensation under the 'IOPC Fund' available per accident being set at 450 million Poincare Francs or \$ 30 million at the inauguration of the fund. 'CRISTAL' was proved to be more favorable, in that it could take over from the 'IOPC Fund' in case of need. Nonetheless, this possibility only existed for a short period of time as the maximum compensation payable by the 'IOPC Fund' was increased, in 1979, to 675 million Poincare Francs, equivalent to \$ 54 million.

The 'CRISTAL' contract contained a provision allowing for an increase in the institute's compensation limit but not to exceed \$ 72 million if future circumstances made it necessary (Revised 'CRISTAL' 1978, Clause IV (I)). However, 'CRISTAL' did not follow the 'IOPC Fund' with regard to the raising of the ceiling of its compensation limit.

3.2.2.3. Contributions to 'CRISTAL'

The funding of 'CRISTAL' was much less restricted than the 'IOPC Fund'. There are several reasons for this.

First, contributions to the 'CRISTAL' fund were due from its oil company members for persistent oil carrying at sea, which was owned by them (Revised 'CRISTAL' 1978, Clause VII (A)). In contrast to the 'IOPC Fund', where contributions were due only from a person or company receiving more than 150,000 tonnes of oil in contracting states during the year in question (Article 10 of Fund Convention 1992). CRISTAL's members contribute to the

fund irrespective of the quantity of oil received. The absence of a qualifying figure considerably increased the number of persons liable to make contributions.

Second, in contrast to the 'IOPC Fund' where contributions depended upon the receipt of oil by a person in the member state, 'CRISTAL' took account of the ownership of the oil transported. The concept of 'ownership' was broadly defined, encompassing the following: Title to the shipment was in said the oil company party; Or title to the shipment was in a person not an oil company party to whom said the oil company party has transferred the shipment, provided that prior to any accident involving said shipment, and in accordance with the rule of the institute, said the oil company party has advised the institute in writing that it elects to be considered the owner thereof; Or title to the shipment was in a person not an oil company party, but the shipment was being carried by a tanker owned by or under the charter to an oil company party or one of its affiliates, provided that prior to any accident involving said shipment, and in accordance with rules of the institute, said the oil company party has advised the institute in writing that for the purpose of this contract it elects to be considered the owner thereof; Or title was in a person not an oil company party who, prior to any accident involving said shipment, contracted to transfer said shipment to an oil company party (revised 'CRISTAL' 1978, Clause V).

Basically, this broad definition of 'ownership' was aimed at removing any anomaly which might occur if the same cargo were treated differently during transport in view of complexities of commercial operations. The result was there were 90 per cent of crude and fuel oil in the world contributed to 'CRISTAL'.

Third, contributions were made to the 'CRISTAL' fund by way of an initial call and a periodic call. The initial call collects \$5 million from oil company members of 'CRISTAL'. The periodic call was made every month in which the institute has to settle claims resulting from an accident. Generally, the institute maintained a capital sum of \$ 5 million plus interest and only called on members in case of need (revised 'CRISTAL' 1978, Clause IX). The fund was administered by the institute which settled claims for compensation.

3.2.2.4. Total autonomy in the settlement of claims

The settlement of claims under 'IOPC Fund' was made co-decision by the assembly comprising the representative from member states of the 'Fund Convention 1971', in contrast to the 'IOPC Fund', the 'Institute', as the manager of the 'CRISTAL' fund, had the exclusive right to make a decision regarding the settlement of claims, such as whether claims were admissible, whether claimants had exhausted all possible remedies, and to interpret the 'CRISTAL' contract under the authority of the agreement. This would conducive the 'Institute' to settle the oil pollution case as soon as possible.

The limitation of action for presenting claims under 'CRISTAL' was one year from the date of the accident. This short period appeared to be unreasonable and, above all, to contradict the institute's role as a last resort. This may explain why it can extend to two years in future revisions. Furthermore, the subrogation clause is more of a formality than its necessity, it being understood that 'CRISTAL' intervenes in the last instance (revised 'CRISTAL' 1978, Clause XI (A)). Finally, 'CRISTAL', like 'TOVALOP', is governed by English law.

In conclusion, in spite of its global applicability, 'CRISTAL' still could not be compared with the 'IOPC Fund' for two reasons: First, 'CRISTAL' plays a subordinate role, and only was a large resort. Examination of 'CRISTAL' emphasized the importance and the advantages of the 'IOPC Fund'. At the same time, the 'IOPC Fund' actively participates in the apportionment of liability for pollution from the carriage of oil by sea with the ship owners, whereas 'CRISTAL' before 1987 helped the latter to assume their liability while offering additional compensation where necessary. Furthermore, 'TOVALOP' may have appeared to be more advantageous than the 'CLC 1969', but 'CRISTAL' prior to 1987 was in no way comparable to the 'IOPC Fund'. Thus, the advantage and disadvantages, of each, determined their interdependence and co-existence.

3.2.2.5. Fundamental differences between 'CRISTAL' and 'IOPC Fund'

As the author mentioned above, the major difference between the 'CRISTAL' and the 'Fund Convention' before 1987 was that the main function of 'CRISTAL' was to play a supplementary role to oil pollution. However, the main function of the 'Fund Convention'

was not only the supplement of the first level of the oil pollution compensation, but also the initial replacement of the first level of compensation which was not available or invalid.

The 'IOPC Fund' substitutes for the owner when the owner can benefit from exoneration from liability under terms of the 'CLC' since the 'CLC' offers more cases of exoneration than the 'Fund Convention' did. However, cases of exemption from compensation in 'CRISTAL' were exactly same as 'CLC' and 'TOVALOP', which means when the primary liable parties are exonerated; the 'CRISTAL' did not step in.

The 'IOPC Fund' substituted for the ship owner if the latter was financially incapable of meeting his obligations under the 'CLC.' Whereas, this function for 'CRISTAL' not only did not exist in theory, but also it was difficult to operate in practice, since all 'CRISTAL' vessels were entered in 'TOVALOP' and therefore have compulsory insurance through anyone of the 'P&I Clubs'. The only similarity was that both of them play the role of supplemented. However, this was only a superficial resemblance, in the form of the supplementation, they still had fundamental differences. The supplement compensation under the 'IOPC Fund' provided by the ship's owner and 'IOPC Fund' reserved the right of recourse against other liable parties. In other words, 'CRISTAL' inaction until the claimant has exhausted all legal remedies, not just against the polluting ship owner under 'TOVALOP', the 'CLC', or national legislation, but also against any other persons liable in law, so as to assist with the compensation for their remaining claims. 'CRISTAL' is no more than a last resort. The reason for this role may be found in the following statement: 'Since 'CRISTAL' is a voluntary compensation regime, it is unclear whether it has a right to sue a responsible party for compensation it pays to claimants' (Cohen 1987:525).

Based on its voluntary character, it was thought that its compensation process would be much quicker than that of the 'IOPC Fund,' but this was not the case with the 1978 'CRISTAL'. Being a last resort fund, its compensation process was slowed down significantly. Besides, by being simply a 'supplement', CRISTAL's involvement was confined to the wide scale pollution accidents in which the total amount of claims would exceed that of all available funds.

3.2.3. Disappearance of ‘TOVALOP’ and ‘CRISTAL’

Since the ‘TOVALOP’ and the ‘CRISTAL’ entered into force, the industry schemes under the ‘TOVALOP’ and the ‘CRISTAL’ provided a worldwide voluntary scheme for oil pollution compensation from vessel sources. As a two-track of the oil pollution compensation system paralleling with the international convention, with the continuous improvement of the ‘CLC’ and the ‘Fund Convention’, these two voluntary schemes were considered to have fulfilled their intended purpose and with the rapid growth in acceptance by member states of the ‘CLC’ and the ‘Fund Convention’. The shipping and oil industry decided to abrogate the ‘TOVALOP’ and the ‘CRISTAL’ on February 20th, 1997 due to the number of member states of two voluntary schemes less than the minimum number of member states to take effect (1987:534).

3.3. Problems of two international conventions

The ‘CLC’ and the ‘Fund Convention’ were criticized by both ship’s owners and victims, main reasons were, for tanker’s owners, the ‘CLC’ and the ‘Fund Convention’ were considered that these two international conventions had been completely revolutionized the liability model in the conservative world of maritime law before 1969. Under ‘CLC’ and ‘Fund Convention’, the ‘fault liability’ was replaced by ‘strict liability’, the limitation of liability doubled the limit compared to the previous international maritime convention, and this invisible greatly increased the burden on ship’s owners. For victims caused by oil pollution damage, victims worried about that whether they can be inadequately compensated for oil pollution damage in case of the major oil pollution accident occurring. Because of victims stubbornly believed that the amount of oil pollution compensation would be decided by the capacity of the insurance market rather than by oil pollution damage or tanker owners’ behaviour. The purpose of ‘Fund Convention’ was created to supply the insufficient compensation to victims in return for limiting liability of tanker owners to readjust their burden between tanker owners and oil industries. Therefore, the ‘Fund Convention’ only implemented the scheme based on the financial compensation rather than on liability. In other words, these two international conventions as a whole party only provided a distribution of the financial burden between tanker owners and oil

industries, it did not address the fundamental question on how to effectively prevent oil pollution accident happening.

3.3.1. Inequality respects in ‘Fund Convention’

Under the ‘IOPC Fund’ regime, the assessed contribution was only on the basis of the calculation provided by the oil received in excess of 150,000 tonnes in a calendar year if they receive less, it should be associated with another oil receiver. This provision applied to all member states without exception. From the literal point view, this kind of standard under ‘IOPC Fund’ seems to be unified and reasonable. However, to research it in detailed, we can still find that this standard was not fair and reasonable among member states. Due to the cost of the oil clean-up, and the difference in the way of loss adjusters, for the same situation of oil pollution damage, the amount of oil pollution compensation which actually indemnified to victims were big difference among member countries. Particularly, this situation most often occurs between developed countries and developing countries. Generally speaking, the cost of oil clean-up and labor costs in developed countries was higher than developing countries. For example, during 1986 and 1987, the cost of oil clean-up for 15 tonnes oil spills in Japan was 345,333 US dollars, but in Algeria, the cost of oil clean-up for the same oil spills was only 109,529 US dollars (IOPC Fund 2000).

3.3.2. Financial cap for oil pollution damage lacks incentives

As noted above, the ‘CLC’ and the ‘Fund Convention’ set up ‘strict and limited liability’ as conventions’ base principle in 1969 and 1972. Although these two conventions were often amended and the amount of liability limit was regularly increased, practice still showed that the limited amount of liability was never sufficient to provide adequate compensation in case of the major oil pollution accident. For example, the ‘*Exxon Valdez*’ investigation clearly showed that the total damage amounted to 50 billion US Dollars in claims with ‘*Exxon Valdez*’, whereas there was only 0.5 billion US Dollars insurance coverage available, being merely one percent of the damage. Furthermore, according to the literature, it has been claimed that the liability limit (that is so-called ‘financial caps’) may have a negative influence on incentives from tanker owners to prevent oil pollution too. If the

liability was limited by law, civil liability will no longer have an optimal preventive effect on the behavior of tanker owners. Therefore, the question arises whether the liability limit may indeed dilute the incentive for prevention from tanker owners in a particular incident? Literature also reveals the anomaly caused by the system of the liability limit, whereby small-scale damage can get full compensation while damage on a bigger scale cannot be fully compensated, even though victims are innocent.

3.3.3. Compulsory insurance limited in P&I Club lacks competition

The damage resulting from oil pollution was insured through the well-known associations of tanker-owners (the so-called 'P&I Clubs'). These 'P&I Clubs' were organized by the international group of 'P&I Club' which can largely limit competition. Price competition between 'P&I Club' was very limited, and the anti-competitive effects on this market had already been under scrutiny by the European commission. However, to a large extent, the pooling arrangements between the 'P&I Clubs' can benefit from an exemption from the competition law. Some have claimed that this high concentration on the insurance market for oil pollution may have adverse effects for the way in which 'P&I Clubs' as insurers regulate the prevention of oil pollution damage. Indeed, literature had suggested that if competition were too limited, incentives for insurers for adequate control of the risk would be too limited as well. Therefore, the problem arises whether the current market structure of insurance via 'P&I Clubs' may negatively affect the prevention of oil pollution damage. Moreover, the 'P&I Clubs' also provides insurance coverage for fines. The legality of such a mechanism was doubted too.

3.3.4. Channeling of liability limiting the right of the claimant to claim

International conventions had established a system whereby the liability for oil pollution compensation was channelled to the registered ship-owner. This system seemed that it could be an advantage for the victim since the registered ship-owner can be easily identified. Then, it saved time and resources in identifying the responsible parties. Upon thorough research in this thesis, it can be found that this kind of system was too paradoxical. On the one hand, the so-called channelling rule limited the right of the victim

to bring an action against the third party who was actually responsible for the incident. On the other hand, there was also another risk that when the registered owner was insolvent or unable to take the financial responsibility due other reasons, the victim may run the risk of receiving no compensation at all. Although the risk of insolvency was reduced by the mechanism of insurance, it was still argued by some whether it was viable or not that such direct action gave the claimant the right to bring claims directly against the insurer of the ship-owner. So there were actually two parties who can be held liable and this was, in effect, against the original rationale of channelling which was meant to direct the claim at only one party instead of two or more (Erik RØsæg 2000). It was argued by some, 'inter alia', in the insurance industry that if the idea of channelling was to save insurance costs, several people can take out insurance in respect of the same incident. It was also common practice in the insurance industry for several parties to co-insure under the same policy. Since these parties will normally take insurance to cover the risks of recourse actions, though it was not compulsory under international conventions, co-insurance seems less costly than simply channelling the liability to one party. Therefore, channelling was also exposed to various critiques.

3.3.5. Compensation for environmental damage is only limited to the cost of reasonable preventive measure, does not cover the environment '*per se*'

Once oil spills occurred and the oil clean-up was inadequate, the marine environment will be adversely affected. Even though, the marine environment had a strong capability of self-recovering, the damage to certain species, particularly, some endangering species could be irreversible. Hence, the legal rules concerning compensation for the damage caused by oil pollution should therefore not only cover the traditional damage to property and personal injury, but also damage to the environment '*per se*' (by itself). However, the damage to the environment '*per se*' was difficult to quantify. Reviewing the 'CLC' and 'Fund Convention', the compensation for oil pollution damage to the environment was only limited to costs of reasonable preventive measures, but it did not cover the environmental damage in '*per se*', this was a critique concerning the current system. On the other hand,

under the 'OPA 1990' system, the natural resource damage assessment was based on an arbitrary model, which is equally criticized.

3.4. Conclusion

In recent years, a series of oil pollution accidents, such as, the '*Torrey Canyon*' occurred in 1960s and '*Amoco Cadiz*' occurred in 1970s, prompted the generation of the 'CLC' and the 'Fund Convention'. These international conventions aimed to provide adequate oil pollution compensation to victims which suffered oil pollution damage from vessel source. In order to balance interests of ship-owners and oil industries, the 'strict liability' was imposed on the tanker owner. However, at the same time, the liability was channelled to him too. That means, for the oil pollution damage, no party other than the tanker owner would be held the liable for the oil pollution damage under the new international regime. In the early stage of the 'CLC' and the 'Fund Convention' implementation, these two international conventions did play an important role in prevention and compensation for oil pollution damage. But with the new accidents occurring, especially such as the '*Exxon Valdez*' oil spilled in the United States, the new oil pollution accident made it clear that the international regime still could not provide adequate compensation to victims in a satisfactory way. The '*Erika*' oil polluted off the coast of Brittany-France in 1999 and the '*Prestige*' oil polluted off the coast of Galicia-Spain in 2002 once again prompted the new amendments to international conventions to increase the amount of the liability under the 'CLC' and compensation under the 'Fund Convention'. Recently, a supplementary fund was established to provide a so-called third tier of oil pollution compensation in 2003. Although international conventions amend constantly, one question still arises why the liability for damage caused by oil pollution was quite different with the traditional way. Indeed, the oil pollution compensation regime under international conventions considerably differed from traditional tort law in most legal systems. Among them, the most important item was the so-called channelling rule, which meant that it was not all parties involved in the oil pollution accident were held liable, but the liability for the oil pollution damage only liable (often exclusively) to the tanker owner under conventions. Also, the liability was capped to a certain limitation of amount, it, of course, constituted a serious deviation from the traditional tort law. So, when the Chinese oil pollution

compensation regime is designed, these features and special must be considered according to China's actual situation.

CHAPTER FOUR

THE OIL POLLUTION ACT 1990: A CASE STUDY OF THE USA

On March 24th, 1989, the ULCC '*Exxon Valdez*' which belonged to Exxon Particular Co. USA run aground on Bligh Reef in Prince William Sound, Alaska, and estimated 11 million gallons (about 41,500 tonnes) of Alaskan crude oil spilled from the tanker. The cost of oil clean-up and oil pollution damage were up to 0.8 million USD. This was the largest oil pollution accident in the United States of America. This oil pollution accident caused a big shock to the whole of the country in the history of the United States of America. In order to effectively prevent the oil pollution accident occurring in the USA waters, USA Congress passed the 'Oil Pollution Act' of 1990 (hereinafter refer to as 'OPA 1990') on July 26th, 1989. The 'OPA 1990' entered into force on August 1990 after President George H.W. Bush signed it (*The Oil Spills Liability Trust Fund* (USA National Pollution Funds Center 2013:3).

The 'OPA 1990' largely deviates from principles established in international conventions, since the liability which they imposed were effectively without limit. The direct result of the 'OPA 1990' is, on one hand, effective in reducing the occurrence of the oil spills in the USA, and on the other hand, makes the law of the United States of America more elusive. Why did the USA choose a unilateral approach instead of joining the international regime to address the oil pollution problems in America? What was the special of the 'OPA 1990'? And what lessons can China learn from the 'OPA 1990'? In this chapter, the author uses legal comparative approach to examine the common practice of oil pollution liability and oil pollution compensation in the United States of America, and critically investigate the 'OPA 1990' using the contrasting approach. Based on historical and comparative methods, this research concludes with the divergence between different approaches to civil liability and compensation for oil pollution damage in different jurisdictions.

To achieve this purpose, this chapter is structured as follows: the first section is a brief

review of the legal history and evolution of the ‘OPA 1990’. The second section focuses on examining the common practice for oil pollution liability and oil pollution compensation in the United States of America. This section adopts a legal comparative approach, and compares with international conventions, critically investigates the ‘OPA 1990’. Through the analysis regarding to the trial practice of the ‘OPA 1990’ in the USA, in the last section, the conclusion shows that the ‘OPA 1990,’ possibly, is a successful story, but it is not suitable with the Chinese current situation at present.

4.1. Why the USA chose unilateralism – ‘OPA 1990’

According to research the USA maritime law, the author found that USA maritime law has seldom been harmonized with international maritime conventions. This was the fundamental reason for the USA unilateral approach instead of joining international conventions.

Firstly, it was difficult for the executive branch to obtain senate approval for an international treaty, premised on uniformity in maritime law. This is due to the conflict between federal and state interests. The treaty would have pre-empted state laws.

Secondly, the development of maritime law in the United States of America has historically diverged from the approaches of the maritime law in EU countries. Due to international conventions or EU laws sometimes incompatibility with USA laws and policies, the United States of America prefers to take the unilateral approach instead of joining international regimes.

Thirdly, a treaty was normally formulated in general terms in order that it may be flexibly interpreted. This is to accommodate the competing commercial, political and environmental interests of different concern parties. However, there were limitations with respect to liability and responsible parties. The USA was reluctant to join international conventions as it felt that the liability limit were lower and the category of responsible parties were narrower compared to federal and state regimes in force in the USA.

Another reason was the USA considered the definition of oil pollution damage in

international conventions was ambiguous. As there were different notions in various countries about what constitutes to oil pollution damages, it was difficult to adopt an acceptable definition of oil pollution damage. It led to the adoption of a general definition, with the result that different countries interpreted it differently.

Furthermore, the direct reasons for the USA had a unilateral approach for the oil pollution liability as it considered the coverage under the 'CLC' and the 'Fund Convention' inadequate to cover major oil spills. For these reasons, the United States of America did not ratify these conventions, instead of the establishment of his own oil pollution compensation regime. Because of the USA sought a minimum liability of \$ 50 – 60 million and the liability limit set by the 'CLC' was approximately \$ 14 million.

4.2. Oil pollution and the 'OPA 1990' compensation regime in USA

Prior to the 'OPA 1990', inadequate clean-up costs, damage remedies and taxpayer subsidies were provided by various federal and state laws. These were provided to cover uncompensated oil pollution costs. There were substantial barriers to victim recoveries, such as, legal defenses. These were not enough incentives for industries to prevent spills and develop improved techniques to reduce spills. Transport of oil in tankers steadily increased through USA waters as it depended on oil imports. This in turn has increased the potential for oil spills in the future and hence the necessity to prevent such oil pollution and minimize its damage.

4.2.1. Oil Pollution Act of 1990

Creation of the 'OPA 1990' was fuelled by the '*Exxon Valdez*,' which belonged to Exxon Particular Co. USA, oil spills on March 24th, 1989, in which more than 11 million gallons of Alaskan crude oil leaked into Prince William Sound waters Alaska when the tanker struck Bligh Reef and grounded. This was the largest oil pollution damage in U.S. history. The oil clean-up cost and oil pollution damages reached up to 0.8 million USD. This oil pollution

accident caused a big shock in the United States of America. In order to effectively prevent oil pollution accident happening and provide adequate compensation to victims caused by the oil spills in the USA, USA Congress passed the ‘OPA 1990’ on July 26th, 1989, and entered into force on August 1990, after President George H.W. Bush’s signature (USA National Pollution Funds Center 2013).

4.2.2. The main objectives of ‘OPA 1990’

The main purpose of the ‘OPA 1990’ was to safeguard the environment and the public from any accident which results in the discharge of oil, restituted natural resources polluted by oil accident to undisturbed, and compensated the loss of natural resource and the damage caused by oil pollution until recovery (§ 990.10 in Subpart A of ‘OPA 1990’). In particular, the main objective of ‘OPA 1990’ was to ensure adequate oil pollution compensation to provide a rapid and effective federal response to the oil pollution accident once happening. The ‘OPA 1990’ was also provided a compensation mechanism (claims process) once the liable part without financial afford payment. The ‘OPA 1990’ established a liability and compensation regime that served as a deterrent for oil spills in the future. (For example, ‘Certificates of Financial Responsibility’ or ‘Certificates of Financial Responsibility’ (hereinafter referred to as ‘COFRs’)). Furthermore, this unilateralism under ‘OPA 1990’ also ensured that owners and operators of responsibility vessels had enough funds to pay for the damage and oil clean-up caused by oil pollution accident (U.S. Senate Committee on Environment & Public Works 2013).

4.2.3. Main contents of ‘OPA 1990’

‘OPA 1990’ created a frame-work which addressed the liability of responsible parties in relation to the discharge of oil into the navigable waters of the United States of America, adjoining shorelines, and the ‘EEZ’. Furthermore, ‘OPA 1990’ imposed limitations on the liabilities of a responsible party in connection with discharging of oil into such areas⁷, but replaced the limit set by the ‘Clean Water Act’ 311 (33 U.S.C. § 1321) with much higher

⁷ A recently introduced bill in the Senate, S. 3305, would raise OPA’s limitation on liability for offshore facilities from \$75 million to \$10 billion, if enacted. The House companion bill to S. 3305, H.R. 5214, would amend OPA’s limitation on liability for offshore facilities in the same manner as S. 3305, if enacted.

ones and also widened the scope of persons authorized to recover removal costs from the responsible party to ‘any person’ who has incurred the oil clean-up cost in connection with the discharge of oil into the covered water (33 U.S.C. § 2702(b)(1)(B)). Under the ‘Clean Water Act’, only the federal government could recover removal costs from responsible parties. Additionally, under ‘OPA 1990’ various categories of damages were defined with specifics limit attached to each of them and these in turn depended on the type of vessel or facility involved in the oil spills accident (33 U.S.C. § 2702(b)(2)(A)-(F)). Specifically, in the ‘OPA 1990’, the act also included the following subparts:

- Title I – Oil pollution liabilities and compensation;
 - Title II – Conforming amendments;
 - Title III – International oil pollution prevention and removal;
 - Title IV – Prevention and removal;
 - Title V – Prince William Sound provision;
 - Title VI – Miscellaneous;
 - Title VII – Oil pollution research and development program;
 - Title VIII – Trans Alaska oil pipeline system;
 - Title IX – Amendments to Oil Spills Liability Trust Fund; and others.
- (U.S. Senate Committee on Environment & Public Works 2013).

4.2.4. Liability under ‘OPA 1990’

The responsible party⁸ under ‘OPA 1990’, is strictly and jointly and severally liable for oil clean-up costs plus oil pollution damages in connection with a discharge of oil into the subject covered waters. However, the responsible party’s liability for oil pollution damages is limited although it expressly states that addition liability may be imposed under the state law (U.S.C. §§ 2718(a) and (c)).

⁸ Under OPA, the term ‘responsible party’ refers to the owner or operator of a vessel or facility from which oil is discharged. 33 U.S.C § 2701(32). See Appendix A for OPA’s definition of the term ‘responsible party.’

4.2.4.1. The liability party

‘OPA 1990’ defined the responsible party covered any person owning, managing, operating or bareboat chartering the vessel with jointly and severally liable. Exactly who is embraced by the definition was open to doubt. It is possible that more than one party may need insurance. It has even been suggested that banks might incur liability, if in a position of dominance over the operator (26, sec. 1001, Title I of ‘OPA 1990’).

As in the international regime, liability was strict under ‘OPA 1990’ with similar defenses to those under the ‘CLC’. However, the ‘OPA 1990’ differs from the ‘CLC’ in its requirements regarding the post-spills conduct of the responsible party. Following by its predecessor act, the ‘OPA 1990’ envisages that the owner had a positive obligation to respond to the oil spills from the ship and to take the necessary action to prevent or clean-up the spills. This obligation was governed by reporting regulations. In the case of tankers, by the requirement for a vessel response plan which details the measures and contractors to be used by the owner for the oil clean-up. All these must be approved by the United States Coast Guard in accordance with the National Contingency Plan. If the owner failed to report the accident or comply with his post spills obligations to cooperate for the oil clean-up, he would loss his defenses and the right to limit (Nichols 2010:2).

4.2.4.2. Limitation of liability

Under ‘OPA 1990’, the liability of oil pollution damage was limited according to the responsible party and the type of accident (33 U.S.C. § 2704(a)). The act further limited on the responsible party’s liability for oil pollution damages based on the type of vessels or facility from which the discharge of oil spills. Specifically, the ‘OPA 1990’ respectively provided different liability limit for (1) Oil tankers; (2) General cargo vessels; (3) Offshore platform or other oil facilities offshore; (4) Onshore facilities and deep-waters ports; and (5) Mobile offshore drilling units).

For example, one deep-waters horizon rig exploded in the Gulf of Mexico and sank two days later on April 20th, 2010. This was considered as a mobile offshore drilling unit⁹. In

⁹ U.S. Coast Guard and Minerals Management Service joint press release referring to Deep-water Horizon oil rig as a mobile offshore drilling unit 2010

order to determine the responsible party's liability, the mobile offshore drilling unit is generally classed as a tank vessel. Once the damage exceed the liability assigned for discharge from tankers, the mobile offshore drilling unit would be considered as an offshore facility (33 U.S.C. 2704(b) (2)). Therefore, if the oil pollution damage in the Gulf of Mexico exceed the vessel liability limitation under the 'OAP 1990', the deep-waters horizon rig would be considered as an offshore drilling unit, and the liability of the 'responsible party' can be limited the oil clean-up based on the tankers' liability limitation (33 U.S.C. § 2704(b) (2)).

However, the liability limitation as I mentioned above were subjected to several exceptions below. If the oil pollution damage caused by the deep-waters horizon was identified as due to gross negligence, violation of federal safety, willful misconduct, construction or operating regulations by the responsible party, then, the liability limitation to responsibility parties will be lose.(33 U.S.C. §§ 2704 (c) (1) (A) and (B)). Furthermore, if the responsible party fails to report the accident according to the legal provisions, refuses to cooperate with federal removal activities or did not comply with the National Contingency Plan (33 U.S.C §§ 2704 (c) (2)(A),(B) and (C)), the liability limitation will not be applicable to the liability party too as per provisions of 'OPA 1990'.

The 'Coast Guard and Maritime Transportation Act of 2006' came into effect on July 11th, 2006 when President George W. Bush approval and sign it. The new 'Coast Guard and Maritime Transportation Act of 2006' contained a number of provisions to increase liability limit of ship owners and operators for oil spills in the USA (The white house 2006).

The new 'Coast Guard and Maritime Transportation Act of 2006' significantly increased the liability limit under 'OPA 1990'. For a single hull oil tanker, US\$ 3,000 per gross tonne, subject to a minimum liability of US\$ 22 million in the case of a ship greater than 3,000 gross tonnes, or, US\$ 6 million in the case of a ship of 3,000 gross tonnes or less; For double hull oil tankers, US\$ 1,900 per gross tonne, subject to a minimum liability of US\$ 16 million in the case of a ship greater than 3,000 gross tonnes, or, US\$ 4 million in the case of a ship of 3,000 gross tonnes or less; For non-tank ships, US\$ 950 per gross tonne or US\$ 800,000, whichever was greater (Sec.603 of Coast Guard and Maritime Transportation Act of 2006).

As a comparison, the original liability limitation under ‘OPA 1990’ were: For all the oil tankers, US\$ 1,200 per gross tonne, subject to a minimum liability of US\$ 10 million in the case of a ship greater than 3,000 gross tonnes, or, US\$ 2 million in the case of a ship of 3,000 gross tonnes or less; For non-oil tankers, US\$ 600 per gross tonne or US\$ 500,000, whichever is greater (Sec. 1004 of ‘OPA 1990’).

The amended limit for tankers came into effect, for oil discharge or the substantial threat of a discharge that occurred on or after October 9th, 2006, while the amended limit for any other vessel came into effect on July 11th, 2006. The existing ‘COFRs’ will remain in effect until financial responsibility regulations were amended (the white house 2006).

However, the right to limit could easily be lost in the event of gross negligence (even of employees and contractors) or the breach of applicable federal safety or operating regulation. It was not hard to envisage such an allegation in most casualties leading to spills. Even if the responsible party was held to be entitled to limit under ‘OPA 1990’, there may well be additional state law liabilities with no right to limit at all.

4.2.5. Compulsory insurance / Certification (COFRs)

Considering the right of the liability under ‘OPA 1990’ was very easy to lose, and the liability limitation under the ‘OPA 1990’ was greater than the same stipulation under international conventions. ‘P&I Clubs’ in the international group declined to provide their members with the evidence of insurance required by the USA Coast Guard to obtain the ‘COFRs’ required under the ‘OPA 1990’. As a result, ship owners trading to the United States had to obtain ‘COFRs’ independently, in many cases, at considerable additional cost (United States Coast Guard 2013).

The ‘P&I Clubs’ have not, in any way, restricted the cover they offer to their members for oil pollution liabilities in the United States, both under ‘OPA 1990’ and under state laws. Ship owners entered in clubs enjoy the same cover as they did before, although tanker owners pay a special additional premium for voyages to the United States to reflect the additional cost of

spills in the states. It is only the guarantee of that cover, as is evident by the COFRs,' that clubs had declined to give.

The decision did not to give the guarantees required by the COFRs' system was taken independently by the ship owner boards of directors of each of the 'P&I Clubs' in the group. Many factors influenced this decision - the traditional indemnity nature of the cover; the wide scope of the damage recoverable under 'OPA 1990', and the fear of proliferating requirements at national or state level. But the single most compelling reason was the exposure of the club's whole assets to direct action as guarantor in the USA courts at federal or state level which would have been required on a voluntary basis under the certificate. This was a risk which clubs were unwilling to take (UK P&I Club 2012).

4.3. The Oil Spills Liability Trust Fund ('OSLTF')

In order to provide an immediate funding source for the oil spills response and cover costs above the liability limit, the American government established the 'Oil Spills Liability Trust Fund' (hereinafter referred to as 'OSLTF'). This was in accordance with the requirement of 'OPA 1990'. The 'OSLTF' had similarities to the 'CLC 1969' and 'Fund Convention 1971'. The most remarkable feature was the 'OSLTF' was co-contributed by ship's owners and cargo industries. The important difference was that ship owner's liability was much higher compared with international conventions (*Oil Spills Liability Trust Fund 2013*).

4.3.1. The history of the 'OSLTF'

The United States Congress approved the 'OSLTF' in 1986, which were codified in part 4611 and part 9509 of the internal revenue code. But until when President George H. W. Bush signed 'OPA 1990' in August 1990, the 'OSLTF' was formally authorized to be operating. Under the part 4611 of the internal revenue code, a tax of five cents per barrel was levied on crude oil received at United States refineries or on petroleum products imported to, or warehoused in the United States. Although, part 4611 of the internal revenue code had made the effective date of the fund, however, due to the United States

Congress did not pass legislation to authorize the using of the fund or the collection of revenue to maintain it, the 'OSLTF' had not entered into force until 1990.

The M/T '*Exxon Valdez*' oil pollution accident in the United States of America prompted 'OPA 1990' production and made the 'OSLTF' authorization was granted. The United States Congress amended relevant provisions as part of the 'Budget Reconciliation Act' in 1989. The amended version made the tax effective since December 31st, 1989, and until December 31st, 1994. Collection of the tax was to be suspended once the unobligated balance of 'OSLTF' reached \$1 billion, as long as the unobligated balance stayed above that level.

Provisions establishing the 'OSLTF' can be found at 26 U.S.C. 9509. In addition to authorizing use of the 'OSLTF', 'OPA 1990' consolidated the liability and compensation requirements of certain prior federal oil pollution laws and their supporting funds, which including:

- - The Federal Water Pollution Control Act (FWPCA) 311k revolving fund;
 - The Deepwater Port Liability Fund;
 - The Trans-Alaska Pipeline Liability Fund, and;
 - The offshore Oil Pollution Compensation Fund.

The Funds in the 'Deepwater Port Liability Fund' and 'offshore Oil Pollution Compensation Funds' were transferred to 'OSLTF' on January 1st, 1990.

With the gradual consolidation of these funds and the collection of a tax on the petroleum industry, the 'OSLTF' balance increased to more than \$1 billion. Fund uses were delineated by 'OPA' section 1012 (33 U.S.C. 2712) to include:

- - Removal costs incurred by USCG and EPA FOSCs;
 - Payments to federal, state, and Indian tribe trustees to conduct 'Natural Resource Damage Assessments' (hereinafter referred to as 'NRDAs') and restorations;
 - Payment of claims for uncompensated removal costs and damages; and

- Administrative, operational, and personnel costs and expenses incidental to implementation, administration, and enforcement of ‘OPA 1990’ and certain provisions of section 311 of the FWPCA (33 U.S.C. 1321).

‘OPA 1990’ included a sunset provision for the tax that supported the ‘OSLTF’ that expired on December 31st, 1994. In 2005, Congress reinstated the tax as a provision of the ‘Energy Policy Act 2005’. Those provisions became effective on April 1st, 2006. In November 2008, the ‘Energy Improvement and Extension Act of 2008’ increased the tax from five cents per barrel to eight cents per barrel through December 31st, 2016 and to nine cents per barrel from then until December 31st, 2017. This increase was effective immediately (‘OSLTF’ Annual Report 2008:2)

4.3.2. The structure of the ‘OSLTF’

The ‘OSLTF’ had two main functions in the process of oil pollution damage in the United States of America. First, the ‘Emergency Fund’ was available for ‘Federal on Scene Coordinators’ (hereinafter referred to as ‘FOSCs’) to respond the oil discharges and for federal trustees to initiate natural resource damage assessments. To make sure the ‘OSLTF’ can rapid and effective response to the oil spills, the President had the authority to make available, without congressional appropriation, up to \$50 million to fund the oil clean-up activities and initiate natural resource damage assessments at each year. Second, the remaining ‘Principal Fund’ balance was used to provide claims and to fund appropriations by congress to federal agencies to administer the ‘OPA 1990’ and support the research and development of the ‘OPA 1990’ and ‘OSLTF’.

4.3.3. The amount of ‘OSLTF’ and its revenues

‘OSLTF’ was capitalized in the amount of US\$ 1 billion. The ‘OSLTF’ had several recurring and non-recurring sources of revenue as follows:

- (1) Barrel Tax. The largest source of revenue has been a five cent per barrel tax, collected from the oil industry on petroleum produced in or imported to the United

States. The tax was suspended in July 1993, because the fund reached its statutory limit. It was reinstated in July 1994, when the balance declined below \$1 billion, but expired at the end of 1994 because of the sunset provision in the law. The ‘Energy Policy Act 2005’ again reinstated the tax as of April 1st, 2006.

- (2) Transfers. A second major source of revenue has been transfers from other existing pollution funds noted above. Total transfers into ‘OSLTF’ since 1990 have exceeded \$550 million. No additional funds remain to be transferred to ‘OSLTF’.
- (3) Interest. Currently, the largest recurring source of ‘OSLTF’ revenue is the interest on the fund principal from U.S. treasury investments. As a result of historically low interest rates, interest income has declined significantly in recent years.
- (4) Cost recoveries. Another source is cost recoveries from responsible parties; those responsible for oil incidents are liable for costs and damages. ‘NPFC’ bills responsible parties to recover costs expended by ‘OSLTF’. As these monies are recovered, they are deposited into ‘OSLTF’.
- (5) Penalties. In addition to paying for clean-up costs, responsible parties may incur fines and civil penalties under ‘OPA 1990’, FWPCA-72, DWPA-74, and TAPAA-73.
(USA National Pollution Funds Center 2013).

4.3.4. Problems of the ‘OSLTF’

The factors which threaten the fund’s continued ability to be used to respond to oil spills were as follows:

Vessel liability limit were inadequate and have not changed since the enactment of ‘OPA 1990’. A provision allowing for periodic adjustments in liability limit was included in ‘OPA 1990’, but the limit has not been adjusted since the act was enacted. Another factor creating a risk of drawing down the ‘COFRS’ were major oil spills, where the costs exceed the liability limit of the responsible party or where there was no responsible party due to complete defenses to liability provided by ‘OPA 1990’. A recent example cited in the testimony was the November 2004 spills in the Delaware River by the M/T ‘*Athos I*’. The owners of the ‘*Athos I*’ paid out more than \$100 million for the response and clean-up of that

accident. However, a recently concluded Coast Guard investigation found no violations on the part of the *'Athos I'* or its crew or pilots. Consequently, the *'Athos I'* is expected to file a claim against the 'COFRS' to recover its costs, since cause by acts of a third-party constitute a defense to liability under 'OPA 1990'. Including other claims for damages by injured third parties, total claims against the 'COFRS' from the *'Athos I'* accident could total more than \$270 million (Damage Assessment Remediation & Restoration Program 2004).

4.4. Comparison between international conventions and 'OPA 1990'

4.4.1. Oil

1) 'CLC 1992' reads that:

'Oil' means as any persistent hydrocarbon mineral oil, such as crude oil, fuel oil, heavy diesel oil and lubricating oil, whether carried on board a ship as cargo or in the bunkers of such a ship (item 5 of Article I in the 'CLC 1992').

As per purpose of the 'CLC 1992' oil definition above, a ship mentioned therein must be a 'CLC 1992' ship. Therefore, the 'CLC 1992' oil not only refers to the oil being carried in bulk on board a 'CLC 1992' ship as cargo, but also refers to the bunkers in a 'CLC 1992' ship.

In view of the definition of the 'CLC 1992' oil, it is evident that the 'CLC 1992' oil does not include the whale oil, any non-persistent oil, like light diesel oil, gas oil, etc. Therefore, even though the oil pollution damage in the territorial sea of a member state was caused by an oil spills from a 'CLC 1992' ship, if the oil involved is that of non-persistent oil, such as light-diesel oil, 'CLC 1992' will not necessarily apply.

2) 'OPA 1990' reads that:

‘Oil’ means any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil. But does not include petroleum, including crude oil or any fraction thereof, which is specifically listed or designated as a hazardous substance under subparagraph (A) through (F) of section 101 (14) of the ‘Comprehensive Environmental Response, Compensation and Liability Act’ (42 U.S.C. 9601) and which is subject to that act (1001(37) of ‘OPA 1990’ (33 U.S.C. 2701(37)).

From the above definition, it can find that the oil coverage in ‘OPA 1990’ is quite extensive. For the purpose of ‘OPA 1990’, ‘Federal Water Pollution Control Act 1972’ (hereinafter referred to as ‘FWPCA 1972’) serves as the defining reference for oils. The oil defined in the Subsection 311(a)(1) of the ‘FWPCA 1972’ covers not only petroleum, fuel oil, sludge, oil refuse, and oil mixed with waste, but also covers dredge spoils. The most common oils are various petroleum oils, e.g., gasoline, crude oil, diesel, etc., non-petroleum oils such as turpentine and various animal fats, e.g., tallow, lard, etc. and vegetable oils, e.g., corn oil, sunflower seed oil, palm oil, etc. are included within the ambit of ‘OPA 1990’ as long as they are carried in bulk as cargo by tankers.

However, from the above definition, it can still find that ‘OPA 1990’ does not cover to all kinds of oil. The ‘OPA 1990’ oil does not include petroleum, including crude oil or any fraction thereof, which is specifically listed or designated as a hazardous substance in the ‘OPA 1990’.

4.4.2. Ship

1) ‘CLC 1992’ reads that:

‘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 (item 1 of Article I in the ‘CLC 1992’).

Notably, for the purposes of qualifying for the ‘CLC 1992’ ship, the oil carried by the tanker or the multipurpose ship must be the ‘CLC 1992’ oil. Based on these unambiguous wording, it is reasonably inferred that a tanker carrying, or capable of carrying the ‘CLC 1992’ oil, or a multipurpose ship actually carrying the ‘CLC 1992’ oil in bulk as cargo, or during a voyage following such carriage with residues of such carriage of the ‘CLC 1992’ oil in bulk aboard, can be a ‘CLC 1992’ ship.

However, the ‘CLC 1992’ does not apply to warships or other ships owned or operated by the government and used, or other vessels acquired by government performing non-commercial service. Notwithstanding, according to the provision of Article 11(2) under ‘CLC 1992’, for those ships owned by a state and used for commercial purposes, each state shall be subject to suit in the jurisdiction of a contracting state. If the oil pollution damage occurs in the territory of that member states, this situation shall waive all defenses based on its status as a sovereign state.

More notably, there are no tonnage limitations and in operation requirements for the ‘CLC 1992’ ship purposes. Theoretically, a submerged abandoned tanker may qualify for the ‘CLC 1992’ ship. Though, in the practical perspective, without auxiliary provisions available in the ‘CLC 1992’ it may be of no value to identify an abandoned tanker as the ‘CLC 1992’ ship because it is impossible to legally catch the owner.

2) Like the FWPCA 1972, the ‘OPA 1990’ covered all types of ship. ‘OPA 1990’ reads that:

‘Ship’ means every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water, other than a public vessel (1001(37) of ‘OPA 1990’ (33 U.S.C. 2701(37))).

Clearly, the implicit intention of the vessel definition of ‘OPA 1990’ is to cover all kinds of vessels, even if it is an abandoned vessel (2701(32) (F) of ‘OPA 1990’), where they fall within the definition, there is no tonnage and in operation requirements for the ‘OPA 1990’

vessels. In other words, oil tankers in the context of ‘OPA 1990’ means a vessel that is built or adapted to carry, or that carries, oil or hazardous material in bulk as cargo or cargo residue, and that is a vessel of the United States, operates on the navigable waters, or transfers oil or hazardous material in a place subject to the jurisdiction of the United States. In particular, the ‘OPA 1990’ vessel does not necessarily mean one physically single vessel. Two physically independent ‘vessels’ may be identified as one discharging vessel in ‘OPA 1990’. Furthermore, ‘OPA 1990,’ also, includes any structure, group of structures, equipment, or device other than a vessel which is used for one or more of the purposes, such as, exploring for, drilling for, producing, storing, handling, transferring, processing, or transporting oil. This facility is divided into two different and independent facilities, namely, the onshore facility¹⁰ and the offshore facility¹¹

The definition of the ship in the ‘OPA 1990’ was vastly different from the ‘CLC 1992’. The ‘OPA 1990’ covered oil tankers, dry cargo vessels, cruise liners and other vessels, the sole exception were state owned vessels. Thus, bulk carriers could incur ‘strict liability’ under the term of the ‘OPA 1990’ if they released oil from their bunker tanks into the sea. Hence, this definition of ‘ship’ made the ‘OPA 1990’ fundamentally different from international conventions.

4.4.3. Geographic scope

1) ‘CLC 1992’

Regarding the geographic scope, the ‘CLC 1992’ reads that:

This convention shall apply exclusively to oil pollution damage caused: (i) in the territory, including the territorial sea, of a contracting state, and (ii) 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

¹⁰ The onshore facility refers to any facility including, but not limited to, motor vehicles and rolling stock of any kind located in, on, or under, any land within the United States other than submerged land.

¹¹ The offshore facility refers to any facility of any kind located in, on, or under any of the navigable waters of the United States, and any facility of any kind which is subject to the jurisdiction of the United States and is located in, on, or under any other waters, other than a vessel or a public vessel.

to the territorial sea of that state determined by that state in accordance with international law and extending not more than 200 nautical miles from the baselines from which the breadth of its territorial sea is measured (Article II of the 'CLC 1992')

As can be seen from the above, the geographic scope in the 'CLC 1992' is large than the cover of the territorial waters, it includes not only the territorial sea or the exclusive economic zone, but also includes an area beyond and adjacent to the territorial sea and extending not more than 200 nautical miles from the baselines which the breadth of its territorial sea is measured based on the contracting state's agreement.

2) 'OPA 1990'

The United States is not the member state of the 'CLC 1992'. Once the oil spills accident occurring, 'OPA 1990' may be triggered to determine liability and compensations, if at least two principal factors can be found in that oil spills accident.

The first and foremost factor is whether the oil discharge or the substantial threat of an oil discharge may or may pose a threat the navigable waters or adjoining shorelines or the exclusive economic zone of the United States (2702(a) of 'OPA 1990'). In the case of *Gatlin Oil Co., Inc. v. United States*, the fourth circuit held that:

The removal costs and damages specified in section 2702 (b) are those that result from a discharge of oil or from a substantial threat of a discharge of oil into navigable waters or the adjacent shoreline (Holmen 2001:3).

The second factor was that the oil pollution damages and preventive measures should fall within the recoverable items set forth by 'OPA 1990'. Once the aforementioned two factors can be found in an oil pollution accident, 'OPA 1990' shall be triggered assuming that the state law shall not be invoked.

In view of the above, we can clearly find that the geographic scope of 'OPA 1990' not only includes the navigable waters, territorial sea, adjoining shorelines and the economic zone of

the United States, but also defines of the 'navigable waters' under the 'OPA 1990' includes the territorial sea too.

In the case of *Rapanos v. United States* (No 04-1304, decided on June 19th, 2006 by the supreme court of the United States), the judgment from the supreme court of the United States stated that: 'the waters of the United States' includes only those relatively permanent, standing or continuously flowing bodies of waters 'forming geographic features' that are described in ordinary parlance as 'streams, ... oceans, rivers, and lakes.' The phrase does not include channels through which waters flows intermittent or ephemeral or channels that periodically provide drainage for rainfall (Oyez 2005:1).

From the above, it is obvious that the geographical scope of the 'OPA 1990' was enlarged in regulation to previous federal laws so as to cover the exclusive economic zone of the United States.

4.4.4. Channelling rule

Where a vessel sources oil pollution accident falls within the scope of the 'CLC 1992', only the ship-owner of the vessel involved can be held liable for oil pollution damages there from. The 'CLC 1992' expressly excludes any claims arising from oil pollution damage against the charterer, manager or other people who may be negligent in causing the oil pollution accident, unless the damage resulted from their personal act or omission committed with the intention to cause such damage, or recklessly and with knowledge that such damage would probably result (Article III of the 'CLC 1992'). The channeling rule of the 'CLC 1992' stands for an 'exclusive channeling rule'.

Correspondingly, if the oil pollution accident from vessel sources falls within the scope of the 'OPA 1990', it not only the ship-owner but also the operator and the demise charterer of the vessel involved, can be jointly and severally held liable for oil pollution damages, without considering their personal involvement. In addition, no matter different types of non-vessel-sources oil pollution accidents occur, the 'OPA 1990' also sets out different

rules on identifying the responsible party (item 26 and item 32 in section 1001 of the ‘OPA 1990’). The channeling rule of the ‘OPA 1990’ stands for an ‘extensive channeling’ rule.

4.4.5. Liability rule

It is known that the ‘CLC 1992’ is only held the ‘strict liability’ without ‘fault’ (Article III of the ‘CLC 1992’). But the liability rule under the ‘OPA 1990’ is the strict, joint and several liability rules (section 1002 and section 1003 of the ‘OPA 1990’).

In the economic literature, ‘strict liability’ with the defense will be superior to the negligence rule when it is more important that injurers be given incentives through a liability rule to reduce their activity level than victims who are given similar incentives. In the field of oil pollution, a polluter is in a better position than a pollution victim to take preventive measures to prevent oil pollution from happening. Therefore, it is more important that the polluters be given more incentives through a liability rule to reduce their activity level than victims who are given similar incentives. Accordingly, for purpose of creating more incentives for polluters, to adopt the ‘strict liability’ rule in the oil pollution compensation regime is the proper choice in terms of economic literature.

Additionally, the joint and several liabilities rule imposes the ‘strict liability’ not only on the owner of a vessel or a facility from where the oil is spilled, but also on the demise charterer and the operator of the vessel or the operator of the facility. On one hand, the joint and several liability rule broadens the possibilities for victims to receive compensation, especially, for the government to get recovery of removal costs. On the other hand, the rule will give incentives not only to the owner, but also to the demise charterer or the operator of a vessel who is also in a better position to take preventive measures in preventing an oil pollution accident from happening.

4.5. Conclusion

The ‘American Oil Pollution Compensation Regime’ (hereinafter referred to as ‘USA OPCLR’) is tougher than both the international conventions and the Chinese vessel’s

sources oil pollution compensation fund. The principal goal of the 'USA OPCLR' is to achieve zero oil discharge in the waters of the United States. In other words, the primary purpose of the 'USA OPCLR' is to prevent oil pollution accidents from happening. Based on this goal, the United States has formulated a very detailed, comprehensive and tougher 'OPCLR', namely, the 'OPA 1990'. Even though 'OPA 1990' is continually experiencing criticisms, the decrease of grave oil pollution accidents after the 'OPA 1990' has strongly demonstrated that the 'USA OPCLR' is one successful case.

USA unilateral regime is able to survive in both the liability scheme and the fund scheme without links with the international market due to his sheer size of the USA market. On the other hand, the international regime also seems to be the stable development through adjusting itself in accordance with changes of circumstances.

It appears that the current dual system will continue in the short term. In the long term, however, it would be better to establish a unified international regime through a compromise among interested parties. It would enable all actors, such as, the shipping companies, the insurance, the oil industry, and governments to direct their energies towards preventing, oil clean-up and compensating oil pollution damages from oil spills rather than grappling with unilateral legislation in individual jurisdictions around the world. Establishing a unified international and USA regimes would not only be helpful for the ultimate unification of the current dual system, but also desirable for transactions of industries concerned and handling boundary oil pollution under the current dual system. once the unified regime is desirable or conflict between the international and USA regimes is to be reconciled at least, the role of international organizations, such as 'IMO', the 'United Nations Conference on Trade and Development'¹², (hereinafter referred to as 'UNCTAD'), and 'CMI' can be seek to facilitate consensus among conflicting political and economic interests. In this respect, it is noteworthy that 'CMI' is trying to bridge these gaps between the international and USA regimes, in terms of natural resource damages.

¹² IMO has not directly involved with the economic aspects of seaborne trade. Such issue has been addressed by 'UNCTAD', through its Committee on Shipping that was founded in 1965. IMO has restricted its own activities to the technical aspects, while 'UNCTAD' has been dealing with commercial or economic problems

CHAPTER FIVE

CHINA'S CURRENT PROBLEM: A REVIEW OF THE LEGAL FRAMEWORK

Since the 1980s, the environmental protection of marine and inland waters has drawn attention of Chinese government and relevant authorities on a daily basis. Consequently, special laws and regulations have been enacted on marine environmental protection. Overall, the legal system of marine environmental protection in China has been principally set up until 2010. However, compared with requirements of the 'CLC', the 'IOPC Fund' and the 'OPA 1990', Chinese legal system for the oil pollution regime still have a considerable gap with the international line (Faure 2006: 286). Contrasted with the increasing risk of oil pollution in China, Chinese legislation for oil pollution damage from ships does not have a specific legal regime which introduces 'strict liability' for ship-owners and a system of compulsory insurance for tankers operating within Chinese waters. There is no particular legislation which specially deals with the marine oil pollution issue or successful judicial practice made by the court. There are only scatter articles within a variety regulations and laws. There are inadequate and do not address the changing situations confronting the country in the present, as well as in the future. These not only cause the confusion of application of the law in practice, but also make legal enforcement authorities shift responsibility onto or interfere with each other.

Along with the fast growing economy of China, especially the booming of the economic activities in the seawaters and coastal areas, the Chinese government had actually turned its attention to environmental protection currently. But through the careful review of above Chinese municipal laws, various critiques can still be found on different occasions.

In this chapter, the author will examine the legislation and administrative regulation for oil pollution in China first, and then, the compensation of victims of oil pollution damage in China is discussed too, as well as international conventions which China ratified. Whereby, it is stressed that China has acceded to the 'CLC', but it has not implemented those in

national law, the lack of compulsory insurance of tanker owners and the fact that China is not member state of the 'Fund Convention' are critically discussed. Through analysis of Chinese trial practice, a comparison between the international regime and Chinese law is provided. The conclusion shows that, with the growing oil pollution accident occurring in China, the Chinese legal system relating to the oil pollution accident is facing a severe challenge.

To achieve this purpose, this chapter is structured as follows: the first section is a brief review of the oil pollution legislation and administrative regulation in China; the second section focus on international conventions which China ratified; the third section introduces about the implementation of international conventions in China, through the analysis relate to the trial practice of oil pollution in China in the fourth section. Finally, the last section provides a conclusion and discussion regarding the policy suggestion in China.

5.1. Legislation and administrative regulations for oil pollution in China

5.1.1. The legal history of oil pollution legislation in China

Since the 1980s, the Chinese government and relevant authorities had enacted a series of basic laws and regulations relating to marine environmental protection and marine activities. Specifically, they include:

- 1) Regulations on the Exploitation of Offshore Petroleum Resources in Co-operation with Foreign Enterprises; January 30th, 1982.
- 2) Marine Environmental Protection Law in 1982¹³ ('MEPL 1982').
- 3) Marine Traffic Safety Law of People's Republic of China 1984¹⁴.
- 4) Regulations concerning Environmental Protection in Offshore Oil Exploration and Exploitation; December 29th, 1983.
- 5) Regulations on the Control over Preventions of Pollution by Vessels in Sea Waters;

¹³ MEPL 1982 Promulgated on August 23rd 1982 at the 24th meeting of the Standing Committee of the Fifth National People's Congress, it was amended by the 13th meeting of the Standing Committee of the Eighth National People's Congress on December 25th 1999 and came into force from April 1st 2000

¹⁴ Marine traffic safety law of P.R.C adopted at the Second Meeting of the Standing Committee of the Sixth National People's Congress, promulgated by Order No. 7 of the President of the People's Republic of China on September 2nd 1983, and effective as of January 1st 1984

December 29th, 1983.

- 6) Mineral Resources Law of People's Republic of China 1986¹⁵.
 - 7) Regulations on Management of Laying Submarine Cables and Pipelines; February 11th, 1989.
 - 8) Regulations on Protection of Underwater Cultural Relics; October 20th, 1989.
 - 9) Environmental Protection Law 1979¹⁶ (hereinafter referred to as 'EPL 1979').
 - 10) Regulations on Investigation and Settlement of Maritime Traffic Accidents; January 11th, 1990.
 - 11) Law on the Territorial Sea and the Contiguous Zone of People's Republic of China; February 25th, 1992.
 - 12) Measures Governing the Participation of Foreign Firms in the Salvage of Sunken Ships and Objects in the Chinese Coastal Waters; July 12th, 1992.
 - 13) Maritime Code of People's Republic of China 1992 ('CMC 1992'); November 7th, 1992.
 - 14) Law on the Exclusive Economic Zone and the Continental Shelf of People's Republic of China; June 26th, 1998.
 - 15) Regulations concerning Prevention and Control over Pollution Damage to the Marine Environment by Coastal Construction Projects, September 9th, 2006.
- (The National People's Congress of the People's Republic of China 2013)

Among laws mentioned above, the first Chinese legal regulation relating to controlling marine pollution could date back to 1974 when the State Council enacted the 'Temporary Regulations concerning Prevention of Pollution in Coastal Areas'. This regulation mainly regulated oil pollution by ships at ports, and it signified the start of control of marine pollution through legal means. China then formulated the 'Environmental Protection Law 1979' (hereinafter referred to as 'EPL 1979') and the 'Marine Environmental Protection Law 1982' (hereinafter referred to as 'MEPL 1982') in succession. 'EPL 1979' was the first basic and comprehensive legislation for China to protect the environment. It has special provisions to govern the protection of the marine environment. 'MEPL 1982' was the first

¹⁵ Mineral Resources Law of P.R.C 1986 adopted at the 15th Meeting of the Standing Committee of the Sixth National People's Congress, promulgated by Order No. 36 of the President of the People's Republic of China on March 19th 1986, and effective as of October 1st 1986, this Law was revised by the Decisions on Amending the Mineral Resources of the People's Republic of China promulgated on August 29th 1996.

¹⁶ EPL 1979 adopted at the 11th Meeting of the Standing Committee of the Seventh National People's Congress, promulgated on December 26th 1989 and implemented by the No. 22 Decree of the President on the same day.

basic and comprehensive legislation for China to specifically protect the marine environment. It provided geographic jurisdiction and qualified operations and the liability relating to marine activities. Both laws are mainly for the purpose of administrative and criminal penalties other than offering a civil liability and compensation.

The new revision of ‘MEPL 2000’ enacted on December 25th, 1999, and became law on April 1st, 2000. The Chinese government declared that China will establish a civil liability and compensation system for oil pollution damages from vessels source. It has also empowered the State Council to work out details of implementation. Based on this declaration, competent authorities of China have finalized the draft of the ‘Regulations on Levy and Usage Management relating to Vessel sources Oil Pollution Compensation Fund’ (hereinafter referred to as ‘China Fund Regulations’) in 2006 and also finished the amendments to ‘RCPPVSW’ (hereinafter referred to as ‘RCPPVSW Amendments’) in 2007. In view of ‘China Fund Regulations’, China shall build a ‘CVOPCF’ by levying a tax on the import of oil. ‘RCPPVSW’ amendments have added chapter nine addressing liability and compensation in respect of vessel sources oil pollution damage. Currently, these two legal documents are coming into force from July 7th, 2012.

To effectively implement ‘MEPL 1982’, several new supplementary regulations and detailed measures were promulgated by the State Council to govern various sources of marine pollution. Specifically, they are:

- 1) Administrative Regulations on the Prevention of Pollution by Vessels in Sea Areas; December 19th, 1983.
- 2) Administrative Regulations concerning Environmental Protection on Offshore Oil Exploration and Exploitation; December 29th, 1983.
- 3) Administrative Regulations concerning the Dumping of Wastes at Sea; March 6th, 1985.
- 4) Administrative Regulations concerning Prevention of Pollution Damage to the Marine Environment by Coastal Construction Projects; August 1st, 1990.
- 5) Administrative Regulations concerning Prevention of Marine Environment Pollution from Land-based Pollutants; August 1st, 1990.

6) Administrative Regulations concerning Prevention of Environmental Pollution by Ship-breaking, May 18th, 1998.

(The National People's Congress of the People's Republic of China 2013)

Among the above-mentioned laws, the most important one was the 'Regulations concerning the Prevention of Pollution in Sea Areas by Vessel'. This was promulgated on December 29th, 1983 by the State Council, containing 12 chapters with 56 articles. This regulation was applicable to Chinese and foreign vessels within the seawaters and seaports under Chinese jurisdiction, as well as to ship owners and other individuals. All are required to comply with the 'MEPL 1982' and these regulations regard the discharge of oils, oily mixtures, waste and other poisonous or harmful substance (Article 8 of 'MEPL 1982'). Such discharge was prohibited in freshwater areas of ports close to estuaries (Article 26 of 'MEPL 1982'). Vessels must be provided with antipollution certificates and equipment (Article 28 of 'MEPL 1982'). It should be noted that many provisions and standards of the 'MARPOL 73/78' convention were considered during the legislation and some have been incorporated into these regulations.

5.1.2. Understanding of current oil pollution legislation in China

The existing Chinese laws that regulate the compensation for pollution damage, occasioned from vessel sources, mainly include the 'General Principle 1986' which was adopted on April 12th, 1986 and entered into force on January 1st, 1987. The 'CMC 1992' adopted on November 7th, 1992, entered into force as of July 1st, 1993, and the 'MEPL 2000', which was passed at the thirteenth session of the standing committee of the ninth National People's Congress (hereinafter referred to as 'NPC') of the People's Republic of China on December 25th, 1999, and came into force on April 1st, 2000. The 'General Principles 1986', as the general civil law in China, it provides that accidents of pollution damage are within the category of typical acts of special infringement of rights, to which 'strict liability' system and the principle of reverse burden of proof shall apply. It further provides that ways to indemnity for such damage includes restoring damage property¹⁷ to its original condition or

¹⁷ The property is referred to private property, public property, including the ecosystem

reimburse the monetary loss. Nevertheless, the ‘CMC 1992’, as a special law¹⁸ provides a right for the ship-owner¹⁹ and salvor to limit liability for maritime claims under the regime of ‘global limitation’ (Art. 204 (1) of chapter XI of ‘CMC 1992’). The ‘global limitation’ regime in the ‘CMC 1992’, however, excludes the application of limitation to oil pollution damage where special limitation regimes apply by international convention on oil pollution compensation of which China is a party, which means only tanker owners whose tankers are engaged in international trade are entitled to limit under the ‘CLC 1992’. There are no other special laws in this regard that apply to compensation for damages by ships for domestic trade.

Furthermore, although China has signed the ‘CLC 1992’, the international convention has not been transformed into domestic legislation in the P.R.C (Faure 2006: 195-196). In terms of maritime law, most of the laws in P.R.C stipulate the direct application of international conventions with priority over municipal law in foreign-related cases. For example, some provisions can be found in the ‘CMC 1992’, the ‘General Principles 1986’ and the ‘Maritime Special Procedure Law’. Yet, it is questionable whether provisions in ‘CLC 1992’ will apply to Chinese coastal service. The flaws in legislation cause disputes arising in practice and academia.

With regards to procedural law, the special procedural law for maritime proceedings, for example the ‘Maritime Special Procedure Law’ (hereinafter referred to as ‘Procedure law’), provides direct action against the underwriter who bears the onus for oil pollution for the ship-owner which is aimed to protect victims of oil pollution caused by ships. However, since there is no compulsory insurance requirement in substantial laws, the victims still cannot get protection from the ‘Procedural law’ if no insurance exists for marine pollution.

5.1.2.1. General Principles of Civil Law in China

The ‘General Principles 1986’ which was adopted on April 12th, 1986 entered into force on January 1st, 1987. As the general civil law in China, the ‘General Principles 1986’ states that occurrences of pollution damage come within the envelope of infringement of rights.

¹⁸ The Law of the People’s of China on Legislation, article 83 reads ‘if the special provisions and general provisions of laws are inconsistent, the special provisions apply’

¹⁹ Under the ‘CMC 1992’, the ship’s owner if referred to registered owner, Charter and the operator

Therefore, the onus of proof is reversed. It further states that ways to indemnity for such damage include restoring damage property to its original condition or reimburse the monetary loss.

For example: Article 9, chapter I ‘General Principles of Constitution of the People’s Republic of China’ stated that:

All mineral resources, waters, forest, mountains, grassland, unclaimed land, beaches and other natural resources are owned by the state, that is, by the whole people, with the exception of the forest, mountains, grasslands, unclaimed land and beaches that are owned by collective in accordance with the law. The state ensures the rational use of natural resources and protects rare animals and plants. Appropriation or damaging of natural resources by any organization or individual by whatever means is prohibited (Article 9 of chapter I of ‘General Principles of Constitution of the People’s Republic of China’).

Article 12 also stated that:

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 therefore, the infringer shall compensate for those losses as well (Article 12 of chapter I of ‘General Principles of Constitution of the People’s Republic of China’).

Article 124, Section III civil liability for infringement of rights of the ‘General Principles 1986’ stipulated 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 of section III of ‘General Principles 1986’).

This is the basic principle of civil compensation regarding the oil pollution damage in China.

5.1.2.2. Environmental Protection Law

The ‘Marine Environmental Protection Law of the People’s Republic of China’ (hereinafter referred to as the ‘MEPL’) was originally adopted in 1982, and revised in 1999.

5.1.2.2.1. ‘MEPL 1982’

In order to protect and improve the living environmental and ecological environment, prevent and reverse the effects of pollution and other public hazards, ensure the health of the people, promote the development and modernization of society, the 24th meeting of the standing committee of the fifth National People’s Congress adopted the first piece of legislation on marine environmental protection in China on August 23rd, 1982, the ‘MPEL 1982’. Article 2 of ‘MPEL 1982’ clearly stipulated that it only applies to domestic waters, territorial waters, contiguous zones, the exclusive economic zone, the continental shelf, and other waters under administration. Obviously, the ‘MPEL 1982’ only applies to seawaters. The question of prevention and control of pollution in waters like rivers, lakes, sea straits, reservoirs and so forth, shall be adjudicated by other laws and regulations. Meanwhile, Article 5 contains stipulations on the division of duties among the authorities responsible for marine environmental protection (the National People’s Congress of the People’s Republic of China 2013).

The ‘MPEL 1982’ was promulgated in 1982 when China had just entered into the initial stage of economic reform and openness. The legislative focused at that time was on how to control pollutants entering the sea from the production processes of industry or / and agriculture. While it focused on pollution control, it ignored the importance of protecting the marine ecological environment as a whole. For this reason, ‘MPEL 1982’ had its limit because it could not comprehensively govern the protection of the marine environment. On the other hand, the fast growth of the Chinese economy since the 1980s, particularly in the coastal regions, has put even greater pressure on the marine environment. The conflict between the goal of development and improved utilization of marine resources and of the protection of the marine environment has become even sharper. Damage resulting from

human activities other than pollution has become even more common and startling. Recent developments indicated that the old ‘MEPL 1982’ could not properly deal with all problems concerning sustainable development of the sea. In addition, legal liabilities imposed by the old law were not strong enough to prevent and control acts that caused marine environmental damage.

5.1.2.2.2. MEPL 2000

With the rapid development of Chinese economy, especially the booming of the economic activities in the seawaters and coastal areas, the marine environment faces great pressure. Therefore, ‘MEPL 1982’ turns out to be outdated and cannot properly handle the new development of economic activities. For the purpose of updating the marine environment protection law, the newly amended ‘MEPL 1982’ was passed at the thirteenth session of the standing committee of the ninth National People’s Congress of the People’s Republic of China on December 25th, 1999, and came into force on April 1st, 2000 (the National People’s Congress of the People’s Republic of China 2013). The promulgation of the revised ‘MEPL 2000’ can be seen as a significant step to strengthen Chinese further efforts to protect the marine environment and to preserve marine resources by legal means.

‘MEPL 2000’ comprises of ten chapters²⁰ with 98 Articles. Compared with ‘MPEL 1982’, chapter one of the ‘MEPL 2000’ sets out the principle and scope of application. It incorporates the term ‘sustainable development’ in prescribing the purpose of legislation, and clearly defines the scope of the application as covering internal waters, the territorial sea, the contiguous zone, ‘EEZ’, the continental shelf and other marine areas under Chinese jurisdiction. The law explicitly spells out that activities outside the waters under Chinese jurisdiction which cause pollution damage to China shall be subject to the law and clarifies the responsibility of different ministries competent to deal with marine affairs. Chapter two ‘marine environmental supervision and management’ was a new chapter, compared with the ‘MPEL 1982’. It lays down a system of co-responsibilities for marine environmental protection activities that were of a cross-regional or cross-departmental nature and sets out

²⁰ ‘MEPL 2000’ comprises of ten chapters with 98 articles, it including: General provisions; Marine environmental supervision and management; Marine ecological protection; Prevention of pollution damage to the marine environment by land based pollutions; Prevention of pollution damage to the marine environment by coastal construction projects; Prevention of pollution damage to the marine environment by marine construction projects; Prevention of pollution damage to the marine environment by dumping of wastes; Prevention of pollution damage to the marine environment by vessels and relevant operating activities; Legal liabilities of wrongdoers; Supplementary provisions. Among these 10 chapters, Chapter Eight focuses on dealing with vessel’s sources pollution

principles for adoption of marine environment quality standards, for maritime monitoring and inspection of accidents, etc. Chapter three deals with the protection of marine ecology and the establishment of special marine protection zone, a subject not covered by the 'MPEL 1982'. Chapter four to seven deal with different pollution sources and have been substantially revised. The chapter on liability provides for 'strict liability' and the polluter pays principles. Its rules on punitive measures are more detailed and precise than before. Chapter ten contains definitions and explanations of some terms and rules in the law. It also declares that international treaties ratified or acceded to by China shall be applied where their provisions are different from provisions of the law, except where reservations have been made by China.

Chapter eight in 'MPEL 1982', which provides information on the 'prevention of pollution damage to the marine environment by vessel and relevant operating activities', is special for dealing with vessel sources pollution. Unlike the 'MPEL 1982,' which mainly regulates oil tankers of 150 tonnes gross tonnage and above, and other ships of less than 400 tonnes gross tonnage, the revised law does not classify ships (Article 28 of 'MPEL 1982'). This regulates all kinds of ships, imposes higher standards and thus strengthens the protection of the marine environment from vessel sources pollution. The new law, also, contains stricter provisions requiring ships to possess anti-pollution equipment and capacities, and all ports, harbors, loading stations and shipyards are required to be equipped with anti-pollution facilities too (Article 27 of 'MPEL 1982'). While the 'MPEL 1982' contained only very general principles on pollution prevention, the 'MPEL 2000' contains a list of ship-operating activities that cannot be carriage of hazardous goods and must be notified to and be approved by the competent authority. In the meantime, the new revision requires arrangements for oil pollution insurance and compensation fund in accordance with international customs. Detailed policies and rules on the subject are to be formulated. As was the case with the 'MPEL 1982', the revised law prescribes that if an accident occurs on the high sea and causes serious pollution damage consequences or poses a threat of pollution damage to sea areas under Chinese jurisdiction, the competent Chinese authority is empowered to take necessary enforcement measures against the ships and marine installations concerned. As in the case of the 'MPEL 1982', the new law provides that all ships have the duty to be on the lookout for pollution and to report to the relevant authorities (Liu 2007:54).

In addition, Article 66 of the new 'MEPL 2000' contains in a provision which requires the state to implement a civil liability system for marine oil pollution damage and to ensure the establishment of oil pollution insurance and a compensation fund²¹.

Article 66 of the 'MEPL 2000' reads that:

The state shall revise and implement the civil liability and compensation regime for ship sources oil pollution, and shall establish ship sources oil pollution insurance, oil pollution compensation fund system in accordance with the principles of owners of the vessel and the cargoes jointly undertaking liabilities for ship sources oil pollution compensation. Specific measures for the implementation of ship sources oil pollution insurance and oil pollution compensation fund system shall be formulated by the States Council (Article 66 of 'MEPL 2000').

This is the first time in Chinese legislation that the principle of compensation for marine oil pollution damage shared between ship-owners and cargo industries which correspond with the international regime has been explicitly established.

Furthermore, article 90 of the 'MEPL 2000' stipulates that:

Whoever causes pollution damage to the marine environment shall remove the pollution 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, that third party, shall remove the pollution and be liable for the compensation. For damages to marine ecosystems, marine fishery resources and marine protected areas which cause heavy losses to the state, the department invested with power by the provisions of this law to conduct marine environment supervision and administration shall, on behalf of the state, put forward compensation demand to those held responsible for the damages (article 90 of 'MEPL 2000').

²¹ Article 66 of MEPL 1999 reads 'The state shall make 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

This provision imposes 'strict liability' on those who cause pollution damage and sets up the principle that natural resource damage suffered by the state is recoverable.

5.1.2.3. Maritime Code of P.R.C 1992

Once oil spills is caused by a collision of ships, Chapter VIII of the 'CMC 1992', collision of ships, will apply. However, the rules set forth there basically follow the 'Convention on Collision 1910', which is based on a negligence rule. This is hence contradictory to the 'strict liability' rule of the 'CLC' Convention.

Chapter XI of the 'CMC 1992' contains provisions on the limitation of liability for maritime claims. However, in article 208 of the 'CMC 1992', there is another requirement provided that provisions in this chapter shall not be applicable to 'Claims for oil pollution damage under the 'CLC' convention which the People's Republic of China is a party' (article 208 of 'CMC 1992').

The liability limitation of oil pollution damage caused by vessel's collisions can be dealt with in different situations: if the oil accident vessel is within the scope of application set forth in the 'CLC' convention, then the ship owner may be entitled to the limitation provided for the international convention; if the oil accident vessel does not fall within the scope of application of the 'CLC' convention, then the indemnity for oil pollution damage is a restricted credit right which meets the condition for liability for maritime claims, whereby the limitation in chapter XI will be applied.

5.1.2.4. Administrative regulations

As I mentation above, the most important regulation in China is the 'Regulations on Control over Prevention of Pollution by Vessels in the Sea' (hereinafter referred to as 'RCPPVSW'). The 'RCPPVSW' equally applies to Chinese flag and foreign flag vessels, once the ships, as well as ship owners and other relevant individuals are within the seawaters or seaports under the jurisdiction of China. The 'RCPPVSW' mandates the complying with 'MEPL 1982' and other regulations relating to the discharge of oils, oily mixtures, wastes and other poisonous or harmful substances.

1) Administrative Rule and Regulation concerning the Protection of the Marine Environment

In order to implement the ‘MEPL,’ for the purpose of preventing ships from polluting the sea and safeguarding the ecological environment of the sea, the state council of the Chinese government promulgated the ‘Administrative Rule and Regulation concerning the Protection of the Marine Environment’ (hereinafter referred to as ‘ARPSP’) on December 1983. Now that the ‘MEPL’ was revised in 1999, the ‘Regulation’ is outdated, and it is now in the process of revision to keep it in line with the new provisions in the ‘MEPL 2000’ (the National People’s Congress of the People’s Republic of China 2013).

The ‘ARPSP’ applies to ship owners and other people as well as ships with Chinese and foreign nationality on the sea or in seaports under Chinese administration. The harbor superintendent is the competent authority to prevent pollution of the sea environment by ships. This regulation is the first administrative statute that specifically concerns preventing pollution of the sea by ships. The provisions of this regulation are detailed, including seven chapters²². Concerning the competent authority, article 54 provides that functions and powers mentioned under these rules are exercised by the ‘National Fishery Superintendent Office’ within the waters of fishing ports. Article 55 states that the ‘Military Environmental Protection Department’ may provide other detailed regulations on the matter of pollution administration of military ships as well as the military administrative area inside seaport according to the ‘MEPL 2000’ and this regulation. In addition, article 53 stipulates that as for foreign ships, pollution administration can also be made on the basis of ‘equal principles’ in addition to the ‘ARPSP’. If an accident occurs which causes or might cause serious marine environmental pollution damage, the harbor superintendent has the right to take strict measures to avoid or reduce damage, including the measures of compulsory removal or towage (Article 53 of ‘ARPSP’). All expenses should therefore be assumed by the ship involved.

22 Chapter I ‘General Rules’, Chapter II ‘General Provision’, Chapter III ‘Documents and devices of antipollution for ships’, Chapter IV ‘Oil operation of ships and discharge of foul water’, Chapter V ‘Carriage of dangerous cargo’, Chapter VI ‘Other shipping sewage’, Chapter VII ‘Shipping waste’, Chapter VIII ‘Waste dumping by ships’, Chapter IX ‘Repair and building as well as salvage of ships above and under water and project of ship dismantling’, Chapter X ‘Compensation for damages by ship’s pollution accident’, Chapter XI ‘Punishment and rewards’ and Chapter XII ‘Supplementary provision’.

(2) Provisions concerning the limit of liability for maritime claims for ships with a gross tonnage not exceeding 300 tonnes and those engaging in coastal transport services as well as those for other coastal operations

This regulation was approved by the State Council of P.R.C on November 7th, 1993 and promulgated by decree no.5 of the Ministry of Communications on November 15th, 1993 (the National People's Congress of the People's Republic of China 2013). The content of the regulation reads that:

Articles 1 these provisions are enacted in accordance with article 210 of 'CMC 1992'.

Article 2 reads that:

These provisions shall apply to the ships with a gross tonnage exceeding 20 tonnes and not exceeding 300 tonnes, and those with a gross tonnage exceeding 300 tonnes engaging in transport services between the ports of the People's Republic of China as well as those for other coastal operations (article 2 of the provisions).

Article 3 regarding the limitation of liability reads that:

The limitation of liability for maritime claims for ships with a gross tonnage not exceeding 300 tonnes, except as otherwise provided for in article 4 of these provisions, shall be calculated as follows: In respect of claims for loss of life or physical injury, 54000 units of account for a ship with a gross tonnage in excess of 20 tonnes and less than 21 tonnes (article 3 of the provisions);

(3) Regulation on the prevention and control marine environment pollution from vessel sources of the People's Republic of China

The executive meeting of the State Council approved the new regulation on the prevention and control marine environment pollution from vessel sources of the People's Republic of China (hereinafter referred to as 'Regulation') on September 2nd, 2009. And it came into

force on March 1st, 2010. In the new regulation, there are several provisions merits to pay special attention:

Article 7²³ provides that:

The ship-owner shall bear the costs of oil clean-up and compulsory actions taken by the authority. In cases where marine accidents have caused, or are likely to cause, major pollution damage to the marine environment, the harbour superintendence administration shall have the right to compel the adoption of measures to avoid or reduce this pollution damage, including measures of compulsory elimination of pollution or compulsory towing of the vessels. The vessels causing the problems shall bear all the costs arising therefore.

Article 39 states the vessels which cause pollution shall pay ‘the cost of eliminating pollution and compensate for the losses suffered by the state’²⁴.

In case of vessel violated the ‘Marine Environmental Protection Law of the P.R.C’ and then caused oil pollution damage to the marine environment, the harbour superintendence will fine the vessel to eliminate pollution and compensate for the state’s loss. If the vessel owner refuses to accept the fine, the harbour superintendence has the right to bring a lawsuit to ship’s owner according to the stipulation of article 41 of the ‘Marine Environmental Protection Law of the People’s Republic of China’.

As far as the scope of compensation is concerned, only the oil clean-up costs and the losses suffered by the state are specifically mentioned. As for private parties who suffer losses, there is still no clear provision indicating if and in what manner their losses can be compensated.

23 Article 7 reads ‘Where a marine accident has occurred to a vessel which has caused or is likely to cause environmental pollution damage, the Harbor Superintendence Administration may decide to take whatever compulsory steps necessary to avoid or mitigate any pollution damage, such as compulsory cleaning up or compulsory towage. All the expenses incurred therefore shall be borne by the owners of the vessels concerned.’

24 Article 39 reads ‘The Harbor Superintendence Administration may order vessels violating the Environmental Protection Law of the People’s Republic of China and these Regulations and causing marine environment pollution damages to pay the cost of eliminating pollution and compensate for the losses suffered by the state.’

Article 13 specifically requires that: Vessels engaged in international trade with the oil cargo capacity of 2,000 tonnes in bulk shall, besides observing these rules, be bound by the provisions of the 'CLC 1969' (article 13 of chapter II of 'Regulation'). As a result of this article, tankers involved in international trade should have to meet the requirement of the 'CLC', as far as compulsory insurance is concerned.

Article 40 of the 'Regulations of the P.R.C on the Prevention of Vessel Induced Sea Pollution' stipulates that:

In the event that units or individuals that have suffered pollution damage as a result of the marine environmental pollution by vessels demand civil liability compensation, the matter shall be handled in accordance with the handling procedures stipulated in article 42 of the 'Marine Environmental Protection Law of the People's Republic of China'. Disputes over liability for and the amount of compensation may be handled by the harbour superintendence through conciliation. If a party does not agree, a suit may be brought before the people's court. Cases involving foreign vessels may also be solved in accordance with arbitration procedures (article 40 of chapter V of 'Regulation').

Article 44 of the 'Regulations of the P.R.C on the Prevention of Vessel Induced Sea Pollution' stipulates that:

In case of vessel induced pollution, the ship owners who request exemption from liability for compensation shall submit to the harbor superintendence a report, which shall be able to prove that the pollution damage has been caused entirely by one of the circumstances as listed in article 43 of the 'Marine Environmental Protection Law of the People's Republic of China', and that the pollution damage to the marine environment could not be avoided despite all prompt and reasonable measures (article 44 of chapter VI of 'Regulation').

Article 58, chapter VIII legal liability on the prevention of vessel included sea pollution:

In case of violation of the regulation by vessels or the relevant units in operation, the maritime administration shall order the correction of the defaults be made. In the event that the faults are refused to be corrected, the maritime administration may order that the relevant operation ceased, cargos discharged compulsorily, vessels prevented from entry into and out of the port / berth or transit stopover, or order that the navigation suspended, the course changed, vessels depart from the waters under the jurisdiction of People's Republic of China, or sail to the designated site (article 58 of chapter VIII of the 'Regulation')

From the above description of the Chinese legal perspective, it is apparent that most provisions of Chinese municipal law are drafted in so ambiguous that it is very difficult to be applied in judicial practices. It is because Chinese municipal law lacks of explicit, uniform criterion, judges, in many case, have to apply their discretion in judgment and interpretation. This is the key reason why the different conclusions come to by the different judges in different court or even from judges in the same court.

5.2. Trial system for oil pollution damage in China

5.2.1. Judicial system in China

The judicial system is a necessary component of the state machinery for governing the country. It can be defined as an 'entire network of courts in a particular jurisdiction' (Garner 1990:849). The legalese 'judiciary' has a boarder meaning as it is used in conjunction with the term 'judicial system'. It refers to the department or branch of government vested with the judicial power or right to interpret, construe, and apply the existing law. Research on the Chinese judicial system, you can find that there are two different views in China about the definition of 'judicial system': one view is that, the 'judicial system' is as the entire judicial system of the people's court, the people's procuratorate, the public security organ and the judicial administrative organ and their function of judicial enforcement, etc.; another view is that the judicial system in China only cover the organization and activities of the court and the procuratorate, it does include the function and judicial enforcement of the public security organ and the judicial administrative organ (Chen & Tang 2000:6).

5.2.2. Maritime courts in China

Current the ‘Constitution of the People’s Republic of China’ and the ‘Organic Law of the People’s Courts of the People’s Republic of China’ (Revised in 2006) stipulated that People’s courts represents Chinese government is the main trial organization in China. According to the organizational structure of the People’s court, the People’s court system consists of local courts, intermediate People's courts (including some special court, such as maritime court, military courts and railway court), higher People’s courts and the Supreme Court, with the first three courts subject to the supervision of the latter (China ORG. CN 2012).

The supreme People’s court is located in Beijing, the capital of China. The supreme People’s court is the highest judicial organ in China. It exercises the highest judicial power and supervises the intermediate People’s courts, local People’s court and special courts. The supreme People’s court is composed by the president, vice presidents, chief justice and judges.

Local People’s courts are the numerous tribunals which located in counties / autonomous counties, cities without administrative districts, or administrative districts of cities. Intermediate courts are set up cities which directly under provinces, autonomous regions and municipalities which directly under the central government and districts in four municipalities direct under the central government (hereinafter referred to as ‘municipalities’). Higher courts are set up in the capital city of provinces, autonomous regions and municipalities. They all exercise state judicial power under the leadership of the supreme People’s court.

Special courts oversee specific spheres and set up in the particular department for an unusual case wherever necessary, such as military cases, railway cases, and would also include the marine industry – maritime courts being a good case in point. These were naturally generally located in seaboard cities such as Dalian, Tianjin, Qingdao, Shanghai, etc. These are operating to cover maritime disputes in their surrounding coastal areas and

provinces. They also run on a par with intermediate courts and are the first step in maritime cases (China ORG. CN 2012).

Maritime courts are special intermediate courts set up in Chinese coastal cities. Their main functions are to try a first hearing of maritime or water transportation cases for the purpose of exercising judicial jurisdiction over maritime affairs. Maritime courts were established in ten principal port cities of China according to the decision by the Standing Committee of the National People's Congress in 1984. As part of the state's judicial organs, maritime courts are at the same level with the intermediate people's courts and are special courts of the first instance in dealing with internal and external maritime commercial and / or maritime cases in China (He & Lu 1993:23).

As of 2013, there have been ten maritime courts set up in China. They are Maritime Courts of Beihai, Dalian, Guangzhou, Haikou, Ningbo, Qingdao, Shanghai, Tianjin, Wuhan and Xiamen. They exercise jurisdiction over the coastal waters and their extended waters respectively for the provinces in which they are located. The jurisdiction area of Wuhan Maritime Court is the Yangtze River and other waters connected with the Yangtze River (UK P&I Club 2012).

The maritime court has jurisdiction on all cases arising from shipping, water transport, and majority of the trade case in which the maritime factors are involved. Especially as far as marine oil pollution compensation is concerned.

Under China's current judicial system, the supreme people's court in Beijing can issue circulars and / or notices to other courts in China. This kind of circulars and / or notices also serve as judicial directives on the interpretation and application of laws. They are authoritative in the Chinese judicial system and they are binding on the other lower level courts. With economic and international trade increasing rapidly, oil pollution damage and the oil pollution compensation case with foreign elements are also on the rise. To ensure China's judicial practice can keep line with international convention in the judicial process, Chinese supreme people's court issued several circulars and / or notices to Chinese lower level courts, which are directly related to the interpretation and application of international convention provisions. Simultaneously, the Chinese supreme people's court also

established a judicial review mechanism to supervise the enforcement of international commercial arbitral awards by the Chinese courts (UK P&I Club 2012).

Furthermore, China's legal system is a statute system, it is not case law, such as in the UK, for the reason that there is no '*stare decisis*' principle can be found in China's legal system and judicial practice ('*stare decisis*' means the policy of courts to abide by or adhere to principles established by the adjudication in previous cases). For the general trial practice, judicial directives issued by the supreme people's court play a significant role in guiding the trial practice in the interpretation and application of laws. At the same time, as per provisions of article 142 of the 'General Principles 1986', provisions of article 238 of the 'Civil Procedure Law', international conventions can be directly invoked as the legal basis for the judgment of justice. However, there are still some confuses and questions on how to apply international conventions from different courts with different cases. The key reason is local courts are not certain about the exact meaning of some international convention terms or the intention of contracting member states. To help clarify and resolve such questions and uncertainties, Chinese supreme people's court issued several notices of judicial directives on the interpretation and application of international treaties on civil and commercial matters to guide China's judicial practice.

5.3. International conventions and Chinese municipal law

Honestly speaking, the Chinese government has made considerable progress in past thirty years with respect to implementation of international obligations and / or conventions in the Chinese domestic legal system. Although China's constitution and its basic laws do not set forth a general provision on the status of international obligations and / or conventions in the domestic legal system, due to substantive treaty obligations being undertaken by China and some was having largely been incorporated into special national laws. This is playing a significant role and increasingly impact on the economic and social activities of China. Ever since the establishment of the people's Republic of China in 1949, China's accession to an implementation of international conventions in good faith has been not only one of China's basic policies of foreign affairs, but also a fundamental principle of Chinese law. According to provisions of the law of the People's Republic of China on the

Procedure of the Conclusion of Treaties promulgated in 1999 (hereinafter referred to as ‘the Treaty Procedure Law’), all international conventions shall be concluded and fulfill necessary domestic legal procedures in China since 1999) (Xue & Qian 2009:301).

Regarding the ‘CLC’ and Chinese oil pollution protection legal system, article 66 of the new version of the ‘MEPL 2000’ states that:

The state has improved and implementation of the vessel oil pollution damage civil liability regime, according to the principle which the risk of the oil pollution damage will be taken by ship-owner and the cargo industries, to build the compulsory insurance, oil pollution compensation fund regime. The implementation of the ship’s oil insurance and the oil pollution compensation fund system will be approached by the State Council (article 66 of ‘MEPL 2000’).

The implementation of the oil pollution compensation regime which according to the requirement of the modification of the ‘Maritime Environment Protection Law’ article 66 should include two aspects: ‘ship oil pollution insurance approach’ and ‘the implementation on how to establish the oil pollution compensation for oil pollution damage by the vessel’. As the Chinese government has accepted ‘CLC 1992’, and has entered into effect in China, when we make the implementation regarding domestic shipping insurance, we must clearly understand the relationship between international conventions and domestic legislation.

5.3.1. Three models on how international conventions transform into Chinese municipal law

For those treaties that came into force internationally to be implemented in any one country, the precondition is that national laws of that country must ‘admit’ treaties. With regard to the application of international conventions, this involves the relationship between international and national law. Theoretically, there are the doctrines of the *Monistic* (dependent) and the *Dualistic* (independent) application (Xue & Qian 2009: 302). In enforcement practices for international conventions around the world, there are three main methods, which are

‘adoption’, ‘transformation’ and ‘mixture’ of adoption and transformation which will be discussed in detail as follows:

5.3.1.1. Adoption

This method is monistic, that is, it accepts that international treaties (including international conventions) are laws, and those they, with national laws; belong to the same legal system. They can be applied directly in the country after they are adopted into national laws of that country. Most western countries mainly adopt this method, such as, France, Switzerland, Netherlands, Japan and most European continental countries (Xue & Qin 2009: 303).

5.3.1.2. Transformation

This method is dualistic, that is, it accepts that international treaties (including international conventions) are laws, but classifies them as belonging to a different legal system from their internal laws. The way to enforce international laws is to transform international treaties and / or conventions into national laws through national acts. This transformation refers to a domestic legislation which implements conventions. In Great Britain, it is also referred to as statutory law carrying out the international convention. ‘In the United Kingdom, the provisions in one convention would not be laws before they are carried out as a decree or legal document’. There are several legislative techniques when granting international conventions legal effect: the decree may be enacted based on the treaty (the treaty, itself, is not incorporated into the decree), the decree may point out the legal force to grant the convention either in its title or preface or not. The decree could list the main body in English (or French or other languages) into its catalogue, or it could, also, list the main body in English or French (or other languages) into a different part from its contents.....’ United Kingdom is a typical dualistic approach, in addition, Australia, Canada, Italy and Germany, and so on are dualistic approach too (Dicey 2001: 84).

5.3.1.3. Mixture of adoption and transformation

Some countries use methods of adoption and transformation simultaneously when they apply international conventions in their own country. Based on treaties’ varied characteristics and contents, they apply some treaties directly through adoption, while transforming some into municipal laws with various legislative measures. The United States

is a typical example of a country that uses both ways. The American judicial practice divides treaties that can be applied directly in the United States, and thus, non-self-executing treaties require some legislative act (so they can, usually, be applied in the United States after legislation is made to carry them out). As to the distinction between self-executing and non-self-executing treaties, it is considered directly by domestic courts and administrative organizations. The latter, on the other hand, are those with general obligations, which cannot be applied directly. However, in practice, the interpretation of this distinction and the affirmation of these two kinds of treaties in different countries are varied and largely arbitrary (Zou 1999:212).

5.3.2. International conventions ratified by China

China has participated more than ten international conventions with purposes of preventing marine environment pollution from vessel sources until the end of 2013 as follows:

- 1) International Convention relating to Intervention on the High Seas in cases of Oil Pollution Casualties (1969);
 - 2) Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (1972);
 - 3) Convention on the Interference of Pollution made by Substance Except Oil in Public Ocean (1973);
 - 4) International Convention for Prevention of Pollution from Ships (1973);
 - 5) International Convention for the Safety of Life at Sea (1974);
 - 6) International Convention on Seamen Training, Certificate and Watching (1978);
 - 7) International Convention on the Law of the Sea (1982);
 - 8) International Convention relating to Oil Pollution Preparedness, Response and Cooperation (1990);
 - 9) International Convention on Civil Liability for Oil Pollution Damage 1992;
 - 10) International Maritime Safety and Management Code (1998).
- (The National People's Congress of the People's Republic of China 2013)

Reviewed above mentioned international conventions, nine of them are designed to deal with the prevention of and response to marine pollution damages, only 'CLC 1992' exclusively provides for the civil liability and compensation in respect of oil pollution damage from vessel sources. Therefore, 'CLC 1992' is the international convention that shall apply to civil liability disputes in the foreign elements related oil pollution cases.

China acceded to the 'CLC 1969' on January 30th 1980, which entered into force in China on April 29th, 1980. Due to the compulsory denunciation procedure, China has denounced the 'CLC 1969' and joined the 'CLC 1992', which was effective in China since January 5th, 2000. When the 2000 amendment to the 'CLC' came into effect on November 1st, 2003, the Chinese government has, since, raised no objection or any announcement of the reservation, under the tacit acceptance procedure, the 2000 amendment to the 'CLC' is effective in China as well²⁵.

5.3.3. Confusion regarding international conventions application in China

The Chinese approach in dealing with the relationship between international conventions and municipal law, strictly speaking, is neither the monistic nor the dualistic approach, as discussed by Mr. Xiaohan Yu (2003: 28). One may find different approaches in various Chinese statutes dealing with specific areas of law. A frequently adopted approach as far as maritime affairs are concerned, is to embrace the principles of international conventions that China has acceded to in the related Chinese law, which is a monistic approach. Take the 'CMC 1992', for instance, chapter eight on the collision of ships is de facto based on the principles set up by the 'Collision Convention 1910' which was ratified by China, although there is no reference to this convention (Faure and Hu 2006:135). In this respect, article 66 of the 'MEPL 1999' obviously embraced the general principle of the 'CLC' and the 'Fund Convention', although there are criticisms concerning these provisions. Furthermore, there is no specific provision on how to apply international conventions joined by the Chinese government in the constitution. One may find a reference in the 'General Principles 1986'

25 The tacit acceptance procedure was introduced in the 1992 Protocols to allow for an easy amendment of the conventions. It means that the Protocol would come into force unless a certain number of States raised objections to the Protocol within a certain period of time (different than the traditional ratification procedure which requires that a Protocol would come into force when a certain number of States ratified it)

more particularly in article 142 (2), which have established the supremacy of international conventions when provisions in national law differ from the convention. Such a principle is in case of a conflict between international conventions to which China is a party and the municipal law; the international convention shall prevail unless a reservation has been made by the Chinese government. The ‘CMC 1992’ and the ‘MEPL’ both follow such a rule to give priority to international conventions²⁶.

The application of this seemingly obvious and simple principle is problematic in practice. Legal scholars and courts have different opinions on the application of this principle. There are two major opinions in this respect:

The first opinion holds that the Chinese law should apply in purely domestic issues and the international convention applies only when a ‘foreign element’ is involved. The arguments to justify this opinion are as follows: Article 268 of the ‘CMC 1992’ which recognizes the supremacy of the international convention is provided in the chapter titled ‘Application of Law in Relation to Foreign related Matters²⁷’. This implies that international conventions shall apply only when there is ‘foreign element’ involved. As for pure domestic issues, it is only the Chinese law that shall be applied. This can be further confirmed by the sovereignty of states that should not be interfered with²⁸. Some scholars also argued that the reason behind the newly added article 66 of ‘MEPL’ is to avoid the direct application of ‘CLC’ in China to all cases, and to stress the importance of municipal law in the process of handling marine pollution cases. Another argument which is employed as the legal basis for this opinion is found in the ‘Regulations of the People’s Republic of China Concerning the Prevention of Pollution of Sea Areas by Vessels’. Article 13 of this regulation stipulates that ‘vessels engaged in international trade with a bulk oil carrying capacity of 2,000 tonnes shall, besides observing these ‘regulations’, be bound by provisions of the ‘CLC 1969’. As a result, for the vessel not navigating on international lanes, being the offshore and inland water

26 Article 97 of Marine Environment Protection Law 1999 reads that: ‘If the provisions provided in an international treaty regarding environment protection concluded or acceded to by the People’s Republic of China are not consistent with the provisions provided in this law, the provisions of the international treaty shall apply, unless the People’s Republic of China has announced reservations.’

27 Article 142 of the General Principles of Civil Law which recognizes the same principle is also under a separate chapter ‘Chapter VIII Application of Law in Civil Relations with Foreigners.’ Article 189 of the Civil Procedure Law follows the same model

28 Article 97 of Marine Environment Protection Law 1999 reads that: ‘If the provisions provided in an international treaty regarding environment protection concluded or acceded to by the People’s Republic of China are not consistent with the provisions provided in this law, the provisions of the international treaty shall apply, unless the People’s Republic of China has announced reservations.’

navigating ships, national law shall apply. There are many scholars in favor of this opinion and this opinion is mostly followed in practice.

In addition, 'CMC 1992' requires that 'if any international conventions concluded or acceded to by the P.R.C contain provisions which are different with Chinese laws, the provisions of relevant international conventions / treaties can be priority applied, unless there is a provision in which P.R.C has announced reservations.' Furthermore, international practice may be applied to matters for which there are not any stipulations Chinese laws and international conventions / treaties (article 268 of 'CMC 1992'). The relationship between relevant international conventions and the domestic legislation in China, which stated in the 'General Principles 1986' article 142 are included in the 'foreign relations' chapter, in the absence of foreign factors; it would be enforced in municipal law. According to this view, the provision about the domestic shipping management should not be restricted by the provisions of international conventions. Qingdao Maritime Court held this opinion when she heard the case '*Yan Jiu You 2*' at 1994.

The second opinion holds that international conventions / treaties take precedence over municipal law, whether domestic or international routes of the ships are to be carried out 'CLC 1992', and should not have distinction. Its basis was: the newly amended 'MEPL' supplementary provision article 97 states: 'when there is a difference between provisions of the 'MEPL' and relevant international conventions / treaties which the People's Republic of China take part in or participate, international conventions / treaties were the priority application. However, the P.R.C statement of the reservation was accepted. Since the Chinese government has joined the 'CLC 1992', and does not hold a statement reservation; it should apply the 'CLC 1992'. Furthermore, although the rule that international conventions prevail is indeed provided in a separate chapter on foreign related issues in the 'General Principles 1986' and the 'CMC 1992', it does not necessarily mean that international conventions should not apply to cases where no foreign elements are involved (Yu 2003:18). Anyway, by virtue of provisions on the scope of application of the 'CLC', the 'CLC' does not distinguish a foreign related case from a non-foreign-related case. Moreover, the 'MEPL 1999' does not even have a separate chapter dealing with so called foreign related issues, which implies that the same rules shall apply in marine environmental protection. A third

argument can be found in the preamble of 'CLC' convention where it is stated that the convention was aiming to 'adopt uniform international rules and procedures for determining questions of liability and providing adequate compensation.' Thus international conventions / treaties were designed for uniformity, not differentiating between internationally navigating vessels and offshore vessels. Hence, international conventions shall apply to all cases to avoid complications and to maintain uniformity, no matter whether it has foreign related elements or not, as discussed by Mr. Xiaohan Yu (2003: 19).

It indeed happens in practice that in cases where only Chinese offshore vessels are involved, different maritime courts apply different rules: those laid down in international conventions or those in the Chinese law. This leads to confusions as court decisions are not consistent with each other. For example, in two cases where all parties involved were Chinese, the Qingdao Maritime Court ruled in 1994 that the request to apply the 'CLC' should be rejected as there is no foreign element involved. In contrast, the Guangzhou Maritime Court in the '*Min Ran Gong 2*' case in 1999 granted the limitation under the 'CLC' to the ship owner and refused the application of Chinese laws, as discussed by Ms. Lixin Han (2006: 195).

5.3.4. Case study

In China, the practice of the application of international conventions does not correspond to the doctrines of either monism or dualism. As to the conventions, China has accepted, China applies these conventions directly or indirectly in different ways depending on their different characteristics and fulfills its obligations as a state party to the conventions.

In Chinese maritime judicial practice, there are contradictory cases about whether the 'CLC' should be applied to oil pollution damage in China without foreign elements. For example, in the case of M/V '*Yan Jiu You 2*', the Qingdao Maritime Court did not apply the 'CLC'.

5.3.4.1. '*Yan Jiu You 2*' Case

This case occurred on August 16th, 1994, when M/V '*Yan Jiu You 2*' was taking shelter from a typhoon. It was polluted to shore by the storm and the bottom of the ship was broken. Most of the 995 tonnes of oil cargo were spilled, causing serious damage to aquatic plants.

The ship's owner of M/V '*Yan Jiu You 2*' applied limitation of liability for maritime damage to Qingdao Maritime Court in accordance to the 'CLC.' The Qingdao Maritime Court, however, held that 'CLC' should not be applied to ships of less than 2000 tonnes sailing in Chinese coastal waters, and then rejected the ship-owner's application (China Foreign-related Commercial and Maritime Trial n.d. 2010).

However, In the case of M/V '*Min Ran Gong*', the Guangzhou Maritime Court held that the 'CLC 1992' shall be applied to the case of civil liability for oil pollution damage caused by coastal vessels, no matter whether foreign elements are involved or not.

5.3.4.2. '*Minrangong 2*' V '*Dong Hai 209*'

At 21:15 of March 22nd, 1999, M/T '*Minrangong 2*' loaded with 1,032.067 tonne 180 fuel oil collided with the empty tanker '*Dong Hai 209*' in the Neilingding channel Guangzhou province. The bow of the '*Dong Hai 209*' crashed into No. 2 and No.3 oil tank of the '*Minrangong 2*' and the cargo oil loaded in '*Minrangong 2*' spilled into the accident waters.

The losses of this case reached 3,700 million Yuan RMB. The owner of the '*Minrangong 2*' applied the liability limitation to maritime court in accordance with 'CLC 1969' which Chinese participation, that is, 52,934 unit SDR. After the application and public notice form maritime court, the Guangdong Maritime Court received objection from the Environmental Protection Bureau of Zhuhai and Provincial Oceanic and Fisheries Agency Guangdong. Two of them defended that the convention vessel was for international routes and the deadweight is more than 2,000 gross tonnes oil tanker, '*Minrangong 2*' is not a convention vessel, she did not enjoy the provisions from convention about the limitation of liability. This case should apply requirements of Chinese 'MEPL' anti-pollution regulation and 'General Principles 1986', the owner of '*Minrangong 2*' should assume full responsibility for the damage to the environmental and other loss.

After hearings, the Guangzhou Maritime Court thought that: Article 1 of the 'CLC 1969' states: 'vessel means any seagoing vessel and any seaborne craft of any type whatsoever, actually carrying oil in bulk as cargo', there is no distinction between the size of the tonnage. So the convention should be considered that the convention will apply to all seagoing vessels

with bulk oil on board. Although the cargo oil carrying in the *'Minrangong 2'* was less than 2,000 tonnes, in accordance with 'CLC 1969', the convention can be applied. The two objectors thought that *'Minrangong 2'* cannot apply 'CLC 1969': lack of legal basis, could not get court support.

The decision of this case limited the *'Minrangong 2'* liability in the 52,934 SDR, the actual loss of this accident is about 3,700 million Yuan RMB, so most of the damage could not be obtained compensation (China Foreign-related Commercial and Maritime Trial n.d. 2010).

5.5. Conclusion

The result of no clear provisions in Chinese law on compulsory insurance or on the compensation fund, in combination with the low limit of liability under the 'CMC 1992', is that victims of oil pollution in China are often left in a disadvantageous position with insufficient compensation or no compensation at all. Even when the 'CLC' is uniformly applied, for a purely domestic issue as well, given the particular situation of China, still problems arise. Indeed, in China small size tankers are mostly employed, and the compulsory insurance requirement is not obliged for these small tankers. Therefore, the higher limitation amount under the 'CLC' seems better in theory, but may not be effective to influence the practice in China, given the fact that the requirement to purchase compulsory insurance under the 'CLC' only applies for tankers above 2,000 tonnes.

Moreover, among the ships carrying oil on domestic lines, many of them are small tankers which are privately owned. Some of these ship-owners have only a single vessel registered under their names, which lowers their financial capability in case of liability. Some of these tankers are badly maintained old tankers, or with single hulls, which increases the potential accident risk. Under this situation, the ship-owner is often insolvent and is unable to pay the full compensation; when the pollution damage exceeds the ship owner's liability, the surplus part cannot be paid.

China has not yet established a complete system for oil pollution compensation that can constitute definite financial sources for oil pollution damage. The pollution damages are

often inadequately compensated, and thus great social losses are incurred. As a consequence, clean-up activities and preventive measures are not encouraged either.

CHAPTER SIX

CHINESE CURRENT PROBLEM: OTHER RELEVANT ISSUES

This chapter will continue to examine China's current problems. This chapter will be the particular focus on the critical study of the liability limitation, compulsory insurance and the oil pollution claim in China.

6.1. Liability limitation

Despite the debate on whether the limitation right shall be granted to those who cause oil spills, there are more problems in this respect, as limitation amounts under the 'CMC 1992' and the 'CLC' are different.

When the limitation amount under 'CLC' applies to cases where foreign elements are involved, and 'CMC 1992' applies to purely domestic tankers, tankers of the same size may be confronted with different limit. Also, as we have shown, the limitation under the 'CMC 1992' is much lower than those under the 'CLC'. The lower limitation amount under the 'CMC 1992' is likely to be inadequate and often.

Even when the 'CLC' applies of oil pollution compensation in China, as far as the limitation of liability is concerned; it may provide a higher amount of compensation to victims only under the strict assumption that the compulsory insurance is well implemented as well. Although the limitation amount provided under the 'CLC' is higher compared to the 'CMC 1992', if the ship-owner is not insured up to this amount, he will unable to pay such a high amount because of his restricted financial capacity. As a result, the high limitation amount without any form of financial guarantee is in vain.

Furthermore, limitation of liability for maritime claims is important for the shipping industry. The original rational of limitation of liability is to encourage the shipping industries to great

develop. It is well known that shipping industries is a risky business. Ship owners are not only exposed to the perils of the sea, but also suffered by the negligence of Master and crew members under ‘Hague / Visby rules’, which holds the ship-owner vicariously liable for the negligence of his employees.

However, regarding the liability limitation of the vessel, there are no special laws and regulations governed in China until now, only a few piecemeal legal provisions scattered in the different Chinese domestic laws, they are, ‘General principles of the Constitution’, ‘General Principles 1986’, the ‘CMC 1992’, the ‘MEPL’, and ‘Regulations on the Prevention and Management of Vessel – Induced Sea Environment Pollution of the People’s Republic of China’ is being amended.

The ‘MEPL’ is an administrative rule. It only prescribes the basic principles of liability limitation under the civil liability and has no rules on the liability limitation and the extent of compensation.

As a special law to ‘General Principles 1986’, ‘CMC 1992’ prescribes the liability limitation for vessels sailing in domestic routes in chapter eleven, but the liability limited in this chapter is for all kinds of accidents, not for the oil pollution compensation only. Compared with the limitation in ‘CLC 1992’, the limitation in ‘CMC 1992’ is much lower, especially for small ships. For more detail, please refer to appendices – appendix II – ‘CMC 1992’.

Now, ‘CMC 1992’ of P.R.C is being amended, a new chapter on the compensation for oil pollution damage will be added to it, which may prescribe the liability limitation for vessels sailing in domestic voyage, but it will take a while for the amendment.

6.1.1. General principles of the constitution

Article 9, chapter I of ‘General Principles of the Constitution of the People’s Republic of China’ reads that:

All mineral resources, waters, forest, mountains, grassland, unclaimed land, beaches and other natural resources are owned by the state, that is, by the whole people, with the exception of the forest, mountains, grasslands, unclaimed land and beaches that are owned by collective in accordance with the law. The state ensures the rational use of natural resources and protects rare animals and plants. Appropriation or damaging of natural resources by any organization or individual by whatever means is prohibited (article 9 of chapter I of ‘General principles of the Constitution of P.R.C’).

6.1.2. General Principles of the Civil Law

Article 124, Section 3 ‘Civil liability for infringement of rights’ of the ‘General Principles 1986’ stipulates 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. This is the basic principle for civil compensation on oil spills pollution (article 124 of section III of the ‘General Principles 1986’).

6.1.3. ‘MPEL 2000’

Article 66 of ‘MPEL’, which was originally adopted in 1982 and revised in 1999, reads that:

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

This is the first time in Chinese legislation that the state has been invoked to implement a civil liability system for marine oil pollution damage and to ensure the establishment of oil pollution insurance and a compensation fund. However, the article 66 only states such a general principle and requires the State Council to formulate implementing measures. So far, no specific measures have been implemented by the State Council. As a result, the principle of joint liability between the ship-owner and the cargo owner remains at a theoretical stage, the requirement of compulsory insurance is not effectively implemented and there has been no compensation fund set up in China so far.

Article 90 of the 'MEPL 2000' stipulates that:

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 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.

This provision imposes 'strict liability' on those who cause pollution damage, and sets up the principle that natural resources damage suffered by the state is recoverable. However, due to lack of accuracy, problems exist concerning the application of this article. One problem has to do with the fact that there is no provision on a limitation of liability of any party in the 'MEPL' 2000. Hence, the first paragraph of article 90 'Those who cause pollution damage to the marine environment shall ... compensate the losses' is interpreted as a duty to compensate the actual loss to the full amount. Though, in practice those who are accused of discharging oil often refer to the provisions of the 'CMC 1992' to limit their liability. Moreover, the 'MEPL 2000' only specifies, in article 90 paragraph two, that natural resources damage is compensable. Concerning other damages, for instance, economic losses sustained by private parties, there is only general reference to the 'losses' that they should be compensated. It remains unclear as to how this provision must be interpreted.

It seems that article 66 imposes liability for oil pollution damage compensation on the ship-owner, while article 90 imposes the liability on the oil discharger, which is not exactly the same concept as the owner of the ship. So, according to article 90, liability can be imposed on anyone responsible for the pollution in theory: charterer or operator. However, in practice, the maritime courts in China often interpret article 90 of the 'MEPL' as implying the ship-owner is the one who is responsible for the ship and therefore also responsible for the pollution damage caused by its vessel.

A result of provisions in the 'MEPL 2000' is that when a claimant brings an action for compensation for oil pollution damage in practice, the 'MEPL' alone does not suffice to provide a solution to the oil pollution compensation problem. Hence, one has to call on other legislation like the 'CMC 1992' as well.

6.1.4. Maritime Code 1992

The 'CMC 1992', as a special law has priority to the common law, provides a legal right for the ship's owner and salvor to limit their liability under the regime of 'global limitation' to the maritime claims. The 'CMC 1992', however, excludes the application of limitation to oil pollution damage where special limit regimes apply by international convention on oil pollution compensation, of which China is a party. This means that only tanker owners whose tankers are engaged in international trade are entitled to limitations under the 'CLC 1992'.

As the author mentioned before, oil dischargers, when confronted with claims for compensation often refer to the 'CMC 1992' to obtain the right of limiting their liability to a certain amount. Chapter XI of 'CMC 1992' deals with 'the limitation of liability for maritime claims.' However, in the 'CMC 1992', the only explicit mentioned regarding the oil pollution damage can be found in article 208 of chapter XI²⁹ which stipulates that.

The provisions of this chapter shall not be applicable to the following claims: (1) Claims for salvage payment or contribution in general average; (2) Claims for oil

²⁹ Chapter XI is titled 'Limitation of Liability for Maritime Claims'

pollution damage under the 'CLC' is a party; (3) Claims for nuclear damage under the 'International Convention on Limitation of Liability for Nuclear Damage' to which the People's Republic of China is a party; (4) Claims against the ship-owner of a nuclear ship for nuclear damage; (5) Claims by the servants of the ship-owner or salvor, if under the law governing the contract of employment, the ship-owner or salvor is not entitled to limit his liability or if he is by such law only permitted to limit his liability to an amount greater than that provided for in this chapter (article 208 of chapter XI of 'CMC 1992').

Due to this clause specifically provides that the limitation of liability as contents in the 'CMC 1992' is not applicable when the 'CLC' applies. Hence, the goal of this provision is to give priority to the international convention. However, the application of international conventions in China is a complicated issue, which will be discussed in further detail below. In order to examine the limitation of liability for oil pollution compensation, several articles shall be considered:

Firstly, the parties who can be granted the right to limit their liability are not restricted to the ship-owner, as provided in article 204; the charterer and operator of a ship and salvors may also limit their liability when complying with the conditions laid down in the chapter XI of 'CMC 1992'.

Secondly, the parties responsible for oil pollution damage may be allowed to limit their liability if that complies with one of the conditions in article 207³⁰. As far as the compensation for oil pollution damage is concerned, it may constitute loss or damage to the property related to the operation of the ship under the sub paragraph (1), or other loss resulting from torts related to the operation of the ship under subparagraph (3). Thus, the

30 Article 207 of the 'CMC 1992' reads that: Except as provided otherwise in Articles 208 and 209 of this Code, with respect to the following maritime claims, the person liable may limit his liability in accordance with the provisions of this Chapter, whatever the basis of liability may be: (1) Claims in respect of loss of life or personal injury or loss of or damage to property including damage to harbour works, basins and waters and aids to navigation occurring on board or in direct connection with the operation of the ship or with salvage operations, as well as consequential damages resulting therefrom; (2) Claims in respect of loss resulting from delay in delivery in the carriage of goods by sea or from delay in the arrival of passengers or their luggage; (3) 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; (4) Claims of a person other than the person liable in respect of measures taken to avert or minimize loss for which the person liable may limit his liability in accordance with the provisions of this Chapter, and further loss caused by such measures. All the claims set out in the preceding paragraph, whatever the way they are lodged, may be entitled to limitation of liability. However, with respect to the remuneration set out in sub-paragraph (4) for which the person liable pays as agreed upon in the contract, in relation to the obligation for payment, the person liable may not invoke the provisions on limitation of liability of this Article.'

compensation for oil pollution damage may be limited under chapter XI. However, there are two exceptions under which the limitation right is not granted as stipulated in articles 208 and 209. Article 208 is the provision as we just mentioned the ‘CLC’ shall have priority over the ‘CMC 1992’³¹. Article 209 specifies the intentional act of the liable party will lead to the loss of right of limitation³².

As for the amount of limitation, article 210 of ‘CMC 1992’ provides a detailed method of calculation. This article makes a distinction between the ‘loss of life or personal injury’ and ‘claims other than the loss of life or personal injury.’ Interestingly, the limit of liability for ‘loss of life or personal injury’ is almost twice as high as those of the ‘claims other than the loss of life or personal injury.’ It seems the legislator attaches greater importance to human life and personal injury than other damages, like economic losses.

Article 210 of ‘CMC 1992’ provides that:

(1) In respect of claims for the loss of life or personal injury:

- a) For a ship from 300 to 500 gross tonnes, 333,000 SDR;
- b) For a ship of more than 500 gross tonnes, 333,000 SDR plus the amount as follows:
for each tonne from 501 to 3000 tonnes: 500SDR; for each tonne from 3,001 to 30,000 tonnes: 333SDR; for each tonne from 30,001 tonnes to 70,000 tonnes: 250SDR; for each tonne in excess of 70,000 tonnes: 167 SDR (Article 210 of ‘CMC 1992’);

(2) In respect of claims other than the loss of life or personal injury:

- a) For a ship between 300 to 500 gross tonnes, 167,000 SDR;

31 Article 208 of the ‘CMC 1992’ reads that: ‘The provisions of this Chapter shall not be applicable to the following claims: (1) Claims for salvage payment or contribution in general average; (2) Claims for oil pollution damage under the International Convention on Civil Liability for Oil Pollution Damage to which the People’s Republic of China is a party; (3) Claims for nuclear damage under the International Convention on Limitation of Liability for Nuclear Damage to which the People’s Republic of China is a party; (4) Claims against the ship-owner of a nuclear ship for nuclear damage; (5) Claims by the servants of the ship-owner or salvor, if under the law governing the contract of employment, the ship-owner or salvor is not entitled to limit his liability or if he is by such law only permitted to limit his liability to an amount greater than that provided for in this Chapter.’

32 Article 209 of the ‘CMC 1992’ reads: ‘A person liable shall not be entitled to limit his liability in accordance with the provisions of this Chapter, if it is proved 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’

- b) For a ship of more than 500 gross tonnes, 167,000 SDR plus the amount as follows: for each tonne from 501 to 30,000 tonnes: 167SDR; for each tonne from 30,001 tonnes to 70,000 tonnes: 125 SDR; for each tonne in excess of 70,000 tonnes: 83 SDR (article 210 of 'CMC 1992').

In case of claims for oil pollution damage, this mostly concerns damages other than 'loss of life or personal injury.' Consequently, the limitation amount under the 'CMC 1992' is actually lower than the limitation under the 'CLC 1992'.

Article V.1 of the 'CLC 1992' provides

The owner of a ship shall be entitled to limit his liability under this convention in respect of any one accident to an aggregate amount calculated as follows: (a) 3 million units of account for a ship not exceeding 5,000 units of tonnage; (b) for a ship with a tonnage in excess thereof, for each additional unit of tonnage, 420 units of account in addition to the amount mentioned in sub-paragraph (a) provided, however, that this aggregate amount shall not in any event exceed 59.7 million units of account.'

Take a tanker of 5000 tonnes for instance: under the 'CMC 1992' the owner of such a tanker can limit his liability to 0.9185 million SDR; while under 'CLC 1992', his limit would be 3 million SDR.

There are, however, different opinions which hold but 'CMC 1992' should not be applicable to oil pollution compensation caused by tankers. The main argument from these advocates for this approach is that due to the application of law in China following the principle of '*lex specialis derogat lex generalis*' (When two or more laws contradict, the more specific law has priority over the common law), the '*lex specialis*' (*Lex specialis* is a Latin phrase which means 'law governing a specific subject matter') in the case of marine oil pollution compensation should applicable the 'MEPL'. Since there is no provision holding the oil discharger can limit his liability to a certain amount. The discharger should compensate the victim to the full amount. Although there are provisions concerning the limitation of liability in the 'CMC 1992', it does not specify that it shall be applicable to oil pollution

compensation as well. A limitation seems to be contradictory to the principle of actual compensation to the full amount incorporated in the 'MEPL'. In practice, owners of tankers often refer to the 'CMC 1992' to limit their liability and most of the time they are successful: the maritime courts grant such a right of limitation.

The limitation set forth in the 'CMC 1992' was a much lower standard than that in the 'CLC 1992'. The two different standards seem contrary to the protection of victims of oil pollution and not very helpful to the development of shipping business.

6.2. Compulsory insurance

According to the requirement of 'CLC 1992', all vessels carrying 2,000 tonnes of oil cargo or more will apply compulsory insurance. The insurance amount should not be less than the limitation of liability according to 'CLC 1992'. Although, for Chinese vessels calling into Chinese ports, the government of China requires only vessels that are registered in the People's Republic of China which carry more than 2,000 tonnes of oil cargo in bulk (including oil barges and oil bags, etc.) to purchase insurance or other financial guarantee (such as a bank guarantee or issued by the international fund for proof) according to 'CLC 1992', apply and hold the 'CLC insurance and other financial assurance certificate' which is issued by Chinese 'MSA', only then can the vessel engage in the transport of cargo oil, regarding other vessels, such as 'small vessels' and 'inland waters vessels', there is no same requirement above.

6.2.1. Compulsory insurance for coastal oil tankers

For a long period of time, most of coastal trade tankers carrying more than 2,000 tonnes of persistent oil in bulk only applied for 'finance credit certificates' in China and did not purchase oil pollution insurance. In recent years, due to the accident of more and more oil pollution claims, some ship-owners took the initiative to purchase oil pollution insurance to protect against the oil pollution risk, but from the overall view, the rate of insurance is still low.

Refer to Mr. Zhang's research, according to the statistics, there were about 674 oil tankers (132.7 million GT) sailing for the coastal trade at the end of 2008, of there, 86 oil tankers (53.6 million GT) had been purchased oil pollution insurance, only 13% of the total tankers, 40% of the total tonnages (Zhang 2008).

6.2.2. Compulsory insurance for small tankers

According to the statistics, there were 62 oil spills of over 50 tonnes in Chinese coastal regions by Chinese-registered tankers from 1973 to 2003. The tankers with the DT of 1000 tonnes or less accounted for 63%, furthermore, according to the Guangdong provincial statistics, there were about 500 small tankers which loaded 2000 tonnes or less of cargo oil sailing in the Guangdong area. Since 1995, nine major oil pollution accidents occurred in this area; seven of them were small tankers accounting for 78% of oil pollution. According to the survey, there were over 2,500 small tankers in China, 2,000 of them were 1,000 tonnes DW, accounting for 80% of the total oil tankers. Among them, there were only 51 small tankers insured against the risk of oil pollution (Liu 2004:37). This meant that once the oil pollution accident occurred, most of them were unable to make payments. In that case, the implementation regarding the oil pollution insurance will need all kind of oil tankers to take compulsory insurance, so that the oil pollution accidents caused by small tankers can be covered by compulsory insurance.

6.2.3. Compulsory insurance for inland vessels

There were about 1,500 oil tankers sailing in the Chinese inland waters in 2013, all these oil tankers were mainly sailing in Shanghai, Zhejiang, Guangdong provinces. The oil pollution accidents from oil tankers sailing inland waters occurred recurrently. More than one dozen of oil pollution accidents occurred in the Yangtze River each year, of these, four to five cases each year was oil tanker collisions, explosions and other accidents. In 1997, '*Daqing 243*' exploded in Nanjing city. Thousands tonnes of crude oil leaked into the Yangtze River, and caused a major oil spills. Therefore, the river tankers should also be included in the scope of compulsory oil pollution insurance. From statistics, there were about 923 oil tankers (0.602 million GT) sailing inland trade at the end of 2008, insurance tankers were 20

(10 thousand GT), it was 2.2 % of inland tankers. Among the 20 insured tankers, 18 tankers belonged to state owned companies (CNPC and Sinopec) and only 2 of them were belonging to local private companies (Zhang 2008).

Article 2.1 of 'CLC 1992' states that:

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 (article 2.1 of 'CLC 1992').

From the definition of the above, it shows that 'CLC 1992' did not cover inland oil tankers. Research Chinese maritime law, we cannot find any oil pollution insurance requirements in Chinese law too. So, how to address the oil pollution application of the inland vessels in Chinese law is still unclear in practice or academia.

6.2.4. Compulsory insurance for the non-persistent oil tankers

The definition about the 'ship' and 'oil' in 'CLC 1992' article I stated that:

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 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 (1 of article I of 'CLC 1992').

Oil means any persistent hydrocarbon mineral oil such as crude oil, fuel oil, heavy diesel oil and lubricating oil, whether carried on board a ship as cargo or in the bunkers of such a ship (1 of article I of 'CLC 1992').

This means that the oil, which demands compulsory insurance was, limited to persistent oil, not including the non-persistent.

In the Chinese, newly revised 'MEPL', the vessel, which were specified in the 66 of article XIII, was not limited to oil tankers. The oil definition stated in the 95 of article X was defined as 'any type of oil and refined products' that can be understood as including crude oil and refined oil, even for vegetable oils.

Research the 50 major oil spills accidents which occurred along Chinese coastal areas since 1973, the author found that at least six accidents were caused by non-persistent oil. This kind of oil pollution still also needs the oil pollution clean-up costs to pay and oil pollution damage to compensate. For example, in the case of the 0# diesel oil pollution emanating from '*Min Ran Gong No 1*' in Fujian on June 6, 2000, the claims expense from fishermen was up to 40 million RMB. The first instance judgment from Xiamen Marine Court was to pay out compensation totaling 7.79 million RMB. Another example, when an oil tanker carrying 8,600 tonnes of the 0# diesel collided and sank in Xiamen anchorage on September 20nd, 2001. In order to prevent oil pollution, the Chinese government implemented underwater oil pumping, the surface laid booms and spraying. The cost was up to several million RMB. There are over 2,000 oil tankers in China, and from the sheer number of vessels, the potential dangers relating to oil pollution accidents are clear. Even if a non-persistent oil pollution accident occurs, the Chinese government also needs to pay compensation. From the author's point of view, it was necessary to expand the insurance coverage from persistent to non-persistent oil for all vessels which transport hydrocarbon mineral oil to purchase compulsory oil insurance.

Furthermore, China has experienced vegetable oil and chemical pollution, such as, the '*Athens Horizon*' bean oil leakage in Shanghai in 1978, and the '*Hu Hang You 1*' vegetable oil leakage in Shanghai in 1978. Although the number of such cases was very small, they were difficult to resolve because the type of cargo was complex. If the rule of oil pollution insurance contains more questions, the rule will become more complex and the ship insurance will take more time to take effect. Therefore, it is benefit to take the easy case first and then the difficult one. That means, resolving the issue of oil tankers insurance first, then

the insurance issue about non-oil tankers and chemical vessels second. At the last, put the sea transport of hazardous toxic substances on the agenda.

6.2.5. Compulsory insurance against oil pollution for the non-oil tankers

There is more pollution by fuel oil from non-oil tankers in China, as indicated by the statistics. The accident rate for non-oil tankers and oil tankers was almost equal probability, but the volume of the oil spills from the non-oil tankers was understandable less than the oil tankers. Overall, it was about 10%. According statistics at 2000, China had a transport ship 220,000 vessels; it is impossible to implement all insurance immediately. It should be done step by step.

6.3. Oil pollution claim

6.3.1. Competent administrative authorities

At the thirteenth session of the Standing Committee of the ninth National People's Congress of the People's Republic of China, the Chinese government amended the law on Marine Environmental Protection (hereinafter referred to as the 'MEPL') on December 25th 1999, and the new revised 'MEPL' came into force on April 1st, 2000. The new law added a new chapter on marine environmental supervision and management which laid down the principle of coordination with regard to marine environmental protection activities of cross regional or cross departmental nature. It also sets out principles for the adoption of marine functional zoning, marine environmental standards, marine protection programmers, and maritime monitoring and inspection measures. In the event that coordination arrangements cannot be concluded between / among relevant governments and / or departments on major marine environmental protection work, the state council will have the final authority to decide.

According to the new 'MEPL' requirement, several governmental administrative departments are responsible for marine environmental protection.

The ministry of environmental protection of P.R.C (hereinafter referred to as 'MEPC') is charge of the marine environmental protection of China. The state oceanic administration of P.R.C (hereinafter referred to as 'SOA') is responsible for organizing investigations and monitoring of and exercising surveillance over the marine environment and conducting scientific research therein; it also has a primary role in the protection against marine pollution damage caused by offshore oil exploration and exploitation and by the dumping of wastes into the sea. (Article 5 of 'MEPL')

The 'MSA' of China is responsible for supervising, investigating and dealing with vessel sources pollution and for keeping under surveillance the waters of the port areas. It exercises the following powers relating to the management of foreign ships: supervising the implementation of marine traffic regulations by foreign ships; Issuing authorisation to foreign ships to enter or depart from Chinese ports; appointing and arranging pilot age for foreign ships which are permitted to enter or leave Chinese ports; supervising the technical status of foreign ships, and maintaining traffic order and safety; and investigating and dealing with issues arising from marine accidents, including pollution damage (article 5 of 'MEPL').

The state fishery administration of the ministry of agriculture (hereinafter referred to as 'SFA') is responsible for supervising the discharge of oil by vessels in fishing harbors and keeping the investigation of oil pollution in the waters area of fishing harbors thereof (article 5 of 'MEPL').

The environmental protection agency of military is responsible for supervising the discharge of oil by naval vessels and keeping the exercise surveillance over the waters of the naval port (article 5 of 'MEPL').

The environmental protection departments of the local governments, under the central government, is responsible for organizing, coordinating, supervising and inspecting the marine environmental protection in their respective administrative areas and shall be in charge of environmental protection against pollution damage

caused by coastal construction projects and land-sourced pollutants (article 5 of 'MEPL').

Moreover, 'MPEL 2000' provides that: the Chinese competent authority has the right to board foreign vessels navigating, berthing and operating in sea areas under Chinese jurisdiction for investigation and settlement of cases of pollution damage caused by such vessels. In practice, many marine pollution cases relating to foreign vessels have been properly handled by the relevant local 'MSA'.

From above provisions, it can be seen that the authority for enforcement is still divided among different government agencies. It will be recalled that one of the purposes of revising the 'MEPL' was to resolve problems of the separation of authority and responsibility for marine law enforcement. With such separation, it has proved very difficult to enforce the law to its full effectiveness on many occasions. This issue was recognized as a big defect in the old law.

Clearly, the objective of remedying this defect has not been realized in the new law. As an alternative, it is recommended that different departments should conduct law enforcement at sea jointly when necessary. The new 'MEPL' encourages the relevant departments to participate in joint and co-operative actions (article. 19). One joint law enforcement action was taken in June 2000 by the 'China Sea Monitoring', the east China sea aviation inspection team, and the local bureau of the oceanic administration in Zhejiang province, to oversee part of the East China Sea with two objectives: a law enforcement inspection relating to marine environmental protection, and one relating to marine resources utilization, as discussed in 'the Joint Marine and Air law Enforcement Action in Ningbo and Zhoushan Sea Areas' in *China Ocean News* (In Chinese) on June 20th, 2000.

According to Chinese laws and relevant regulations, there are about five to six competent authorities for marine environmental pollution, and their duties and limit are unclear. It is very difficult to decide how to divide their functions and powers and how to coordinate between them.

Although, the 'MEPL' has defined the duties and functions of the ministry of environmental protection of P.R.C (hereinafter referred to as 'SEPA'), the state oceanic administration of P.R.C and Chinese 'MSA', the precise competencies are not very clear yet.

Article 90 (2) of 'MEPL' reads that:

The department exercising the right of supervision and administration on the marine environment has the right to file the claim against the party responsible on behalf of the country (Article 90 (2) of 'MEPL').

However, combined with article 5 of the 'MEPL', the 'SEPA', the 'SOA', the 'MSA', the superintendent office of fishing policy and fishing ports, the military environmental protection department as well as the departments of the coastal local governing bodies above the country level exercising the right of marine environmental supervision and administration and so forth each have the right to supervise and manage the marine environment. Hence, there is not just one department that may exercise the right of supervision and management.

6.3.2. Assessment method for oil pollution damage

To claim oil pollution compensation from the 'IOPC Fund,' it must be submitted in accordance with the claim manual requirement, and provide sufficient evidence. Otherwise, the claim cannot be accepted. But at present in China, the pollution damage assessment is still at its initial stage. There is neither a uniform assessment method which matches the 'IOPC Fund', nor of the assessing the oil pollution damage. Each assessment organization adopts different methods and parameters during the assessment. As a result, there have been arguments on the results of assessment especially on whether the losses and damages of fisheries and marine environment could be calculated by the theoretical method. Sometimes, different assessment organizations drew the different conclusion about the same oil pollution accident. It is therefore difficult for the court and the fund to choose the right result, or for the 'IOPC Fund' to accept it.

6.3.3. Oil clean-up measures

The cost of oil clean-up is the easiest to get oil pollution compensation in all the oil pollution damage. As per the 'IOPC Fund' claim manual, all costs must be reasonable and must have actually taken place. According to the 'IOPC Fund' report, the oil clean-up cost accounts for about 60% of the oil pollution compensation in the 104 cases which were accepted by 'Fund 1971', accounting for about 78% of oil pollution compensation in 12 cases which were accepted by 'Fund 1992'.

6.3.3.1. *Nakhodka* oil spills

For the '*Nakhodka*' oil spills in Japan in 1997, the Japanese government organized 54 oil clean-up units, mobilized about 772,000 man power, invested 4,700 trips of aircrafts and ships contributed to the oil clean-up. The total oil clean-up cost was up to 228,241 million Japanese Yen.

From an overview of oil clean-up processing in China, the measure and the ability of oil clean-up was very low in China at present. The main measures were the reliance on manpower and the use of straw and other primitive measures. The direct result of this situation led to the calculation of the oil clean-up cost becoming more complex and difficult. According to the statistics from 'MSA' in 2013, the oil clean-up cost was only 1,600 Yuan RMB per tonne for a small oil pollution accident and 13,600 Yuan RMB per tonne for the major oil pollution accident in China. A research of the 46 fully fledged compensation data from 'IOPC Fund' shows that, the average oil clean-up cost had reached £ 2,090 per tonne, which was 17 times of that of China. The biggest cost of oil clean-up was £ 11,505 per tonne, which was 11 times of the same situation in China. From the above analysis, we can find that the cost of oil clean-up has huge disparities between China and developed countries.

6.3.3.2. '*Oriental Ambassador*' oil spills

In 1983, the claim of '*Oriental Ambassador*' oil clean-up cost was 7.55 million Yuan RMB.

6.3.3.3. '3.24' oil spills

In 1999, at Guangzhou Maritime Court, Zhuhai Marine Environmental Protection Agency (hereinafter referred to as 'EPA Zhuhai') claimed the oil clean-up cost was 0.4 million Yuan RMB, 'MSA' claimed the oil clean-up expense 300 million Yuan RMB (about 41.67 million of USD, based on the 1 USD = 7.2 Yuan RMB), the total claim of the oil clean-up cost was less than 400 million Yuan RMB.

As per the current Chinese laws, the cost of oil clean-up and property damages were normally bear by the tanker owner and the oil clean-up action which was taken by 'MSA' with supporting by social resources. But due to lack of protection and enforcement measures in Chinese domestic law, or due to bankruptcy of ship owners, or due to the oil clean-up cost exceeding to ship owners' liability limitation, or due to other reasons which the perpetrators cannot be found, etc.,. The oil clean-up cost was very difficult to be fully covered from the tanker owners. The actual situation was '*Who perform oil clean-up, whom suffer the loss of oil pollution damage*', the direct results led by this were the following vicious circle repeating itself again and again.

- (1) The measure and the ability of oil clean-up lacked development, the gap between China and international level became even greater;
- (2) When oil pollution accidents occurred, the scope and the size of oil clean-up was only according to the vessel which was insured or whether the ship owner has finance ability to pay. If the ship owner lacks the finance support, the port authorities or the Chinese government are often unwilling to spend more efforts and financial resources to oil clean up. Therefore, in most cases, the best opportunity for cleaning up the spills is squandered;
- (3) Due to lack of funds and national finance support, the larger, advanced and effective oil clean up equipment unwilling be equipped by 'MSA' and port authorities, professional oil clean up teams are not able to play a role in general.

Researched by Mr. Liu in his Master's degree paper showed that during the period from 1987 to 2003, there were about 1,748 medium and small oil pollution occurred in Chinese waters. 74% cases were fine by the administrative, only 131 oil pollution cases conducted oil clean-up operation, the ratio of oil clean-up was 7.5%. (See table 6.1) (Liu 2004: 37).

Table 6.1 Chinese oil pollution process during 1987 to 2003

	No of oil pollution	Ratio	Amount (Yuan RMB)	Ratio
Penalty	1293	74%	2300,000	76.6%
Oil Clean up	131	7.5%	638,000	21.3%
Other	324	18.5%	62,000 *	2.1%
Total	1748	100%	3000,000	100%

* : Including accident investigation costs, oil pollution monitoring costs and transport costs.

Source from: (Liu 2004: 4)

6.4. Conclusion

Up to now, there are no clear provisions in Chinese law on compulsory insurance or on the compensation fund. In combination with the low limit of liability under the ‘CMC 1992’, that means the victims of oil pollution in China are often left in a disadvantageous position with insufficient compensation or no compensation at all. Even when the ‘CLC’ is uniformly applied, for a purely domestic issue as well, given the particular situation of China, problems still arise. Indeed, in China small size tankers are mostly employed, and there is no compulsory insurance requirement for these small tankers. Therefore, the higher limitation amount, under the ‘CLC,’ seems better in theory, but may not be effective to influence the practice in China, given the fact that the requirement to purchase compulsory insurance under the ‘CLC’ only applies for tankers above 2,000 tonnes.

Moreover, among the ships carrying oil on domestic lines, a large number of them are small oil tankers which are privately owned. Some of these ship owners have only one single vessel registered under their names, which lowers their financial capability in case of liability. Some of these tankers are badly maintained old tankers, or with single hulls, which increases the potential accident risk. Under this situation, the ship owner is often insolvent so that he is unable to pay the full compensation. When the pollution damage exceeds the ship owner’s liability, the surplus part cannot be paid.

China has not yet established a complete system for oil pollution compensation that can constitute definite financial sources for oil pollution damage. The pollution damages are

often inadequately compensated, and thus, great social losses are incurred. As a consequence, clean-up activities and preventive measures are not encouraged either.

CHAPTER SEVEN

CHINESE VESSEL SOURCES OIL POLLUTION COMPENSATION REGIME: DISCUSSION AND RECOMMENDATION

‘CLC 1992’, ‘IOPC Fund 1992’ and ‘OPA 1990’ are admittedly the most developed and comprehensive on the subject of the liability and compensation regime for oil pollution damage from vessels. An exposition and evaluation of the latest developments in ‘CLC 1992’, ‘Fund Convention 1992’ and ‘OPA 1990’ cases will help to fully understand the international and regional compensation regime for recent oil pollution, and try to find that whether the oil pollution compensation regime reform in other jurisdictions has the potential to curative the deficiencies of the Chinese oil pollution compensation regime.

In view of the comparative study of the foregoing chapters, it is clear that all three ‘OPCLRs’ have common features, such as, ‘strict liability’ with defenses, limitation of liability, etc. Nevertheless, the differences between them are significant at the present stage.

7.1. Discussion

Briefly, the significant differences can be summarized as the following eleven aspects:

7.1.1. Vessel and oil

As shown in chapter four the USA ‘OPCLR’ has significantly broadened the types of qualified oil and qualified ships. The qualified oil includes not only persistent hydrocarbon mineral oil, but also non-persistent oil and oil mixtures. The qualified ships include not only tankers carrying or capable of carrying oil in bulk as cargo, but also all other kinds of ships. Variously, the international ‘OPCLR’ applies only to persistent hydrocarbon mineral oil and ships carrying or capable of carrying such oil. In this respect, the Chinese ‘OPCLR’ for the

foreign-related oil pollution situation shares the same features with the international ‘OPCLR’. The Chinese ‘OPCLR’ for the purely domestic oil pollution situation applies to both persistent and non-persistent oil. Also, the Chinese ‘OPCLR’ for the purely domestic oil pollution situation has no limitation on the types of ships.

7.1.2. Sources of oil pollution

The USA ‘OPCLR’ applies to not only oil pollution damage from vessel sources, but also oil pollution caused by a discharge from a facility and deep-waters ports. Various, the international ‘OPCLR’ applies only to oil pollution from vessel sources. The Chinese ‘OPCLR’ for the foreign-related oil pollution situation has the same application as the international ‘OPCLR’. However, the Chinese ‘OPCLR’ for the purely domestic oil pollution situation broadly applies to the marine oil pollution caused by a spill from a vessel, the facility or other sources.

7.1.3. Admissible damage

As shown in chapter four, the USA ‘OPCLR’ has broadened the scope of admissible damages. Besides removal costs and damages to real or personal property, it makes a responsible party compensate for ‘NRDAs’ which includes the restoration or replacement, diminution in value of the resources until they are restored and reasonable costs of assessing the damage or injury to, destruction of, loss of, or loss of use of, natural resources. Also, it makes a responsible party compensate for the pure economic loss which includes the profits lost directly because of the damage sustained by a victim’s property; the lost profits or earnings even if the victims do not own the damage property; the loss of Federal or State revenues and taxes caused by oil pollution; and the costs of providing increased or additional public services as a result of a spill incurred by the Federal and State governments. Respectively, both the international ‘OPCLR’ and the Chinese ‘OPCLR’ excludes diminution in value of the marine environment and loss of revenues and taxes caused by oil pollution from admissible damages.

7.1.4. Responsible party

The USA ‘OPCLR’ has defined the responsible party in a broad way. It does not limit the number of responsible parties for an oil pollution accident. It makes any person owning, operating or demise chartering a vessel and any person owning or operating a facility and pipeline be a statutory responsible party. Also, the definitions of who may constitute a responsible party are not mutually exclusive. The court interpreted the USA ‘OPCLR’ expansively to extend the liability to multiple responsible parties, including someone who did not own or even operate a discharging facility. Furthermore, the meaning of the responsible party under the USA ‘OPCLR’ has been interpreted to include the owner of a vessel towing another discharging vessel. While the international ‘OPCLR’ regards only the owner of a ship involved as the responsible party except in some particular circumstances. In this respect, the Chinese ‘OPCLR’ for the foreign-related oil pollution situation takes the position similar to that of the international ‘OPCLR’. The Chinese ‘OPCLR’ for the purely domestic oil pollution situation has no clear rule. Practically, any person who actually controls the ship or facility involved when the oil pollution accident occurs shall be the responsible party or parties.

7.1.5. Statutory responsible parties

The USA ‘OPCLR’ makes all statutory responsible parties of a ship or a facility assume strict, joint and several liability for oil pollution damage. Whereas, the international ‘OPCLR’ only makes the owner of a ship involved be strictly liable for oil pollution damage. In this respect, the Chinese ‘OPCLR’ for the foreign-related oil pollution situation shares the same feature with the international ‘OPCLR’. However, the Chinese ‘OPCLR’ for the purely domestic oil pollution situation makes any person who actually controls a ship or a facility involved when the oil pollution accident occurs is strictly liable for oil pollution damage.

7.1.6. Limitation liability

The USA 'OPCLR' has provided for, not only the limitation liability rule for a responsible party, but also the limitation liability rule for a liable third party. Obviously, both international 'OPCLR' and the Chinese 'OPCLR' have no specific limitation liability rule available to a liable third party.

7.1.7. Liability limitation defences

The USA 'OPCLR' has provided for the tough limitations on complete defenses and liability limitation of a responsible party. As a result, the USA 'OPCLR' makes the right of complete defenses and liability limitation of a responsible party much easier to lose. While, there are both the international 'OPCLR' and the Chinese 'OPCLR' have no limitation on complete defenses. Additionally, unless 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, no other reasons can defeat the right of liability limitation of a responsible party under both the international 'OPCLR' and the Chinese 'OPCLR'.

7.1.8. Mandatory presentation rule

The USA 'OPCLR' has provided for a mandatory presentation rule which is to encourage the prompt settlement of the oil pollution disputes out of court. Obviously, both the international 'OPCLR' and the Chinese 'OPCLR' have no similar rules.

7.1.9. Liability limitation adjust

The USA 'OPCLR' makes the sums of liability limitation to be adjustable to reflect consumer price index. Recently, the sums of liability limitation in respect of vessels set out by the USA 'OPCLR' had been adjusted by the 'Delaware River Protection Act', title 6 of the 'Coast Guard and Maritime Transportation Act of 2006'. Obviously, both the international 'OPCLR' and the Chinese 'OPCLR' has no similar rule. However, the

international 'OPCLR' adjusts the sums of liability limitation by negotiating the amendments. But the calculations of liability limitation in the Chinese 'OPCLR' for the purely domestic oil pollution situation are never adjusted since it was enacted into law.

7.1.10. Multifunctional 'OSLTF'

The USA 'OPCLR' has established a multifunctional 'OSLTF' with a very huge figure of limit by mainly levying a tax on domestic oil interests. 'OSLTF' not only compensates for oil pollution damages afterwards in the eligible situations as the principal fund, but also finances an emergency response in advance and 'NRDAs' as the emergency fund. Obviously, the revenues of the 'IOPC Fund' established by the international 'OPCLR' comes from the contributions of the oil interests of all contracting states and the indemnity from ship-owners under 'Small Tanker Oil Pollution Indemnity Agreement' (hereinafter referred to as 'STOPIA') 2006. Similarly, the revenues of the supplementary fund established by the international 'OPCLR' comes from the contributions of the oil interests of all contracting states and the indemnity from ship-owners under Tanker Oil Pollution Indemnity Agreement (hereinafter referred to as 'TOPIA'). Both the 'IOPC Fund' and the Supplementary Fund compensate oil pollution damage afterwards. But where 'IOPC Fund' may be called upon to compensation under 'Fund Convention 1992', it may finance an emergency situation in advance.

7.1.11. Independent limitation periods

The USA 'OPCLR' has provided for independent limitation periods for oil pollution damage and removal costs. Additionally, it provides for limitation periods for recourse and subrogation. The international 'OPCLR', alternatively in contrast, has uniform and simple limitation periods for oil pollution damages and removal costs, but has no specific limitation periods for recourse and subrogation. Similarly, the Chinese 'OPCLR' has three uniform limitation periods available to different kinds of oil pollution damages and removal costs. However, except for an oil pollution accident caused by both-to-blame collision where there is a limitation period for recourse action, the Chinese 'OPCLR' has no specific limitation periods for recourse and subrogation.

7.2. Recommendation

Generally, all the features of the USA ‘OPCLR’, embodied in chapter four’s brief summary of the differences, show that the primary purpose of the USA ‘OPCLR’ is to prevent oil pollution from happening in the navigable waters of the United States by creating more incentives for all potential responsible parties to take more precautionary measures. The secondary purpose of the USA ‘OPCLR’ is to ensure that the adequate compensation is available to oil pollution damage and removal costs. Undoubtedly, these unique features have brought the far-reaching changes in the field of the traditional oil pollution liability and compensation regime. So, how and what lessons can China take from the United States of America’s advanced experience? The author research suggestion and recommendation is comparing with ‘OPA 1990’, ‘CLC 1992’ and the Chinese Vessel’s sources Oil Pollution Compensation Fund (hereinafter referred to as ‘CVOPCF’), in author’s opinion, ‘The US Oil Pollution Compensation Regime (OPCLR) is tougher than both the international conventions and the Chinese Vessel sources Oil Pollution Compensation Fund. The ‘OPA 1990’ Regime aims to stop oil pollution from happening. The USA is able to enforce such a rigorous regime because the USA has such a large market that it can operate independently of the international market. China, with its extensive inland waters, is a similar case, or will be in the future. Therefore the more rigorous USA-style regime is the better option for China to reference.’

Comparatively, all the features of the international ‘OPCLR’, embodied in chapter three’s summary of the differences, largely show that the primary purposes of the international ‘OPCLR’ to ensure the adequate compensation available to oil pollution damages and removal costs caused by an oil discharge from ship. The secondary purposes of the international ‘OPCLR’ is to create incentives for the owner of a qualified ship to take precautions measures in preventing oil pollution from happening and to facilitate the goals of other international conventions in respect of marine pollution prevention and response. Through the research done by author, the answer is ‘the international conventions deviate from traditional tort law and oil spills are dealt with in a different way from traditional forms of damage. The international conventions follow the principle of ‘strict liability’

those involved in a pollution accident have to pay in any way, whether or not they are at fault. Chinese law currently follows the civil law principle that only a party directly at fault needs to pay compensation. When the Chinese oil pollution compensation regime is re-designed, the 'strict liability' principle should be followed'.

Currently, the Chinese 'OPCLR' is in a, in some respects, poorly crafted, partially enacted, and in a financially lower-funded condition. The somewhat incomplete and bifurcated 'patch-work' regime, apparently, could not carry out the 'polluter pays' rule to satisfy the needs of victims to recover fully damages caused by a big oil pollution disaster, let alone create more incentives for all potential responsible parties to take more precautions in preventing oil pollution from happening.

As shown in chapter two, China is a big country with more than 32,000 km of coastline. The maritime space of China, including inland waters, territorial waters, exclusive economic zone and continental shelf, is 4.73 million square km or more. In the past few decades, China sustained serious marine pollution damages. Statistically, from 1973 to 2003, there occurred more than 2,350 oil pollution accidents in coastal waters of China. There occurred one oil spills accident almost every 4.6 days. The total oil spillage was more than 30,000 tonnes. The marine ecosystem, aquatic life and natural resources suffered serious damages. Nowadays, due to the rapid development of the market economy of China, the import of crude oil is sharply increased. As a result, more and more big tankers sail in and out of Chinese ports every day, and more and more oil industries are established along the coastal areas. Consequently, the potential tremendous oil pollution disasters are the foreseeable threat to China's marine environment. For years, the question in respect of marine environmental protection, such as, 'where shall China head for?' has been examining the wisdom of the Chinese people and the Chinese government.

In the past decade, the Chinese government has placed 'resource-saving and environmental protection' in an important strategic position as it works out the country's development goals. Especially in the 11th five-year programmer for economic and social development, the Chinese government has clearly declared the main goals for environmental protection for the next 5 years which is by 2010. While the national economy will maintain a relatively stable and fast growth, the environmental quality of key regions and cities will be improved. To

achieve the goals, the Chinese government will actively speed up ‘three changes.’ The first change is the change from emphasizing economic growth but ignoring environmental protection to emphasizing both environmental protection and economic growth. The second change is the change from environmental protection lagging behind economic growth to synchronizing environmental protection and economic growth. The third change is the change from mainly employing administrative measures in environmental protection to comprehensive use of legal, economic, technical and necessary administrative measures to solve environmental problems. Also, the Chinese government will emphasize the principle of prevention first and control pollution in comprehensive manner. The Chinese government will continue working to improve policies and legislations on environmental protection, strictly supervise their implementation. The Chinese government will strengthen the management of environment according to law will make greater efforts to control pollution of key drainage areas, rivers, cities and offshore sea areas, and effectively improve the environmental quality there. Financial input will be increased by improving the system of government, enterprises and the general public investment in financing environmental protection.

Given the facts that the vast expanse of the maritime space China has, the grave oil pollution damage China has already suffered and the threat of a large-scale oil pollution accidents like the ‘*Exxon Valdez*’, the ‘*Erika*’ and the ‘*Prestige*’ that China faces from time to time, the Chinese environmental policy provides strong supports as well as opportunities for China to improve the legal system for the purpose of environmental protection first. It is the right time for China to formulate a complete and comprehensive oil pollution compensation regime package to create more incentives for potential responsible parties to take more precautions in preventing oil pollution accident from happening, and meanwhile to fully compensate for oil pollution damages and removal costs.

Fortunately, China has started the engine of improving the current ‘OPCLR’. Based on Article 66 of MEPL, China has finished the draft of Chinese fund regulations and the draft of ‘RCPVSW’ amendments. Also, China is studying the possibility of acceding to ‘Fund Convention 1992’. By implementing ‘RCPVSW’ amendments, the compulsory insurance system shall be structured. By implementing Chinese fund regulations, ‘CVOPCF’ shall be established by levying a tax on import oils. By joining ‘Fund Convention 1992’, the victims

of China shall have the right to get compensations or indemnity from 'IOPC Fund' in some circumstances. At that time, the Chinese 'OPCLR' will become the preliminary sound 'OPCLR' by ensuring that adequate compensation is available to a victim who suffers oil pollution damage resulting from the escape or discharge of oil from a qualified ship but not a non-qualified ship or facility.

However, given the defects of the said preliminary 'OPCLR', it is foreseeable that the new 'OPCLR' will not be sound enough to create more incentives for all potential responsible parties to take more precautions in preventing oil pollution accidents from happening. It is necessary to ensure adequate compensation available to persons suffering damages caused by pollution resulting from the escape or discharge of all kinds of oil from all kind of ships, or facilities. For the purposes of remedying the defects, China should establish a complete and comprehensive oil pollution liability and compensation system.

With the national 'prevention first' policy in mind, it is reasonable to maintain that the Chinese 'OPCLR' should be improved to be the 'OPCLR' with the primary purpose of creating more incentives for any responsible party to take more precautionary measures in preventing an oil pollution accident from happening, and meanwhile to ensure adequate compensation available to a victim who suffers pollution damages resulting from the escape or discharge of all kinds of oil from one of all kind of ships or facilities, etc. Actually, this is also the basic principle which should be abided by when improving the existing Chinese 'OPCLR' in the future. Additionally, when improving the existing Chinese 'OPCLR', China should not only understand the principal policies and purposes behind both the international 'OPCLR' and the USA 'OPCLR', but should, also, draw as much as possible lesson from the structures and provisions of both the international 'OPCLR' and the USA 'OPCLR'.

Therefore,

1. The USA 'OPCLR' applies to a significantly broader range of oil products and sources of oil pollution than the international conventions and the current Chinese regime. It covers not only tankers but also to discharges from oil platforms, shore-based facilities and deep-waters ports. In this regard, China could follow the

US model relatively easily.

2. At present, there is compulsory insurance for Chinese vessels carrying more than 2000 tonnes of oil. However, the research has shown that, between 1973 and 2003, there were 63 percent of the oil spills coming from oil tankers of less than 1,000 tonnes. China has also experienced spillages of vegetable oils which, for oil pollution purposes, are not classified as 'oil'. Through my research, the author thinks that the special legal regime in the 'COPC Fund' should be extended to cover all kinds of oil which ships carrying, no matter what their size, plus all offshore platforms and shore facilities, as the model being implemented in the United States of America. However, for the reasons in actual operation, the special legal regime needs to be implemented in stages.
3. 'CLC 1992' only applies to maritime (sea) transport vessels, and does not include inland waters (defined as all waters inside the baseline for territorial waters and the 'EEZ'). The same is true of the international 'CLC' and 'Fund Convention'. Therefore, the US 'OPA 1990' provides a good model for future legislation in China.
4. At present, the Chinese system is to pay all victims proportionately, without giving priority to oil cleaning up. The money is proportionately distributed to other 'victims', such as the example of fishermen who have lost their business and oil clean-up cost from 'MSA', it is not benefit to motivate the enthusiasm of the oil clean-up action. According to the research, the author strongly recommends that China should learn from United States and follow its practice and prioritise the clean-up operation, and if there is any capital left, then it can be distributed to other 'victims'.

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APPENDIX

Interview Transcript (One)

1. Name and position

Mr. Jianbin Zhang/Managing director of 'MSA' Shenzhen.

2. Interview date and location

Dec 12nd, 2011, London.

3. Age

A. Under 17 B. 18-24 C. 25-44 D. 45-64 E. 65 and over

4. Gender

A. Male B. Female

5. Educational level

- 1) High school or less
- 2) Undergraduate student
- 3) College graduate
- 4) Postgraduate or equivalent

6. Are you satisfied with the Chinese compensation regime at present? If not, can you give some reasons?

Honestly speaking, in my personal opinion, I am not satisfied with the Chinese oil pollution compensation regime at present. The main reason was as following:

- 1) With Chinese economic growing rapidly, Chinese government do not have a mature oil pollution compensation regime until now, it does not match with her status in the world;
- 2) As per oil spills occurs in Chinese waters, nobody care the oil pollution and the damage to the marine environment except government;
- 3) When oil spills occurs in Chinese waters and damage to marine flora and fauna, the victims are very difficult to receive effective compensation, so, in

China, the innocent victims will suffer big lost in the oil pollution.

7. Do you think China should take part in IOPC Fund 92 or not? If not, why?

With the great risk of the oil pollution and the rapid increase for oil import in China, from a long-term perspective, China takes part in 'IOPC Fund 1992' will be the overall trend to China in the future.

8. If Chinese government decided to establish national compensation regime for oil pollution, do you think which mode is suitable? IOPC Fund, US Mode or Canada Mode?

In my opinion, Canada mode will be much better than others.

Interview Transcript (Two)

1. Name and position

Mr. Jihong Wang/ Director of the Department of navigable waters management of 'MSA' Guangdong.

2. Interview date and location

Dec 12th 2011, London.

3. Age

A. Under 17 B. 18-24 C. 25-44 D. 45-64 E. 65 and over

4. Gender

A. Male B. Female

5. Educational level

- 1) High school or less
- 2) Undergraduate student
- 3) College graduate
- 4) Postgraduate or equivalent

6. Are you satisfied with the Chinese compensation regime at present? If not, can you give some reasons?

China must establish Chinese oil pollution compensation regime as soon as possible.

'China did not established an emergency centre to special deal with large-scale oil spills until now, when the emergency situation occur, the common practice was temporary organize different teams to participate in the emergency system under the command of the government, after that, disband again....'.

7. Do you think China should take part in IOPC Fund 92 or not? If not, why?

I don't think so.

8. If Chinese government decided to establish national compensation regime for oil pollution, do you think which mode is suitable? IOPC Fund, US Mode or Canada Mode?

If Chinese government decided to establish national compensation regime for oil pollution, Canada mode will be best chose.

Interview Transcript (Three)

1. Name and position

Mr. Hongjun Shan / Head of law School of Dalian Maritime University

2. Interview date and location

Oct 16th 2011, Dalian China.

3. Age

A. Under 17 B. 18-24 C. 25-44 D. 45-64 E. 65 and over

4. Gender

A. Male B. Female

5. Educational level

- 1) High school or less
- 2) Undergraduate student
- 3) College graduate
- 4) Postgraduate or equivalent
- 5) PhD

6. Are you satisfied with the Chinese compensation regime at present? If not, can you give some reasons?

The existing Chinese Laws that regulate the liability limitation and compensation for oil pollution damage from vessel sources mainly include the ‘General Principles 1986’, the ‘CMC 1992’ and the ‘MEPL 2000’. The ‘General Principles 1986’, as the general civil law in China, provides that accidents relating to pollution damage are within the category of typical acts of special infringement of rights, to which strict liability system and the principle of reverse burden of proof shall apply. It further provides ways to indemnify against such damages, including restoration of damage property (Remark: this property is referred to private property, public property, including the ecosystem) to its original condition or reimbursement of monetary loss. Nevertheless, the ‘CMC 1992’, as a special law, which prevails on general laws (remark: the law of the People’s Republic of China on Legislation, Article 83 reads ‘if the special provisions and general provisions of laws are inconsistent, the special provisions apply’), provides a right for the ship-owner and the salvor to limit liability for maritime claims under the regime of ‘global limitation’. The global limitation regime in the ‘CMC 1992’, however, does not apply to oil pollution damage. In contrast, the special limitation regimes adopted in the international convention on oil pollution compensation to which China is partly applied to liability arising from oil pollution damages. This means only owners whose tankers are engaged in international trade are entitled to limit liability under the ‘CLC 1992.’ There are no other special laws in this regard, which apply to compensation for damages by ships for domestic trade. Furthermore, although China has signed the ‘CLC 1992’, the international convention has not been transformed into domestic legislation in the P.R.C. In terms of maritime law, most of the laws in the P.R.C stipulate that in foreign related cases, direct application of the international conventions take priority over municipal law, e.g. ‘CMC 1992’, the ‘General Principles’ and the ‘Maritime Special Procedure Law’.

7. Do you think China should take part in IOPC Fund 92 or not? If not, why?

Subject Chinese economic development in the future, Specific issues, specific analysis.

8. If Chinese government decided to establish national compensation regime for oil pollution, do you think which mode is suitable? IOPC Fund, US Mode or Canada Mode?

No time to discuss this question this time.

Interview Transcript (Four)

1. Name and position

Mr. Gongchen Liu/ Former managing director of 'MSA' Beijing.

2. Interview date and location

Oct 18, 2012, Beijing.

3. Age

A. Under 17 B. 18-24 C. 25-44 D. 45-64 E. 65 and over

4. Gender

A. Male B. Female,

5. Educational level

- 1) High school or less
- 2) Undergraduate student
- 3) College graduate
- 4) Postgraduate or equivalent
- 5) PhD

6. Are you satisfied with the Chinese compensation regime at present? If not, can you give some reasons?

China must establish Chinese oil pollution compensation regime as soon as possible. From the case handling, you can see that 'in the majority oil pollution cases, adequate clean-up measures were not taken, and even if some measures had been taken by the government, due to a lack of sufficient financial support, the clean-up measure was very poor and inadequate. The invariable consequence of this was oil left to drift in all directions, and causing irreversible damage to the fisheries, cultivation industry and the marine environment'. 'Moreover, as a result of the failings of the oil pollution compensation regime in China, clean up teams for middle and small-scale oil pollution accidents occurring in Chinese coastal waters were unable to obtain

compensation or were not sufficiently compensated. As a consequence, there were significant effects of the oil spills’.

China acceded to the ‘CLC 1969’ in 1990 and to the ‘CLC 1992 Protocol’ in 1999. Currently, all Chinese ocean going ships, carrying more than 2000 tonnes of oil in bulk, are compulsorily insured for oil pollution liability. China is also a party to the ‘Fund Convention’ but as Hong Kong has different systems of law from the mainland of P.R.C, the ‘Fund Convention’ is only applicable to Hong Kong SAR, but not to the rest of the P.R.C. So when major oil pollution occurs, it is impossible to ensure that the victims can be compensated sufficiently.

7. Do you think China should take part in IOPC Fund 92 or not? If not, why?

No time to discuss this question.

8. If Chinese government decided to establish national compensation regime for oil pollution, do you think which mode is suitable? IOPC Fund, US Mode or Canada Mode?

American model can be considered if Chinese economic develop to a certain extent.

Interview Transcript (Five)

1. Name and position

Mr. Aiping Chen / Managing director of ‘MSA’ Beijing.

2. Interview date and location

June 21st 2013, London UK.

3. Age

A. Under 17 B. 18-24 C. 25-44 D. 45-64 E. 65 and over

4. Gender

A. Male B. Female

5. Educational level

1) High school or less

- 2) Undergraduate student
- 3) College graduate
- 4) Postgraduate or equivalent
- 5) PhD

6. Are you satisfied with the Chinese compensation regime at present? If not, can you give some reasons?

No time to discuss this question.

7. Do you think China should take part in IOPC Fund 92 or not? If not, why?

I don't think so.

8. If Chinese government decided to establish national compensation regime for oil pollution, do you think which mode is suitable? IOPC Fund, US Mode or Canada Mode?

China is facing serious oil pollution threat, but China still has a long way to go in perfecting her legislation concerning oil pollution damage. There is, now, an urgent need in China to establish a sound legal regime regulating the civil liability for oil pollution damage caused by ships. Such a regime shall cover strict liability of the ship owners and other responsible parties, compulsory insurance for oil pollution damage, direct action against the liability insurer. Special competent administrative authorities like the U.S Coast Guard should be set up and be provided special equipment and personnel to deal with problems related to marine environmental pollution and joint action in work to protect the environment.