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A Study On Civil Liability and Compensation for Oil Pollution Damages from Ships in China

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중국의 선박기인 유류오염손해에 대한 민사책임에 관한 연구

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초록

세계 산업은 에너지에 의존하여 성장과 발전을 하고 있으며, 에너지의 대부분은 석유를 근본으로 하고 있다. 따라서 석유등의 유류 해상운송은 해상오염의 위험을 항상 내포하고 있다. 세계경제의 중요한 한축을 담당하고 있는 중국 역시, 막대한 양의 에너지를 산업발전에 사용하고 있으며, 에너지 원으로서의 석유 확보를 위해 유류의 해상운송을 적극적으로 활용하고 있다. 이는 앞에서 언급한 바와 같이 중국도, 석유의 해상운송에 따른 해상 유류오염 사고의 위험에 잠재적으로 노출되어 있다고 할 것이다. 이러한 유류의 선박운송에 따른 해상오염사고에 대비하고자 세계는 국제기구를 통해 보상을 위해 꾸준히 노력하였고, 그 결과 “유류오염손해에 대한 민사책임에 관한 국제협약”이 성립되었고, “1971년 유류오염손해에 대한 국제보상기금의 설치에 관한 국제협약”에 의해 보완되었다. 또한 각 협약의 1992년 개정의정서가 채택되어 1998년 발효되었다. 그러나 해상물동량의 증가와 선박의 대형화로 대형 유류오염사고가 발생하자 피해자 보호를 위해 IOPC Fund를 설립하게 되었다. 그럼에도 불구하고, 중국은 해상유류오염에 대비한 실질적인 법률규정 및 보상체계에 대한 제도등이 미비할 뿐만 아니라, 이를 대비하기 위한 연구 또한 활발하게 이루어지고 있지 않다. 그 주된 이유는 중국정부가 국제협약에서 규정하고 있는 보상제도를 중국이 받아들이는 것을 주저하였기 때문이다.

이에 본 논문은 해상유류오염사고에 대비한 국제기구의 노력 및 그 합의 결과인 국제협약에 대하여 심도 깊게 살펴보고, 이를 중국법제도에 반

영할 수 있는지를 사회 과학적 방법론으로 분석하고자 한다. 이를 위해 한국의 유류오염보상법 및 보상제도를 분석하고, 이를 바탕으로 중국도 1992년 기금 협약 가입의 필요성과 당위성을 검토하고자 한다. 또한 중국 현실에 맞는 유류 오염보상을 위한 방안을 제시할 예정이며, 이러한 연구는 중국 정부가 1992년 기금 협약의 수용을 검토할 때 유용한 자료로서 활용될 것으로 사료된다.

A Study On Civil Liability and Compensation for Oil Pollution Damages from Ships in China

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Abstract

We live in an energy-dependent world where oil is the main source of energy. The oil carriage by sea goes indispensably and inseparably with the potential risk of oil spill incidents. China is potentially exposed to an increasing risk of ship oil pollution incidents as a result of rapid development of its marine petroleum industry and marine transportation. However, the complete framework of a compensation regime for ship oil pollution damage has not established until a number of laws and regulations are coming into effect. Furthermore in China, currently there is no any relevant research dedicated to this new regime of compensation for ship oil pollution damage. In addition, this research is motivated by China's reluctance to fully accept the well-established international compensation regime for ship oil pollution damage. Few attempts have been made to explain the different attitudes of countries toward the international compensation regime, or to analyze the rationality of China's incomplete acceptance of such international regime.

This thesis as far as possibly contributes to the existed literature (solutions) on that aspect, it not only definitely reviews the legal framework of the compensation regime, but also obviously explains the various attitudes in terms of the international compensation regime for tanker oil pollution damage. In this respect, this research relevantly applies a social science methodology into legal research, to figure out and interpret the patterns of related countries with a high acceptance level of the international regime.

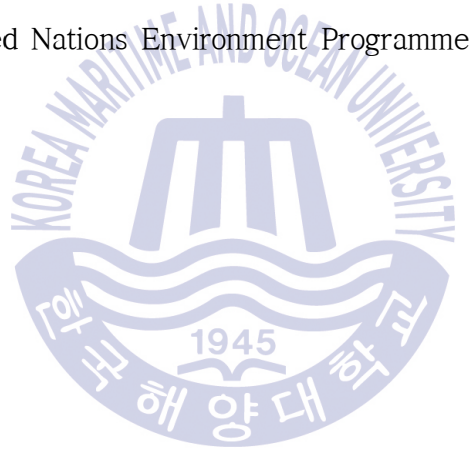
In fact, the aim of this thesis is to completely explore the general model of accession to the 1992 Fund Convention and to fully explain further rationale behind this type. By analyzing the Korean type which is similar in China, the possible explanation of these types will help to analyze the rationality of China's accession to the 1992 Fund Convention. This probably will provide inspiration for policy makers when they consider their needs to accept the 1992 Fund Convention now. Based on the above analysis, on one side, we come to conclude three ways to polish the legal system of compensation for oil pollution in China; on the other side, we are likely to analyze the feasibility of these approaches.

Abbreviations

CLC	Civil Liability Convention
CLCs	The 1969 CLC and 1992 CLC
CMC	China Maritime Code
COPE Fund	Compensation for Oil Pollution in European Waters Fund (EU)
CODGA	Compensation for Oil Pollution Damage Guarantee Act
CRISTAL	Contact Regarding a Supplement to Tanker Liability for Oil pollution
C O P C FUND	China Ship-Source Oil Pollution Compensation Fund
EU	European Union
FC	International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage
FOSC	Federal On-Scene Coordinator
GIS	Geographic Information System
GNI	Gross National Income
GT	Gross Tonnage
HSC	Hebei Spirit Center
IEA	International Energy Agency
IMCO	Intergovernmental Maritime Consultative Organization
IMO	Intergovernmental Maritime Organization
IOPC Fund	International Oil Pollution Compensation Fund
ITOPF	International Tanker Owner Pollution Federation

KCG	Korea Coast Guard
KOEM	Korea Marine Environment Management Corporation
KOPCA	Korea's oil pollution damage compensation law
KRW	Korean Won
LLMC	Convention on Limitation of Liability for Maritime Claims
LLR	The Regulation of Limitation of Liability for Maritime Claims Relating to Ships with a Gross Tonnage not Exceeding 300 Gross Tons and Those Engaging in Transport Services Between Ports of China, as well asThose for Other Coastal Operations (PRC)
LLP	Liability Limitation Proceeding
MARPOL	International Convention for the Prevention of Pollution from Ships
MEPL	Marine Environmental Protection Law (PRC)
MLA	Marine Liability Act
MLTM	Ministry of Land, Transport and Maritime Affairs
MPCF	Maritime Pollution Claims Fund
MOGASM	Ministry of Government Administration and Safety Management
MOF	Ministry of Finance (PRC)
MOT	Ministry of Transport (PRC)
MSA	Maritime Safety Administration (PRC)
NPFC	National Pollution Fund Center
OBOs	Oil/bulk/ore ships
OPA	Oil Pollution Act

OSLTF	Oil Spill Liability Trust Fund (The United States)
P&I	Protection and Indemnity
PRC	The People's Republic of China
SDR	Special Drawing Right
SOA	State Oceanic Administration (PRC)
SOPF	Ship-source Oil Pollution Fund (Canada)
STOPIA	Small Tanker Oil Pollution Indemnification Agreement
TOPIA	Tanker Oil Pollution Indemnification Agreement
UNCTAD	United Nations Conference on Trade and Development
UNEP	United Nations Environment Programme



Chapter 1 Introduction

1.1 Research Background

Oil remained the world's leading fuel, accounting for 32.9% of global energy consumption. Roughly 63% of oil consumption is from the transport sector. Oil substitution is not yet imminent and is not expected to reach more than 5% for the next five years.[1]Transporting such a huge amount of oil by sea involves the risk that oil spills may lead to pollution of the marine environment. According to Korea Institute of Environmental Law, there are probably more than 3,000 sour oil tankers running around the world every day, and the actual traffic volume can reach tens of millions of dollars.[2] Ocean tanker in 1960 was less than 64 million DWT[3]. But by the end of 2016, it has reached 550 million DWT.[4] And the large tanker ship in the 1950s is 30,000 DWT. Most of

1) WORLD ENERGY COUNCIL RESOURCES 2016 SUMMARY https://www.worldenergy.org/wp-content/uploads/2016/10/World-Energy-Resources_FullReport_2016.pdf. (2017.03.05.).

2) Sob Yeongcheon, "A study on Hebei oil pollution incident related to the environmental law-the US environmental pollution law contrast as the center, Korea Environmental Law Association", *Environmental Law Research*, 2008(05), p.474.

3) Deadweight tonnage (also known as deadweight; abbreviated to DWT, D.W.T., d.w.t., or dwt) or tons deadweight (TDW) is a measure of how much mass a ship is carrying or can safely carry; it does not include the weight of the ship. DWT is the sum of the weights of cargo, fuel, fresh water, ballast water, provisions, passengers, and crew.
DWT is often used to specify a ship's maximum permissible deadweight (i.e. when she is fully loaded so that her Plimsoll line is at water level), although it may also denote the actual DWT of a ship not loaded to capacity.

4) PETROLEUM & OTHER LIQUIDS http://www.eia.gov/petroleum/(2016.05.14.).

the cruises are between 250,000DWT-500,000DWT. The cost is the same as the cost of the car society on the expressway. In the period 1970 to 2016, nearly 50% of large spills occurred while the vessels were underway in open water. And 59% of the causes for these spills are accounted by allusions, collisions and groundings. These same causes accounted for an even higher percentage of incidents when the vessel was underway in inland or restricted waters, being linked to some 99% of spills[5]. At present, 60% of the world's oil is transported by sea. In order to increase the volume, reduce costs, the greater the oil tanker, in the event of an accident, the consequences could be disastrous. The world's annual pouring into the ocean of oil amounted to 2 million tons to 10 million tons, due to shipping into the ocean of oil pollutants amounted to 1.6 million tons to 2 million tons, of which about 1/3 is the oil tanker in the sea accident caused oil Caused by leakage. China's various oil spill accidents occur about 500 per year. Some coastal areas of seawater oil content has exceeded the national standard of seawater quality 2 times to 8 times. Marine oil pollution is very serious in China now[6].

The relevant international legal framework for liability and compensation is very developed for oil pollution from tankers, and providing significant compensation for loss or damage arising from oil pollution. As we all known the relevant international conventions is the CLC-IOPC Fund regime[7], they have been developed and improved upon, primarily in the aftermath of some particularly large oil spills. The first of these, the 1969 Civil Liability Convention (CLC) and the 1971 Fund

5) ITOPF Oil Tanker Spill Statistics 2016
http://www.itopf.com/knowledge-resources/data-statistics/statistics/(2017.06.10.).

6) People's network, Oil tanker leakage and marine biological disaster, *"new security"*
http://www.people.com.cn/GB/paper2515/12239/1101549.html.(2017.06.11.).

7) The CLC is The Civil Liability Convention and The IOPC Funds are two intergovernmental organisations (the 1992 Fund and the Supplementary Fund) which provide compensation for oil pollution damage resulting from spills of persistent oil from tankers.

Convention were negotiated following the Torrey Canyon disaster in 1967. It representing a clear legislative response of the international community to an oil pollution incident which at the time was of unprecedented proportions. The 1969 CLC and 1971 Fund Convention were subsequently amended, leading to the adoption of the 1992 CLC, the 1992 Fund Convention, the 2003 Supplementary Fund Protocol and the 2010 International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, which today represent the most advanced and modern legal instruments in the field.

Also, along with the growth in size of bulk carrier and container ships, numerous spills at sea have been of heavy fuel oil from non-ship vessels[8]. To prevent ship oil pollution damage, the International Maritime Organization (IMO) has adopted a number of international conventions in this regard. One of the most important international instruments is the International Convention for the Prevention of Pollution from Ships, 1973 and its 1978 Protocol (MARPOL 73/78). Annex I of MARPOL 73/78 specifically deals with prevention of pollution by oil. According to a recent study conducted by the International ship Owner Pollution Federation (ITOPF), there was a significant reduction in both the volume and frequency of oil spills during the period from 2010-2016[9], and this trend is likely to be partly attributable to the implementation and enforcement of conventions and regulations specifically aimed at the prevention of ship oil pollution[10].

With global trade in oil set to intensify in response to increasing demand especially from developing regions and with growing world oil

8) Ling Zhu, "Compensation Issues under the Bunkers Convention", *WMU Journal of Maritime Affairs*, 2008(7), pp.303-316.
9) ITOPF Oil Tanker Spill Statistics 2016.
http://www.itopf.com/knowledge-resources/data-statistics/statistics/(2017.06.10.).
10) Crude Oil Prices Begin 2016 with Short Covering Rally
http://marketrealist.com/2016/01/chinas-crude-oil-imports-bright-spot-2016-oil-market/(2017.05.06).

trade and dependence on longer-haul supply expected to continue to rise (e.g. from Brazil and Africa to China and Korean), ship oil pollution remains a potentially important risk. With the development of China's economy, China needs to import large amounts of oil resources, and the risks of oil pollution incidents are increasing.

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 and Korea, as the major oil import countries. Japan and Korea have become the important oil contributing states 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. These increasing demands for oil transport on the sea have made a number of Asian states become likely victims of serious oil spills inevitably.

Although China was one of member states of the 1969 CLC and 1992 CLC already[11], neither of these international conventions had been legislated into Chinese municipal laws for the purpose of governing oil pollution accidents in China. 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 and in judicial practice. Therefore, Chinese oil pollution trials are facing severe challenges as a consequence. This situation caused great confusion regarding the application of Chinese laws or international conventions in the field of justice.

11) China acceded to the 1969 CLC and its 1976 protocol on January 30th, 1980 and they entered into force in China on April 29th, 1980. At the same tune, the 1992 CLC was effective in China since January 5th, 2000.

However, in China, due to some historical and political reasons, the Fund Convention (Fund Convention 1971/1992) 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 tune, the Regulations on Levy and Usage Management relating to the Oil Pollution Compensation Fund from ships also become effective since July 1st, 2012. However, due to detailed requirements under the 'APC'PMEV 2010' and 'Regulation of the China Ship Oil Pollution Compensation Fund having not been clearly revealed, the claimants who suffered oil pollution damage from vessel source stilly find it is very difficult to obtain compensation from compensation or indemnification fluid regarding the oil pollution damage in China.

The China Ship Oil Pollution Compensation Fund (hereinafter referred to as the "COPC FUND") is in place to provide an additional amount of compensation up to RMB 30 million to oil pollution victims. The operation of the COPC FUND not only starts the mechanism of sharing the financial burden between ship owners and oil receivers, but also signifies the establishment of a two-tier compensation regime for ship oil pollution damage in China. Admittedly, this demonstrates the significant progress that China has so far made to protect the interests of pollution victims, as well as to protect the marine environment. However, it should be noted that the maximum compensation amount

provided by this two-tier compensation regime, particularly with regard to tanker oil pollution, is still much lower than the international standard that has been established by the above mentioned international conventions.

1.2 Research Questions and Purposes

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' which were:

1) To becomes 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 Canada;

3) Instead of joining international conventions, directly to formulate its own comprehensive municipal laws to govern all kinds of oil pollution accidents in their waters, as was the case in the United States of America.

The primary goal of this research is to compare the comprehensively examine the compensation regime for ship oil pollution damage in China and Republic of Korea. Questions are as follows:

(1) The legal problems under Chinese compensation system for ship oil pollution damage.

(2) How and what lessons can China take from international conventions; And how does China improve its compensation regime for ship oil pollution damage and move closer to the international standard? And how and what lessons can China take from the Korean advanced experience?

(3) Is it still necessary and sensible for China to accept the 1992 Fund Convention, which offers a higher level of compensation to victims?

In order to answer these questions, prior to investigating the newly established regime in China, the author chooses a similar situation in China-Korean compensation system as an example to illustrate.

Moreover, factors or combinations of factors, which may influence countries to accept the international compensation regime for tanker oil pollution in varying degrees, are to be identified analysis. The aim is to unveil the general patterns of Republic of Korea that has acceded to the 1992 Fund Convention, and to further explain the reasons behind the pattern. If China represents one of these patterns, the interpretations of these patterns will be helpful in analyzing the rationality of China's concerns regarding the 1992 Fund Convention. This will provide inspiration for policy makers when considering the necessity of now accepting the 1992 Fund Convention.

The research would have as-following purposes and significances:

(1) Bring out the principle of economics of environment and illustrate the theoretical model on the oil pollution liability regime to explain the rationality and significance of an oil pollution convention system;

Use the Pigou's external diseconomy theory, Aristotle's justice theory and Rawls's distributive justice theory to explain the theoretical of oil pollution convention fund system. The aim is to point out a clear direction for the future development of Chinese vessel source oil pollution damage compensation system.

(2) In order to improve the Chinese oil pollution damage compensation system, point out the problems under Chinese laws.

(3) Analyze the international convention to find the different liability choices among Korea and China, and make the major contributions to the determination of oil liability policy.

(4) Analyze the oil pollution damage compensation regime in Korea and its enlightenment to China.

(5) Contributions to the Regime for ship Oil Pollution Damage.

Throughout the ages, the international compensation regime for ship oil pollution damage has been proved to be one of the most successful and acceptable compensation schemes.

This thesis as far as possibly contributes to the existed literature on that aspect, it not only definitely reviews the legal framework of the compensation regime, but also obviously explains the various attitudes in terms of the international compensation regime for tanker oil pollution damage. In this respect, this research relevantly applies a social science methodology into legal research, to figure out and interpret the patterns of related countries with a high acceptance level of the international regime.

This thesis demonstrates that the establishment of the two-tier compensation regime for ship oil pollution damage has had a significantly positive effect in enhancing compensation capacity, and in moving closer to the international standard in the following eight aspects:

(1) The subject of oil pollution compensation.

(2) The scope of the compensation.

(3) Liability principles and the limitation of liability.

(4) The compulsory insurance of liability.

(5) The oil pollution compensation fund.

(6) Application of law.

(7) Consider acceding to the 1992 Fund or not.

(8) Improve the oil pollution compensation law.

1.3 Research Methods

This research is aimed to analyse problems of the oil pollution liability and compensation in the current regime of CLC-IOPC Fund Convention. Th oil pollution convention regime in Korea and China are also be analysed. This research uses a comparative study and aims to find a suitable model to establish the Chinese national compensation regime for oil pollution damage.

First of all, legal documentary analysis. A legal multidisciplinary approach[12] is to be employed. Introduced the compensation status of oil pollution damage in China and point out the Legal problems under Chinese ship Oil Pollution damage system. Various legal disciplines will be investigated, including maritime law, environmental law, tort law and insurance law. Maritime law, which regulates the relationships arising out of marine transportation and those pertaining to ships, is the basic research discipline, because ships causing oil pollution at sea are the sole object of research in this study. Besides this, certain specific issues in civil law, such as the application of the international conventions, are to be analyzed, because civil law provides general rules dealing with property relationships, as well as personal relationships between civil subjects with equal status. In addition, ship oil pollution is by nature a

12) Michael G. Faure and James Hu (eds.), "Prevention and Compensation of Marine Pollution Damage: Recent Developments in Europe, China and the US" ,Alphen Rijn, *Kluwer Law International*, 2006, iv.

kind of environmental tort. Accordingly, the basic principles and functions of environmental law and tort law need to be examined as well. Apart from the above, as a special feature of the liability and compensation system for ship oil pollution damage, compulsory insurance needs to be studied, to obtain a general understanding of insurance law.

Secondly, historical research. This article systematically combed the history and development of international compensation regime for ship oil pollution damage, as well as the related domestic oil pollution damage compensation legal system in China and Korea. The analysis of the international conventions regarding compensation for ship oil pollution damage will not be limited to the texts of the Conventions. The intentions of legislators concerning some important issues, such as strict liability, limitation of liability and compulsory insurance, are to be illustrated.

Thirdly, legal comparison method. The legal comparison method is adopted in analyzing the compensation regime for ship oil pollution in China. Comparisons between the well-established Korean regime and the Chinese regime are involved in almost all the main legal issues, such as strict liability, admissible claims, limitation of liability, compulsory insurance and the compensation fund. The legal comparison method helps to gain an in-depth understanding of both of these regimes, as well as to observe any gaps, which are difficult to detect the Chinese regime.

Fourthly, value analysis. Social science method analysis will be used to empirically explain how certain factors, which may influence the acceptance level of the international regime for ship oil pollution damage. And it also combined together to lead to the high acceptance level of the international regime. It focuses on the multiple combinations of different factors producing a specific outcome, rather than the "net effect" of each factor on this outcome. This research is also use the Pigou's external diseconomy theory, Aristotle's justice theory and Rawls's

distributive justice theory, seeking to demonstrate the potential this method has for solving legal problems. This research is for applying this method in the area of oil pollution compensation, and attempts to innovate the research in this area by combining a legal multidisciplinary approach with a social science method.

Lastly, case study. Through the case analysis, the status and legal problems under China's current oil pollution damage system has been well analyzed.

1.4 Thesis Structure

This paper is composed of five chapters.

Chapter 1 Introduction; it mainly elaborates research background, research questions, research significances, research methods and thesis structure.

Chapter 2 Bring out the principle of economics of environment and illustrate the theoretical model on the oil pollution liability regime to explain the rationality and significance of an oil pollution convention system. A number of key issues in several international conventions in this respect are analyzed. Under the international compensation regime for ship oil pollution damage, the different attitudes of countries toward the international compensation regime have been explained.

By explained the diverse acceptance level of this well-established international regime, and the influence of these factors, the patterns of legal application and acceptance level of the international compensation regime for ship oil pollution damage will be matching. And use the Pigou's external diseconomy theory, Aristotle's justice theory and Rawls's

distributive justice theory to explain the theoretical of oil pollution convention fund system for Chapter 5 to point out a clear direction for the future development of Chinese ship-source oil pollution damage compensation system.

Chapter 3 Illustrates the current situation with regard to oil spills from ships in Chinese sea areas by a statistical analysis and review of the legal framework of the compensation regime. Since there is no specific oil pollution law in China, stipulations of the civil liability and compensation for ship oil pollution damage can be traced through several national legislations and international conventions to which China has acceded. Under this Compensation Status, point out the legal problems under the Oil Pollution damage system from ships in China.

Chapter 4 Analyze the Korean compensation regime for ship oil pollution damage and its enlightenment to China. In addition, it analyzes the Korea's choice of the international compensation for oil pollution damage. In combination with the China's situation, this chapter provides Korean experiences in improving the oil pollution damage compensation system in China.

Chapter 5 Make suggestions and conclusions based on Chapters 3 and 4. This chapter focuses on to improve the compensation regime for ship oil pollution damage in China. Points out three ways to perfect the legal system of oil pollution damage compensation in China and analyzes the feasibility of each road. And summarizes the whole of the research, point out the contributions to compensation for ships oil pollution damage and areas for further research.

Chapter 2 Evolution of Legal Framework of the International Compensation Regime

2.1 Introduction

Compensation for pollution damage caused by spills from oil tankers is governed by an international regime elaborated under the auspices of the International Maritime Organization (IMO). The framework for the regime was originally the 1969 International Convention on Civil Liability for Oil Pollution Damage (1969 Civil Liability Convention) and the 1971 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (1971 Fund Convention). This 'old' regime was amended in 1992 by two Protocols, and the amended Conventions are known as the 1992 Civil Liability Convention and the1992 Fund Convention. The 1992 Conventions entered into force on 30 May 1996. The 1971 Fund Convention ceased to be in force on 24 May 2002 and the International Oil Pollution Compensation Fund 1971 (1971 Fund) ceased to exist with effect from 31 December 2014. A large number of States have also denounced the 1969 Civil Liability Convention. Therefore this note deals with the 'new regime', the 1992 Civil Liability Convention and the 1992 Fund Convention. The 1992 Civil Liability Convention governs the liability of ship owners for oil pollution damage. The Convention lays down the principle of strict liability for ship owners and creates a system of compulsory liability insurance. The ship owner is normally entitled to limit its liability to an amount which is linked to the tonnage of its ship. The 1992 Fund Convention, which is supplementary to the 1992 Civil Liability Convention, establishes a

regime for compensating victims when the compensation under the applicable Civil Liability Convention is inadequate. The International Oil Pollution Compensation Fund 1992, generally referred to as the IOPC Fund 1992 or the 1992 Fund was set up under the 1992 Fund Convention. The 1992 Fund is a world wide inter governmental organisation established for the purpose of administering the regime of compensation created by the 1992 Fund Convention. By becoming Party to the 1992 Fund Convention, a State becomes a Member of the 1992 Fund. The Organisation has its headquarters in London. As at 3 October 2017, 137 States had ratified or acceded to the 1992 Civil Liability Convention, and 115 States had ratified or acceded to the 1992 Fund Convention[13].

In 2003, the Protocol of 2003 to the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1992 (hereinafter referred to as "the 2003 Supplementary Fund Convention") was created to provide higher levels of compensation to some contracting states of the 1992 Fund Convention and this constitutes a third tier of the compensation regime. Moreover, two voluntary agreements, including (1) The Tanker Oil Pollution Indemnification Agreement, 2006 (hereinafter referred to as "TOPIA 2006") and (2) The Small Tanker Oil Pollution Indemnification Agreement, 2006 (hereinafter referred to as "STOPIA 2006"), were approved to ensure the cost of oil pollution claims under the 1992 CLC, the 1992 Fund Convention and the 2003 Supplementary Fund Convention are shared equally between ship owners and oil receivers.

Table 2-1 Legal Framework of the International Compensation Regime for Oil pollution Damage

13) IOPC FUNDS FIPOL FIDAC, 1 State which has deposited an instrument of accession, but for which the 1992 Fund Convention does not enter into force until date indicated. Thailand,7 July 2018.
http://www.iopcfunds.org/fileadmin/IOPC_Upload/Downloads/English/explanatory_note.pdf.(2016.03.18.).

Legal Framework of the International Compensation Regime for Oil Pollution Damage [14]			
Legal framework	Adoption Date	Effective Date	Number of Contracting Parties
1969 CLC	1969.11.29	1975.06.19	34
1971 FUND	1971.12.18	1978.10.16	14
1976 CLC	1976.11.19	1981.04.08	53
1976 FUND PROT	1976.11.19	1994.11.22	31
1992 CLC	1992.11.27	1996.05.30	137
1992FUND	1992.11.27	1996.05.30	115[15]
The 2003 Supplementary Fund Convention	2003.05.16	2005.03.03	31
Bunker2001	2001.03.23	2008.11.21	84

The advantages for a State being Party to the 1992 Civil Liability Convention and the 1992 Fund Convention can be summarised as follows. If a pollution incident occurs involving a tanker, compensation is available to governments or other authorities which have incurred costs for clean-up operations or preventive measures and to private bodies or individuals who have suffered damage as a result of the pollution. For example, fisher folk whose nets have become polluted are entitled to compensation, and compensation for loss of income is payable to fisher folk and to hoteliers at seaside resorts. This is independent of the flag of the tanker, the ownership of the oil or the place where the incident occurred, provided that the damage is suffered within a State Party.

The 1992 Civil Liability Convention and the 1992 Fund Convention

14) Status of multilateral conventions and instruments in respect of which the international maritime organization or its secretary-general performs depositary or other functions
http://www.imo.org/en/About/Conventions/StatusOfConventions/Documents/Status%20-%202017.pdf.(2016.03.15.).

15) Thailand, 7 July 2018 effective.

provide a wider scope of application on several points and much higher limits of compensation than the Conventions in their original versions. For these reasons, it is recommended that States which have not already done so should accede to the 1992 Protocols to the Civil Liability Convention and the Fund Convention (and not to the 1969 Convention) and thereby become Parties to the Conventions as amended by the Protocols (the 1992 Conventions).

The 1992 Conventions would enter into force for the State in question 12 months after the deposit of its instrument(s) of accession. States which are already Parties to the 1969 Civil Liability Convention are advised to denounce that Convention at the same time as they deposit their instruments in respect of the 1992 Protocols, so that the denunciation of the Convention would take effect on the same day as the 1992 Protocols enter into force for that State. As regards the Supplementary Fund Protocol, a State will have to consider whether, in light of its particular situation, ratification of or accession to the Protocol is in the interests of that State.

2.2 Basic Theory of Ship Oil Pollution Damage

2.2.1 Introduction

With regard to compensation for tanker oil pollution, countries have differed in the extent to which they accepted the international compensation regime. Based on the ratification of the 1969 CLC, the 1992 CLC, the 1992 Fund Convention and the 2003 Supplementary Fund Convention. There are currently 115 States Parties to the 1992 Fund Convention and 31 States Parties to the Supplementary Fund Protocol.

The Member States of the 1992 Fund and Supplementary Fund can be viewed by map or list below, as can the current States Parties to the 1992 and 1969 Civil Liability Conventions and the former States Parties to the 1971 Fund Convention. countries can be divided into five groups to some degree, reflect the level of protection afforded to victims of tanker oil pollution incidents:

(1) Countries that have not ratified or acceded to any of the relevant international conventions ;

(2) Countries that have only acceded to the 1969 CLC;

(3) Countries that have acceded to the 1992 CLC but not acceded to the 1992 Fund Convention;

(4) Countries that have acceded to the 1992 CLC and the 1992 Fund Convention; and

(5) Countries that have acceded to the 1992 CLC and the 1992 Fund Convention and, additionally, to the 2003 Supplementary Fund Convention.

So what is the reason for these countries to choose a different degree of acceptance?

What factors can make the country closer to international law?

As we all know, oil pollution from tanker is a hot topic, many experts have done a lot research on the technical and operational regulations as well as the accidents analysis with regard to the development of IMO conventions.

However, there is less systematic analysis from the economic theoretical point of view. Meanwhile, the liability regime, which consists of international conventions and national legislations, has not been harmonized by many countries. It is necessary for the regulators to have the entire understanding of the cost-benefit analysis in order to achieve the optimal level of the pollution.

Figure 2-1 Parties to the international liability and compensation Conventions.

16)

What are the appropriate types and levels of such regulations and how can they be determined?

China and Korea, as neighbors, but the oil pollution damage compensation international level of acceptance is not the same. which factors actually motivate states when deciding on the acceptance levels, and what types of countries tend to choose a high level of acceptance (i.e. accession to the 1992 Fund Convention or the 2003 Supplementary Fund Convention). The following will be explain the factors that may affect the country to accept the international oil pollution damage compensation system, and with the social science research methods

16) IOPC FUND
http://www.iopcfunds.org/about-us/membership/map/(2017.02.15.).

applied to legal research, to analyzed these factors, on the one hand, in order to the international oil pollution damage compensation system play a better advantage. On the other hand through the theoretical analysis of different levels of acceptance, to identify a better national acceptance path, improve the international oil pollution damage compensation system.

With regard to the impact factors, at the 2012, a report published by the United Nations Conference on Trade and Development (hereinafter referred to as "UNCTAD"),[17]some considerations that may be relevant to national policy makers in assessing the relevant merits of acceding to the 1992 CLC, the 1992 Fund Convention or the 2003 Supplementary Fund Convention are proposed. These considerations can be summarized as follows:

•The relative benefits of adherence to the relevant international conventions and the substantive merits of provisions of such relevant international conventions;

•The risk of exposure to tanker oil pollution;

•The financial burden associated with adherence to the relevant international legal conventions.

And we all know that the principal benefit of adherence to the relevant international conventions regarding compensation for tanker oil pollution damage is that the Contracting States are "better placed to deal with the financial consequences of a tanker oil spill". In other words, victims in the Contracting States of these international conventions can benefit from the compensation provided by the ship owners and oil cargo receivers. Based on equitable functioning of the international compensation regime, claimants in all Member States

17) UNCTAD Report of Liability and Compensation for Ship-Source Oil Pollution: An Overview of the International Legal Framework for Oil Pollution Damage from Tankers, Studies in Transport Law and Policy, 2012 No.1, p.19.

should be treated equally. Therefore, with respect to the benefit of providing compensation for oil pollution victims, there should be no differences among the Contracting States that have acceded to the same international conventions (i.e. the 1969 CLC or the 1992 CLC or the 1992 Fund Convention or the 2003 Supplementary Fund Convention). However, the maximum compensation amounts available to victims are different under the different international conventions. The maximum compensation amount available for pollution victims under the 1969 CLC is approximately 53 times less than the maximum compensation amount available for pollution victims under the 2003 Supplementary Fund Convention.[18)]

Different acceptance levels of the international compensation regime for tanker oil pollution could reflect the different levels of protection afforded to the victims of oil pollution incidents. For example, China and Korea have accept the different levels of the international compensation regime for tanker oil pollution, when to the victim, will get the different afford.

In the author's opinion, there are three factors may influence the acceptance level of the international compensation regime for tanker oil pollution, as follows:

(1) the risk of exposure to oil spills;

(2) the financial burden associated with adherence to the relevant international conventions; and

(3) the level of economic development.

2.2.2 Risk of Exposure to Tanker Oil Spills

18) The United States is an exceptional case.

ITOPF's guidance notes that the main reason some countries have not signed into the FUND Convention is the perception that the country's oil spill risk is not high. Low oil spill risk is likely to be a small local oil imports, then it will give people the feeling of low oil spill risk. However, oil tankers carrying crude oil for export and oil tankers passing through the country to other countries may pose a risk of oil spill in the country. Even in the case of small-scale oil pollution incidents in sensitive areas, it will be very difficult to clean up, resulting in losses and liquidation costs high. Although statistics show that there is very little likelihood of a major oil spill anywhere in the world, the serious consequences of these accidents could be unaffordable to local economic capabilities like the insurance purchased in the event of an accident.

The International Oil Pollution Fund does not seem worthwhile to buy insurance if there is no major oil spill. In the event of an accident, if the country is not a member of 1992 CLC and 1992 FUND, due to a lack of adequate financial support, the country may delay the necessary emergency response action to minimize the disposal risk and eventually lead to the failure of the claim to be carried out. As a result, People have serious consequences.

The risk of oil spills is defined as the probability (or likelihood) of spills multiplied by the consequences of those incidents. [19)]

Risk = Consequence * Probability

The probability relates to factors such as vessel traffic density, weather and sea conditions, navigational hazards, visibility, water depth and nature of the sea bed[20)]. The consequence of an oil spill refers

19) Manual on Oil Spill Risk Evaluation and Assessment of Response Preparedness, 2010 Edition, issued by IMO Publishing.

20) Irina Enache, Sabina Zagan, "Risk Assessment of Oil Marine Pollution", in Exposure and Risk Assessment of Chemical Pollution-Contemporary Methodology, eds. L.I. Simeonov and M.A. Hassanien ,*Springer*, 2009, pp. 325-334.

to the socioeconomic or environmental costs or damage which may result from an incident. It is a function of a number of factors, such as volume and type of cargo carried by a vessel at the time of an incident[21], effectiveness of the incident response, and proximity to environmentally and economically sensitive areas. Countries located in highly exposed areas not only have a high probability of oil spills occurring, but may also face a catastrophic loss if a major oil spill incident occurs. Adoption of the 1992 CLC can ensure that oil pollution victims are able to benefit from much more substantive financial compensation rules than under the 1969 CLC[22]. Furthermore, where a country is one of the Member States of the IOPC Fund, his risk of a major oil pollution incident and the financial losses incurred could be spread out over the large number of oil receivers who contribute to the IOPC Fund[23].

Therefore, it is likely that those countries having a greater risk of oil spills have a greater incentive to accede to the 1992 Fund Convention or the 2003 Supplementary Fund Convention.

Most studies regarding assessing the risk of tanker oil spill incidents are conducted at a regional level. There are few existing studies classifying the risk categories of different countries on a global scale. This might be partly due to the complexity of such risk assessment.

To evaluate the risk perception in relation to the degree of

21) Ibid., p.37

22) Colleen O'Hagan, "Use of GIS for Assessing the Changing risk of Oil Spill from Tankers", paper presented at 3rd Annual Arctic Shipping Conference, St Petersburg, Russia, pp.17-20. April 2007, available at:
http://www.itopf.com/information-services/publications/papers/documents/arctic_shipping.pdf.(2017.06.15.).

23) André Schmitt and Sandrine Spaeter, "Hedging Strategies and Financing of the 1992 International Oil Pollution Compensation Fund", Working Papers of BETA from Bureau d'Economie Théorique et Appliquée, UDS, Strasbourg, available at:
http://www.beta-umr7522.fr/productions/publications/2005/2005-12.pdf (2017.06.15.).

preparedness, research[24] was carried out by a group of ITOPF researchers to provide a general overview of the risk of tanker oil spill in 14 Regional Seas[25]and 5 Partner Seas as defined by the United Nations Environment Programme (hereinafter referred to as "UNEP"). The relevant risk of oil spill from tankers in different locations was deduced by comparing the historical occurrence of spills with the amount of oil transported.

The result, as illustrated in Table 2-2, shows different levels of the risk of oil spill from tankers (i.e. High, Medium or Low) in different regions.

Table 2-2, Different Levels of the Risk of Oil Spill from Tankers (i.e. High, Medium or Low) in different Regions

Regional Sea/ Partner Sea	Risk Category
North-east Pacific	Low
South-east Pacific	Low
Upper South-west Atlantic	Medium
Wider Caribbean	Medium
west&Central Africa	Medium
Eastern Africa	Medium
Red Sea & Gulf of Aden	Medium
Gulf Area	Medium
Mediterranean	High

24) T.H. Moller, F.C. Molloy and H.M. Thomas, "Oil Spill Risks and the State of Preparedness in Regional Seas", (2003), a paper presented at the International Oil Spill Conference 2003, *Vancouver, Canada*, pp.6-11.
April 2003, available at:
http://www.itopf.com/_assets/documents/iosc03.pdf.(2017.06.15.).

25) The Regional Seas Programme, launched in 1974 in the wake of the 1972 United Nations Conference on Human Environment held in Stockholm, is a program of UNEP aiming to address the accelerating degradation of the world's oceans and coastal areas through the sustainable management and use of the marine and coastal environment by engaging neighboring countries in comprehensive and specific actions to protect their shared marine environment.

Black Sea	High
Caspian	Medium
Baltic	Medium
North-east Atlantic	High
South Asian Seas	Medium
East Asian Seas	High
South Pacific	Low
North-west Pacific	High
Arctic	Low
Antarctic	Low

From this table we can see that the East Asian Seas have a high risk of the oil pollution. China and Korea are in this region.

Figure 2-2 Incidents attended by ITOPF.

2.2.3 Financial Burden

The final consideration proposed in the UNCTAD report is the financial burden associated with adherence to the relevant international

conventions. This is because any person in the Member States of the IOPC Fund who has received total quantities of contributing oil exceeding 150,000 tons, which oil has been carried by sea to the ports or terminal installations in the territory of that State, should pay an annual contribution to the IOPC Fund[26].

By and large, the contribution is proportional to the imports of crude and fuel oil.[27] Accession to the 1992 Fund Convention or the 2003 Supplementary Fund Convention could be of particular benefit to those countries reporting low annual receipts of crude or fuel oil but who are potentially vulnerable to the effects of a major tanker oil spil l[28]. This is because accession to the 1992 Fund Convention or the 2003 Supplementary Fund Convention ensures substantial compensation, but without incurring a heavy financial burden. Thus, it is logical that countries receiving limited shipments of crude and fuel oil, especially those who, at the same time, face potentially high risks, might be willing to adopt the 1992 Fund Convention or the 2003 Supplementary Fund Convention.

The IOPC Fund is financed by contributions from oil receivers in the Member States. Any person who, in the Member States of the IOPC Fund, has received total quantities of contributing oil exceeding 150,000 tons, which oil has been carried by sea to the ports or terminal installations in the territory of that State, should pay annual contributions to the IOPC Fund. Contributing oil refers to crude and fuel oil.[29] The annual contributions are calculated on the basis of a fixed

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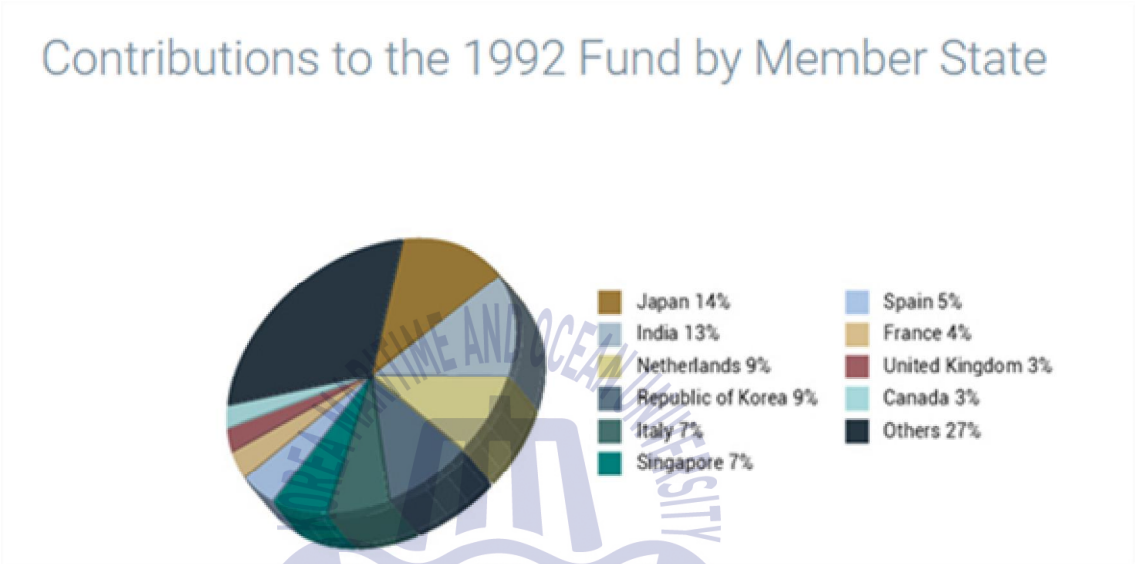
26) The 1992 CLC, Article 10(1)(a) and the 2003 Supplementary Fund Convention, Article 10(1)(a)

27) Under the 2003 Supplementary Fund Convention, a minimum contribution requirement is set. According to Article 14 (1) of the 2003 Supplementary Fund Convention, there is deemed to be a minimum annual receipt of 1 million tons of contributing oil in the state. Where the aggregate amount of contributing oil received is less than 1 million tones, the Contracting State is required to assume the obligations to pay the difference between the 1 million tones and the actual contributions by oil receivers.

28) Supra note 1, p.2.

sum per ton of oil, and vary from year to year depending on the number and size of claims expected[30].

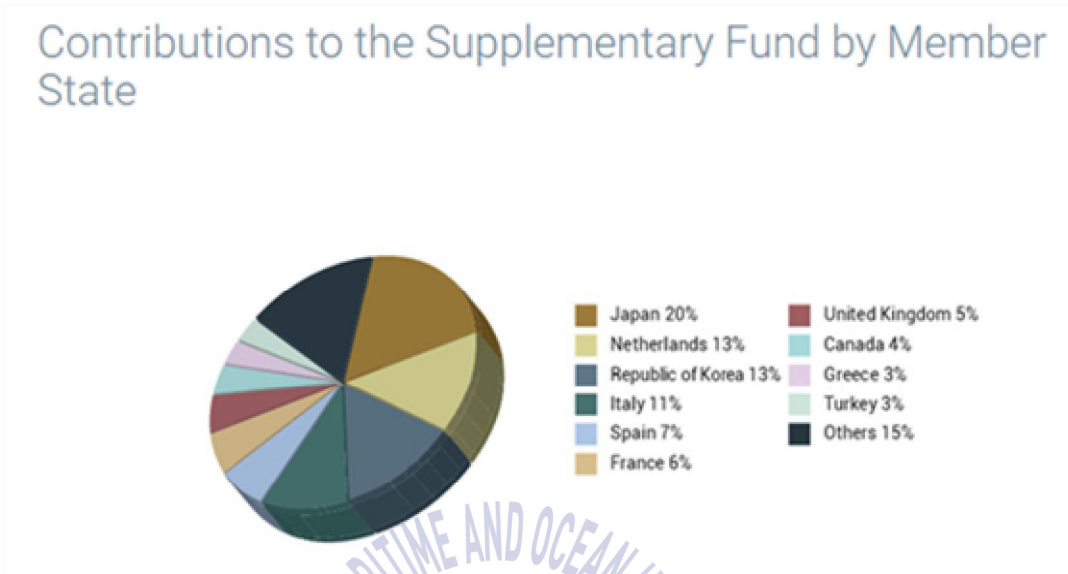
Figure 2-3 General Fund Contributions for 2016 (based on 2015 oil receipts), the most recent year for which contributions were levied.



The Supplementary Fund has not levied contributions since 2006. The figure2-4 shown depict the contributions by Member State if General Fund contributions had been levied for 2016 (based on 2015 oil receipts).

Generally speaking, the annual contribution is proportional to the crude and fuel oil received in a year[31]. In this research, financial burden refers to the financial burden of countries that are Member States of the 1992 IOPC Fund and the potential financial burden of countries that are not the Member States of the 1992 IOPC Fund. Since there are no actual contributions paid to the 1992 IOPC[32].

29) The 1992 CLC, Article 10(1)(a) and the 2003 Supplementary Fund Convention, Article 10(1)(a).
30) The 1992 CLC, Article 1(3)(a) and(b) and the 2003 Supplementary Fund Convention, Article (1)&(7).
31) UNCTAD Report of Liability and Compensation for Ship-Source Oil Pollution: An Overview of the International Legal Framework for Oil Pollution Damage from Tankers, Studies in Transport Law and Policy, 2012 No.1, p.22.
32) Data concerning the ratifications of the 1969 CLC, the 1992 CLC, the 1992



Fund by countries that are not currently Member States of the 1992 IOPC Fund, their financial burden is measured by the imports of contributing oil, including crude oil and fuel oil. This can provide a crude snapshot[33] of the financial burden that would be placed on them, or may be potentially placed on the oil receivers in a country. The imports of crude and fuel oil in 2016 of 116 countries were collected from the International Energy Agency (hereinafter referred to as "IEA") database. [34]

Fund Convention and the 2003 Supplementary Fund Convention of these countries are taken from the IMO documentations.

33) It should be noted that there are two limitations to using the imports of crude and fuel oil to measure the financial burden. The first limitation is that, according to Article 10(1) of the 1992 CLC, the contributing oil may include both oil that has been carried from abroad and oil that has been carried from another port in the same country. The second limitation is that the annual contributions to the Supplementary Fund are not considered because of the requirement of minimum contributions.

34) Energy Statistics of OECD Countries (2015 edition) and Energy Statistics of Non-OECD Countries (2015 editions), IEA Statistics. http://wds.iea.org/wds/pdf/WEDBES_Documentation.pdf.(2017.05.15.).

2.2.4. Level of Economic Development

The level of economic development is measured by Gross National Income per capita (hereinafter referred to as "GNI per capita") [35]

In addition to the abovementioned considerations addressed in the UNCTAD report, the level of economic development could also be considered as a factor that may influence the acceptance level of the international compensation regime for tanker oil pollution damage.

Firstly, since the economic structure of society is the foundation of our legal and political superstructure[36] and "legal guaranties are directly at the service of economic interests to a very large extent[37], the level of economic development may play a significant role in the decision over adopting the relevant international conventions.

Secondly, the international compensation regime for ship oil pollution damage aims to provide adequate and prompt compensation for victims of oil pollution incidents in Contracting States. Some scholars argue that pollution claims in poor countries could invariably be smaller and less costly than those in rich countries,[38] so making them reluctant to ratify the relevant international conventions with their relatively high financial caps.

Thirdly, the international compensation regime for ship oil pollution has also been thought to be relevant to environmental concerns and environmental protection strategies. This is because the international

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35) GNI per capita (formerly GNP per capita) is the gross national income, converted to U.S. dollars, using the World Bank Atlas method, divided by the midyear population.

36) Marx, K. and Engels, F., "A Contribution to the Critique of Political Economy in Collected Work" Vol.29, London: *Lawrence & Wishart,* 1975, pp.263-264.

37) Weber, M, Economy and Society: An Outline of Interpretive Sociology ,*University of California Press,* 1978, pp.334.

38)Alan Khee-Jin Tan, "ship Marine Pollution-The Law and Politics of International Regulation", London: *Cambridge University Press*, 2006, pp.330.

compensation regime could provide incentives on the part of interested parties to control and carry out measures to minimize pollution, and this in turn could produce better marine environmental protection.[39] Moreover, adequate compensation for cleanup costs can encourage prompt cleanup operations, which in itself could be beneficial for the marine environment. Wealthier countries can better afford more environmental protection activities than can poorer ones.[40]

In addition, a recent study indicates that, on average, populations in richer countries tend to have a higher level of environmental concern than do inhabitants of poorer nations.[41]

This finding is in accordance with the idea of an "environmental Kuznets Curve", which holds that environmental concerns, and thereby environmental quality, increase after a point as a society becomes more.

According to the World Development Indicator, Each year on July 1, the analytical classification of the world's economies based on estimates of gross national income (GNI) per capita for the previous year is revised. As of 1 July 2016, low-income economies are defined as those with a GNI per capita, calculated using the World Bank Atlas method, of $1,025 or less in 2015; lower middle-income economies are those with a GNI per capita between $1,026 and $4,035; upper middle-income economies are those with a GNI per capita between $4,036 and $12,475; high-income economies are those with a GNI per capita of $12,476 or more. The updated GNI per capita estimates are also used as input to the World Bank's operational guidelines that determines lending eligibility. Korea has experienced remarkable success in combining rapid

39) Gotthard M. Gauci, "Protection of the Marine Environment through the International Ship-Source Oil Pollution Compensation Regimes", *Review of European Community & International Environmental Law*, 1999, No.8, pp.29-36.
40) Mark Sagoff,"The Economy of the Earth: Philosophy, Law, and the Environment", 2nd,ed. ,New York: *Cambridge University Press*, 2008, p.4.
41) Axel Franzen and Reto Meyer, "Environmental Attitudes in Cross-National Perspective: A Multilevel Analysis of the ISSP 1993 and 2000", *European Sociological Review,* 2010, No.26, pp.219-234.

economic growth with significant reductions in poverty.

As to the financial burden associated with becoming a Member State of the IOPC Fund, there are no specific criteria to tell whether the financial burden is high or not. Based on the oil imports of those countries that ranked in the top fifteen in the world, the qualitative anchor of full non-membership of the set of countries with a low financial burden is placed at 30 million tons imports of crude and fuel oil. It should be noted that any person who, in the Member States of the IOPC Fund, has received total quantities of contributing oil exceeding 150,000 tons, is required to pay annual contributions to the IOPC Fund. By and large, the oil receivers do not need to pay any annual contributions if the aggregated oil imports in a country are below 150,000 tons. Thus, the qualitative anchor of full membership of this set is placed at 150,000 tons. The crossover point is set at 5 million tons.

2.2.5 Summary

Through the above analysis, we can be concluded that the oil pollution damage compensation system in the country is divided into three types.

The three types of countries have a high acceptance level regarding the international compensation regime for tanker oil pollution, which indicates they afford a high level of protection to both victims and the marine environment. These country types are:

(1) Upper-middle or high income countries facing medium risk of oil spill and receiving limited shipments of crude and fuel oil;

(2) Upper-middle or high income countries facing high risk of oil spill and receiving limited shipments of crude and fuel oil and

(3) Upper- middle or high income countries facing high risk of oil spill and receiving a large amount of shipments of crude and fuel oil.

For all three patterns, their economic development is a vital factor leading to a high acceptance level, because countries with strong economies usually have a better environmental protection strategy and stronger compensation ability to enable more environmental treaty ratifications so as to protect both victims and the marine environment. As far as the first two types are concerned, accession to the 1992 Fund Convention is advantageous, especially for those countries facing potentially high risks, yet who receive limited shipments of crude and fuel oil. This is because the IOPC Fund can provide a substantial amount of supplementary compensation for victims without imposing a heavy financial burden on domestic oil receivers. However, it is interesting to note that the majority of upper-middle or high income countries facing potentially high risk of oil spill ratified the 1992 Fund Convention or the 2003 Supplementary Fund Convention, even though a heavy financial burden is associated with it. In other words, with regard to the upper-middle or high income countries, the major determinant of adopting the 1992 Fund Convention is not whether the financial burden placed on the domestic oil industry is heavy, but whether the potential risk of exposure to tanker oil spill incidents is high. This might be because accession to the 1992 Fund Convention is undoubtedly a sensible method of spreading the high risk of major oil pollution incidents which could lead to huge economic and environmental losses.

However, as characterized by an upper-middle income, high risk exposure to oil spill incidents, and a potentially high financial burden, China has only acceded to the 1992 CLC and the Bunkers Convention; it has not acceded to the 1992 Fund Convention (currently, this has only been acceded to by the Hong Kong SAR), nor the 2003 Supplementary Fund Convention. What are the reasons that have led to China's reluctance to participate in the 1992 Fund Convention? Does the domestic legislation in China, like the legal regime of compensation for ship oil pollution in Korea, afford stronger protection to victims? To seek

answers to these questions, the legal regime of compensation for ship oil pollution in China will be comprehensively investigated in the following Chapter 5 of this thesis.

2.3 The Jurisprudential Basis of Oil Pollution Damage Compensation Fund System

As a shared relief method of environmental tort socialization, the oil pollution damage compensation system is established to protect the marine environment and marine oil pollution accident victims. Based on Pigovian tax theory,[42] the oil pollution damage compensation system levy is an internalization of external diseconomy for the enterprise. According to Aristotle's theories of distributive justice and corrective justice, the oil pollution damage compensation system is not only a redistribution of justice, but also a correction for the inability to restore a damaged justice using the traditional tort relief method; and Rawls' two justice principles (especially the difference principle)[43] shows the importance of

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42) A Pigovian tax (also spelled Pigouvian tax) is a tax levied on any market activity that generates negative externalities (costs not internalized in the market price). The tax is intended to correct an inefficient market outcome, and does so by being set equal to the social cost of the negative externalities. In the presence of negative externalities, the social cost of a market activity is not covered by the private cost of the activity. In such a case, the market outcome is not efficient and may lead to over-consumption of the product。
An often-cited example of such an externality is environmental pollution. In the presence of positive externalities, i.e., public benefits from a market activity, those who receive the benefit do not pay for it and the market may under-supply the product. Similar logic suggests the creation of a Pigovian subsidy to make the users pay for the extra benefit and spur more production. An example sometimes cited is a subsidy for provision of flu vaccine.
Pigovian taxes are named after English economist Arthur Pigou (1877-1959) who also developed the concept of economic externalities. William Baumol was instrumental in framing Pigou's work in modern economics in 1972.

43) A Theory of Justice is a work of political philosophy and ethics by John

adequate relief from oil pollution damage compensation fund for victims. Below the relevant legal basis will be analyzed from these theories.

The COPC FUND is transplanted from International Convention mostly, while the international convention neither represents China's interest, nor accords with the current Chinese social situation completely, as a product of national compromise of interests. In addition, the society's advancing with stable laws, so many terms from the International Convention cannot meet demands of current development after decades of development. Especially, as for the Limitation of Liability, the relief aims at the damage caused by tankers only with no consideration for those caused by non- tankers and other aspects. What's more, the later compensation is conducted only, but the prior prevention and emergency should even more be done compared with the later compensation. [44]The COPC FUND management methods have been modified a certain extent in transplantation, but many deficiencies still exist especially in theory and practice.

2.3.1. Pigou's Economic Externality Theory

Economist Arthur Cecil Pigou presented the concept of economic externality for the first time in his Economic Externality published in 1920, that is, some people's economic activities bring profits or losses

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Rawls, in which the author attempts to solve the problem of distributive justice (the socially just distribution of goods in a society) by utilising a variant of the familiar device of the social contract. The resultant theory is known as "Justice as Fairness", from which Rawls derives his two principles of justice: the liberty principle and the difference principle. First published in 1971, A Theory of Justice was revised in both 1975 (for the translated editions) and 1999.

44) Wang Tingting & Yu Shihui, "Discussion on the jurisprudential basis of the oil pollution compensation fund", *Lawrence & Wishart,* 2005, No.2, p.15.

to others, in which those who get profits do not have to pay for the consideration, and those who suffer losses will get no corresponding economic compensation. The positive external economy , also called external economy, means that the profits can be obtained without consideration payment (the marginal private net output is less than the marginal social net output) ; on the contrary, the negative external economic, also called external diseconomy, means that the suffered losses cannot get corresponding compensation (the marginal private net output is greater than the marginal social net output). The externality will lead to the behavior subject's failure of full internalization for negative or positive effects of economic activities and failure of the cost and benefit reflection, and it cannot keep the production in a optimal level in society, which is also one of defects in resource distribution. So the government should conduct moderate intervention with different economic policies aiming at the negative externality and the positive externality respectively: to collect tax from the departments producing negative externality to force manufacturers to reduce production for reducing the social external diseconomy of enterprises; to give rewards and allowances for the departments producing positive externality to encourage manufacturers to increase production for increasing its external economy, and this tax-charge policy tool is called as Pigou Tax later.

In the United States, the oil pollution damage compensation fund is considered as a kind of premium tax as one of Pigou Tax, that is the insurance fund formed by collecting tax from industries or interest groups aiming at potential environment risk that is associated with production and use of taxed products. It plays a role in encouraging enterprises to consider environmental risk and internalize it in decision making. The environment pollution is the typical external diseconomy caused by the enterprise economic development.

Before the 1770's, all governments had increased financial input for

pollution regulation with the worsening environmental problems, so environment destroyers could transfer their behavior cost and enjoy benefits brought by environment destruction, leading to heavier public finance burden as well as more environment destruction behaviors. According to the principle of Pigou Tax, OECD put forward the polluter pays principle in 1972, and required companies to internalize pollution cost, and undertake all costs from pollution control, pollution regulation and pollution damage compensation, to reflect the social fair and polluter pays principle. After constant enrichment, it has developed into the principle of payment by polluters, compensation by users, protection by developers and recovery by destructors, that is, the principle of payment by polluters and compensation by beneficiaries. The oil pollution damage compensation fund is levied by actors using the sea for oil imports and submarine oil exploitation. A fixed sum is for a fixed purpose , the fund is used to compensate victims and pollution cleaners who suffer losses in marine environment damage. In fact, based on Pigou's externality theory, the environment pollution regulation fee is internalized in the development of related oil companies, and the cost of environment regulation, recovery and compensation is undertaken by the polluter (ship owner), beneficiary (oil owner) and developer (marine oil developer) together, in order to promote companies to calculate their production cost benefit, choose the most beneficial environment protection behavior, and realize the sustainable development of economic development and environment protection.

2.3.2 Aristotle's Theory of Justice

"Law is aimed at creating a just social order",[45] and the justice is an

45) Edgar Bodenheimer. "Jurisprudence", *The Philosophy and Method of the Law*, 1962, p.30.

ultimate goal of all laws. The law can only approach to justice infinitely, but cannot overlap with it completely. More approaching-justice law is, more better. Therefore, it is beneficial to make a value judgment for the oil owner's sharing of marine oil pollution damage from a viewpoint of justice for measuring it pros and cons. Aristotle thinks that the fundamental legislation purpose is to promote the realization of justice. As the embodiment of justice, the law should be obeyed, which is also to obey justice. The justice can make everyone get his due, namely everyone will acquire what he deserves. The justice is divided into distributive justice and corrective justice. The distributive justice refers to the wealth, power, honor and interest are distributed among social members in accordance with the standards such as individual talents and contributions. While the corrective justice begins to play a role facing the broken distributive justice, namely offenders will give compensation if the individual rights are violated, which demands offenders to return undeserved profits to victims, or transfers victims' losses to offenders for getting their own due.[46] The damage compensation embodies the corrective justice as a typical example. Aristotle's justice theory starts from the inequality among people with limitation, and has a guiding significance for our understanding of the oil pollution damage fund law system.

Modern tort law adopts a no-fault principle for the environmental tort liability, and the transition itself is a kind of redistribution of justice from a fault principle to a no-fault principle. However, the no-fault principle only has protected victims' of pollution accidents, is not just for subjects who directly bear marine environment pollution damage compensation liability and ship owners. The no-fault principle actually put the human's fault on an individual subject in both offshore oil exploitation and ocean oil cargo transportation, as high-risk industries

46) Aristotle's Theory of Justice http://www.yourarticlelibrary.com/paragraphs/aristotles-theory-of-justice/40130/(2015.11.15).

that occur accidents possibly with the largest duty of care, which is not fair or just. As a result, 1969 International Convention on Civil Liability for Oil Pollution Damage was put forward outside of the principle of full compensation by the jurisprudential circle in the middle the 20th century, to avoid socially public-welfare enterprises to fall into economic difficulties and even be bankrupt due to bearing civil liability. The convention is a theoretical foundation of oil pollution damage compensation liability limitation of ship owners.

However, the ship's liability limitation is not enough to cope with the increasingly serious pollution damage due to large-scale oil pollution accidents. Along with higher and higher non-compensation proportion, a new unfairness and injustice occur. The shipping industry is vital to the national economy as an energetically fostered national industry. Since ancient times, a flourishing shipping industry leads to a strong ocean industry and an increased national strength. As an indispensable part of national economic development, the shipping companies are essential to the development of human society. In large-scale marine oil pollution accidents, if the ship is requested to bear all compensation liability alone, the huge damage compensation will lead to bankruptcy of the shipping enterprise with great possibility, which will hit the enterprise' s enthusiasm undoubtedly. Because the special properties of oil cargos is a reason for oil pollution damage, it is unfair to let the tanker transportation industries bear all compensation liability alone. In this case, the redistribution of justice occurs. The ship owner should bear strict liability for possible oil pollution damage, and the ship owner distributes some risks to the insurer through liability insurance .For what the ship owner and its insurer can compensate, it will be scattered to importing oil owners with oil pollution damage fund, and then the oil owner pays shared fund as cost, reflected in the price of oil.[47] In this

47) Zhangwei "Crisis" and "Revolution"
Http: //www. Civillaw. Com. Cn / article / default. Asp? Id = 13462 (2016.10.17.).

way, a potential oil pollution damage consequence can be shared among the carrier, cargo owner, consumer and victim for distributive justice.

From the perspective of corrective justice, everyone is born with the right of environment, and the right to survive and use environmental resources in an unpolluted and undestroyed environment. Marine environment pollution not only has a bad effect on relevant rights and interests of coastal residents, farmers and tourism operators, but also violates the state ownership of the natural marine resources and citizen right to enjoy a clean environment, which has destroyed the distributive justice of natural law, the social order and interests established according to the actual law. Therefore, a tort damage compensation legal procedure needs starting to correct the destroyed justice. The victims are still unable to get complete relief , restore its balance or return to its original place by the ship' s damage compensation as a responsibility party of oil pollution damage.[48] At this point, the IOPC FUND has reflected its value on correcting destroyed justice and compensating victims' loss.

2.3.3 Rawls's Justice Theory

Rawls's justice theory has inherited and developed modern bourgeois enlightenment thought with people's freedom and equality as a core, and proposed two fundamental principles of justice, starting from a hypothesis condition of "veil of ignorance": the first one is an equal freedom principle, namely everyone is equal to enjoy a basic freedom right like others at the greatest extent; the second justice principle includes an equal opportunity principle and a difference principle. It is impossible to distribute resources for every social member according to

48) Christon Lapouyade &Deschamps, *RTDC*, 1998(2), p.369.

his need based on limited social resources. So for fair and reasonable distribution, all social members must be provided with an equal opportunity in distribution, keeping all positions and statuses open, which is the connotation of an equal opportunity principle. In order to mediate difference of all social members, the worst people's status will be improved at most. Those who are in the most unfavorable social position should enjoy the best interest for what can be compensated equally, which is the embodiment of "a difference principle".[49)]

Everyone can enjoy the equal rights and opportunities in Rawls's justice theory. At the same time, the theory shows the conflict between freedom and equality or between the individual and the society: when a person enjoys the right of freedom, the defect of rationality and pursuit of interests will inevitably lead to the interest conflict among people, and the difference and inequality of politics and economy, which ultimately limits people to fully enjoy the right of freedom. So a difference principle must be implemented, and weak-position people's interests should be taken care of in social wealth distribution, and the economic inequity is eliminated by national regulation farthest for the

49) Rawls's theory of justice revolves around the adaptation of two fundamental principles of justice which would, in turn, guarantee a just and morally acceptable society. The first principle guarantees the right of each person to have the most extensive basic liberty compatible with the liberty of others. The second principle states that social and economic positions are to be (a) to everyone's advantage and (b) open to all.
A key problem for Rawls is to show how such principles would be universally adopted, and here the work borders on general ethical issues. He introduces a theoretical "veil of ignorance" in which all the "players" in the social game would be placed in a situation which is called the "original position." Having only a general knowledge about the facts of "life and society," each player is to make a "rationally prudential choice" concerning the kind of social institution they would enter into contract with. By denying the players any specific information about themselves it forces them to adopt a generalized point of view that bears a strong resemblance to the moral point of view. "Moral conclusions can be reached without abandoning the prudential standpoint and positing a moral outlook merely by pursuing one's own prudential reasoning under certain procedural bargaining and knowledge constraints."

social harmony. Rawls's justice theory has a guiding influence on sharing costs, benefits and cooperation produced by social cooperation.

In cases of marine oil pollution damage, the first principle of justice is applied to freedom and right of using water areas for production and living in equal distribution, which is protected equally. As for obtained wealth in marine development and use, its risk burden is not equal, so the second principle of justice will be adopted. The distribution is just when it meets the most disadvantaged people' s best interest. Among three parties who bear the marine oil pollution damage risk, oil owners and ship (or ocean development and equipment) owners are always large enterprises with powerful economic strength. In the first half year of 2013, Petro China's net profit reached 65.522 billion Yuan with daily profit of 362 million Yuan as an Asia's most profitable company. Sinopec's net profit reached 29.417 billion Yuan with daily profit of 160 million Yuan. And Cnooc's net profit reached 4.38 billion Yuan with daily profit of 190 million Yuan. There were 3 oil companies among 10 richest companies in the world in 2014.[50] These oil companies import and transport oil or exploit seabed oil s relying on marine, with both pollution and huge profits, as beneficiaries of marine environment and resources. By contrast, the victims and cleaning expense claimers belong to a vulnerable group in oil pollution damage. The insignificant shared-payment is all worth for victims and cleaning expense claimers, although it is a drop in the ocean in eyes of oil owners and ship (or ocean development and equipment) owners. For example, in the deepwater horizon oil spill accident, the $20 billion fund set up by BP only accounted for 20% of the total income of $410 billion in 2004.[51] In marine oil spill accidents, victims cannot get full compensation due to

50) Be "tied" by oil: from spacecraft to garbage bags ,*VIS-TA to see the world*, 2013(24), p.72.
51)Eastmoney.
http://finance . eastmoney.com(2016.10.18.).

the many victims, huge compensation, polluters' limited compensation ability and liability limitation. The victim's rights and interests cannot be protected for a long time, which means that a no-fault principle and a full-compensation principle exist in name only, the social interest is in imbalance, and the fair value is lost. The oil pollution damage compensation system has raised the possibility of victim relief and the efficiency of compensation, and protected the interests of victims furthest in line with the difference principle in Rawls' theory of justice, which is good for social stability and harmonious.

2.3.4. Summary

What is stipulated in law cannot be simply regarded as a reason to explain a legal issue, and the rationality is required to be analyzed and explained behind the law. Based on the social need, the oil pollution fund law system first appears in 1971 Fund Convention as a practical system without any support from the legal foundation and basis. Through the development of more than 40 years in many countries, the system is gradually enriched and perfected. Pigou's external diseconomy theory ,Aristotle's justice theory and Rawls's distributive justice theory not only explain the rationality and significance of an oil pollution fund system, but also point out a clear direction for the future development of Chinese vessel source oil pollution damage compensation system.

2.4 1969&1992 CLC

Despite several improvements in the 1992 CLC, the general framework and basic features of the 1969 CLC and the 1992 CLC are the same,

and some of the provisions are identical. Both of them impose a strict liability on ship owner, with limited exceptions where they are entitled to limit their liabilities. Besides this, compulsory insurance and direct action are also important features of these two conventions. The main differences between the 1969 CLC and the 1992 CLC are the limits of compensation. Limits under the 1992 CLC are significantly higher than the limits under the 1969 CLC. Although the 1992 CLC is widely accepted, there are a number of states that only ratified the 1969 CLC, for instance, Brazil and Costa Rica.

2.4.1 The Subject of Liability

After the oil pollution damage occurs, it is the first step to solve the oil pollution damage compensation. The main body of the subject and the subject of the compensation for Vessel Source oil pollution damage are the rights and obligations of the Vessel Source oil pollution damage compensation relation Vessel Source. The subject of liability for compensation for oil pollution damage in Vessel Sources is more complicated than the general civil liability. Especially in the case of Vessel Source collision.

2.4.2 Scope of Compensation

1. Geographic Scope

The 1969 CLC applies to pollution damage caused on the territory, including the territorial sea, of a Contracting State, and to preventive measures taken to prevent or minimize such damage.[52] The 1992 CLC

52) The 1969 CLC, Article II.

extends the geographic application to the exclusive economic zone of a Contracting State established in accordance with international law, and to the area beyond and adjacent to the territorial sea extending not more than 200 nautical miles from the baseline from which the breadth of its territorial sea is measured if a Contracting State has not already established such zone.[53] Moreover, it explicitly provides that any preventive measures to prevent or minimize such damage, wherever taken, are covered by the 1992 CLC. [54]

2. Ship

The 1969 CLC restricted its application to sea-going vessels and seaborne craft of any type whatsoever actually carrying oil in bulk as cargo.[55] Thus, ships in ballast were excluded. However, the 1992 CLC applies to sea-going vessels and seaborne craft of any type whatsoever constructed or adapted for the carriage of oil in bulk as cargo.[56] Accordingly, the 1992 CLC extends its application to include oil spills caused by ships that do not actually have oil carried in bulk as cargo at the time of an incident. In addition, the 1992 CLC also extends the scope of coverage to oil spills from oil/bulk/ore ships (OBOs),[57] provided that they are 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. For both conventions, warships or other ships owned or operated by a State and used for non-commercial government service are excluded from application. [58]

The term "General Ship" means all ships excluding oil tankers and oil storage barges. The provisions of this Law shall not apply to warships or

53) The 1992 CLC, Article II(a).
54) The 1992 CLC, Article II(b).
55) The 1969 CLC, Article I(1).
56) The 1969 CLC, Article I(1).
57)Tsimplis M.N., "Marine Pollution from Shipping Activities", *Journal of International Maritime Law,* 2008(14), pp.101-152.
58) The 1969 CLC, Article XI and the 1992 CLC Article XI.

other ships owned or operated by the State which were then used solely for non-commercial services by the Government[59].

3. Oil

Oil is defined in the 1969 CLC as any persistent oil, no matter whether carried on board a ship as cargo or in the bunkers, such as crude oil, fuel oil, heavy diesel oil, lubricating oil and whale oil.[60] The 1992 CLC deletes the whale oil and restricts the application to persistent hydrocarbon mineral oil.[61]

4. Scope of Compensation

The 1969 CLC applies to pollution damage caused on the territory, including the territorial sea, of a Contracting State, and to preventive measures taken to prevent or minimize such damage.[62] The 1992 CLC extends the geographic application to the exclusive economic zone of a Contracting State established in accordance with international law, and to the area beyond and adjacent to the territorial sea extending not more than 200 nautical miles from the baseline from which the breadth of its territorial sea is measured if a Contracting State has not already established such zone.[63] Moreover, it explicitly provides that any preventive measures to prevent or minimize such damage, wherever taken, are covered by the 1992 CLC. [64]

The scope of ship oil pollution damage compensation mainly involves two aspects, the ship oil pollution damage compensation for ships and oil. The establishment of the oil pollution damage compensation system of the ship is bound to stipulate which ships are applicable to which ships are not applicable; and the scope of the applicable oil shall be

59) The 1969 CLC, Article 11.
60) The 1969 CLC, Article I(5).
61) The 1969 CLC, Article I(5).
62) The 1969 CLC, Article II.
63) The 1969 CLC, Article II(a).
64) The 1969 CLC, Article II(b).

clearly established, which shall be included and excluded.

5. Oil Pollution Damage

Pollution damage defined by the 1969 CLC means "… loss or damage caused outside the ship carrying oil by contamination resulting from the escape or discharge of oil from ships, wherever such escape or discharge may occur, and the costs of preventive measures and the further loss or damage caused by preventive measures." [65] The preventive measures mean "…any reasonable measures taken by any person after an incident has occurred to prevent or minimize pollution damage." [66] Damage is limited to that caused outside the ship, so that damage caused by pollution on board is not covered. Besides this, the damage must be caused by contamination resulting from the escape or discharge of oil from the ship. Personal injury resulting from an explosion or fire caused by oil is excluded. [67] The 1992 CLC clarified the compensation scope for environmental loss. It is provided that compensation for impairment of the environment other than loss of profit from such impairment shall be limited tothe costs of reasonable measures of reinstatement actually undertaken or to be undertaken.[68] In addition, the 1992 CLC extends the compensation to include preventive measures after an incident creating a grave and imminent threat of causing such damage.[69]

2.4.3 Strict Liability of Ship owner

Strict liability is imposed on a ship owner, but at the same time, under

65) The 1969 CLC, Article I(6)
66) The 1969 CLC, Article I(7)
67) Chao Wu, supra note 4, p.48.
68) The 1969 CLC, Article I(6).
69) The 1969 CLC, Article I(8).

the CLCs, a limited number of exonerations are available to them.[70] Claimants only need to prove that the damage was caused by the spill incident. The burden of proof that a pollution incident is caused by exonerations provided by the CLCs[71] is on ship owners. Thus, ship owners bear the risk of pollution claims resulting from incidents occurring that are not their fault, and this is important because often all the relevant evidence is outside the control of claimants.[72] "Owner" means the registered owner or the person or persons owning the ship when the registered owner is in absence.[73] Channeling the liability to owners[74] is one of the important features of the CLCs. On the one hand, the CLCs channel oil pollution claims to the owner of the ship by excluding claims against him that are outside the scope of the CLC. On the other hand, claims against various parties other than the ship owner are excluded. Under the 1969 CLC, no claimant be made against the servants or agents of the owner.[75] The 1992 CLC goes further than the 1969 CLC in this regard.[76] However, this provision does not prejudice the right of recourse of the owner against any party for pollution claims. [77] The channeling provision is designed to simplify the compensation system for pollution victims by clarifying the compensation route to the greatest extent, thus speeding up the settlement of claim

70) The 1969 CLC, Article III(1) and the 1992 CLC, Article(1).
71) The 1969 CLC, Article III(2) & (3) and the 1992 CLC, Article(2) & (3).
72) Colin de la Rue, Charles B. Anderson, "Shipping and the Environment", 2nd ed. ,London, Hong Kong: *Informa*, 2009, p.98.
73) The 1969 CLC, Article I(1) and the 1992 CLC, Article I(1).
74) The 1969 CLC, Article I(3) and the 1992 CLC, Article I(3).
75) The 1969 CLC, Article III(4).
76) This is because the 1992 CLC further provides that no claims can be made against: (a) the servants or agents of the owner or a member of the crew; (b) the pilot or any other person who, without being a member of the crew, performs services for the ship; (c) any charterer, manager or operator of the ship; (d) any person performing salvage operations with the consent of the owner or on the instructions of a competent public authority; (e) any person taking preventive measures and (f) all servants or agents of any person mentioned in (c), (d) and (e).
77) The 1969 CLC, Article III(5) and the 1992 CLC, Article III(5).

s.[78]

If oil is discharged or escapes from two or more vessels, the owners of all the ships concerned shall be jointly and severally liable for all such damage that is not reasonably separable.[79] Where oil is discharged or escapes after a collision between two or more vessels, then if oil is spilled from only one vessel, under the CLCs, and without prejudice to the right of recourse, the owner of the spilling vessel shall be strictly liable for the oil pollution damage, unless he can discharge himself from liability due to any stipulated exonerations in the CLCs. It should be noted that, although the CLCs do not provide a basis for claims against non-spilling vessels involved in a collision that results in oil pollution, claims being brought against colliding vessels on some other basis for liability are not prevented.[80]

2.4.4 Limitation of Liability

As one of the traditions in maritime law, the right of ship owners to limit their liability under the CLCs may be considered as a quid pro quo for the stringent basis of liability.[81] As far as strict liability is concerned, unless such liability is limited, industry would not carry out hazardous activities that are essential to society, because the risk generated from the activities would be greater than the profit.[82] Under the 1969 CLC, owners are entitled to limit their liability in respect of any one incident to an aggregate amount of 2,000 francs for each ton of ship's tonnage, and the maximum compensation amount shall not in

78) Mans Jacobsson, "Bunker Convention in Force", *Journal of International Maritime Law* 15, 2009, pp.21-36.
79) The 1969 CLC, Article IV and the 1992 CLC, Article IV.
80) Colin de la Rue and Charles B. Anderson, supra note 21, pp.669-670.
81) Colin de la Rue and Charles B. Anderson, supra note 21, p.113.
82) Chao Wu, supra note 4, p.62.

any event exceed 210 million francs. Under the 1976 protocol, Special Drawing Rights (hereinafter referred to as "SDR"), as defined by the International Monetary Fund, are used as the applicable unit of account replacing the gold franc.[83] A new limit of 133 SDR for each ton, and a financial cap of 14 million SDR, are provided.[84] There is no minimum limitation of liability under the 1969 CLC, which resulted in the IOPC Fund being involved in a number of minor incidents and bearing a large proportion of compensation.[85] As a consequence, in the 1992 CLC, a minimum limit of 3 million SDR for a ship not exceeding 5,000 tons is set. For ships above 5,000 tons, the limit is 3 million in addition to 420 SDR for each ton above 5,000 tons. The maximum compensation amount is 59.7 million SDR. Following the Erika incident, limits were again increased by the 2003 Amendments.[86] A minimum limit of 4.51 million SDR is set for a ship not exceeding 5,000 tons; for ships above 5,000 tons, the limit is increased to 4.51 million SDR in addition to 631 SDR for each ton above 5,000 tons; and the overall financial cap is reached at 89.77 million SDR.[87]

Under the CLCs, certain conduct by ship owners can lead to the loss of limitation. Under the 1969 CLC, the owners are not entitled to limit their liability if the incident occurred as a result of actual fault or privity of the owner.[88] Under the 1992 CLC, the test of conduct barring the right of limitation is stricter, so it is harder to break the limits, which could be seen as a compromise to increase the limitation amounts. A ship owner is denied the right of limitation if it is proved that the pollution damage resulted from his personal act or omission, was

83) The 1976 Protocol to the International Convention on Civil Liability for Oil Pollution Damage, 1969, agreed on 19 November 1976.
84) The 1976 Protocol, Article II(1).
85) Colin de la Rue and Charles B. Anderson, supra note 21, p.14.
86) IMO Resolution LEG. 1(82), Amendment, adopted on 18 October 2000, to the Limitation Amounts in the Protocol of 1992 to Amend the International Convention on Civil Liability for Oil Pollution Damage, 1969.
87) The 2003 Amendment, Article 2.
88) The 1969 CLC, Article V(2).

committed with the intent to cause such damage, or recklessly and with knowledge that such damage would probably result.[89] The burden of proving the ship owner's conduct is on the claimant.[90]

The owner shall establish a fund with the Court or other competent authority, for the total sum representing the limit of his liability as described in the CLCs.[91] Establishment of a limitation fund is a prerequisite to the right of limitation.[92] Where the owner has established a fund and is entitled to limit his liability, no person having a claim for pollution damage arising out of the incident shall be entitled to exercise any right against any other assets of the owner in respect of such claim. Meanwhile, the Court, or any other competent authority, shall order the release of any ship or other property belonging to the owner, which ship or property may have been arrested in respect of a claim for pollution damage arising out of the incident, and shall similarly release any bail furnished to avoid such arrest.[93] With regard to the distribution of the limitation fund, the pro-rata rule is introduced so that the fund shall be distributed among the claimants in proportion to the amount of their established claims.[94]

2.4.5 Compulsory Insurance and Direct Action

Owners of a ship carrying more than 2,000 tons of oil in bulk as cargo is required to maintain compulsory insurance or other financial security in the sum fixed by applying the limits of liability prescribed in

89) The 1992 CLC, Article V(2).
90) The Bowbelle, 1990, Lloyd's Rep. p.532 and MSC Mediterranean Shipping Co SA v Delumar BVBA, *The Rosa M & Lloyd's Rep,* 2002, No.2, p.399.
91) The 1969 CLC, Article V(3) and the 1992 CLC, Article V(3).
92) The 1969 CLC, Article V(3) and the 1992 CLC, Article V(3).
93) The 1969 CLC, Article VI(1) and the 1992 CLC, Article VI(3).
94) The 1969 CLC, Article V(4) and the 1992 CLC, Article V(4).

the 1969 CLC or the 1992 CLC.[95] Smaller ships of less than 2,000 tons are not required to maintain compulsory insurance, so as to alleviate the administrative burden on the compulsory insurance regime.[96] Claimants are entitled to claim for compensation directly against the liability insurers or other person providing financial security.[97]

However, as a compromise, the insurer may avail himself of the limits of liability, even though the owner is not entitled to limit his right. Furthermore, it is the right of the insurer to avail himself of any defenses which the owner himself would have been entitled to invoke. The insurer can be discharged of his liability if the pollution damage resulted from any willful misconduct of the owner himself. However, in no case can the insurer reject a claim for a defense which he might have been entitled to invoke in a proceeding brought against him by the owner.[98] Compulsory insurance and direct action solve any difficulties in enforcing claims caused by the insolvency of one-ship companies, and ensure adequate and prompt compensation for claimants.[99]

Contracting States shall be ensure that, under the domestic legislations, the adequate insurance or other financial guarantee is in force for a ship carrying more than 2,000 tons of oil in bulk as cargo, wherever registered, which calls at their ports or offshore terminals.[100] With respect to a ship registered in a Contracting State, a certificate attesting that insurance or other financial guarantee is in force shall be issued by the appropriate authority of the State of the ship's registry.[101] At the same time, with respect to a ship not registered in a Contracting State, the certificate shall be issued by the appropriate authority of any

95) The 1969 CLC, Article V(1) and the 1992 CLC, Article V(2).
96) O.R. LEG/CONF/4, p.469.
97) The 1969 CLC, Article V(8) and the 1992 CLC, Article V(8).
98) The 1969 CLC, Article V(8) and the 1992 CLC, Article V(8).
99) David W. Abecassis, The Law and Practice Relating to Oil Pollution from Ships, London: *Butter worths*, 1978, p.205.
100) The 1969 CLC, Article V(8) and the 1992 CLC, Article VII(11).
101) The 1969 CLC, Article V(2) and the 1992 CLC, Article VII(2).

Contracting States of the CLCs. The issuing authorities have the discretion to determine the conditions of issue and validity of the certificate. However, no specific provision in CLCs requires the issuing authorities to investigate the financial standing of the insurer before issuing the certificate. The certificate shall be carried on board the ship, and a copy shall be deposited with the authorities who maintain a record of the ship's registry[102], or with the authorities of the State issuing and certifying the certificate if the ship is not registered in a Contracting State.[103] Contracting States agree to recognize the certificates issued by each other under the Conventions. If there are some concerns that the insurer is financially incapable of meeting his obligation in full, the authorities of any Contracting States of CLCs may request consultation with the issuing authorities at any time.[104]

2.5 The 1992 Fund Convention

As the second tier of compensation under the international regime, the IOPC Fund provides supplementary compensation for ship oil pollution damage. The 1992 IOPC Fund is available where (1) the ship owner is exempted from liability under the 1992 CLC; (2) the ship owner is financially incapable of meeting his obligations in full and any financial guarantee does not cover or is insufficient to compensate for the damage; or (3) the damage exceeds the limits of liability under the 1992 CLC.[105] At the same time, the 1992 IOPC Fund incurs no obligation of compensation if (a) it is proved that the pollution damage resulted from an act of war, hostilities, civil war or insurrection, or was caused by oil

102) The 1969 CLC, Article VII(6) and the 1992 CLC, Article VII(6).
103) The 1969 CLC, Article VII(4).
104) The 1969 CLC, Article VII(7) and the 1992 CLC, Article VII(7).
105) The 1992 Fund Convention, Article 4(1).

which has escaped or been discharged from a warship or other ship owned or operated by a State and was used on Government non-commercial service at the time of incident; and (b) the claimant cannot prove that the damage resulted from an incident involving one or more ships.[106] Additionally, the 1992 IOPC Fund is exonerated wholly or partially from its obligation to pay compensation if it is proved 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.[107] However, exoneration due to contributory negligence of the claimant does not apply to preventive measures.[108] The maximum compensation amount provided by the 1992 IOPC Fund was originally set at 135 million SDR in respect of any one incident,[109] but this was increased to 203 million SDR from 1 November 2003.[110] This amount includes the actual amount paid by the ship owner under the 1992 CLC.[111]

1. Supplementary Compensation

The 1992 Fund pays compensation to those suffering oil pollution damage in a State Party to the 1992 Fund Convention who do not obtain full compensation under the 1992 Civil Liability Convention for one of the following reasons.[112]

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106) The 1992 Fund Convention, Article 4(2).
107) The 1992 Fund Convention, Article 4(3).
108) The 1992 Fund Convention, Article 4(1).
109) The 1992 Fund Convention, Article 3(4).
110) Amendments of the Limits of Compensation in the Protocol of 1992 to Amend the International Convention on the Establishment of An International Fund For Compensation for Oil Pollution Damage, 1971, was approved by IMO Resolution LEG1(82) on 18 October 2002.
111)IOPC Fund Annual Report, 2011, available at:
http://www.iopcfund.org/npdf/AR2011_e.pdf.(2017.04.05.).
112) (1) the ship owner is exempt from liability under the 1992 Civil Liability Convention because it can invoke one of the exemptions under that Convention; or(2) the ship owner is financially incapable of meeting its obligations under the 1992 Civil Liability Convention in full and its insurance is insufficient to satisfy the claims for compensation for pollution damage; or (3) the damage exceeds the ship owner's liability under the 1992 Civil Liability

In order to become Parties to the 1992 Fund Convention, States must also become Parties to the 1992 Civil Liability Convention.

2. Limit of Compensation

The maximum amount payable by the 1992 Fund in respect of an incident occurring before 1 November 2003 was SDR 135 million (US$ 190.3 million), including the sum actually paid by the ship owner (or its insurer)under the 1992 Civil Liability Convention. The limit was increased by some 50.37% to SDR 203 million(US$ 286.1 million) on 1 November 2003. The increased limit applies only to incidents occurring on or after this date.

3. Financing of the 1992 Fund

The 1992 Fund is financed by contributions levied on any person who has received in one calendar year more than 150, 000 tonnes of crude oil and heavy fuel oil (contributing oil) in a State Party to the 1992 Fund Convention.

4. Basis of Contributions

The levy of contributions is based on reports of oil receipts in respect of individual contributors. Member States are required to communicate every year to the 1992 Fund the name and address of any person in that State who is liable to contribute, as well as the quantity of contributing oil received by any such person. This applies whether the receiver of oil is a Government authority, a State-owned company or a private company. Except in the case of associated persons (subsidiaries and commonly controlled entities), only persons having received more than 150 000 tonnes of contributing oil in the relevant year should be reported.

Oil is counted for contribution purposes each time it is received at a port or terminal installation in a Member State after carriage by sea.

Convention.

The term received refers to receipt into tankage or storage immediately after carriage by sea. The place of loading is irrelevant in this context; the oil may be imported from abroad, carried from another port in the same State or transported by ship from an off-shore production rig. Also oil received for trans shipment to another port or received for further transport by pipeline is considered received for contribution purposes.

5. Payment of Contributions

Annual contributions are levied by the 1992 Fund to meet the anticipated payments of compensation and administrative expenses during the coming year. The amount levied is decided each year by the Assembly. The 1992 Fund has a General Fund which covers expenses for administration. The General Fund also covers compensation payments and claims-related expenditure, to the extent that the aggregate amount pay able by the Fund does not exceed a given amount per incident (SDR 4 million). If an incident gives rise to substantial payments of compensation and claims-related expenditure by the 1992 Fund, a Major Claims Fund is established to cover payments in excess of the amount payable from the General Fund for that incident.

The Director issues an invoice to each contributor, following the decision taken by the Assembly to levy annual contributions. Each contributor pays a specified amount per tonne of contributing oil received. A system of deferred invoicing exists whereby the Assembly fixes the total amount to be levied in contributions for a given calendar year, but decides that only a specific lower total amount should be invoiced for payment by 1 March in the following year, the remaining amount, or a part thereof, to be invoiced later in the year if it should prove to be necessary.

The contributions are payable by the individual contributors directly to the 1992 Fund. A State is not responsible for the payment of contributions levied on contributors in that State, unless it has

voluntarily accepted such responsibility.

6. Level of Contributions

Payments made by the 1992 Fund in respect of claims for compensation for oil pollution damage may vary considerably from year to year, resulting in fluctuating levels of contributions. The following table sets out the most recent contributions levied by the 1992 Fund to both the General Fund and Major Claims Funds, covering the period 2013-2016. Further information and a detailed history of contributions levied by the 1992 Fund is available here. Annual contributions Date due Fund Total.

Table 2-3 The most recent contributions levied by the 1992 Fund to both the General Fund and Major Claims Funds, covering the period 2013-2016.

Annual contributions	Date due	Fund	Total contribution (£)	Contribution per tonne of contributing oil (£)
2013	01.03.2014	General Fund	3300000	0.0021077
		Prestige	2500000	0.0018429
		Major Claims Fund Volgoneft 139 Major Claims Fund	7500000	0.0048892
2014	01.03.2015	General Fund	3800000	0.0024779
2015	01.03.2016	General Fund	4400000	0.0029061
2016	01.03.2017	General Fund	9700000	0.0062582
		Alfa I Major Claims Fund	6400000	0.0041634

2.6 The 2003 Supplementary Fund Convention

Following the Erika[113]and Prestige[114] incidents, compensation provided by the 1992 CLC and the 1992 Fund Convention was proved to be inadequate. The Supplementary IOPC Fund was created by the 2003 Supplementary Fund Convention. It provides a third tier of compensation in cases where the total damage exceeds, or there is a risk that it will exceed, the applicable limit of compensation provided by the 1992 IOPC Fund.[115]Only the Contracting States of the 1992 Fund Convention are entitled to participate in the 2003 Supplementary Fund Convention, and only those established claims which have been recognized by the 1992 IOPC Fund can be covered by the Supplementary IOPC Fund.[116]The maximum compensation available under the Supplementary IOPC Fund for any one incident is up to 750 million SDR, which includes the amount payable under the 1992 CLC and the 1992 Fund Convention.[117]

The Supplementary IOPC Fund is financed by contributions levied on any person in a Contracting State who has received more than 150,000 tons of crude oil and heavy fuel oil in one calendar year. In addition, there is the requirement of a "membership fee" provided by Article 14 of the 2003 Supplementary Fund Convention. According to this article, there shall be deemed to be a minimum receipt of 1 million tons of contributing oil in each Contracting State.[118] If the aggregate quantity of contributing oil received in a Contracting State is less than 1 million tons, the Contracting State shall assume the obligation to pay the contribution, based on the deemed 1 million tons receipt or on the difference between the 1 million tons deemed receipt and the actual receipts within the state that fall within the 2003 Supplementary Fund

113) Erika incident took place in France in 1999.
114) Prestige incident took place in Spain in 2002.
115) IOPC Fund Annual Report, 2011, available at: http://www.iopcfund.org/npdf/AR2011_e.pdf (2015.11.12.).
116) The 2003 Supplementary Fund Convention, Article 1(8).
117) The 2003 Supplementary Fund Convention, Article 4(2).
118) The 2003 Supplementary Fund Convention, Article 14(1).

Convention.[119] The inclusion of the deemed receipt of 1 million tons contributing oil ensures at least a minimum contribution to the very considerable compensation offered by the Supplementary IOPC Fund, and also effectively enforces the proper reporting of oil receipts.[120]

Contracting States shall communicate to the Director of the Supplementary IOPC Fund information on oil receipts in accordance with Article 15 of the 1992 Fund Convention.[121] If a Contracting State does not fulfill the obligation to submit the communication, and this results in a financial loss for the Supplementary IOPC Fund, that Contracting State shall be liable to compensate such loss.[122] Furthermore, compensation provided by the Supplementary IOPC Fund will be temporarily denied if a Contracting State does not fulfill the communication obligations imposed by Article 13(1) and Article 15(1). [123] Where the compensation has been temporarily denied, the compensation will be denied permanently if the communication obligations have not been complied with within one year after the Director of the Supplementary IOPC Fund has notified the Contracting State of its failure to report.[124]

2.7 The Bunkers Convention

According to Article 1(1) of the CLC 1969 and its 1992 Protocol, the CLCs do not apply to ships other than oil tankers. It was the purpose of

119) The 2003 Supplementary Fund Convention, Article 14(2).
120) Elizabeth Blackburn QC, "The 2003 Protocol to the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage 1992: One Bridge Over Some Particularly Troubled Water", *Journal of Maritime Law and Commerce*, 2003, No.9, pp.530-544.
121) The 2003 Supplementary Fund Convention, Article 13(1).
122) The 2003 Supplementary Fund Convention, Article 13(2).
123) The 2003 Supplementary Fund Convention, Article 15(2).
124) The 2003 Supplementary Fund Convention, Article 15(3).

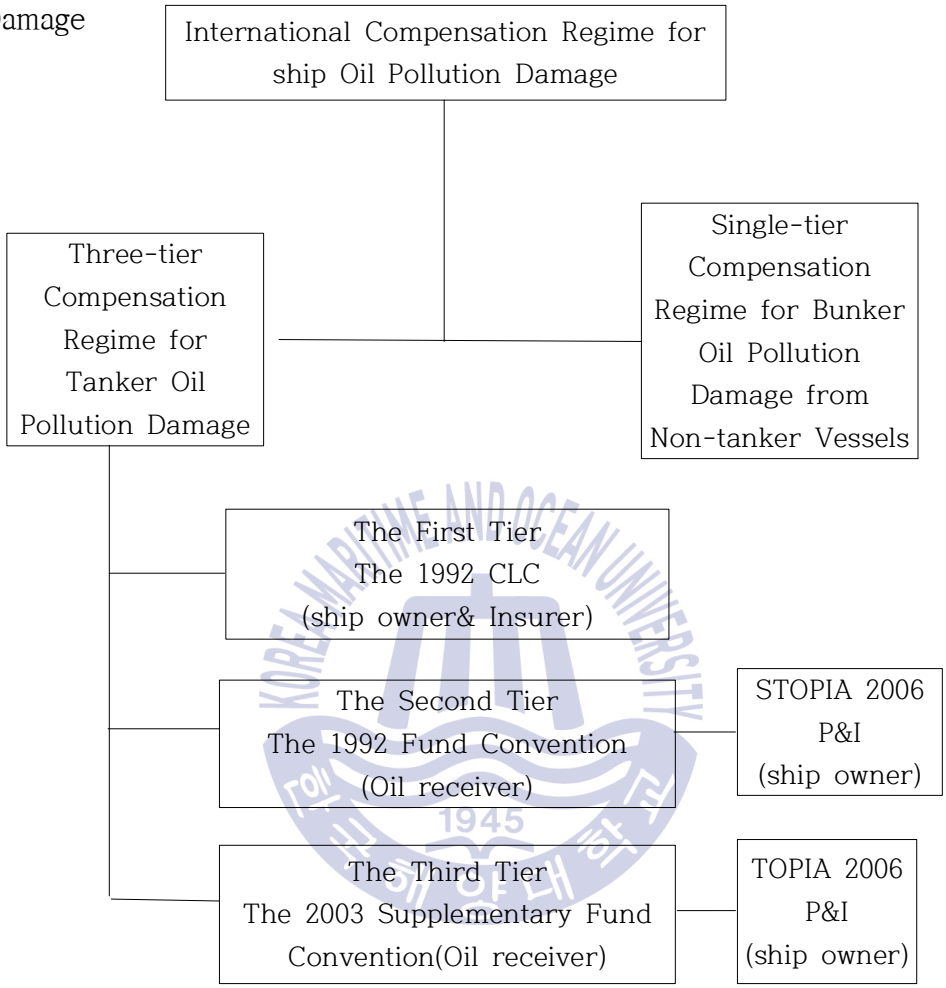
the Bunkers Convention to fill in this gap and to develop an international system of liability and compensation for bunker oil pollution damage from non-tanker vessels.[125]The Bunkers Convention was created to ensure adequate and prompt compensation to victims of oil pollution damage when oil is carried as fuel in a ship's bunker.[126] The main features of the Bunkers Convention are similar to that of the 1992 CLC, such as the strict liability[127], limitation of liability[128] and compulsory insurance[129]. However, there is no supplementary compensating source for bunker oil pollution under the international system. This is because of the practical problem that it is impossible to identify contributors among the cargo interests.[130] Despite the fact that the Bunkers Convention is largely modeled on the 1992 CLC, and that some of the provisions are identical, the Bunkers Convention differs from the 1992 CLC in many aspects, such as the definition of "ship" & "oil" ; Wider Scope of Liable Parties and No Channeling Provisions;

2.8 Summary

The international compensation regime for ship oil pollution damage has been considered to be successful in achieving the goal of compensating victims of oil pollution incidents, and has served as model

125) Ling Zhu, "Can the Bunkers Convention Ensure Adequate Compensation for Pollution Victims?", *Journal of Maritime Law and Commerce*, 2009, No.40, pp.203-219.
126) Ling Zhu, "Compulsory Insurance and Compensation for Bunker Oil Pollution Damage", *Berlin: Springer*, 2007, p.7.
127) The Bunkers Convention, Article 3.
128) The Bunkers Convention, Article 6.
129) The Bunkers Convention, Article 7.
130) Ling Zhu, "Compensation Issues under the Bunker Convention", *WMU Journal of Maritime Affairs,* 2008,No.7, PP.303-316.

Figure 2-5 International Compensation Regime for ship Oil Pollution Damage



For other liability and compensation instruments, such as the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea (hereinafter referred to as "the HNS Convention"). It not only strives to provide adequate compensation for victims of oil pollution incidents in the Contracting States, but also balances the financial burden between ship owners and oil receivers. Its success can be clearly seen from its wide worldwide ratification.[131]

The international compensation regime for damage caused by spills from oil tankers was primarily governed by the two IMO Conventions-the 1969 CLC and the 1971 Fund Convention. These Conventions were amended in 1992by the two Protocols, which amplified the compensation limits and expanded the span of the previous conventions. In 2000, an agreement was accomplished on aising the limits of the 1992 CLC and Fund Convention. The Supplementary Fund established in 2003 increases the amount of compensation in States that ratify it to about US$1.2 million. The IMO regime lays down the principle of strict liability for tanker owners and creates a system of compulsory liability insurance. It covers pollution damage but environmental damage compensation (other than for loss of profit from impairment of the environment) is limited to costs incurred for reasonable measures to reinstate the contaminated environment.

Expenses incurred for preventive measures are recoverable even when no spill of oil occurs, provided there was grave and imminent threat of pollution damage. Claims for compensation for oil pollution damage (including clean-up costs) may be brought against the owner of the tanker which caused the damage or directly against the owner's P&I insurer. The tanker owner is normally entitled to limit his liability to an amount which is linked to the tonnage of the tanker causing the pollution. Oil receivers in countries that are party to the Fund Convention are liable for the payment of supplementary compensation through the IOPC Fund. The environmental loss and economic losses suffered by the oil spills must be adequately compensated. It is submitted that the relevant provisions oft he CLC and Fund Conventions are somewhat disappointing on this aspect.

Although the Conventions provide for a comparatively straightforward

131) As of October 2017, the 1992 CLC has 137 Contracting States; the Fund Convention has 115 Contracting States; the 2003 Supplementary Fund Convention has 31 Contracting States and the Bunkers Convention has 66 Contracting States.

claims procedure, claimants are less likely to obtain adequate compensation in the event of a catastrophic oil spills and the oil industry is put under less pressure to prevent oil spills.The liability and compensation system set up by both the Conventions met with response in the international community. As the Fund Convention succeeded in securing quick proceedings for the payment of compensation, the ratification status of the Conventions by states is on the rise, which shows the way to the harmonization of the law and practice of liability and compensation system for oil pollution damage. The States, which had adopted both conventions, a fair coverage of damage were achieved. The liability and compensation system have worked remarkably well until now. Except in a few cases, the States, which had adopted both conventions, have achieved a fair coverage of damage. On the contrary, in States, which had adopted only the CLC, the amounts payable under this Convention or under national laws, barely covered the damage sustained.

The liability and compensation system set up by the IMO Conventions must be met with complete uniformity and full reciprocity between States. States have to be ready to give up some of their sovereign rights in consideration of the expectation of some greater protection of their own interests in some other State’ s jurisdiction.

After more than half a century of efforts, oil pollution damage compensation system formed a relatively perfect legal mechanism,

They show the following characteristics:

1, Oil pollution compensation system presents a unified international trend.

2, At the international level to establish a ship oil pollution compensation system of the basic legal framework.

3, International legislation has emerged a new form, making it an important complement to international conventions.

4, The provisions of the limit of liability for damage has gradually increased trend.

And form above analysis ,for all three high level patterns, their economic development is a vital factor leading to a high acceptance level, because countries with strong economies usually have a better environmental protection strategy and stronger compensation ability to enable more environmental treaty ratifications so as to protect both victims and the marine environment. As far as the first two types are concerned, accession to the 1992 Fund Convention is advantageous, especially for those countries facing potentially high risks, yet who receive limited shipments of crude and fuel oil.

This is because the IOPC Fund can provide a substantial amount of supplementary compensation for victims without imposing a heavy financial burden on domestic oil receivers. However, it is interesting to note that the majority of upper-middle or high income countries facing potentially high risk of oil spill ratified the 1992 Fund Convention or the 2003 Supplementary Fund Convention, even though a heavy financial burden is associated with it. In other words, with regard to the upper-middle or high income countries, the major determinant of adopting the 1992 Fund Convention is not whether the financial burden placed on the domestic oil industry is heavy, but whether the potential risk of exposure to tanker oil spill incidents is high. This might be because accession to the 1992 Fund Convention is undoubtedly a sensible method of spreading the high risk of major oil pollution incidents which could lead to huge economic and environmental losses.

For Korea, as the type of upper-middle or high income countries facing potentially high risk of oil spill ratified the 1992 Fund Convention or the 2003 Supplementary Fund Convention, even though a heavy financial burden is associated with it. However, as characterized by an upper-middle income, high risk exposure to oil spill incidents, and a potentially high financial burden, China has only acceded to the 1992

CLC and the Bunkers Convention; it has not acceded to the 1992 Fund Convention (currently, this has only been acceded to by the Hong Kong SAR), nor the 2003 Supplementary Fund Convention. What are the reasons that have led to China's reluctance to participate in the 1992 Fund Convention? Does the domestic legislation in China, like the legal regime of compensation for ship oil pollution in Korea, afford stronger protection to victims? To seek answers to these questions, the legal regime of compensation for ship oil pollution in China will be comprehensively investigated in the following Chapter 5 of this thesis.

Chapter 3 Compensation Status and Legal problems under Chinese Laws

3.1 Compensation Status in China

3.1.1 Oil spill from Ships in Chinese Sea Areas

According to the statistics from Ministry of Transportation, there are totally 3200 shipping oil spill accidents in coastal areas of China, including 91 major oil spill accidents with the oil spill volume of more than 50 tons each accident, with the total oil spill volume of about 42936 tons. In the history, the 1983 Qingdao East Ambassador oil spill (Panama) is the largest shipping pollution accident, with the oil spill volume of more than 3000 tons. In addition, there are 5-7 increased major oil spill accidents per year in a very serious situation..[132] On average, incidents involving more than 50tons take place each year, and the average annual spillage volume is 1,014 tons .Of the 63 oil tanker spill incidents of 1973 to 2004, 29 were oil tanker accidents in China , of which only 11 were awarded compensation for 38% of the total; 22 were from foreign oil tankers with a compensation rate of 100% , The average compensation of 8.28 million per win, the maximum amount of compensation of about 50 million yuan.[133]

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132) All oil spills mentioned in this article refer to oil spills of over 50 tons from ships into Chinese sea waters. Data can not be obtained after 2009, so no statistics are available.

133) Han Lixin, "Ship Pollution Damage Compensation Legal Issue"s, *Law Press*, 2007, p.21.

Table 3-1 Annual Number and Volume of Oil Spills Over 50 Tons From 1973-2009 in China

Year	Number of Spills	Volume (tons)	Year	Number of Spills	Volume (tons)
1973	1	1,400	1995	6	1567
1794	1	895	1996	6	2437
1975	2	228	1997	4	540
1976	3	8530	1998	2	392
1977	1	350	1999	2	1089
1978	1	655	2000	2	305
1979	2	555	2001	3	2790
1983	2	4093	2002	3	1260
1984	3	1842	2003	5	1500
1986	1	200	2004	1	1268
1989	2	364	2005	7	1758
1990	1	100	2006	3	749
1991	2	295	2007	6	319
1992	2	430	2009	5	1172
1994	5	431	Total	84	37514

Table 3-2 Number and Quantities of Oil Spills Over 50 Tons by Nationality of Vessel

Nationality	Number of Incidents	Percentage of Total Number of Incidents	Volume of Spillage	Percentage of Total Volume of Spillage
Chinese	49	58.3%	16021	42.7%
Foreign	35	41.7%	21493	57.3%

Table 3-3 Number and Quantities of Oil Spills Over 50 Tons by Type

Vessel Type	Number of	Percentage	Volume of	Percentage

	Incidents	of Total Number of Incidents	Spillage (tons)	of Total Volume of Spillage
Tanker	50	59.5%	29591	78.9%
Bulk Carrier	26	31.0%	4942	13.2%
Container Ship	4	4.8%	2051	5.5%
Oil Barge	4	4.8%	930	2.5%

of Vessel

Table 3-4 Number and Quantities of Oil Spills Over 50 Tons by Cause

Cause	Number of Incidents	Percentage of Total Number of Incidents	Volume of Spillage (tons)	Percentage of Total Volume of Spillage
Colliding	51	60.7%	21062	56.1%
Grounding	19	22.6%	13100	34.9%
Sinking(being sunk after collision is excluded)	9	10.7%	1320	3.5%
Others	5	6.0%	2032	5.4%

Table 3-5 Number and Volume of Oil Spillage Over 50 Tons by Decade

Decade	Number of Incidents	Percentage of Total	Volume of Spillage	Percentage of Total

		Number of Incidents	(tons)	Volume of Spillage
1970s	11	13.1%	12613	33.6%
1980s	8	9.5%	6499	17.3%
1990s	30	35.7%	7281	19.4%
2000s	35	41.7%	11121	29.6%

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.

In recent years, China has experienced an increase in pollution incidents, in part due to the rapid expansion of the Chinese economy and the rise in shipping. These incidents include bunker fuel spills from non tank vessels and can result in substantial environmental damage and fisheries claims. A number of incidents are outlined below:

In 2002, the tanker TASMAN SEA was involved in a collision at the entrance to the port of Tianjin, spilling some 350 tonnes of Champion Export crude. Most of the oil drifted out into Bohai Bay and quickly emulsified. The Tianjin Harbour Authority and local fishermen conducted clean-up operations in near shore waters for about a week. Although the incident was relatively small and had no significant impact on the coastline, substantial claims were made in court for fisheries losses.[134)]

In 2005, the tanker ARTEAGA ran aground off the port of Dalian, spilling a relatively small quantity of Marib Light crude oil, a significant proportion of which evaporated within one or two days of the spill. No recovery, containment or dispersing operations were carried out, and no shoreline oiling was reported.[135)]

In 2009, the unladen container vessel AGIOS DIMITRIOS 1 spilt approximately 600 tonnes of bunker fuel after grounding close to Zhuhai in Guangdong province, affecting nearby oyster farms. Local fishermen applied sorbent material although most of the oil stranded on nearby shorelines to be collected by local villagers. The cargo vessel ZOORIK (November 2009) spilt some 500 tonnes of bunker fuel after grounding at the mouth of the Yangtze River, affecting nearby mariculture. The response primarily involved the use of sorbent and dispersant, often simultaneously.[136)]

Also in 2009, the bulk carrier AFFLATUS grounded off Weihei, spilling about 800 tonnes of HFO. Containment booms were initially deployed around the vessel and local fishing boats were used to recover oil at sea using absorbent pads. Workers also manually scooped oil from the grounding site and other impacted areas, and a limited amount of dispersant was used.

In 2010, a pipeline exploded during tanker discharge operations at the north-east port of Dalian, resulting in a large fire and causing around 1,500 tonnes of crude oil to be spilt into the sea. A number of specialist response vessels and small fishing boats were deployed to assist with the clean-up operation.

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134)CRI on line. Tasman Sea "oil tanker pollution of the Bohai Sea ecological environment first instance verdict
http://gb.cri.cn/3821/2004/12/31/1329@408867.htm(2016.05.10.).
135) Jinyueya.com,http://www.jinyueya.com/magazine/1430455.htm(2016.04.11.).
136) ITOPF, China
http://www.itopf.com/knowledge-resources/countries-regions/countries/china/(2016.05.11.).

In 2012, the general cargo vessel MAXIMA suffered a collision off Shanghai resulting in the loss of about 100 tonnes of HFO. At-sea response centered on the spraying of dispersant and shoreline oiling was cleaned up by local contractors. [137]

A collision some 100 nautical miles east of Shanghai in 2013 involving the bulk carrier CMA CGM FLORIDA resulted in the release of an estimated 590 tonnes of IFO 80 and IFO 180 into the East China Sea. The Shanghai MSA commissioned aerial reconnaissance and satellite imagery to monitor the movement of the oil which rapidly spread and fragmented. Response at sea was limited to small-scale containment and recovery and dispersant spraying.[138]

3.1.2 Compensation Plight Status in China

In recent years China has promulgated a series of new pollution regulations relating to ships which progressively came into force in the period 2010-12. These cover a wide range of issues, including oil pollution response planning, pre-spill clean-up arrangements and the emergency handling of pollution incidents. Regulations have also introduced a domestic ship-source oil pollution compensation fund.

Although China has taken a lot of measures in oil pollution in recent years, China has received little compensation for oil pollution damage in China. According from the 'MSA' statistics , there were approximately a total of 29 major cases of oil pollution accidents occurred in Chinese coastal waters since 1973 to 2016. Among them, seven oil pollution accidents were caused by foreign tankers. All of them were fully

137) Beidafabao, http://www.pkulaw.cn/case_es/pfnl_1970324860559166.html?match=Exact(2015.10.11.).

138) SHIP NEWS, http://www.ship.sh/news_detail.php?nid=8242 (2016.02.03.).

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 [139)]

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 this research and interview with the concerned parties, the following six questions should be the primary consideration regarding this issue, although the more discussion will be provided in next section in detail.

(1) Chinese municipal law does not have specific provisions which related to oil pollution damage from ships;

(2) The ship owner bankruptcy;

(3) Liability beyond the ship owners liability limitation under CLC;

(4) Accident tanker missing or escape;

(5) Plight of Clean-up;

(6) Lack of funds;

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

139) Lee Fook Choon," Shortcoming in oil and Chemical Pollution Compensation Regime-The China Experience", http://toplishongkong.blogspot.com/.(2016.09.15.).

still find many problems in China.

3.2 Legal Problems under Chinese Laws

3.2.1 Legislative Issues

There is no specific oil pollution law in China although there are stipulations of the civil liability and compensation for ship oil pollution damage. As for domestic laws, there are General Principle of Civil Law, China Maritime Code, Marine Environmental Protection Law, Regulations on the Prevention and Control of Marine Pollution from Ships, Tort Law, Measures of the People's Republic of China for the Implementation of Civil Liability Insurance for Vessel-induced Oil Pollution Damage, Provisions of the Supreme People' s Court on Several Issues Concerning the Trial of Cases of Disputes over Compensation for Vessel-induced Oil Pollution, and Administrative Measures for Use and Collection of the Compensation Fund for Oil Pollution Damage from Ships.

As for international conventions to which China has acceded, there are The 1992 Civil Liability Convention[140]and International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001.[141]Also, there are

140) China acceded to the 1969 Civil Liability Convention and the 1976 Protocol on 30 January 1980, and this came into effect on 29 April 1980. The updated Protocol of the 1992 Civil Liability Convention (hereinafter referred to as "the 1992 CLC") came into effect in China on 5 January 2000. The 1992 CLC applies exclusively to pollution damage that occurs within the territory of China, including its territorial seas and exclusive economic zones; it also applies to preventive measures, wherever taken, that were taken in order to prevent or minimize damage.

141) Hereinafter referred to as Bunkers 2001, which was ratified on 9 December 2008, came into effect in China on 9 March 2009. In common with the 1992 CLC, the Bunkers Convention is applicable where the pollution damage occurs

ship oil pollution Compensation Guide and ship oil pollution Compensation Fund claims Guidelines in 2016.

Table 3-6 Laws concerning compensation for ship oil pollution damage in China

	Name of Law/Regulation/International Convention	Year of Accession
National Legislation	1. General Principle of Civil Law[142]	1986
	2. China Maritime Code[143]	1992
	3. Marine Environmental Protection Law[144]	1999
	4. Regulations on the Prevention and Control of Marine Pollution from Ships[145]	2009
	5.The Tort Law[146]	2009
	6. Measures of the People's Republic of China for the Implementation of Civil Liability Insurance for Vessel-induced Oil Pollution Damage[147]	2010
	7. Provisions of the Supreme People's Court on Several Issues Concerning the Trial of Cases of Disputes over Compensation for Vessel-induced Oil Pollution[148]	2011
	8. Administrative Measures for Use and Collection of the Compensation Fund for Oil Pollution Damage from Ships[149]	2012
International Convenience	1. The 1992 Civil Liability Convention	1999
	2. The Bunkers Convention	2008
	3.ship oil pollution Compensation Guide" and	2016

in the territorial seas and exclusive economic zones of China. Preventive measures, wherever taken, that were taken in order to prevent or minimize damage are also covered by the Bunkers Convention.

	"ship oil pollution Compensation Fund claims Guidelines"	

142) The General Principles of the Civil Law (hereinafter referred to as "the Civil Law") offers general principles dealing with all kinds of torts, including environmental torts. Article 124 regulates the strict liability rule.

143) In the China Maritime Code (hereinafter referred to as the "CMC") there is no specific chapter dealing with civil liability and compensation for ship oil pollution damage. The only article that is specific to marine pollution is Article 208 in Chapter XI of the Limitation of Maritime Claims. According to this Article, the CMC shall not apply to claims for oil pollution damage under the 1992 CLC, to which China is a contracting State.

144) The Marine Environmental Protection Law of 1999 was originally adopted at the 24th Meeting of the Standing Committee of the Fifth National People's Congress on 23 August 1982. Later on, it was revised at the 13th Meeting of the Standing Committee of the Ninth National People's Congress on 25 December 1999 (hereinafter referred to as "MEPL 1999"). Chapter VIII of the MEPL 1999 is dedicated to the prevention and control of pollution damage to the marine environment caused by vessels and their related operations. Principally set out is civil liability for oil pollution damage from ships, including the strict liability of liable parties, along with any exemptions. Most importantly, Article 66 in principle regulates compulsory insurance and the national compensation fund for oil pollution damage from ships, this providing a legal basis for the establishment of a compensation regime for ship oil pollution damage.

145) The Amended Regulations, promulgated by the State Council of China in 2009, intends to replace the previous one enacted in 1983. It covers a wide range of matters relating to both the prevention of and compensation for marine pollution.

146) Chapter IX of the Tort Law focuses specifically on the liability incurred as a result of environmental torts. The polluter is strictly liable for any pollution damage. Besides this, the joint and several liability of any third party who causes pollution damage is stipulated.

147) Measures of the People's Republic of China for the Implementation of Civil Liability Insurance for Vessel-induced Oil Pollution Damage, 2010, hereinafter referred to as "Oil Pollution Insurance Regulation"; The Oil Pollution Insurance Regulation is one of the implementing regulations of the Amended Regulations that covers specific issues of civil liability insurance for oil pollution damage. The Oil Pollution Insurance Regulation includes the subject matter insured, the insured value, competent insurance institutions and insurance certificates.

148) Provisions of the Supreme People's Court on Several Issues Concerning the Trial of Cases of Disputes over Compensation for Vessel-induced Oil Pollution, 2011(hereinafter referred to as "The Judicial Interpretation"). The Judicial Interpretation aims to clarify several controversial issues in trial over the compensation for ship oil pollution damage. It contains a total of 32 articles covering a number of specific issues and includes the scope of application,

Although the "General Principles of Civil Law", "Environmental Protection Law", "Marine Environmental Protection Law", "Maritime code"ect. constitutes the basic content of the oil pollution damage compensation system for oil pollution victims to provide the possibility of claim. But after the analysis, we can find the following problems:

1. Administrative Measures Instead of Civil Means

Although China's oil pollution damage system has formed a basic framework, most of the laws on oil pollution damage in China are regulated from the point of view of administration. China's oil pollution damage system has a tendency to neglect civil liability which are mainly presented in the following aspects : ①some oil pollution regulations in the laws and regulations itself are the administrative laws and regulations. For example ,there are China's "Environmental Protection Law", "Marine Environmental Protection Law", "Prevention of Marine Pollution by Sea Regulations" and so on.②Among these articles of laws, those related to "Compensation" also has a mixed nature of civil and administrative matters. For example, Chapter 5 of the Chinese Environmental Protection Act refer "legal liability" but not "civil liability"and in its Article 41[150] does so. From these statements, it also indicate a clear administrative nature of administrative liability.③It is not clear in the legal definition that the cost of cleaning up should be the

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jurisdiction, oil pollution liability, the scope of compensation and loss identification, maritime lien, limitation of liability for oil pollution claims, direct action against the liability insurer, and subrogation for oil pollution claims.

149) Administrative Measures for Use and Collection of the Compensation Fund for Oil Pollution Damage from Ships, 2012(hereinafter referred to as"The Compensation Fund Regulation."). As an implementing regulation of the Amended Regulations, the Compensation Fund Regulation contains 33 provisions with respect to the collection and use of the domestic compensation fund for ship oil pollution damage. It covers a number of issues, including the source and administration of the fund. Also, it covers cases in which the fund is available, compensable damage, maximum compensation amounts, and claims settlement procedures.

150) Chinese Environmental Protection Act, Article 41.

oil pollution of the ship should be the scope the administrative responsibility or the scope of civil liability under the article 41 of the Marine Environmental Protection Act of 1982.[151] The article 39 of the 1982 Regulations for the Prevention of Marine Pollution by Sea.[152] and Article 12 of the Ordinance.[153] Obviously, the nature of "sewage charges" in the 1982 "Marine Environmental Protection Law" and "Prevention of Marine Pollution by Sea Regulations" is administrative responsibility. This was revised in the Marine Environmental Protection Act, which was revised in 1999. Similarly, Article 92 of the Marine Environmental Protection Act provides for exemption from liability for environmental pollution, which is clearly a civil norm and should be placed in the corresponding civil law.

2. Too Abstract Oil Pollution Damage Compensation

The provisions of the Law on Compensation for Oil Pollution Damage in China are very abstract and not operational, such as "Maritime Law" and "Marine Environmental Protection Law", which can not provide legal basis for the relevant oil pollution cases. For example, Article 90 of the Marine Environmental Protection Law, which was amended in 1999 in China, provides for civil liability for those who cause oil pollution damage, but there is no clear definition of who is the "responsible subject". Is the "responsible subject" the owner of cargo, or the owner of ship? It is doubtful that the "responsible subject" is either the owner of cargo or the owner of ship.

In accordance with the Article 204 of Chinese "Maritime Law", the scope of the ship owner includes the charterer and the ship operator. In addition, Article 90 of the Marine Environmental Protection Law provides for the civil liability for damages for the civil liability for damages for the main body of the oil pollution liability, but the compensation scope

151) Ibid., Article 41.
152) Ibid., Article 39.
153) Ibid., Article 12.

for the loss is not clear. These ambiguous terms can not provide the right legal basis for the right to exercise.

3. Incomplete Oil Pollution Damage Compensation System

In accordance with the provisions of the international conventions in which China participated, compulsory insurance and oil pollution fund are an important part of the oil pollution compensation system for ships. However, the establishment of compulsory insurance and oil funds, there is no corresponding legal norms for its assessment methods, the competent department in charge and so on. The result became a dead letter. Moreover, the 1971 Fund Convention and the 1992 Protocol to the 1971 Fund Convention do not apply in the Chinese mainland. In this regard, China's oil pollution damage compensation mechanism is not perfect. As there is no specific regulations of oil pollution insurance, oil pollution damage compensation fund system, clean fee of oil spills accident, the system can not be fully implemented.

4. Unreasonable Standards

China's ship oil pollution damage compensation system is not only abstract and some of the relevant standards are unreasonable. For example, there is a clear inconsistency between regulation of the application of the legal relation ship oil pollution damage liability concerning foreign affairs of in Maritime law and the applicable provisions of Chapter 8 of the General Principles of Civil Law of China. Besides, Chapter 11 of the Maritime Law stipulates the limitation of liability for the oil pollution damage compensation system. The Maritim damage compensation system, applies to only the liability limitation part of the compensation. However it is doubtful why the Maritime Law stipulates the statute of limitations for compensation for oil pollution damage in Article 265. If the overall framework of the oil pollution damage compensation system is not reflected in the Maritime Law, what is the basis for the limitation of liability for oil pollution damage. The

Maritime Law provides for a prescribed period for litigation of 3 years, consistent with the provisions of Article 42 of the Environmental Protection Law, which is one year longer than the two-year statute prescribed in the General Principles of Civil Law. It seems that it is to protect the rights of the victim. However, the longest action limit for oil pollution damage claims is 6 years, as stipulated in Article 265 of the Maritime Law, which is 14 years shorter than the maximum litigation time stipulated in General Principles of Civil Law. Thus, it seems to violate the spirit of legislation.

3.2.2 The Subject of Liability

The subject of claim hereof in the field of oil pollution accident happened in China is restricted by three collateral systems, general subject of claim, subject of claim on the basis of public benefit and the subrogated subject of claim.

1. Subject of Claim

(1) The Problems in general Subject of Claim

Under the perspective of substantial law, and on the basis of specific regulations from the "Constitution of the People's Republic of China", [154]the "Management Law of Maritime Right of Use of the People's Republic of China",[155] the "the Civil Law,[156] the "Environmental Protection Law" [157] and MEPL 1999", [158]all the entity and citizens can be recognized as the subject of claim concerning marine environmental

154) Constitution of the People's Republic of China stipulates, Article 9.
155) Provisions of the People's Republic of China on the Administration of the Right to Use Sea Waters, Article 3.
156) General Principles of the Civil Law states, Article 106, paragraph 2.
157) MEPL, Article 41, paragraph 1.
158) Ibid., Article 90, paragraph 2.

pollution damage, but not including the limited to SEPA (State Environmental Protection Administration), State Oceanic Administration and other administrative and responsible organs, procuratorial organs and environmental protection social organizations.

Judging on the perspective of procedural law,[159] the 55th section of "China's Civil Procedure Law" has entitled the corresponding statutory organs and related organizations to submit the case concerning environment pollution issues to the People's Court.

The general claim mainly refers to citizens, legal persons or other organizations that suffer from oil pollution damage in the ship's oil pollution damage accident. This type of main body is mainly fishery and fishery enterprises. The claim is mainly due to loss of aquatic products and loss of aquaculture. Its main feature is the large number of claims. Individual litigation, whether for individuals or the use of legal resources, can cause great pressure. So the more prominent solution is the representative of the litigation system.

However, in China's judicial practice, environmental pollution damage claims case is not uncommon. But there is not much to apply for a representative action. Most cases are artificially split into cases for many separate cases. The separate hearing will bring more substantial figures to the court. In a small number of representative litigation cases, environmental pollution damage dispute cases occupy an important position. The road to the litigation involving environmental damage can be said to be tortuous and long. Because the legislation on the representative of the attitude of the litigation can choose to apply, thus giving the court not to choose the right. As a representative of the litigation, the representative of the selection there are some difficulties, and the application of representative litigation has brought some obstacles.

159) Civil Procedure Law, Article 55.

(2)Subrogated Subject of Claim

In accordance with the 45th section of "China's Law of Insurance" [160] and the 252nd section of "CMC",[161] insurer is entitled to exercise the right of subrogation within the scope of the aggregate amount of compensation after the vessel oil pollution accidently happening. As for the right of compensation after acquisition of subrogation right, the94th section has regulated that insurer is able to exercise the right of subrogation in his own name according to "China's Procedural Law on Maritime Affairs.[162]

A. The position of the executive authorities in compensation for oil pollution damage.

In the new "MEPL" before the implementation of the environmental legislation, the administrative organs in the pollution damage compensation mainly play the role of administrative mediator. But the executive authorities in China is pollution compensation administrative organs. Because there is no procedural law on administrative decisions made by the executive authorities, there is no basis for practical operation. In practice, there are few cases where the administrative organ makes compensation for pollution damage compensation.

2. Subject of Compensation is not Clear

(1) No Clear Legal Provisions

Subject to the 66th section of the MEPL", the ship holder has been listed as the subject of liability. The 90th section of the Law of "MEPL" has listed the third party as the subject of liability. In addition to this, the 97th section of "Special Maritime Procedure Law" has listed all members of vessel, insurer and guarantor as the suitable standard defendant. The 64th section of "Environmental Protection Law

160) Insurance Law, Article 45.
161) CMC, Article 252.
162) Ibid., Article 94.

of the People's Republic of China" has stipulated the damage liability types which shall be assumed. The 8th Article of "The Tort Law" has stipulated the liability assumed for environmental pollution, including the liability assumed by polluter, burden of proof reversed, the third party fault and the pursuing damage hereof. In conclusion, the corresponding laws and regulations have mostly stipulated the subject of liability clearly, but the oil pollution damage to the environment has not been specifically regulated.

Compared with international conventions and foreign legislation, the subject of compensation for oil pollution damage in China is in the overall lag, in particular, many provisions are more vague, and in practice, it also faced with a lot of confusion. Especially the different laws and regulations of the responsibility of the main differences, making the law to bring a lot of difficulties. Because of the provisions of the inconsistency, there have been many confusion problems in the practice of law.

(2) No Clear Application

The victims are difficult to seek protection in China now. In the ship collision caused by oil pollution damage, it also need to consider the nature of the other party or multi-ship. If the "ship" is not a ship specified in an international convention, it shall also apply or not. These do not have foreign factors and the application of international conventions can be said to face difficulties, hinder the oil pollution damage compensation in the determination of the main body of responsibility.

China's law for the ship oil pollution damage, the definition of the ship is not clear, which makes the main body of responsibility more vague. If the interpretation of 'pollution' and "responsible person" has yet to be investigated and analyzed.

In the case of the multi-party liability subject caused by the collision

of the ship,[163] the owner of the ship in the collision is not clearly defined. Especially in the case can not distinguish between the responsibility of this standard of responsibility, remains to be considered. And the subject is relatively complex, it can not get the exact scope for the third person, so it often lead to controversy.

In summary, the current law of China's oil pollution damage compensation for the main subject compensation did not make clear the provisions of the different laws of the main body of responsibility is not only the same. And for the same law, because the angle is different, the concept of fuzzy and the conclusions are different, and because of the different laws applicable to the case in the case of a variety of basis. And there is a difference between the commitment and the form of responsibility of the civil liability subject. There are also significant differences in disclaimers and restrictions on liability. The biggest performance is that China has joined the international convention and CMC in dealing with the responsibility of the main responsibility of the system of restrictions, because the difference in the limits of liability, making the compensation is very different. In addition, when the subject of compensation for the liability limit within the payment, it can not bear the corresponding liability. The insurance and the corresponding financial guarantor should be protect the victims. But in China, it does not correspond to the specific provisions of the law.

3.2.3 Scope of Compensation

The scope of compensation for ship oil pollution damage refers to the scope of compensation for losses that victim may claim from the person responsible for the pollution after the marine environment is pollution

163)Xi Xiaoming, "the People's Republic of China Tort Liability Act Understanding and Application" , Beijing: *People's Court Press*, 2010, p.466.

due to oils, fuel and other substances spilled out of or discharged from a vessel.[164] It includes the following levels:(1) Applicable ship and oil (2) Applicable area. (3) the scope of compensation, and how to calculate the extent of these indemnities, or losses caused by oil pollution.

Under China's current laws and regulations, there are no provisions defining the scope of compensation for ship oil pollution damage.

1. Applicable ship and Oil have not a unified definition

(1) Applicable ship

China's laws and regulations of the ship is not a unified definition. The MEPL, which is the parent law for the prevention and control of marine pollution by ships, has clearly stipulated in Chapter 8 marine environmental pollution caused by ships and related operational activities. The definition of "ship" is not defined in Article 95 of the Sea-Ring Act.

CMC and the judicial interpretation of the Supreme Court are referred to the "maritime mobile devices", and "maritime mobile device" interpretation, academia has not yet formed a unified view. Supreme People's Court in the amendment of the CMC in the draft further cite the "maritime mobile device" includes a floating in the drilling platform, hovercraft, seaplane and so on. In accordance with domestic laws and judicial interpretations, the "ship" involved in oil pollution damage accidents in China includes a drilling platform with self-propelled capability and only points to ships and other naval vessels with military capability device. So, in 2011 bohai oil spill case, the "sea mobile drilling platform" does not have the self-propelled, not "ship oil pollution damage compensation interpretation" and "CMC" defined under the ship, so although the recent occurrence of large oil pollution accident in China, but this case will not be analysis in this article.[165]

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164) Si Yuzhuo, "Special research on Maritime Law", Dalian: *Dalian Maritime University Press*, 2002, p.410.

(2) Applicable Oil

The definition of “oil“ in Chinese judicial interpretation of oil pollution damage basically includes CLC / FUND and Bunker2001, which solves the embarrassing situation of “oil“ which is not suitable for oil pollution liability in China.[166] The oil to which the judicial interpretation applies is limited to CLC 1992 and the three hydrocarbon mineral oils and their residues as specified by Bunker 2001. [167]They mainly include tanker-loaded persistent oils, tanker-loaded non-persistent fuels and non-tanker-loaded fuels, The first is1992 CLCof the oil, the latter two are Bunker2001 specified oil.[168] As the HNS Convention has not yet come into force, China has not yet developed similar to the HNS Convention on ship borne toxic and hazardous substances pollution damage laws and regulations, for those non-persistent oil damage compensation how legislation is not clear.

In practice, the China Maritime Safety Administration as a collection of oil pollution fund authorities in accordance with the actual June 27, 2012 release “on the acquisition of persistent hydrocarbon mineral oil containing oil advice opinions“ to levy: Throughout the above laws and regulations, China has The international oil and gas industry has been defined on the basis of the international conventions, and the damage

165) The 2011 Bohai bay oil spill was a series of oil spills that began on June 4, 2011 at Bohai Bay. The spill itself however was not publicly disclosed until a month later.There were suspicions of official cover-ups by the State Oceanic Administration (SOA).

166) Article 95, paragraph 6, of the Sea-Ring Act provides: "Oil of any type and its refined products".

167) Article 31 of the Judicial Interpretation of Oil Pollution from Ships stipulates: "Hydrocarbon mineral oil and its residues shall be limited to those carried on board as cargo transport Persistent cargo oil, loaded for the operation of the ship's persistent and non-persistent fuel, not included in the ship as cargo transport of non-persistent goods oil."

168) Feng Shoujie and Yu Xiaohan, "Understanding and Application of the Provisions on Several Issues Concerning the Trial of Disputes on Compensation for Oil Pollution Damage by Ships" Dalian: *Dalian Maritime University Press*", 2012, P.43.

compensation of various oil substances under different definitions has been made preliminary. But the following problems still need to be resolved in the following legislation: Since July 2012, China has actually collected the oil pollution fund in accordance with the “Notice on Solving Persistent Hydrocarbon Mineral Oil Containing Oil Opinion“. However, whether the oil pollution fund is collected according to the above internal notice and the classification of oil products is not clear.

2. The Scope of Compensation

On the basis of the 12th The Judicial Interpretation, the scope of oil pollution damage compensation can be classified as flowing fields:

(1) Expenses for takin pollution damage; (2) Extra losses for taking preventive measures; (3) Loss of life or g preventive measures as to prevent or reduce the vessel oil personal injury caused by oil pollution accident; (4) Property damage caused by vessel oil pollution damage; (5) Environmental damage caused by oil pollution; (6) Losses in income further caused by property loss and environmental loss; (7) Expense for having taken and being going to take reasonable restoration measures. The seven classifications of compensation fields for damage can be divided on the basis of items approved and confirmed by international convention.

However, specifically, the loss of life and personal injury definitions mentioned in international oil pollution convention and foreign oil pollution legislation are different. In addition, China’s juridical interpretation has listed the loss of life and personal injury caused by vessel oil pollution accident within the scope of oil pollution damage compensation.

3. Loss Calculation

(1) Oil clean-up

In 1969 CLC and 1992 CLC, expenses for takin pollution damage and

extra losses for taking preventive measures are all including in . It contrast with the increasing risk of oil pollution from ships 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. 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.

(2) Losses to aquaculture and fisheries

Losses to aquaculture and fisheries: include direct losses to aquaculture and fisheries as well as medium and long term losses to fishery resources arising from pollution, such as death or reduction in catch of fish, shrimp, shellfish, etc. in aquacultures areas and fisheries areas, death or reduction of marine organisms in marine nature reserves and marine protected areas of marine organisms. etc. There isn't much dispute when it comes to compensation for direct Issues, but any claim of compensation for medium and long term losses to fishery resources in always highly controversial and will be examined in depth in the following pages.

(3) Onshore and environmental losses

Onshore and environmental losses: include death of coastal flora and fauna, reduction in the production for sea salt and adverse impacts on the food processing and catering industry, transportation and production sectors, sea water, desalination industry, etc., reduction in income from sea sports, destruction for recreation areas and seenic spots, damage to port waters and areas of water for general industrial use, damage to

marine development zones and marine engineering operating areas, etc.

(4) Pollution eliminating costs

Pollution eliminating cost means the cost of cleaning and treating the pollution.

4. Medium and Long Term Losses to Fishery Resources

In China's jurisprudential discourse as well as judicial practices, any claim of compensation for medium and long term losses to fishery resources caused by ship oil pollution occurring in China's waters is always highly controversial and bitterly disputed. There are two opposing views in this regard, one of which is that the medium and long term losses to fishery resources caused by ship oil pollution falls wihtin the scope of compensation for oil pollution damage, and the other is just the opposite.

In author's opinion, the medium and long term losses to fishery resources caused by ship oil pollution occurring in China's water should be compensated if the claims for such compensations are supported by sufficient evidence and if they are reasonable; but the difficulty lies in arriving at a fixed criterion for determining the rationality of such claims that is agreeable to all.

In compensating the foregoing medium and long term losses, the key is to identify the existence and value of such losses, which are usually expected ones and not the present or existing ones. Such losses are neither definable nor quantifiable. In addition, there is never sufficient factual evidence for most of the claims for compensation for medium and long term losses that are filed.

The main basis for calculating the foregoing medium and long term losses is the calulating methods. on the economic loss of fishery pollution accidents (hereinafter"the Calulating methods") recased by China's ministry of agriculture in October 1996. I believe that the

Calulating methods belong to the category of departmental regulations and are not universally binding. Moreover, the compensation stipulated in the Calulating methods is punitive in nature and is inconsistent with the principle established in the General Principles of the Civil law whereby the infringer must compensate for the loss or restore the property to its original conditions. the conclusions derived from such methods are through reasoning ,which are not definable, quantifiable or prddictable, and contrary to the principle of compensating for actually incurred losses established in the General Principles of the Civil law. Therefore, the Calulating methods should not be used as the basis for calculating the foregoing medium and long term losses.

5. Pollution Eliminating Costs

The pollution eliminating cost of tacking vessel induced oil pollution damage in China's waters mainly covers the following aspects (a)Onshore and offshore pollution eliminating operations and loss of property; (b)Relief and precautionary measures;(c) Processing recyclables.

(1) Plight of Clean-up

It contrast with the increasing risk of oil pollution from ships 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. 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.

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 m 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.

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.

The main reason for the above comparison is the financial problem. In China's oil pollution accident handling practice, cleaning companies are often in a very embarrassing situation: the first time after the occurrence of oil pollution that need to invest a lot of personnel and materials to clean up, but this time the relevant departments have not yet identified the responsibility of the accident attribution. In practice, the maritime sector will organize the company to clean up the company first need the clean money, and then to the accident responsible person to recover, in the process of the maritime sector is not to the cleaning company to provide any form of clean-up subsidies, in the market economy system,[169] Clean-up companies need self-financing, independent accounting, once the clean-up costs are subject to the risk of ex post facto.[170] Their clean-up activities, spending and the effect will be

169) Keqing, "From the Dalian oil pipeline explosion to see China's oil pollution legislation and improve the contained in the "*Journal of Guangxi Politics and Law Institute of Management*, 2011(2), P.45.

greatly reduced.

(2) Liability attribution of pollution eliminating cost

After a ship oil spill occurs in China's waters, the pollution will usually be eliminated or cleaned up by the ship owners (or other person who responsible for the oil pollution) itself or other personnel commissioned thereby, or be eliminated mandatorily by the maritime administrative departments. For the former case of pollution elimination, the pollution eliminating cost is a matter of civil liability and the responsible person may enjoy limited liability, over which there is essentially no controversy in Chinese jurisprudential discourse and practices, However, in the later case of pollution elimination, there is much controversy over whether the pollution eliminating cost arising therefrom is a matter of civil liability or administrative liability and whether the responsible person may enjoy limited liability.

For the liability attribution of the pollution eliminating cost arising from mandatory pollution elimination organized by the maritime administrative department, there exist mainly the following two views: (a)the pollution eliminating cost arising from mandatory pollution elimination is a matter of administrative liability; (b) the pollution eliminating cost arising from mandatory pollution elimination is a matter of civil liability. The author believe that in case of the costs arising from mandatory pollution elimination organized by maritime administrative departments, due to the following reasons, the responsible person should be civilly liable and ear the pollution eliminating costs within the limits of liability:(a) It is the civil liability of the responsible person to bear the mandatory pollution eliminating cost; and (b) for mandatory pollution eliminating costs the responsible person may enjoy limited liability.

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170) Liu Hong, "China ship oil pollution damage compensation mechanism establishment and implementation",*traffic environmental protection, the sixth period*, 2002, P.88.

(3) Should pollution eliminating costs have priority of repayment

After a ship oil pollution accidents occurs in China's waters, the pollution eliminating costs incurred by the ship owners (or other person who responsible for the oil pollution) itself or other personnel commissioned thereby, don't have priority of repayment and this is incontrovertible in China's jurisprudential discourse and practices; however, there is much controversy over whether the pollution eliminating costs incurred during the mandatory pollution elimination orgainzed by the maritime administrative departments should have priority of repayments. There are two main views: mandatory pollution eliminating costs should have priority of repayment; and the opposite.

In the authors opinion, mandatory pollution eliminating costs should have priority of repayment, although it is a matter of civil liabiliy. After the pollution damage is eliminated because of economic difficulties of the responsible person and many other reasons, the pollution eliminating costs can't be fully repaid. so far, China 's COPC FUND is poor, the pollution eliminating costs can't be repaid through COPC FUND. And the mandatory pollution elimination is classified as administrative enforcement action and the expenses arising therefrom, of course, are an administrative liability, so mandatory pollution eliminating costs should have priority of repayment;

(4) Bearing the pollution eliminating costs arising from oil pollution caused by collision of vessels

In China's jurisprudential discourse as well as judicial practices, there are mainly three views on how the pollution eliminating costs arising from oil pollution caused by collision of vessels occurring in China' waters should be borne: (a) Such costs should be borne by the owner of the vessel that spilled the oil and caused pollution (b) Such costs should be borne by the owner of both the vessels that collided with each other in proportion to their respective contributions in causing the collision;(c)

The two vessels colliding with each other should be severally liable for such costs.

The author believe that the second view is most reasonable. because, the pollution eliminating cost of the efforts of the responsible person itself or any other person commissioned thereby or the cost of mandatory pollution elimination is a matter of civil liability, [171]And it is stipulate in Article 90 of MEPL revised in 1999.[172]

3.2.4 Limitation Liability

1. The Limitation Liability under Chinese Laws

Due to the promulgation of the Amended Regulations and the Judicial Interpretation, several changes with respect to the limitation of liability for oil pollution claims are accordingly made in domestic law.

Prior to the promulgation of the Amended Regulations, according to Article 142 of the Summary, the limitation amount stipulated in Article 210 of the CMC was applicable to: Purely domestic oil pollution from tankers; foreign-related oil pollution from tankers outside of the 1992 CLC scope; and bunker oil pollution from non-tanker vessels. However, according to the last paragraph of Article 210 of the CMC, the limitation of liability for ships with a gross tonnage not exceeding 300 tons, those engaged in transport services between ports of the PRC, and those engaged in other coastal works, shall be regulated by the Limitation of Liability Regulation39 (hereinafter referred to as the "LLR").[173]

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171) CMC, Article 169.
172) MEPL, Article 90.
173) The Regulation of Limitation of Liability for Maritime Claims Relating to Ships with a Gross Tonnage not Exceeding 300 Gross Tons and Those Engaging in Transport Services Between Ports of China, as well as Those for

Since the Amended Regulations and the Judicial Interpretation came into effect, the limitation amount for oil pollution damage from tankers has been greatly impacted, especially for those tankers engaged in purely domestic service. According to Article 52 of the Amended Regulations and Article 5 of the Judicial Interpretation, with regard to the limitation amount of liability for persistent oil pollution damage 40 caused by vessels carrying persistent oils in bulk to sea areas under the jurisdiction of China, the provisions of the international treaties concluded or acceded to by China shall apply.

This is to say, the 1992 CLC shall be applicable to persistent oil pollution damage caused by all tankers carrying persistent oil in bulk, regardless of whether or not they are engaged in international service. Given that tankers carrying persistent oil are engaged in coastal services, especially for the small tankers there is a significant increase. Taking a tanker of 300 tons engaged in coastal service as an example, under the old calculation system its limitation amount was approximately 0.0835 million SDR, whereas under the new calculation system it is up to 4.5 million SDR.

It should also be noted that the Bunkers Convention is not intended to establish a separate limitation regime. Accordingly, the limitation rule shall be subject to Article 210 of the CMC and the LLR.

Since the Amended Regulations and the Judicial Interpretation came into effect, the limitation amount for oil pollution damage from ships can be classified into three categories, as follows:

(a)The 1992 CLC limitation amount

This applies to persistent oil pollution damage caused by all tankers carrying persistent oil in bulk.

(b)The CMC limitation amount:

Other Coastal Operations took effect on 1 January 1994.

This applies to: (i) non-persistent bunker oil pollution damage caused by tankers over 300 tons that are carrying persistent oil in bulk and engaged in international service; (ii) oil pollution damage caused by vessels over 300 tons that are carrying non-persistent oil in bulk and engaged in international service; and (iii) bunker oil pollution damage caused by non-tanker vessels over 300 tons engaged in international service.

(c)The LLR limitation amount:

This applies to: (i) non-persistent bunker oil pollution damage caused by tankers over 20 tons that are carrying persistent oil in bulk and engaged in domestic service; (ii) non-persistent bunker oil pollution damage caused by tankers from 20 tons to 300 tons that are carrying persistent oil in bulk and are engaged in international service; (iii) oil pollution damage caused by vessels over 20 tons that are carrying non-persistent oil in bulk and engaged in domestic service; (iv) oil pollution damage caused by vessels from 20 tons to 300 tons that are carrying non- persistent oil in bulk and are engaged in international service; (v) bunker oil pollution damage caused by non-tanker vessels over 20 tons engaged in domestic service; and (vi) bunker oil pollution damage caused by non-tanker vessels from 20 tons to 300 tons engaged in international service.

2. The Problems On the Limitation for Coastal Tankers

The effectiveness of the Amended Regulations has brought about a significant change to the limitation amount for tankers engaged in domestic service. Prior to the promulgation of the Amended Regulations, according to Article 141 of the Summary, the limitation amount stipulated in Article 210 of the CMC was applicable to purely domestic oil pollution from tankers. However, according to the last paragraph of Article 210 of the CMC, the limitation of liability for ships with a gross tonnage not exceeding 300 tons and for those engaged in transport

services between ports of the PRC, as well as those engaged in other coastal works. It shall be regulated by the LLR. Therefore, the LLR limitation amount, which is much lower than the 1992 CLC limitation, applied to oil pollution from tankers over 20 tons engaged in domestic service. However, after the Amended Regulations came into effect, the 1992 CLC limitation shall be applicable to oil pollution caused by vessels carrying persistent oil in bulk, regardless of whether or not they are engaged in international service. In terms of tankers carrying persistent oil and engaged in coastal services, especially the small tankers, this is a significant increase.

The high limitation of liability for vessels carrying persistent oil as cargo in bulk could be beneficial for ensuring sufficient compensation for pollution victims and for protecting the marine environment in China. However, the high limitation could also have a significant impact on the Chinese coastal oil shipping industry. Most coastal oil shipping enterprises in China are small and of low financial ability to compensate, and most of their coastal tankers are small and old.[174] 80% of the coastal tankers in operation are small vessels with a tonnage not exceeding 1000 tons.[175] The high limitation, which places a heavy burden on the coastal oil carriers, could possibly drive them into bankruptcy. Some scholars hold that such a high limitation of liability will definitely cripple the coastal oil shipping industry, and will also do harm to the whole of China's oil shipping industry.[176] On the other hand, other scholars believe that the high limitation will benefit the Chinese oil shipping industry in the long term. They hold that such high limitation will promote optimum

174) Qi Chen , "On the Application of CLC 92 in China", *in Maritime Pollution Liability and Policy - China, Europe and the US, eds. Michael G. Faure, Lixin Han and Hongjun Shan*, 2010, pp.347-357.

175) Liying Zhang, "Compensation for Domestic Oil Pollution in China's Coast: Which Law Shall Apply?", in Maritime Pollution Liability and Policy - *China, Europe and the US eds.* Michael G. Faure, Lixin Han and Hongjun Shan, 2010, pp.359-369.

176) Lixin Han, supra note 1, P.275.

competition in the Chinese oil shipping industry, and will also speed up the elimination of old ships and the purchase of new oil tankers, thereby speeding up development of the Chinese shipbuilding industry.[177]

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'. Based on the trend of the 'CLC' and 'Fund Convention', the liability limitation of the ship-owner will be further increased with economic development.

3.2.5 Compulsory Liability Insurance System

1. Legislations and Insured Value

China's first legislation on compulsory liability insurance began on December 29, 1983, the State Council promulgated the "offshore oil exploration and development of environmental protection management regulations", the Ordinance for the first time in the field of oil pollution in China to implement compulsory liability insurance.

The CMC does not establish a special chapter on the pollution damage of ships. Only in Chapter 11, "Limitation of Liability for Maritime Claims" refers to the compensation for oil pollution damage.[178] The "MEPL", which sets out to establish ship oil pollution insurance in China, does not specify compulsory liability insurance, but at least it has

177) Liying Zhang, "Compensation for Domestic Oil Pollution in China's Coast: Which Law Shall Apply?", in Maritime Pollution Liability and Policy – *China, Europe and the US eds. Michael G. Faure,* Lixin Han and Hongjun Shan, 2010, pp.359-369

178) CMC, Article 208, paragraph 2.

already been noted that China has taken notice of the importance of compulsory liability insurance at the legal level, The establishment of the system. “Insurance Law“ also gives a third person directly to the insurer litigation rights, the insurer claims to the insurer can be rejected directly to the insurer as the defendant to the court. Through clear legal provisions to solve the judicial practice of direct litigation rights in the long-term controversial problems, the protection of the interests of third parties is of great significance. Under Article 53 of the Amended Regulations, owners of all vessels navigating the sea areas under the jurisdiction of China, except for vessels of less than 1,000 gross tonnage carrying cargos other than oil, shall be required to maintain insurance or other financial security, this requirement corresponding to the 1992 CL C[179]and the Bunkers Convention.[180]However, it should be noted that the scope of applicable tankers required to purchase compulsory insurance is wider than that under the 1992 CLC, given that only vessels carrying more than 2,000 tons of oil in bulk as cargo shall maintain insurance or other financial security under the 1992 CLC.

As a result, vessels engaged in either international service or coastal service that need to maintain compulsory insurance or other financial security include the following: (a) Vessels, however small, carrying persistent oil in bulk; (b) Vessels, however small, carrying non-persistent oil in bulk; and (c) Vessels over 1000 tons carrying non-oil cargoes. The insured value should be not lower than the amount of limitation for oil pollution damage in either the CMC, LLR or 1992 CLC, whichever is applicable.[181]

The owner of a Chinese flagged vessel shall purchase civil liability insurance for ship oil pollution from commercial insurance institutes legally established in China; or from mutual insurance institutions that

179) The 1992 CLC, Article VII(1).
180) The Bunkers Convention, Article 7(1).
181) The Amended Regulations, Article 53 and the Oil Pollution Insurance Regulation, Article 5.

are legally established in China or have their representative office or agency in China; or obtain other financial guarantees, such as a letter of guarantee and a letter of credit, issued by the abovementioned insurance institutions or domestic banks.[182] An insurance certificate or a financial security certificate shall be issued by the MSA to the owners of Chinese flagged vessels at the port of registry of the vessel, by presenting an application form, an insurance policy covering ship oil pollution damage or other evidence of financial security and the certificate of registry of the vessel.[183] With respect to the foreign flagged vessels, the insurance certificates issued by the relevant authorities of any other Contracting States of the 1992 CLC and Bunkers Convention are recognized by the MSA.[184] For both Chinese flagged vessels and foreign flagged vessels, the insurance certificate shall be carried on board the ship for inspection by the MSA.[185]

2. Direct Action

The stipulation regarding direct action against the civil liability insurer of oil pollution damage predated the appearance of compulsory insurance in Article 97 of the Special Maritime Procedure Law (hereinafter referred to as the "SMPL"). Claimants for oil pollution damage can make the claim against the ship owner causing oil pollution damage, or can make the claim directly against the liability insurer or other person providing financial security, who is also then entitled to require the ship owner to join in the proceedings. As to the defenses of the insurer, by Article 8 of the Judicial Interpretation, the insurer is entitled to avail himself of any defenses which the owner himself would have been entitled to invoke. However, in no case can the insurer reject a claim

182) Decision of Ministry of Transport on Amending the Measures of the People's Republic of China for the Implementation of Civil Liability Insurance for Vessel-induced Oil Pollution Damage, Article 2.
183) The Amended Regulations, Article 54 and the Oil Pollution Insurance Regulation, Articles 13 and 14.
184) Ibid, Article 17.
185) The Oil Pollution Insurance Regulation, Article 16.

for the defense which he might have been entitled to invoke in a proceeding brought by the owner against him, unless the pollution damage resulted from any willful misconduct of the owner himself.[186]

Based on the general rules in the MEPL, compulsory insurance is elaborated on by the Amended Regulations, the Oil Pollution Insurance Regulation and the Judicial Interpretation. This becomes not only the cornerstone of the constitution of the first tier of the compensation regime for ship oil pollution damage, in which the ship owner and his insurer are both involved, but it also lays a foundation for the second tier of the compensation regime, namely, a domestic compensation fund contributed to by oil receivers.

3. The Deficiency

Although China ship Oil Pollution Liability Insurance has played a huge role in reducing the responsibility of the owner of the ship and safeguarding the interests of the third party, there are still many shortcomings; The actual demand is still a big gap.

(1)The coverage of existing liability insurers is too small.

China's current realit is the small and medium-sized oil tankers. Ship aging and poor technical content, resulting in a higher incidence of oil pollution accidents. A large number of ships engaged in coastal and inland water transport, in the event of an accident, but not from the CPI's indemnity insurance to get protection. For example, in China's coastal oil tankers, less than 1,000 tons of oil tankers accounted for 71% of the total number of tankers. [187]As China has not mandatory insurance requirements for domestic shipping ships liability insurance, so many of these large number of small oil tankers are individual shipping companies or individual owners, neither insurance nor the business situation is not good. In the event of oil pollution accident, the current

186) The Judicial Interpretation, Articles 7 and 8.
187) Lixin Han, supra note 1, P.65.

insurance mechanism can not provide protection for these ships.

(2) The interests of parties can not be guaranteed.

In practice, the P&I Club has certain requirements on the quality of the ship insured and the management level of the ship's managers in the practice, which is the majority of the underwriters of the compulsory insurance. The insured ship's technical condition and safety status are not good. The occurrence of marine accidents caused oil pollution is often the uninsured. Even if the ship insured insurance, the injured party can not directly or indirectly get all the compensation from the P&I Club.

(3) The Requirement of Compulsory Insurance is too Strict for Coastal small Tankers

Most tankers in the current Chinese coastal oil shipping market are small and old vessels, which are characterized by high incident rates and low compensation capacity. The requirement of compulsory insurance for the owners of those small tankers, and the establishment of direct action against the insurer can help ensure full and prompt compensation for oil pollution victims. However, according to Article 5 of the Oil Pollution Insurance Regulation, the insured value for tankers carrying persistent oil as cargo in bulk should be not lower than the amount of limitation for oil pollution damage provided in the 1992 CLC. Thus, the insured value for a ship not exceeding 5000 units of tonnage should be not lower than 4.5 million SDR.[188] Some scholars hold that 95.5% of tankers flying the Chinese flag are small tankers not exceeding 5000 tons, and that the amount of oil spillage from these small tankers is usually less than from tankers of a huge size, so that it is not fair for owners of small tankers to be charged insurance fees that are equivalent to the insurance fees for tankers with 5000 units of tonnag e.[189] Besides this, as stated in the section above, most coastal oil

188) The 1992 CLC, Article V(1) and the 2002 Amendment.

shipping enterprises in China are small ones that cannot afford high insurance fees. The high insurance fees will possibly aggravate the risk of bankruptcy of these small coastal oil shipping enterprises, and force them to withdraw from the Chinese coastal oil shipping market.

3.2.6 The Chinese Oil Pollution Fund System

On 1 July 2012, the Administrative Measures for Use and Collection of the ship Oil Pollution Compensation Fund (hereinafter referred to as "the Compensation Fund Regulation") took effect. Four days later, the China ship Oil Pollution Compensation Fund (hereinafter referred to as the "COPC FUND") welcomed its first very large crude carrier (VLCC) in Maoming Port located in southwestern Guangdong Province of the PRC.[190]

In 2014, Implementing Rules for Management Methods of Levy and Use of Compensation Fund for ship oil pollution Damage was formulated jointly by the Ministry of Transportation and the Ministry of Finance. In 2015, the China ship oil pollution Damage Compensation Fund Management Committee was formally established, which marked a beginning of a full operation for Chinese oil pollution fund. June 16, 2016, the establishment of Fund Management Committee passed the "ship oil pollution Compensation Guide" and "ship oil pollution Compensation Fund claims Guidelines", it will help victims of oil easier clearly assert their reasonable demands.

1. The Operational Mode

(1) Characteristics of COPC FUND

COPC FUND has provided a set of unified solution for 115 countries

189) Lixin Han, supra note 1, P.65.
190) China Communications News issued on 13 July 2012.

currently, whose mature experience is used for reference. At the same time, based on many domestic characteristics and practical problems, such as the multiple quantity of small ships, the multiple quantity of small ship accidents, the poor compensation ability of small ships, non-persistent oil, the multiple quantity of fuel oil pollution accidents, etc, there are own features in system design (especially the fund use) for China, compared to COPC FUND:

① Different oil kind scopes of levy and compensation: COPC FUND only levies the shared payment for persistent oil carried by the oil tanker, and only also compensated for the persistent oil pollution damage caused by the oil tanker. That is, there exists consistency between its levied and compensated oil kinds and ship kinds. As for COPC FUND, it also only levies the shared payment for persistent oil carried by the oil tanker, but applied oil pollution fund compensation accidents are not limited to persistent oil spill accidents, including the fuel oil leakage of all kinds of ships (military ships, government ships, except fishing ships) as well as the persistent or non- persistent cargo oil leakage. In short, all shipping oil spill accidents can be compensated.

② Different compensation quota: COPC FUND capital is mainly obtained from major oil owners in the world with enough capital, in which a pollution accident can be compensated for 2 billion Yuan. In consideration of domestic oil owners' bearing ability and its indirect impact on other industries, the levied oil pollution fund shared-payment standard is low with 0.3 Yuan per ton, so the levied oil pollution fund just reaches about 100 million RMB every year. Due to a wide compensation range of oil fund, a single accident compensation quota cannot be too high with 30 million Yuan at most. However, a compensation quota mechanism of timely fund adjustment according to the procedure is set up by the current system.

③ Different scopes and orders of economic loss compensation: due to strong economic strength, COPC FUND has taken a more relaxed policy

for claimants, and compensate for some indirect economic loss, pure economic loss and prospective recovery measures of marine environment, with a wide range and equal right of claim.

Due to the small scale, the COPC FUND is unable to fully satisfy all damage compensation, mainly used in cleaning cost, property damage and other economic loss having a direct causal relationship with oil pollution accidents. It can't compensate for non-happened cost with no confirmed rationality, and the damage compensation inferred by calculation; In addition, the compensated damage is sequential, following the emergency response, environmental damage and monitoring as well as surveillance.

④Different compensation attitudes to shipping oil spill of undetermined liability: COPC FUND does not compensate for shipping oil spill of undetermined liability, while the COPC FUND will compensate for it in view of many above accidents in China.

The above content is some differences between COPC FUND and COPC FUND In addition, the Chinese oil pollution fund also has a lot of Chinese characteristics in the specific operation.

(2) The operation mechanism of COPC FUND

① As an independent consortium legal person with own revenue and expenditure, COPC FUND has a strict mechanism of budget, audit and supervision. The Chinese oil pollution fund has been defined as the governmental fund, so all shared-payment income should be handed over to the central treasury and brought into central budget, implementing "two lines of revenue and expenditure".

② The organization structure of fund management

The oil pollution fund use organization can be divided into three levels, showed by related laws and regulations of the COPC FUND:

As the highest authority, the Chinese ship oil pollution Damage

Compensation Fund Management Committee is a decision-making body but not a standing body, formally established on June 18, 2015, which is composed by 6 government departments (Ministry of Finance, Ministry of Transport, Ministry of Environmental Protection, Ministry of Agriculture, State Oceanic Administration, National Tourism Administration) and 3 major oil owner representatives (Sinopec, Petrochina, Cnooc), and it exercises the power by opening the meeting one or two times per year.

As a daily coordination agency, Fund Secretariat is set up in Maritime Safety Administration of Ministry of Transport. Because Fund Management Committee is composed of several unit representatives that belong to different functional departments, Fund Secretariat is set up to strengthen communication and coordination among various units, deal with daily affairs and service for Management Committee.

As a specific working body, China ship oil pollution Damage Insurance Compensation Transaction Center (hereinafter referred to as Insurance Compensation Transaction) is located in Shanghai with service for the whole country, which was established at the end of 2014 upon the approval of Central Staffing Department. As an independent institution legal person, it will take charge of specific insurance compensation work and consulting service work about victims' application for Chinese oil pollution compensation fund.

At present, these three-level institutions have been established, and Chinese oil pollution compensation fund has entered an operational stage.

③ Financial management of fund

COPC FUND is governmental with the strict budget management and compensation procedure. The claimant's compensation proposal should be approved by Fund Management Committee, and then Insurance Compensate Transaction Center applies for appropriation from Ministry of Finance, so Ministry of Finance conduct appropriation procedures and

compensate the claimant.

④ Claim for compensation of fund

After the ship oil pollution accident, all units and individuals, who are eligible for compensation, can submit the application or evidence for compensation to Insurance Compensate Transaction Center. Except the ship oil pollution damage with no determined liability, the judgment documents must be provided as core evidence to determine that the ship oil pollution damage has exceeded the compensation liability limitation of ship owners and insurers, or that ship owners or insurers don't have compensation ability any more.

Insurance Compensate Transaction Center will conduct the investigation, verification and specific adjustment for claim for compensation application, forming a claim for compensation report, compensation scheme and proposal, which is examined, approved and performed by Fund Management Committee of Fund Secretariat.

2. The Problems in COPC FUND

The COPC FUND is transplanted from Fund Convention mostly, while the international convention neither represents China's interest, nor accords with the current Chinese social situation completely, as a product of national compromise of interests. In addition, the society's advancing with stable laws, so many terms from Fund Convention cannot meet demands of current development after decades of development. Especially, as for the compensation quota, the relief aims at the damage caused by tankers only with no consideration for those caused by non-tankers and other aspects. What's more, the later compensation is conducted only, but the prior prevention and emergency should even more be done compared with the later compensation. The Chinese oil pollution fund management methods have been modified a certain extent in transplantation, but many deficiencies still exist especially in theory and practice.

(1)Scope of Application

The COPC FUND provides supplementary compensation for oil pollution damage occurring in the sea areas under the jurisdiction of the PRC.[191] As mentioned in the above section, contributing oil is defined by Articles 2 and 5 of the Compensation Fund Regulation as persistent hydrocarbon mineral oil goods and materials. However, there is no provision in the Compensation Fund Regulation specifying what kinds of oil pollution can be compensated for by the COPC FUND. Thus, two questions may arise regarding (1) whether both persistent oil and non- persistent oil are covered by the COPC FUND; and (2) whether oil pollution discharged from all types of ships are covered by the COPC FUND.

The legislative aim of the Compensation Fund Regulation is to protect the marine environment and promote the sustainable development of China's shipping industry.[192] A wider coverage of the COPC FUND may encourage prompt clean-up operations where pollution incidents caused by spillage of non- persistent oil, or pollution incidents caused by non-tanker vessels, occur. This is beneficial for achieving the aim of protecting the marine environment and pollution victims. Due to the lack of further interpretation at the national legislative level, it is suggested that the COPC FUND should provide supplementary compensation for oil pollution damage caused by all types of ships that discharge both persistent and non-persistent oil in the sea areas under the jurisdiction of the PRC.

The COPC FUND will cover oil pollution damage where under Article 15 of the Compensation Fund Regulation[193] are consistent with those

191) According to Article 2 and Article 95 of MEPL 1999, the sea area under the jurisdiction of the PRC refers to the internal waters, territorial seas, contiguous zones, exclusive economic zones and continental shelves of the PRC. "Inland water" means all sea areas on the landward side of the baseline of China's territorial sea.

192) The Compensation Fund Regulation, Article 1.

193) The Compensation Fund Regulation, Article 15.

under the 1992 Fund Convention.[194] However, Article 15 regulates that the COPC FUND covers oil pollution caused by an unidentifiable ship, which is not explicitly stipulated by the 1992 Fund Convention, even though a claim for a "mystery" oil spill caused by an unidentified ship is usually accepted by the 1992 FUND.[195] Besides, it is not clear whether the expenses reasonably incurred or sacrifice reasonably made by the ship owner voluntarily to prevent or minimize pollution damage shall be covered by the COPC FUND.[196] Acceptance of these costs would encourage a ship owner liable for oil pollution to take reasonable measures to prevent or minimize pollution damage promptly.

(2)Exonerations of the COPC FUND

The COPC FUND shall incur no liability where: (1) The pollution damage results from an act of war, hostilities or is caused by a discharge of oil by military ships, fishing boats and ships owned or operated by the government being used for non- commercial services at the time of the incident; (2) the claimants cannot prove that the damage results from an incident involving one or more ships; and (3) the pollution damage is wholly or partially caused by the fault of the person who suffered the damage.[197] Such fault includes an act or omission with intent to cause damage and an act of negligence.[198] It should be noted that there is a slight difference regarding the exoneration due to contributory negligence of the claimant between the Compensation Fund Regulation and the 1992 Fund Convention. According to Article 3 of

194) The 1992 Fund Convention, Article 4(1).

195) Liability and Compensation for Ship-Source Oil Pollution: An Overview of the International Legal Framework for Oil Pollution Damage from Tankers, Studies in Transport Law and Policy (2012 No.1), United National Conference on Trade and Development, p.53.

196) According to Article 4(1) of the 1992 Fund Convention, reasonable costs of preventive measures and sacrifices incurred by the ship owner can be compensated by the COPC FUND.

197) The Compensation Fund Regulation, Article 16.

198) Liming Wang, *"Research on Tort Liability Law I"* ,Beijing: China Renmin University Press, 2011, p.315.

the 1992 Fund Convention, even if the pollution damage is wholly or partially caused by the fault of the person who suffered the damage, the 1992 FUND cannot be exonerated from its obligation to pay the costs of preventive measures of such person. This can encourage preventive measures to be taken at the time of an incident so as to prevent or minimize the pollution damage. Unfortunately, there is no such provision in the Compensation Fund Regulation.

(3) Maximum Compensation Amount Provided by the COPC FUND

According to Article 18, the COPC FUND in no case pays more than RMB 30 million for any one incident. The maximum compensation amount of RMB 30 million is determined mainly based on the average compensation amount paid out for ship oil pollution occurring in the Chinese sea areas over the past 10 years.[199] The MOF, together with the MOT, is empowered to adjust this financial cap based on the pollution damage and the accumulated amount in the COPC FUND.[200] It should be noted that the amount paid by the ship owner liable for the pollution is not to be included in the amount paid by the COPC FUND. This is different from the arrangements under the 1992 FUND, under which the limits of liability established by the 1992 FUND include the owner's limits of liability under the 1992 CLC.[201] That is to say, the largest amount that a claimant can obtain for oil pollution damage in any one incident is the limitation amount of a ship owner as stipulated in the relevant domestic legislation and international conventions,[202] plus the RMB 30 million paid by the COPC FUND.

(4) Admissible Claims

A. Scope

199) Chunchang Zhang, "What Is Missing in China's Ship-source Pollution Damage Compensation System?",*China Maritime Safety*, 2011(7), pp.8-10.
200) The Compensation Fund, Article 18.
201) M.N. Tsimplis, "Marine Pollution from Shipping Activities," *Journal of International Maritime Law,* 2008(1), pp.101-152.
202) CMC, Article 210; LLR, Articles 3 and 4; the 1992 CLC, Article V(1).

According to Article 17 of the Compensation Fund Regulation, six types of claims listed in order of priority are admissible.[203] Pollution damage which can be compensated by the ship owner liable for the pollution is regulated by the Judicial Interpretation. The types of admissible claims under the Compensation Fund Regulation are basically consistent with that under the Judicial Interpretation, although a different expression is used. Nevertheless, there are some discrepancies between these two regulations. Firstly, according to Article 9 of the Judicial Interpretation, not only the costs of measures to prevent or clean up the pollution damage, but also the further loss caused by such preventive measures can be compensated by the ship owner liable for the pollution. However, compensation for the further loss caused by the preventive measures is not mentioned in the Compensation Fund Regulation. Besides, except for property damage to the fishery and tourism sectors, other property damage and the economic losses caused by such property damage is covered by the Judicial Interpretation but not by the Compensation Fund Regulation. In essence, compensation provided by the COPC FUND is a supplement to the compensation provided by the ship owner.

The COPC FUND is supposed to provide an additional amount of compensation for the same types of pollution damage that can be compensated by the ship owner liable for the pollution.[204] As a result, it is suggested that the types of admissible claims under the Compensation Fund Regulation should be identical to the admissible claims under the Judicial Interpretation.

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203) Including: (1) Costs of emergency measures to prevent oil pollution damage; (2) costs of controlling and cleaning up the pollution damage; (3) direct economic losses in the fishery and tourism sectors; (4) costs of measures actually undertaken to reinstate the marine ecosystem and natural fishery resources; (5) costs of surveying and monitoring;and (6) other costs approved by the State Council.

204) Longjie Chen and Xianming Liu, "Structure of a Fund for Compensation for Oil Pollution Damage in PRC", *Annual of China Maritime Law*, 2008(17), pp.314-331.

B. Distribution

As stated in the previous section, the six types of admissible claims are listed in order of priority.[205] If the costs of the claims which have the highest priority[206] exceed the maximum compensation amount provided by the COPC FUND, other lower rank claims cannot get any compensation from the COPC FUND, and the amount available shall be distributed in proportion among the highest rank claims.[207] This is different from the pro-rata rule under the 1992 Fund Convention, by which all claims relating to ship oil pollution damage, including the cleanup costs and other preventive measures, are to be treated equally and compensated in proportion.[208]

According to Article 55 of the Amended Regulations, all necessary expenses incurred by the relevant departments of a national organization, such as the MSA, when carrying out the emergency disposition and removal of the pollution, are to have priority in compensation. This is logical, because giving compensation priority to emergency costs encourages prompt cleanup operations. However, it is questionable whether the other claims should be treated unequally.

C. Emergency Costs

Although emergency costs have the highest priority in compensation, the COPC FUND will not directly pay the emergency costs in advanc e,[209] whereas in the United States, as one of the two components of the OSLTF,[210] an emergency fund is entitled to pay the removal costs and certain other costs directly in advance. The emergency fund, which

205) The Compensation Fund Regulation, Article 17.
206) At the top of the list of admissible claims, emergency costs have the highest priority in compensation.
207) The Compensation Fund Regulation, Article 17.
208) The 1992 Fund Convention, Article 4(5).
209) Hong Jun shan, "Comparative Study of China, American and International Civil Liability Regime on Oil Pollution" ,Beijing: *Law Press China*, 2009, P.231.
210) OSLTF is composed of two major parts, including an emergency fund and a principal fund.

cannot exceed USD 50 million annually, is available for three purposes, including: (1) Payment of federal removal costs; (2) funding for state requests to access the Fund directly for immediate removal action; and(3) initiation of natural resource damage assessments.[211] The emergency fund can provide financial support for oil spill emergency response without delay, so as to prevent or minimize any oil pollution damage caused by ships.[212] Therefore, it is suggested that an emergency fund should be established to pay the emergency costs directly in advance. At the same time, it could be more sensible to treat other types of admissible claims equally.

(5) Tax issues

The Chinese oil pollution fund only compensates for ship oil pollution accidents, excluding non- ship oil pollution accidents, such as oil developing and storing facilities. But in non- ship oil pollution accidents, the oil leakage volume is far greater than that in ship oil pollution accidents. In recent years, besides the American deepwater horizon oil leakage accident, oil pollution accidents caused by facilities have occurred frequently in China. For example, on July 16, 2010, the oil leakage volume reached about 60,000 t in Dalian Newport Petro China oil-conveying pipe explosion, estimated by Greenpeace; in June of 2011, according to the public data, the Bohai Bay oil leakage volume reached 3400 buckets in Penglai 19-3 oil field oil spill accident of Bohai Bay, China, leading to more than 5500 square kilometers of water pollution accumulatively.

So the victims were compensated by Conocophillips China Inc and China National Offshore Oil Corporation with RMB 1.683 billion, and Conocophillips was fined 200,000 Yuan by State Oceanic Administration;

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211) Colin de la Rue and Charles B. Anderson, Shipping and the Environment, 2nd ed. ,London, Hong Kong: Informa, 2009, p.216.

212) Lixin Han, "Suggestion On Improving the Management Regulations of Collection and Use of the Ship Pollution Damage Compensation Fund (Draft)", *Annual of China Maritime Law*, 18, 2008, pp.299-331.

and on November 22, 2013, the 11.22 Sinopec Donghuang oil-conveying pipeline leakage and explosion in Qingdao, Shandong Province killed 62 people and injured 136 people, with the direct economic loss of 751.72 million Yuan. Facing frequent catastrophic oil spill accidents, the oil pollution fund is needed urgently as a mechanism of disaster response and compensation to conduct the relief for oil pollution damage caused by facilities of offshore and onshore. In addition, the Chinese oil pollution damage compensation fund levies the tax for all kinds of oil through the marine transport in accordance with Pigou's Incentive Effect. And this tax policy of "one size fits all" has a weak incentive effect on reducing oil use and choosing the marine transport of oil owners, but not on choosing safer ships. How to effectively use the taxation policy tool to stimulate oil owners to choose safer ships and reduce oil pollution risk, which should be taken into consideration for taxation object selection of oil pollution damage fund.

3. Summary

Establishment of the COPC FUND has had a significantly positive effect on compensation for ship oil pollution damage in China. However, the maximum compensation amount provided by the COPC FUND is much lower than that provided by the 1992 FUND. Compensation from the COPC FUND could be insufficient to cover oil pollution caused by a major oil pollution incident, whereas the 1992 FUND has a relatively high compensation capacity in this respect.

Nowadays, China potentially faces significantly greater exposure to such major oil incidents, due to the ongoing increase in oil imports and the rapid development of the oil transport industry. As a result, it may well be high time that China participated in the 1992 Fund Convention. However, the COPC FUND, with its wider application scope, is also needed to cover oil pollution that is not covered by the international regime. Therefore, although the benefits brought about by the establishment of the COPC FUND cannot be denied, it is suggested that

it is now more appropriate for China to set up a combined scheme, under which the 1992 FUND provides supplementary compensation for pollution damage caused by spillage of persistent oil from sea-going tanker vessels carrying persistent oil as cargo in bulk, while the domestic compensation fund provides supplementary compensation for other oil pollution damage not covered by the 1992 FUND.

3.2.7 No clear Application of Law

In both academic circles and judicial practice in China, it is unanimously recognized that the 1992 CLC and the Bunkers Convention are directly applicable to ship oil pollution damage in which foreign elements are involved (hereinafter referred to as "foreign-related oil pollution"). According to Article 141 of the Summary of the Second National Work Conference on Foreign-Related Commercial and Maritime Trials[213]the 1992 CLC shall apply to foreign-related oil pollution caused by a ship owned by a Contracting State of the 1992 CLC, including oil pollution within the sea waters of China caused by a Chinese flagged ship engaged in international service.[214]However, it shall not apply to purely domestic oil pollution. Any Summary announced by the People's Supreme Court always provides significant guiding principles.[215]Hence,

213) Announced by the People's Supreme Court in December 2005.

214) In China the 1992 CLC and Bunks 2001 in which foreign elements are involved (hereinafter referred to as "foreign-related oil pollution"). Apart from the issue of limitation of liability, neither the Amended Regulations nor the Judicial Interpretation intend to directly apply the 1992 CLC and the Bunkers Convention to other liability and compensation issues in a domestic oil pollution incident.

215) According to Articles 4, 5, 6 and 18 of the Provisions of the Supreme People's Court on the Judicial Interpretation Work, any judicial interpretation which has legal force should be deliberated on and adopted by a judicial committee and reported to the National People's Congress. The Summary did not go through the approval procedure of a judicial committee and reporting to the National People's Congress. Also, it does not belong to any of the

this Summary would be followed by Chinese courts when dealing with legal disputes arising from oil pollution.[216]

In respect of limitation of liability, the 1969 CLC should not be used as the basis for China to deal with non-foreign oil pollution cases because the 1969 CLC provisions of limitation of liability is too high. [217] some confusion has again arisen after the promulgation of the Amended Regulations. Article 52[218]provides that the amount of limitation of liability for oil pollution damage caused by vessels carrying persistent oil in bulk to sea areas under the jurisdiction of the PRC shall be in accordance with the 1992 CLC. However, it is not clear as to whether or not the 1992 CLC shall directly apply to other liability aspects of an oil pollution incident, such as the liability for oil pollution damage that is wholly caused by the negligent act of a third party in purely domestic oil pollution incidents.[219]

1. Case summary

(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 stone and the bottom of the ship was broken. Most of the 995 tonnes

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forms of judicial interpretation mentioned above. Therefore, the Summary does not have legal binding force. However, in judicial practice, the Supreme Court may also promulgate certain rules which do not go through a judicial committee and do not have legal force, but which would be followed by Chinese courts as guiding principles. The Summary is of this kind.

216) Hongjun Shan, "Comparative Study of China, American and International Civil Liability Regime on Oil Pollution" ,Beijing: *Law Press China,* 2009, p.109.

217) Zhao, Hong, "The Legal Issues of Compensation for Oil Pollution in Judicial Practice", *Conference on Maritime Law of Chinese Lawyer* , 2005, P.65.

218) Article 52 of the Amended Regulations, which is an article specializing in limitation of liability rather than regulating the application of national laws and international conventions.

219) Zhang, Liying, "Compensation for Domestic Oil pollution in China's Coast: Which Law Shall Apply?", *Maritime Pollution Liability and Policy-China, Europe and the US, eds,* by Faure, G. Michael, Han, Lixin and Shan, Hongjun ,Alphen aan den Rijn, The Netherlands: Kluwer Law International, 2010, pp.359-369.

of oil cargo were spilled, causing serious damage to aquatic plants.

The ship's owner of '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[220].

However, in the case of 'Min Ran Gong2' the Guangzhou Maritime Court held that the 1992 CLC 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.

(2) 'Min Ran Gong2'

At 21:15 of March 22nd 1999, M/T 'Min Ran Gong2' 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 'Min Ran Gong2' and the cargo oil loaded in 'Min Ran Gong2' spilled into the accident waters.

The losses of this case reached 3,700 million Yuan RMB. The owner of the 'Min Ran Gong2' applied the liability limitation to maritime court in accordance with 1969 CLC, that is, 52.934 unit SDR. After the application and public notice from 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, 'Min Ran Gong2' is not a convention vessel. It 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 'Min Ran

220) China Foreign-related Commercial and Maritime Trial, 2010,

Gong2' 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: ship 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 ships with bulk oil on board. Although the cargo oil carrying in the 'Min Ran Gong2' was less than 2.000 tonnes, in accordance with 1969 CLC, the convention can be applied. The two objectors thought that 'Min Ran Gong2' cannot apply 1969 CLC, and because lack of legal basis, it could not get court support.

The decision of this case limited the 'Min Ran Gong2' 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 compensatio n[221].

2. Cases Analyse and Conclusion

In China, the practice of die 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 on their different characteristics.

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 YanJiu You 2 the Qingdao Maritime Court did not apply the CLC.

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 1992 CLC. Victims of oil pollution in China

221) Ibid., p.12.

are often left in a disadvantageous position with insufficient compensation or no compensation at all. Even when the CLC is uniformly applied, there still many 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 it may not be effective to influence die practice in China.

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. So it is unable to pay the full compensation. When the pollution damage exceeds the ship owner's liability, the surplus part will 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. As a consequence, clean-up activities and preventive measures are not encouraged either.

Chapter 4 Legal Regime of Compensation in Korea and its Enlightenment to China

4.1 Overview of Laws and Regulations in Korea

On December 18, 1978, Korea acceded to the 1969 International Convention on Civil Liability for Oil Pollution Damage. However, due to national conditions, Korea did not accede to the 1971 Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage.[222] Therefore, in that time oil pollution damage protection was basically dependent on two organizations which were the spontaneous compositions of the owners of the form of folk TOVALOP and (CRISTAL). While who joined the organization was mainly a number of large ships and fuel companies, which those small vessels suffered oil pollution damage accident was not fully protected.

In this case, Korea began to amend the commercial law on the protection of tankers pollution damage to the relevant provisions in 1991, and on January 1, 1993 entered into force. At the same time, Korea has begun to formally join the 1971 International Civil Liability for Oil Pollution Liability Convention, and in accordance with the provisions of these international conventions, promulgated Republic of Korea's oil

222) Korea announced on December 8, 1992 to join the 1971 International Oil Pollution Compensation Fund International Convention on the 1976 Protocol, according to Republic of Korea Oil Compensation Supplementary Provisions Article 1, the agreement in March 1993 without on effect from Republic of Korea.

pollution damage compensation law“ (hereinafter referred to as “CODGA“. “CODGA“ as a special law of Korean commercial law, when the conflict with the international conventions and the terms, the oil compensation on would be taken precedence.

After that, with the issuance and entry into force of the 1992 CLC, Korea has made continuous efforts in compensation for oil pollution damage, and revised on 13 January 1997.[223] Furthermore, Korea has revised several times to develop the protocol in 1976, 1984, 1992, 2000 , In 1999, the contents of the survey on oil pollution damage were revised as well. [224]The amount of protection in the relevant amendments was revised in 2003. [225]And in 2009, Korea added to the “Bunker 2001“ and in 2010, it added to “the 2003 Supplementary Fund convention“. And in 2009, based on “Bunker 2001“ and “the 2003 Supplementary Fund convention’, Korea has amended the obligation to join liability insuranc e.[226]. In 2013, in order to reducing the issue of the application of the law , the law was amended once again.[227]In 2014, the amount of fines and penalties were imposed eventually.[228]

Table 4-1 Legal Regime on Marine Pollution Damage in Korea

223) The amendments to the Korea Oil Claims are mainly based on the relevant provisions of the 1969 Convention on Civil Liability for Oil Pollution Damage and the International Convention on Oil Pollution Compensation Fund 1971, but on the high seas the tankers are included on the high seas, exclusive economic zone. Only a part of the 1984 Convention (subsequently the 1992 Convention on Civil Liability) was invoked, but in the 1997 revision, the 1992 Convention on Civil Liability and the Compensation Fund Agreement were fully referenced and quoted.

224) The legal code of law 5811,1992.02.05, Partial amendment, 1999.02.05. It was allowed to participate in various fields in areas ranging from oil pollution to emotional effects.

225) The legal code of law 7002,2003.12.11, Partial amendment, 2003.12.11.

226) The legal code of law,9740,2009.05.27, Partial amendment,2009.11.28.The Act also stipulated that the responsible insurance boat should be subjected to the obligation to obtain adequate damage to the oil gate of the oil gate of the oil gate, and to ensure that the residents of the spent fuel pool are allowed to receive sufficient damage.

227) The legal code of law,11757,2013.04.05., Partial amendment,2013.07.06.

228) The legal code of law, 12829,2014.10.15., Partial amendment,2014.10.15.

Korean Legal Regime on Oil Pollution	Years of Accession
Commercial Act of Koran	1963
Compensation For Oil Pollution Damage Guarantee Act [229]	1992
Ship owner's Limitation Procedural Act	1993(latest amendments made in 2009)
Taean Special Law	2008

The above laws, some of the provisions of the Korean oil pollution damage related content. However, the most two important laws of oil pollution damage in Korea are Compensation for Oil Pollution Damage Guarantee Act (CODGA), and Taean Special Law[230] in relation to Hebei incident, so that the local residents of the affected areas may receive compensation in a speedy and appropriate fashion. [231]

Korean law on Protection of marine environment from ship oil pollution corea has signed international conventions on Oil Pollution Prevention such as: International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990 (OPRC 1990); International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, 1969 CLC; International Convention on

229) Korea (Korea) ratified the CLC 1969 on 18 December 1978. Korea also ratified the FC 1971 on 8 December 1992 and Compensation for Oil Pollution Damage Guarantee Act (CODGA) was legislated at the same time. This Act reflected all contents of the CLC and FC. On 7 March 1997, Korea ratified the 1992Conventions and amended the Act accordingly.

230) On 14 March 2008, the National Assembly legislated a special law, namely „The Special Law for the Support to Residents Suffering Damages from the M/T Hebei Spirit Oil Spill Incident and Restoration of Marine Environment".

231) The main contents are as follows

i) Establishment of Special Committee on Oil Pollution Incidents(Article 5 & 6).T;

ii) Victim Group (Article 7);

in) Support for Compensation to Victims (Article 8 & 9);

iv) Designation of Special Marine Environmental Restoration Zone (Article 10).

Civil Liability for Bunker Oil Pollution Damage, 2001; International Convention on Civil Liability for Oil Pollution Damage, 1992 CLC and 1992 Protocol to the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (1992FUND); International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 (MARPOL 73/78); International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, 1996 (HNS 1996); International Convention for the Safety of Life at Sea (SOLAS), etc.

To implement the commitments after becoming a membership of the international conventions, Korea incorporated the provisions of the international convention in the national law. Korea issued written system of marine environmental protection, prevention of oil pollution caused by ships, one of which may mentioned are: Environmental Conservation Law of 1977; Coastal Management Law of 1999; Environmental Protection Law of 1980 (amended 1986, 1999). Damage Compensation law of 2009; Marine pollution prevention law of 2004. 29 December 1995, Korea adopted the marine pollution prevention law. Until now, this law was modified three times in 1997, 1999, and 2004. Marine pollution prevention law of Korea was issued with the purpose is the protection of the health and property of citizens through the protection of the marine environment by provisions on discharge of oil, hazardous substances or waste into the sea, and minimize the factors causing marine pollution.

4.2 Legal Regime of Compensation in Korea and its Enlightenment to China

4.2.1 The Subject of Liability

1. The Subject of Liability in Korea

The Subject of liability for ship oil pollution damage in CODGA, is the owner of the ship at the time of the accident, or, if the accident is constituted by a series of events, the owner of the ship at the time of the first such incident shall be liable on any pollution damage caused by the accident. In the event of an accident involving two or more ships and causing pollution damage, the owner of all the ships concerned shall be jointly and severally liable for all such damages which reasonably can not be distinguished.

In accordance with Article 7, paragraph 8, of the Convention, any claim for oil pollution damage may also be made directly to the insurer or other person providing financial assurances for the liability of the owner of the ship[232] for oil pollution damage.

However, the Korean oil compensation for the main provisions of the responsibility of the principal although the basic use of the provisions of the 1992 Convention on Civil Liability stipulated in the ship owner. But the Korean law Article 2, paragraph 2 provides that the object of the loss is Loss of pollution caused by oil flowing out of oil tanker “Oil pollution damage compensation protection law.[233]

(1) The ship owner

Article 5, paragraph 1, of the CODGA provides for the principal status of the ship owner of the cruise ship when the accident occurred. [234]

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232) Owners of ships" means the person registered as the owner of the ship and, in the absence of such registration, the person who owns the ship. "ship owner" means a company which is operated by a company registered in the State as a ship operator if the ship is owned by the State.

233) CODGA. Article 1 & Article 2.

234) Cheong yeong seok, *"The Low of Oil Pollution Damage"*, Dasom publish company, 2017, p.28.

CODGA Article 5, paragraph 5, paragraph 1 and paragraph 6 of the provisions: No claim for compensation for pollution damage may be made against the owner otherwise than in accordance with this Convention. Subject to paragraph 5 of this Article, no claim for compensation for pollution damage under this Convention or otherwise may be committed again. No claim for compensation under Chapter II may be made against the person falling under any of the following sub paragraphs:

a. The agents or servants of the owner a ship, or the members of the crew;

b. The pilot or any other person, who without being a member of the crew, performs services for the ship;

c. Any charterer (excluding a bareboat charterer), manager or operator of the oil tanker;

d. Any person performing salvage operations with the consent of the owner of a ship or on the instructions of a competent public authority;

e. Any person taking preventive measures; and

f. All agents or servants of the persons mentioned in subparagraphs 3 through unless the damage resulted from their personal act or omission, committed with the intent to cause such damage, or recklessly and with knowledge that such damage would probably result. In this case, the owner of the ship as a liability for compensation for oil pollution damage has been clearly defined.[235)]

(2) National of Korea, the owner of the ship and the charterer

In Article 2 (4) of the CODGA, the person registered as the owner of the cruise ship and the owner of the ship are the persons specified in the law for the case of a ship tenant whose nationality is other country but the owner of the ship belongs to the Korean national Ship owner.

235) CODGA. Article 5.

Because a Korean national who has other nationality, as a ship owner, is in control of the ship in the same way as the ship owner in the construction, it shall be deemed to be the owner of the ship.[236)]

Though CODGA, we cannot claim compensation for ship leasing person (including bareboat leasing person) other than ship owner in terms of responsibility subject, but there is nature of responsibility of light vessel leasing person as Korean national here. It is established as responsibility subject.

The subject of liability is the person registered as owner of the ship "Oil Pollution Compensation Law 2" . In the case of a foreign ship wholly owned by a Korean national, the owner of the ship registered as the owner of the ship and the owner of the ship's hull shall be deemed to be the owner of the ship under this Act. In addition, the owner of the oil pollution accident should bear the responsibility of compensating the loss of oil pollution accident regardless of the negligence under the principle of no-fault liability. Article 4 (1) of the CODGA. The ship owner and the charterer shall be jointly and severally liable. The scope of the owner of the ship includes the person who is registered as the owner of the ship and the owner of the hull when the Korean national as a whole rents a foreign ship.

In the case of Korea, on the one hand, when Korea leased a foreign ship as a whole, the person who registered as owner of the ship and the owner of the hull was the subject of legal responsibility and was a progressive legal and policy legislation for the better and prompt compensation of the damage .[237)] On the other hand, the nationals of

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236) Cheong yeong seok, *"Maritime Regulation Law"*, Haein publish company, 2003, p.30.

237) On the basis of the above, it is pointed out that the hull charterer is responsible for the responsibility as the occupant manager of the risk source, because the management and occupancy of the crew through the senior command , supervision and the use of the vessel for the ship are entrusted to the charterer.

Korea and the charterers of the ship leases are responsible for reducing the burden of insurance on both sides.

The 1992 Convention on Civil Liability for the use of the owner of the ship owner and agent excluded from the scope of the main responsibility, but the Korean oil claims that the two objects provided in the context of damages, its intentional or negligent damages cannot be in accordance with the general fault of the main responsibility to deal with the object should be in accordance with other provisions of the damage, which is oil compensation and the 1992 Convention on Civil Liability Agreement differences.

2. Inspiration to China

Korea more specifically classifies the "ship owner" into two categories of ships, one is oil tankers and general vessels, and the other is oil storage barges. The term "ship owner" can be defined under the following classifications:

- For oil tankers and general vessels:

Any person could be registered as the owner of a ship under Art. 8 (1) of the Ship Act, Art. 13 (1) of the Fishing Vessels Act, or foreign Acts and subordinate statutes (in the absence of registration, any person who owns an oil tanker or general vessel);

In case a ship is owned by a foreign government, any corporation or association in that country which is registered as the operator of the oil tanker or general vessels shall be deemed as the ship owner; and In case an oil tanker or general vessel of foreign registry is chartered by a national of Korea, both the person who is registered as the owner of the ship and the charterer shall be prospectively regarded as the ship owners.

- For oil storage barges:

The "ship owner" of oil storage barges means any person who

owns or rents an oil storage barge

In China, the definitions of the "ship owner" in CLC 1992 and Bunker 2001 are separately applicable respectively when the respective convention applies. When none of the convention applies, the "polluter" who causes the pollution is probably liable according to the domestic laws;

However, there are still many problems in the provisions of Chinese law in the light of the provisions of the subject for ship oil pollution. Owing to the inconsistency of various laws and the lack of a clear concept and judicial interpretation, the resulting legal precedents are explicitly unfair and unfavorable to the development of the shipping industry.

Therefore, based on China's practical experience, China should learn from Korea's practices and, based on China's practical experience, identify the first responsible party of the ship oil pollution compensation system as the owner and the insurer, but the owner of the ship should include bareboat charterers.

(1) Clear the claim Subject

It is a very important problem to clearly define which is the plaintiff or the defendant, in the legal relationship of the oil pollution damage compensation.

a. Maritime Administration department.

When the oil pollution happens , the national maritime administrative department should have the obligation to take emergency plans for the pollution accident. One important content of the plan is to clean up the oil. The maritime administrative department should pay the cost of cleaning work. China's marine environmental protection law does not clearly define which level of the maritime administrative department should demand the compensation. Based on the principle 0f convenience,

my suggestion is that the damage compensation would be taken by the administrative department who has the emergency plan for the oil pollution accident.

b. Environmental protection department

Oil pollution damage not only costs a lot for cleaning, but also may cause damage to the marine ecology. Environmental protection department shall have the right to file a civil action on the marine environmental pollution and ecological damage to the marine ecology.

c. Fishery Administration department

When the oil pollution of the ship makes damage to the fisheries resources, The Fishery Administration department, representing the nation, has the right to appeal for the damage compensation.

d. Unit or Individual

The unit or individual can take the civil action as the right subject when its property or itself has been suffered damage directly from the ship's oil pollution. This type of main body is mainly represented as fishery or fishery enterprises. The claim is primarily leading to the loss of aquatic products and aquaculture. Its main feature is the large number of claims. Individual litigation, whether for individuals or the use of legal resources, can cause great pressure. So the better prominent solution could be regarded as the representative of the litigation system. However, Chinese representative litigation system is not perfect. In the oil pollution damage case, it should be in compliance with the conditions of the applicable representative action, simultaneously the court and the parties are required to explore the applicable method in practice. Only in this way can better achieve the unit and individual claims.

(2) Right the Obligation subject

A. Improve the Legal Requirements and Applicable

1) Determination of the subject of responsibility for oil pollution

damage of foreign ships in the legal relationship between foreign oil pollution damage, when the domestic law and international conventions are inconsistent the determination of the subject of responsibility should be given priority to the application of international conventions.

2) The Application of Law to the Subject of Responsibility of Oil Pollution Damage in Non-foreign ship

Non-foreign ship oil pollution damage to the main responsibility of the determination of the application of Chinese domestic law. Therefore it should make a clear definition on the unilateral responsibility.

In addition, the owner of the ship as the main responsibility for the damage to the ship oil pollution is obviously not in consistent with the current international practice and legislative trends.

3) The provisions of the subject of liability for oil pollution damage caused by inland waterways shall be specified separately

In order to determine the responsibility of the oil pollution damage which is caused by the river ship, the author suggested that the owner of the ship should be regarded as the responsibility subject of the ship owner under the strict liability principle. It should also be recommended to extend the oil pollution damage accident to the maritime law adjustment for a better guarantee of the victim obtaining compensation.

B. Improve the construction of the subject of responsibility

1) For the first level of the subject of the responsibility.

Currently, on the aspect of the ship oil pollution damage liability subject, China is not yet specifically delimited any legal provisions. Therefore, China should primarily make extensive reference to the international conventions and the relevant regulations of the CODGA and other countries in the laws and regulations of the subject of liability for oil pollution damage, with out abandoning the practical experience of China. The first responsibility of the oil pollution compensation system is

the owner of the ship and the insurer, but the ship owner shall be contained as the bareboat charter. However, such compensation is constantly unable to meet the victim's request for compensation, definitely it also needs to build a second layer of liability to intend to make up for the victim to obtain more compensation.

2) For the second level of the subject liability

Under the Chinese compensation system, the maximum amount of pollution damage caused by oil tanker ships is still far below the maximum amount of compensation that is set forth in 1992CLD and 1992 FUND. Therefore, on the one hand , China should improve the second layer of compensation mechanism as soon as possible; on the other hand , China should join the oil pollution damage compensation fund at the appropriate time.[238]

3) Try to establish a mechanism for the whole society

"Cargo dual mechanism" has internationally become more mature on the ship oil pollution damage to the main model. China should also follow this trend. For the case of oil pollution damage, the owner of the ship can be the main compensation, in the compulsory insurance and direct litigation system with the help of the oil cargo owners to raise the fund system to compensate, so as to better improve the oil pollution compensation system. Especially for the current shipping industry in the doldrums, the oil industry is relevantly lucrative, in order to achieve a balance of interests. Oil goods should bear more responsibility for oil pollution damage. In addition, the responsibility of the oil pollution which is caused by the ship to the whole society to participate in marine issues is crucially related to the interests of the whole society, therefore

238) The "supplementary fund" as the third order of the compensation subject, the author holds a negative attitude. The second is that the Supplementary Fund itself is selective and the number of participating countries is small. Thirdly, the CNOOC Compensation Fund itself is not yet included in the scope of the Supplementary Fund. Perfect, it is impossible to directly establish a supplementary fund with international standards.

the whole society should be paid for marine pollution damage. Although it is still difficult to establish a perfect mechanism for the whole society in China under the current situation, it is entirely possible to establish a compensation mechanism based on this concept and provide a third level compensation for oil pollution damage.

There is no dispute that the owner of the ship should be the subject of liability for oil pollution damage. The inclusion of a bareboat charterer in the subject of liability for ship oil pollution damage arises from the fact that bareboat charterers, and these charterers often have actual control over the ship within the ship's liability for oil pollution damage in addition to encouraging it to take better measures to prevent oil pollution Damage under the incident.

In addition, it can also take effective measures as soon as possible to reduce the pollution to a minimum while the incident of oil pollution damage to ships occurs. Compared with the ship managers and operators, bareboat charterers are registered, so in the victim's lawsuit, it can be found clearly and conveniently as to obtain more effective compensation. However, regarding ship managers and operators, in practice, ship operators and managers often do not register, they usually cannot actually control ships. It is not significant for them to be embraced in the sphere of responsibility.

4.2.2 Scope of Compensation

1. Scope of Compensation in Korea

(1) Geographical

In CODGA, the scope shall apply to oil pollution damage occurring in the territory (including the territorial sea, hereinafter the same shall apply) of Korea and in the exclusive economic zone of Korea: Provided,

that this Act shall apply to preventive measures, wherever taken to prevent or minimize such oil pollution damage in the territory and the exclusive economic zone of Korea.[239] The defendant's nationality, address, place of residence and so are not required, but also the point for the second in the preventive measures, where to prevent, to prevent or deviation, there is no geographical restrictions, to apply this law directly. [240]Under the administration of the State party, it is important to note that litigation, In order to protect the territorial sea and the exclusive economic zones, such as offshore installation-rigs, single buoy, fishing grounds for sedentary and free-swimming species and artificial islands is not apply this law.[241]

(2) Ship

Under 1969 CLC Article1 "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. [242]

Under CODGA, the term "General Ship' means all ships excluding oil tankers and oil storage barges; [243]CODGA make all the country's

239) CODGA, Article 3.
240) David w. Abecassis, Richard L.Jarashow,etc., *"Oil Pollution from ships"*, 2nd ed., London, Stevens&Sons, 1985, p.204.
241) Ibid., p.205.
242) 1969 CLC, Article1.
243) 1.The term "Oil Tanker" means any sea-going vessel (including a barge) of any type constructed or adapted for the carriage of oil in bulk as cargo: Provided, that a ship capable of carrying oil or other cargoes shall be regarded as an oil tanker only when it is actually carrying oil in bulk as cargo, or it has residues of such carriage of oil in bulk aboard; 2. The term "General Ship' means all ships excluding oil tankers and oil storage barges; 3. The term "Oil Storage Barge" means a floating maritime structure, or aship, for storing oil under subparagraph 1 of Article 2 of the Ship Safety Act.

ships and military ships excluded, this is different with the 1969 CLC. Korea so that the provisions of his own meaning. Oil pollution caused by national acts can be specified as the main body alone. “Ships“ means any type of sea and maritime craft constructed or modified for the purpose of transporting bulk oil cargoes; however, ships capable of transporting oil and other cargoes are liable only to the extent of their actual carriage of bulk oil cargoes , And any voyage after such carriage (other than that which has been shown to have no residue of such bulk oil transport on board) shall be deemed to be a ship.

(3) Oil

In CODGA article 2(5) the term “Oil“ means any persistent hydrocarbon mineral oil such as crude oil, fuel oil, and lubricating oil, whether carried on board a ship as cargo or in the bunkers of such a ship, which is determined by the Presidential Decree; Article 2(6) the term “Bunker Oil” means hydrocarbon mineral oil, including lubricating oil, that is used or intended to be used for the operation or propulsion of the ship.

The definition adopted by the COPC FUND does provide clear guidance on those oils that are covered by the Conventions. The term “persistent” and the chemical definition relied upon by the Conventions and those who apply them ensures consistency in the application of the term and overcomes the variety of terminologies that may be used on a local or regional basis.

This consistency is very important in the context of the United States where under the Oil Pollution Act 1990 (US) even though the concept of persistent/non-persistent oil has no direct relevance in the law. However, given the significant potential liability associated with loading or discharging persistent oil cargoes in waters of the US, it has been necessary to apply a weighting on such voyages.

The P&I Clubs have adopted the COPC FUND definition of

persistence/non-persistence as a convenient standard by which to apply an additional premium on persistent oil cargoes deemed to represent a greater risk of financial exposure in the event of oil pollution. Thus, the advice is often sought from ITOPF on the determination of the persistence or otherwise of an oil and to interpret the COPC FUND definition. As described above, the assessment is based on the distillation characteristics of the individual oil.[244)]

In the enforcement order of Article 2 (5) of CODGA, the above definition is basically adopted in accordance with the provisions of Article 12 of Enforcement decree of the industrition standardization in Korea.

But has been leaked oil, and lubricants or marine oil has nothing to do, are adjusted by this law. [245)]

(4) Oil Pollution Damage

In order to bear the liability of the owner of the ship, there must be an occurrence of oil pollution damage. In Article 2, paragraph 7, of the CODGA, the oil pollution damage to the cruise ship is specified: The term “Oil Pollution Damage“ means the following damages or costs caused by an oil tanker, a general ship or an Oil Storage Barge:

a. Loss or damage caused outside a 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 recovery actually undertaken or to be under taken;

b. The costs for preventive measures; and

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244) International Tanker Owners Pollution Federation Limited, https://www.itopf.com/fileadmin/data/Documents/Papers/persistent.pdf.(2017.09.16.).

245) CODGA, Article 2, paragraph 5.

c. Further loss or damage caused by preventive measures.[246)]

CODGA Article 2, paragraph 8, the term “Incident“ means any occurrence or a series of occurrences having the same origin, which causes oil pollution damage or creates a grave and imminent threat of causing such damage;

2. Inspiration to China

It can be seen that Korea has defined the geographical scope, definition of damage to ships and oils as well as pollution in the scope of oil pollution damage compensation. However, there is no clear definition of the existing laws in China. Therefore, the experience of Korea can inspire China to make the following improvements in the definition of the scope of oil pollution damage compensation.

(1) Applicable Ships

In the system of compensation for oil pollution damage from ships, it is an important content which kind of the damage caused by ship and oil can be included in the extent of compensation. The ship on the system of compensation for oil pollution damage from ships in China should draw lessons from the provisions of the Convention on civil liability. That means ship is any type voyage regulator, constructed or adapted to transport the bulk oil cargo.

Further ships should be these, which carrying oil and other goods. only in the actual transport of bulk oil cargo, and it does not transport bulk oil. This definition is not only applicable for oil tankers, oil and other goods or ship carrying dual-use, but also for inland tanker.

(2) Oil Aspect

In practice, the China Maritime Safety Administration as a collection of oil pollution fund authorities in accordance with the actual June 27, 2012 release. But the following problems still need to be resolved in the

246) CODGA, Article 2(8).

following legislation. First, Since July 2012, China has actually collected the oil pollution fund in accordance with the "Notice on Solving Persistent Hydrocarbon Mineral Oil Containing Oil Opinion". However, whether the oil pollution fund is collected according to the above internal notice and the classification of oil products has not a clear statement. The author hereby recommends that the China Maritime Safety Administration to confirm the notice through the normative documents. Second, the "ship oil pollution damage judicial interpretation" clearly excludes "non-persistent cargo oil" compensation for damage caused by the "oil pollution fund management approach" also includes "non-persistent cargo oil" damage compensation. The contradiction between the two legislation is that the "non-persistent cargo oil" can be compensated in the oil pollution fund, but not recognized by the Court of oil pollution damage. Therefore, the proposed maritime administrative organs and maritime courts should be operation of the problem clear in practice.

The system of compensation for oil pollution damage from ships in China shall be governed by the existing laws. Oil is any kind of oil and its refined products.

(3) Applicable Region

Combined with the provisions of 1969 CLC, Any damage arising from the following areas shall apply to the system of compensation for oil pollution damage from ships in China. These damages are caused within the territory of China, including the territorial waters, in China's exclusive economic zone, also by the preventive measures in China in order to avoid or reduce the damage.

(4) Scope of Compensation

Specifically, the loss of life and personal injury definitions mentioned in international oil pollution conventions and foreign oil pollution legislation are different. In addition, China's juridical interpretation has

listed the loss of life and personal injury caused by vessel oil pollution accident within the scope of oil pollution damage compensation. China's current laws and regulations do not make provisions for the scope of compensation for oil pollution damage caused by ships. I think that the scope of compensation for oil pollution damage shall at least include the costs of cleaning up and the loss and damage caused by pollution.

A. The Costs of Cleaning up

The cost of cleaning up includes the cost of cleaning up pollution by government organizations and the cost of implementing action or precautionary measures under the coordination of oil and pollution contingency plans by any unit and individual. With regard to the specific scope of the clean-up costs, and in accordance with the International Convention and the 2005 "Second National Conference on Foreign Maritime Trial", The cost of the maritime sector that use its own human and material resources to participate should be in the cost of cleaning up. At the same time, the maritime sector survey costs, staff due to the accident occurred in the cost (overtime pay) and so on also should be including in the costs.[247)]

B. Loss and Damage Caused by Oil

(a) Personal Injury. It should be include that medical expenses,

247) Guanghai Fa Chu Zi No. 182: At the beginning of 2005, "Minghui 8" round and "Minhai 102" round in Guangdong Nanao Island near the waters of the collision, 'Minghui 8' 'round leakage O # diesel 628 tons into the sea, Shantou Maritime Bureau in accordance with the law to start contingency plans Pollution action, the cost of 6928681.49 yuan. And then to the Guangzhou Maritime Court to prosecute the two ship owners, asked to jointly compensate the aforementioned costs. The court ruled that the plaintiff's organization to clean up the unit costs, but for the plaintiff's own claim fees, the court that the plaintiff staff and all their official ships engaged in investigation, monitoring and removal of oil pollution should be administrative acts , In the absence of evidence to prove that the conduct of its conduct beyond the scope of administrative duties, should be identified by the investigation, monitoring and removal of oil pollution accidents incurred expenses are administrative expenses, should not be compensated by the defendant.

travelling expenses, lost income and other losses incurred by any damage to the life or physical health of a natural person due to environmental pollution.

(b) Medium and long term losses to fishery resources should be compensation. In compensating the foregoing medium and long term losses, the key is to identify the existence and value of such losses, which are usually expected ones and not the present or existing ones. Such losses are neither definable nor quantifiable. They are usually notional and huge sums that may be calculated solely on theoretical bases. Currently, in disputes regarding the compensation for oil pollution damage, most of the formulas applied by the parties or the relevant departments to investigate, estimate and predict the foregoing medium and long term losses are unscientific and questionable and most of the survey results are inaccurate. In addition, there is never sufficient factual evidence for most of the claims for compensation for medium and long term losses that are filed. The authors note that it is common problem for the survey reports on medium and long term losses to be inaccurate and often the evidence presented is not sufficient ot support a claim for compensation for such losses. When setting disputes related to compensation for medium and long term losses, it is necessary to apply scientific formulas and techniques for investigating, estimating and predicting medium and long term losses, and to set proper standards of admitted evidence in survey reports.

C. Pure economic losses of oil pollution cases involving foreign ships

It shall be included in the scope of compensation for the pure economic loss caused by the oil pollution cases of foreign ships. The scope should be include (1), fishing, aquaculture and similar industries; (2) To provide travel services such as hotels, restaurants, shops, beachfront facilities and related activities; (3) Operating desalination plants, saltworks, power plants and Water for similar production or cooling treatment.

Objectively, the starting point for a purely economic loss should be pollution rather than the event itself. Consideration should be given to the reasonable proximity between pollution and the loss or damage suffered by the claimant. The claim that the loss or damage does not occur without oil spill is inadmissible. When considering whether to meet the criteria of reasonable proximity, the following aspects should be focused: (1)there is a geographical proximity between the claimant's activities and pollution; and (2), the claimant's economic dependence on the affected resources; (3), the extent to which the claimant is available in other resource supply or business opportunities. Subjectively, the subject of oil spill must be deliberately subjective. Negligent acts that cause pure economic losses should not be paid.[248)]

The author believe that implementing a compulsory ship oil pollution insurance and establishing an oil pollution compensation fund system are effective ways for setting the disputes of pollution eliminating costs resulting from ship oil pollution in China's coastal areas.

4.2.3 Limitation of Liability

1. Limitation of liability in Korea

(1) The subject of Limitation of liability

In accordance with the provisions of Article 5, paragraphs 1 and 2, of the CODGA, the owner of the oil tanker shall exercise the right of defense in accordance with this Law in the liability for oil pollution damage. Article 7, paragraph 1, of the CODGA provides that: The owner of an oil tanker (including partners with unlimited liability in the ase of

248) The reason for this is to prevent the burden on the accused class, which creates a fair question. Because the formalism of "formalism" is often confined to the state of uncertainty, it is technically possible to review the subjective state of the defendant by drawing lessons from the duty of attention.

a corporation) who is liable for compensation for oil pollution damage the provisions of Article 5 (1) or (2) may limit the oil pollution liability in accordance with the provisions of this Act: Provided, that this provision shall not apply to the cases of oil pollution damage resulting from his / her personal act or omission, committed with the intent to damage, or recklessly and with knowledge that such damage would probably result. 'However, under article 5 (1) (4) of the Act and the provisions of article 2, paragraph 4, the person registered as the owner of the ship , The case of the owner of the other country's government as a company or group registered by the actual operator, and the bareboat charter of the ship of other nationals owned by the Korean national are the main body of the limitation of liability.

So the subject of limitation of liability includes the ship owner, the ship manager, the lessee-level ship operator, and the owner of the ship as legal person and the unlimited liability of the persons listed in the preceding paragraph.

The registered owner is entitled to limit its liability.[249] limitation level is identical to that of the CLCs . these figures are higher than that of the general 1976 LLMC in order to protect the victims caused by an oil pollution.

The ship owner shall not be entitled to limit his liability if it is proved pollution damages was resulted from his personal act or omission ,committed with the intent to cause such damage ,or recklessly and with knowledge that such damages would probably result.[250] The claimant' s proving the above is not a easy one and thus there is no reported case that the ship owner' s limitation right was broken under CODGA .[251]

(2) The exclusion of Limitation of Liability restrictions

249) CODGA article6(1) & CLC article 5(1).
250) CODGA article6(1) & CLC article 5(2).
251) Cheong yeong seok, *"The Low of Oil Pollution Damage"*, Dasom publish company, 2017, p.46.

In CODGA , this provision shall not apply to the cases of oil pollution damage resulting from his/her personal act or omission, committed with the intent to cause such damage, or recklessly and with knowledge that such damage would probably result.

For the owner of the ship, the limitation of liability is based on the principle of faith, in order to maintain the balanced development of the overall shipping industry. Therefore, when the claim occurs, according to the reasons for the occurrence of claims, if their behavior is illegal or the owner of the ship is not in the case of liability restrictions occur, the need to rule out their restrictions.

Although the expansion of the limitation of liability is beneficial to the creditor, the original intention of the system itself is to produce better results, so that the parties can understand the direction of the specific provisions of the provisions. This is consistent with the strict liability principle set forth in Article 3, paragraph 4, of the CLC.[252)]

In Article IN, 4 of the 1992 CLC, any charterer, manager or operator shall not be liable for pollution damage unless the damages resulted from their personal actor omission, committed with the intent to cause such damage, or recklessly and with knowledge that such damage would probably result. [253)]Regardless, according to Article 5, (5) of the CODGA, any manager or operator shall not be liable for pollution damage and there are no provisions for any exemption on it. Therefore, it can be interpreted that victims can not make claims to manager or operator of a ship even though he is at fault, as described in Article IN of the 1992 CLC.

(3) Aggregate Amount of Liability

Where the owner of an oil tanker can limit his/her liability under

252) Cheong, yeong-seok," A Study on the restriction of the responsibility of the ship owner" *Korea Maritime and Ocean university Degree Thesis*, 1988, 07, p.61.

253) 1992 CLC, Article IN 4.

Article 7(1).[254]

In Korean commercial law, the subject of limitation of liability includes the ship owner, the ship manager, the lessee-level ship operator, and the owner of the ship as legal person and the unlimited liability of the persons listed in the preceding paragraph.

(a) Limitation of liability for damage to passengers[255]

(b) Damage resulting from death or bodily injury to persons other than passengers.

(c) The limit of liability in respect of claims for damage resulting from death or bodily injury to persons other than the passenger is determined by the tonnage of the ship. But less than 300 tons of ships equivalent to 160,000 SDR amount.

(4) Scope of Limit of Liability

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254) The aggregate amount of liability shall be as follows:
1. 4.510,000 units of the account for an oil tanker not exceeding 5,000 units of tonnage; and
2. For an oil tanker with a tonnage in excess of 5,000, the amount calculated by multiplying each additional unit of tonnage exceeding 5,000 by 631 units of the account within the limit of the amount corresponding to 89,770,000 units of the account shall be added to the amount mentioned in subparagraph 1.
The "units of account" referred to in paragraph (1) is the Special Drawing Right as defined by the International Monetary Fund, and the calculation of units of the account in terms of Korean currency shall be made in accordance with the provisions of Article 11 (2) of the Act on the Procedure for Limiting the Liability of ship owners, etc.

255) The limit of liability in the Commercial Law relating to the death or bodily injury of a passenger is the sum of the amount of the passenger's capacity multiplied by 46,660 Special Drawing Rights recorded in the inspection certificate of the ship and the amount equivalent to 25 million Special Drawing The amount of the right to take a small amount (Korean Commercial Law Article 770, paragraph 1, No.1). This is a further limitation of the Commercial Code's liability in relation to damage resulting from death or bodily injury to passengers in the commercial law as amended in August 2007, which is another significant improvement to the commercial law amended in 1996 under the 1976 Convention. Even if the revised commercial law commences, but the accident occurred in April 2008 to March 2011, the limitation of liability of the ship owner is still in accordance with the original ship survey book.

For each ship, the limit of liability of the owner of an oil tanker shall extend to all limited claims against the owner of a ship, or the insurer related to the incident involving such a ship.

In accordance with the provisions of Article 9 of the CODGA, for oil tankers with limited liability, it should be a tanker as a unit, and all the amount involved is limited. In theory, in a voyage, there may be more than two accidents, then when the ship arrived at the time of all the accidents can be integrated together to form the amount of liability limit can also be imposed on the various restrictions were. All that exists in navigational and false doctrine. [256], the two doctrines for comparison, the former is more favorable to the debtor, the latter is relatively more favorable to the creditors.[257]

In the CODGA, however, the principle of accidental attention is clearly defined in terms of claims for all claims within the scope of the oil tanker. Therefore, in the above discussion, if a maritime accident occurred more than 3 times the accident, each accident according to the accident unit of their respective restrictions on the amount of restrictions.[258]

(5) The direct claim for the insurer

In the principle of contract law, the insured person can not claim the insurance premium from the insured in the principle of the direct party, the insured person and the insurer in the direct party of the insurance contract. But for the protection of the third person, the legal system of each country on the case of liability insurance, the third person's direct claim has been provided.

CODGA on the ship owner of the damage liability occurs, the victim

256) Cheong yeong seok, "*The Low of Oil Pollution Damage, Dasom publish company*", 2017, p.48.
257) Giminhyeon, *"Maritime regulations 2ed"*, beommunsa, 2007, p.64.
258) Cheong, yeong-seok, *"Maritime Regulation Law, 6th ed"*, Haein publish company, 2015, p.75

can directly to the owner of the ship's insurers and other direct damages claims. (CODGA Article 16, paragraph 1) However, if the owner of the ship intentionally causes the damage to occur, the insurer can not make a direct claim. The victim's direct request to the insurer can only request the ship owner within the circumstances of the victim's claim.

(6) Short-term elimination system

In the civil law of Korea, the right of claim for damages resulting from the illegal act is within three years after the occurrence of the illegal act, and within three years after the violation of the law, the defendant has three years of effect on the damage and the victim. However, according to CODGA, oil pollution damage occurred within 3 years, the cause of oil pollution damage and the original accident occurred within 6 years from the date of no appeal request, the claim for damages.[259)]

(7) The ship owner's liability for damage points

Oil compensation for ship owners to implement the principle of strict liability, when the cruise oil pollution incidents occur, regardless of whether the owner of the ship should be related to the negligence of any damages. Cruise ship oil pollution damage to the relevant parties, as long as there is the fact that pollution damage, and the existence of the causal relationship between the facts and the damage is certified, regardless of liability is due to intentional or negligence should be compensation for damages. However, the general oil pollution incident occurred in the oil, oil compensation is not within the scope of the object, in accordance with the civil law of the wrongful act of fault liability. In addition, the damage to the ship is subject to the relevant provisions of the ship owner's liability limit in commercial law. Even if the ship owner in the commercial law is found to be negligent, there is

259) CODGA, Article 11.

a certain limit on the damages. Even so, because the limitation of the ship owner's liability Reason, the general ship in the event of oil pollution damage, in accordance with the provisions of commercial law, then the injured will not be a good compensation. In view of this situation, especially for the general ship fuel oil pollution damage, should also be the same as the oil compensation law, the ship owners to implement strict compensation provisions to protect the rights and interests of victims, the agreement in 2008 , Japan on the 21st century in the international entry into force, before this, Japan's ship oil pollution law has translated the use of this content, Korea should also be on the general ship oil pollution damage compensation to pay attention and modify its oil compensation.

(8) Absolute Liability

Under Korean CODGA, it is like 1992 CLC ,the registered owner who is strictly liable for oil pollution damages.[260] By imposing absolute liability upon the registered owner, the claimant is not required to prove that damages was caused by the fault of the servant or agent of the ship owner .

In Article IN of the 1992 CLC, the ship owner shall be liable for any pollution damage caused by the ship. However, in Article 2, (4) and 5, (4) of the CODGA, the charterer together with the ship owner, shall be liable for pollution damage, in cases where a foreign flag ship is chartered by a Korean. This provision is to protect victims, where ships not covered for their liabilities under the 1992 Conventions, are chartered by Korea. Korean government tries to secure compensate fully by imposing liability upon the bareboat charterer in addition to the owner , unlike 1992 CLC . A scholar suggests that the above provision should be amended in line with those of 1992 CLC.[261]

260) CODGA article 4(1) & CLC article 3(1)

261) Jong Hyun, Choi, "Opinion on the revision of Korean oil pollution compensation act" ,*The Journal of Korea maritime law association*, vol. 8(1),

2. Inspiration to China

In China, Bunker 2001 applies for pollution caused by non-persistent bunker oil carried by tanker or bunker oil carried by non-tanker vessel. According to Art 6 of Bunker 2001,the limitation of liability shall be in accordance with national or international regimes. Considering that China is not member state of LLMC 1976 and its 1996 Protocol, as per paragraph 2 of Art 5 and paragraph 1 of Art 19 of "the Oil Pollution Rules of the PRC Supreme People's Court", the provisions of Chapter 11 (i.e. LLMC) of China Maritime Code shall apply. For specific oil pollution caused by ship for which neither 1992 CLC nor Bunker 2001 applies, for example, pollution caused by non-persistent oil carried on board a ship(including tanker) as cargo, the provisions of chapter 11 of China Maritime Code maybe applied for the limitation of liability of the liable party.

Prior to the implementation of the Anti-Fouling Regulations in China, out of the consideration of the actual conditions of Chinese shipping, the limit of liability of ships solely carrying Chinese oil cargo carrying on international voyage is required to apply to 1992 CLC , while the liability of other ships. The quotas are implemented in accordance with the provisions of the Maritime Law, that is, the "dual system" is implemented. With the development of China's shipping industry, the establishment and improvement of oil pollution damage compensation system has become the consensus of all sectors of society, including as far as possible the implementation of marine oil pollution damage compensation limit the implementation of standards and international, change "dual system" as a "monorail system ". Article 5, paragraph 2, of the Supreme Court" Judicial Interpretations of Oil Pollution from Ships "clarified that the limitation of liability under the Bunker 2001 Convention should apply the provisions of the Maritime Law. In addition, since China clearly made a reservation when it acceded to the Bunker

2006, p.118.

2001 Oil Convention, the Convention does not apply to ships that sail only in the waters of China and China's Maritime Code mainly does not apply to ships with inland waterways and therefore In the case of an inland water area vessel in the event of an indemnity limit for oil spills, the entry into force of the Bunker 2001 Convention did not fill the gap left by the limitation of ship pollution liability in any waters within China.

Korea is constantly increasing its liability limit with the development of society. However, China has never revised this quota since it established the relevant standards for maritime liability compensation quotas in the Maritime Code. China should be combined with the actual situation of domestic oil pollution damage. It is obviously beyond the tolerance of most ships and insurers in China now. They are directly connected with the international compensation limit level. Therefore, the limits of liability should be cautious and gradually promoted, and the overall situation should not be extended within a short period of time. At the same time, we should not only consider the difficulties existing in the shipping industry and the petroleum industry in China but also neglect the interests of the oil-polluter and the natural environment. On the issue of raising the limit of liability, China should learn from Korea's gradual compliance with international standards and in combination with the price increases in recent years, and appropriately increase the limit of liability when the conditions are met in the future.

China did not accede to the 1976 Liability Convention on Maritime Claims. According to the Maritime Law, the liability of a responsible person for loss of liability is limited to one of the following two situations. One is being the intentional act of the responsible person; the other is being that the responsible person know singly may cause damage and recklessly do nothing. However, in the Chinese legislation, the specific category of the responsible person does not clearly stipulate the specific provisions. In addition, in practice, there is much

controversy over how to bear the burden of proof in the loss of liability limitation. Legislation should also be clearly defined.

4.2.4 Compulsory Insurance and Direct Action

1. Compulsory Insurance in Korea

In order to protect victims resulted from oil pollution accidents, the CODGA requires the registered owner of tankers or the bareboat charterer to provide insurance or other financial security. This insurance means the compulsory liability insurance. By prohibiting vessels without compulsory insurance from entering Korean port, the above legal scheme is implemented effectively.[262] Victims are entitled to invoke a direct action against the liability insurer of the vessel involved in an oil pollution accident.[263]

Section 2 of the CODGA shall be liable for compensation for oil pollution damage to the owner of the oil tanker, and in order to protect the victim from adequate compensation, the obligation to join the liability insurance and the certificate of liability insurance Issuance and implementation procedures are carried out.

The owner of the ship to transport oil in the tanker must be obliged to join the liability insurance and impose an administrative penalty on the oil tanker that violates this provision. [264]The liability insurance is enforced and embodied. This provision also embodies the principle of liability for oil pollution damage is the principle of strict liability, which is more than the responsibility of the owner of the ship specified in the Korean commercial law, and the responsibility of the responsible subject

262) CODGA, Article 14(4) & (5).
263) CODGA, Article 16 & CLC, Article 7(8).
264) CODGA, Article 14.

is more perfect. In addition, in order to better adapt to the relevant provisions of the International Convention, Korea in the safeguards and other aspects of liability insurance has also been obligations to better apply the contents of the Convention.

The most noticeable difference between CODGA and 1992 CLC is threshold tonnage for the compulsory insurance . Under CODGA , the vessel carrying more than 200 ton of oil in bulk should have a compulsory insurance [265],whereas under 1992 CLC vessel carrying more than 2,000 tons of oil in bulk should have it . Furthermore , the victims have a legal right to pursue claims against 1992 FUND in Korean court pursuant to FUND convention.[266]

Therefor more than 200 tons less than 2,000 tons of bulk carriers, under the 1992 Civil Liability Convention requirements, do not need to join the compulsory liability insurance, according to Korea oil compensation or oil pollution damage protection agreement to join the relevant insurance. However, under the 1992 Convention on Civil Liability, more than 2000 tons of bulk oil products must be insured during transport, which is also an international agreement, from the good side, if less than 2,000 tons of bulk oil transport of small cruise ships , According to the loss of pollution can not afford the case, the 1992 International Fund for oil pollution damage related compensation.

In the case of Korea, Korean ship owners have the boat owners to pick up small-scale cruise ships, because of compulsory insurance makes the increase in costs, overburdened, easy to lose international competitiveness, which is very worrying thing. Foreign oil ships with a capacity of 200 tons or more are required to be insured if they enter Korean ports, which is controversial. In violation of the relevant provisions of the 1992 CLC, may have a negative impact.[267]

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265) CODGA, Article 14 & CLC, Article 7(1).
266) CODGA, Article 23.
267) Gim changjun," *Korea Legislation Research Institute Act*", 2007, pp.110-111.

(5) Direct Claim

CODGA Article 16 provides for direct claims to insurers. The victim of oil pollution damage by an oil tanker may be directly made claims against the insurer, etc. that made a guarantee contract with the owner of an oil tanker: Provided, that in the case of oil pollution damage from the willful misconduct of the owner of an oil tanker, this provision shall not apply.

The insurer, etc. may only use the defenses, which the owner of a ship may use against the victim, against the victim. The provisions of Articles 5 (6) and 7 through 11 shall apply mutatis to the compensation for damage by insurer, etc.

This provision was preceded by the fact that only in the United States was certified, and now in Korea's commercial law Article 724, paragraph 2, as many countries have already certified the system. For the insured person can not pay the owner of the circumstances, the victim can be directly on the insurer to make a claim. The establishment of this system on the one hand can make the introduction of compulsory liability insurance more rationalized, on the other hand also to prevent if the oil damage caused by the owner of the ship is a foreigner, the property victims are not clear, by exercising directly to the insurer Claims, more convenient and quick to obtain compensation.

Damage caused by intentional acts by the owner of the tanker

When the owner of an oil tanker at the time of an incident shall be liable for any oil damage, in the event that occurs: apply in case of the following oil pollution damage:

1. Resulting from an act of war, civil war, insurrection or a historical phenomenon of an exceptionally inevitable and irresistible character;

2. Wholly caused by an act or omissions done with intent to cause

damage by a third party, other than the owner of a ship or his / her employee. Wholly caused by negligence or other wrongful acts of the State or public organization responsible for the maintenance of navigational marks or navigational aids.[268]

As well as the provisions of paragraph 2: When an investigation involve two or more ships occur, and where it is said that the oil pollution damage is caused by oil escaped or discharged from any particular ship, the owners of all the parties sever as tolerance for all such damage: Provided, that this provision shall not apply when such oil pollution damage falls under any of sub paragraphs of paragraph (1).

In this case, the victim can exercise the direct claim to the insurer. But the insurer is not the subject of liability for damages, so the request is primarily a request for payment of the amount of compensation. It is more specifically to say that such a direct claim is not a claim for damages but a claim for payment of damages. However, if the owner of the ship intentionally caused damage to oil pollution damage, the victim can not exercise the direct claim to the insurer. Article 659 of the Korean Commercial Law stipulates that the insurer shall not be liable for the payment of cash in arrears due to the insured person or the insured person, the insured person's intentional or gross negligence. Therefore, the CODGA Article 16, the first paragraph provides that the insured in the ship owners intentional acts of damage caused by the incident, the direct claim is rejected. Even so, but in reality, if the insurer rejects the direct claim, it is necessary to prove that the occurrence of the oil pollution damage is due to the intentional act of the insured. And the owner of the ship has the right of defense, so the actual need for the intention of the owner of the ship's strict provisions of the provisions of the provisions.

Oil pollution damage accident, according to the oil compensation, the

268) CODGA, Article 7(1).

victim can act as a protector, you can exercise the right of direct claim, but pollution damage to the owner of the ship because of deliberate circumstances, the insurer can be true disclaimer defense. (The victim of oil pollution damage by an oil tanker may directly make claims against the insurer, etc. that made a guarantee contract with the owner of an oil Tanker: Provided, that in the case of oil pollution damage resulted from the willful "Intentional" in the oil compensation law is translated according to the wilful misconduct in the 1992 CLC. But the wilful misconduct on the agreement is a wilful misconduct used in the UK maritime insurance law to justify the excuse, not just the intentional meaning, but also the above notions. However, at this point, Korea oil compensation and the 1992 CLC is not the same. If, in Korea, the ship owner's insurer is the responsibility of the foreign ship owner, according to P&I Clud, the law of insurance law, under British law, the ship owner's reckless conduct leads to injury to the victim, You can bring a lawsuit to Korea, apply for the insurer exemption. Because according to the applicable law of the British law, the ship owner's reckless acts can be used as a cause of exoneration, but in Korea oil compensation, only intentional behavior conditions, to become exempt from liability, reckless behavior is not difficult to become exemptions.

Therefore, the author believes that the liability of the insurer related to the insurance contract should be the first use of the law, the insurer's exemption should be carefully analyzed, in this case, if the ship owner is not autonomous, then, according to 1992 International Fund for compensation.[269)]

In the international conventions, only 2,000 tons of ships to participate in compulsory insurance, but Korea to expand the scope of application to more than 200 tons of the scope of a lot of legal issues. In particular, it is questionable whether foreign ships can be refused entry

269) J.Kenneth Goodacre, *"Marine Insurance Claims"*, Third Edition Witherby, London, 1996, p.204.

if the tonnage of foreign ships is not insured. Since Korea has acceded to international conventions, it has resulted in conflicting results with international conventions. Although the compensation is also required more than a ton of ships to join the compulsory insurance, but did not join the case is also given compensation. As a result, the need to enforce compulsory insurance for ships below the tonnage in Korea is diminishing.

2. Inspiration to China

However, in China, the current coverage of existing liability insurance institutions is too small. ship owners Mutual Insurance Association for the application of the insured vessel itself, the quality and management of ship managers have some quality requirements. ship owners Mutual Insurance Association and insurance companies are often insured ship some of the better technical conditions of the ship. Second, the interests of third parties can not be guaranteed.

So China should learn from Korea

(1)To improve the ability to prevent oil pollution accidents, establish the accident investigation system, set loss and accountability mechanisms.

Government departments and insurance companies should develop a sound supporting mechanism to improve the ability to prevent oil pollution accidents, and properly handle oil pollution damage compensation. Maritime, environmental protection and insurance regulatory authorities should be established. The national legislation and local supporting laws and regulations should be improved, And the relevant legislation and supporting the prevention system also shoud be perfected.

(2) To extend the scope of compulsory liability insurance

China's 1,000 tons for the following small vessels have not yet established a perfect compulsory liability insurance system. Therefore,

the author suggests that for tonnage of 1,000 tons of ships and inland water transport ships should be the establishment of the corresponding compulsory insurance system. It will be compulsory liability insurance system gradually covering all ships. But for the specific amount of insurance should be in the capacity of the ship owners, the acceptability of insurance companies, the actual requirements of compensation to find an appropriate balance point, distinguish the level, step by step, and gradually with international practice. In this regard can refer to the Republic of Korea's legislation.

(3) To develop scientific and reasonable standards

At China present, it should be set up the compulsory insurance system for the small tonnage ships . As the tonnage and the different materials decided to require ships under 2,000 tons to pay the same mandatory insurance costs is not feasible. Otherwise, for many ship owners, that are also unfair. Insurance companies should develop corresponding insurance products. And the scope of reasonable responsibility for the rate should also be differentiated between different categories of determination, in order to improve the ship oil pollution liability insurance system in practice in the relevance and effectiveness.

(4) Improve the limits of liability

China should be combined with the actual situation of domestic oil pollution damage, to a certain extent, appropriate to improve the compensation limit. Directly with the level of international compensation limit for China's ship and the insurer's is unrealistic. If the first layer of the insurance compensation system to impose excessive compensation Pressure, it is easy to lead to the injured party can not get full compensation. Therefore, the limits of liability should be cautious attitude, and gradually advance. At the same time China should consider the current stage of the shipping industry and the difficulties of the oil industry, while ignoring the interests of oil pollution victims

It is not realistic to make China generally low level Shipping enterprises to follow the higher requirements of the International Convention on standards. The author suggest that China should set different levels of insurance level and limitation of liability, according to the tonnage of ship size. Therefore, it is suggested to add the corresponding content in the system of compensation for oil pollution damage. Firstly, the owner of a ship in respect of an international route must be insured or obtain a financial guarantee. Secondly, to establish a unified insurance quota that the minimum amount of coastal tankers is not more than 500 tons. Thirdly, to establish a unified insurance quota that the minimum amount of inland tanker is not more than 200 tons. Fourthly, to increase the terms of the liability of the insurer for direct prosecution.

4.2.5 Fund system and Supplementary Fund Convention

1. Fund System in Korea

'CODGA' mainly provides for the victim ship owner and the insurer in accordance with the 1992 FUND and its Article 4, paragraph 1 of the compensation request can not be guaranteed. According to 'CODGA', the victim first receives compensation from the owner of the ship within the limit of compensation.

Table 4-2 Application of Compensation Law in Korea

Location of oil damage The ship of the accident	The country that CLC and IOPCFUND all joined		Only joined CLC	CLC& IOPCFUND has not been added
	Korea	Korea except for other		

		countries		
The ship of the country that both conventions are joining	CODGA	CLC&FUND as well as the relevant domestic law	CLC as well as the relevant domestic law	Applicable domestic law
CLC ship	CODGA			
The other ship	CODGA			
Jurisdiction country	Korea(The country where the accident occurred	The country where the accident occurred	The country where the accident occurred	The country where the accident occurred and The defendant's seat

If the amount of damage exceeds the limit of the owner of the ship, or if the owner of the ship is bankrupt, it is compensated without compensation, but the maximum of the 1992 fund is only $ 230 million in SDR compensation.

(1) Claims of Victims for Compensation against International Funds

(2) Intervention by International Fund

(3) Notification of Litigation to International Fund

(4) Jurisdiction of Action against International Fund

(5) Validity of Foreign Judgments

(6) Report of Quantity of Contributing Oil

(7) Communication of Data to International Fund

(8) Making Contributions to International Fund

(9) Notice of Demand to Payer in Arrears of International Fund

Korea is party to 1992 FUND. Therefore, there is several provisions to implement IOPC FUND system. 1992 FUND is eligible as the defendant

under Korean jurisdiction.[270] 1992 FUND is entitled to participate in the limitation procedure.[271] Any person who has received in total quantities exceeding 150,000tons in Korean port should pay contribution to FUN D.[272]

(2) Supplementary Fund Convention

In the process of concluding the Supplementary Fund Protocol, Korea also explored whether to accede to the Protocol. If it accedes to this Protocol, Korea, as a State Party to the Convention, should pay a significant amount of contribution. It would be problematic to receive compensation equivalent to payment of contributions. Since the Supplementary Fund Protocol was applicable only in the event of a number of incidents where the amount was considered to be quite high, it was not incorporated into the Protocol, considering that there were few cases of compensation in a similar European country.[273]

CODGA Article 30 provides for the relevant content of the Supplementary Fund Convention. Claims for Compensation by Victory against Supplementary Fund: Any person suffering oil pollution damage may claim for compensation under the provisions of Article 4 (1) of the Supplementary Fund Convention with respect to the oil pollution damage exceed the maximum liability limit of the International Fund under the terms of the Supplementary Fund Convention.

Article 31 deals with the Applicability of the Supplementary Fund Convention. In addition, the participation of the Supplementary Fund Convention, the notification of the litigation, the jurisdiction of the proceedings, the validity of the other national judgments, the payment of the assessed contributions and the submission of the materials are

270) CODGA, Article 23.
271) CODGA, Article36.
272) CODGA, Article31(1).
273) Mu Zhenyong, "Adaptation of Korea Oil Pollution Compensation System", *Korea Marine Fisheries Development Institute*, 2005, No.11, p.39.

basically in line with the provisions of FUND.

2. Inspiration to China

The establishment of COPC FUND has a significant positive impact on the compensation of oil polluters. However, the maximum compensation for damage caused by oil tankers under China's domestic compensation system is still far below the maximum compensation set by 1992 CLC and 1992FUND. So it is suggested that China can learn from Korea, it is time to consider joining 1992 FUND.

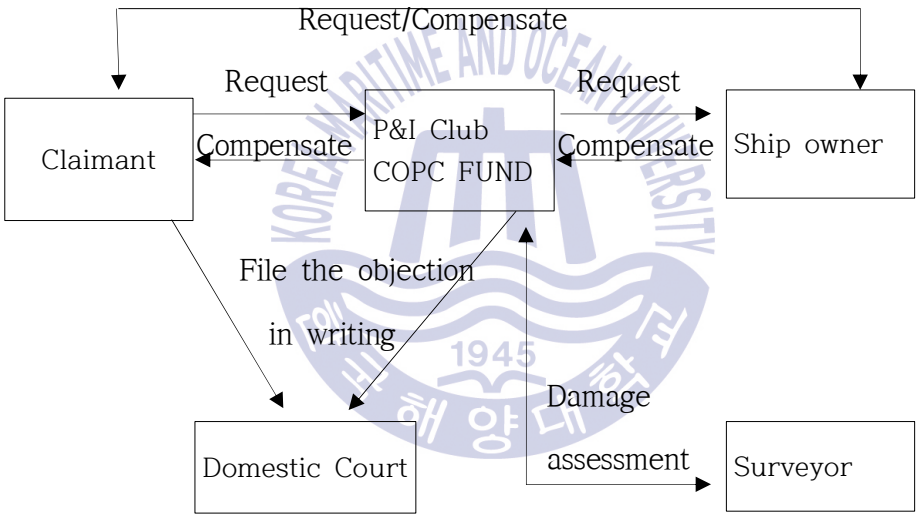
In addition, emergency funds and general fund accounts should be set up in COPC FUND. After the accidental spill of Hebei Spirit No. 2007 in Korea, Korea enacted a special law on Hebei Spirit and set up 30 billion won of emergency relief funds. This has played a significant role in safeguarding the continued expansion of oil pollution damage and in protecting the interests of victims. However, in China's oil pollution damage compensation case, the litigation cycle generally takes a long time. Responsible emergency and decontamination units often have to pay a large amount of expenses, greatly dispel their enthusiasm and do not favor the handling of oil pollution damage. In addition, COPC FUND is also mainly implemented after-the-fact compensation. Although the emergency treatment costs listed as the first compensation order, it still can not fundamentally solve the problem of China's oil spill emergency response.

Therefore, China can borrow from Korea and set up two fund accounts in COPC FUND - "contingency fund" and "general fund" accounts. The "contingency fund" account is dedicated to providing adequate emergency response to oil spill accidents at sea. Financial support to reflect the "first payment" function of the COPC FUND. The "Emergency Fund" and "General Fund" accounts complement each other, permitting the "General Fund" to be properly and reasonably complemented in the event of a shortage of "contingency funds".

4.2.6 The Limitation of Liability Procedure

1. Claim Procedure in Korea

Figure 4-2 Claim Procedure in Korea



Claim procedure is usually based on the national procedural laws. In Korea Claimants can bring claims against the ship owner, his insurer, and the IOPC-FUND by submitting the written forms with supporting documentation. The IOPC-FUND and P&I Club nominate experts to monitor clean-up process and to approve to pay for damages. The IOPC and P&I Club contact the claimants to explain and notify the results of the assessment. If the claimants agree with the decisions, the

compensation will be paid or in case the claimants disagree, the claimants may request for a reassessment by providing additional documentation or by bringing the case to a domestic court.

When the registered owner tries to invoke the right to limit its liability, he should apply for limit procedure in a separate court from the court dealing with merits. For this purpose Korean has an called as ship owner's limitation liability procedural Act .

CODGA has several special provisions for the ship owner to invoke its liability. The court for limitation amount to the court within 14 days if the court admit that application for the commencement of the limitation is resonable.[274] the applicant is allowed to deposit an equivalent bond to a cash deposit.[275]

Article 51 of the CODGA, indemnity bond for loss of damage caused by oil pollution from a ship shall be applied maritime lien, but this clause is not in the 1992 CLC. This provision enables victims caused by oil pollution, to recover their loss of damages before other claims.

The ship owner is able to follow the Liability Limitation Proceeding (LLP) under Article 41 of this Act when the amount of loss caused by an oil pollution incident exceeds the amount of limitation under the CLC. CODGA, article 43 allows the claimants who has claims resulted from oil pollution to exercise maritime lien against the vessel at issue. this maritime lien is inferior to the general maritime lien at the KCC article 861. It is not stipulated in the CLC. Under Korean law, maritime is regarded as a counter-balance against the ship owner' s right to limit his liability. Therefor, it appears that CODGA intends to give the victims a kind of protective measure against the registered owners who are entitled to limit its liability.[276] However, now that the registered owner should maintain a compulsory liability insurance or financial securely for

274) CODGA, Article35(1).
275) CODGA, Article35(2).
276) Kim Hyeon, *Maritime law*, Bobmun Sa, 2007, p.314.

the victims , the presence of CODGA article 43 seems redundant except that the registered owner does not provide such insurance . Other than the CODGA, there is a separate Act called the Liability Limitation Proceeding Act. There are six steps in the LLP under this Act as shown below[277] .

a) Application for Commencing the LLP

A ship owner has to apply for commencement of the LLP to court having jurisdiction of the incident within six months after receiving claims exceeding the amount of limitation available under the CLC

b) Deposition The ship owner has to deposit the amount of limitation under the CLC and 6% ofthe interest to the court of justice.

c) Commencement of the LLP The court of justice decides when to commence the LLP and then receive claims from victims until the designated date.

d) Attendance of the LLP Victims have to submit their claims within the designated date and the COPC FUND may also attend the LLP as an interest party.

e) Examination The court examines detailed contents of each claim submitted by victims. If there are any different views on the claims, the claims may be decided as submitted.

f) Judgement If there are different views or arguments on the claims, the court decides the amount of loss as judgment. If the COPC FUND or claimants disagree with this decision, they may bring this matter to court.

In Article IN, 5 of the 1992 CLC describes "Nothing in this Convention shall prejudice any right of recourse of the owner against third party. This means that the ship owner has the right of recourse against their charterer, manager or operator according to a general

277) Kim, *Maritime law*, Bobmun Sa, 2009, pp.22-24.

principle of law on the liability. However, according to Article 5, (6) of the CODGA, a ship owner is restricted in his right of recourse against their charterer, manager or operator, only when the damages result from their personal act or omission, committed with the intent to cause such damage, or recklessly and with knowledge that such damage would probably result.

2. Inspiration to China

China's liability limitation procedure faces the awkward position of practice and law. According to Paragraph 3 of Article 101 of the Maritime Procedure Law, the cases of establishing or limiting the fund for limitation of liability can be divided into two categories, one is application before litigation and the other one is application for litigation. However, filing an application does not mean establishing. According to Chinese law, courts need to conduct substantive examination before adjudication. From filing to final adjudication, it takes at least 2 months or more[278]. For such a long time, to the owner is very bad. Because, if the owner of the ship chooses to file a limitation of liability before litigation to prevent or disarm ship or other property, the possible consequence is that:

a. while the ship has not been seized, the ship can no longer be detained for at least two months. It is possible that seaports will be seized and landing areas and time zones severely restricted.

b. The ship has been seized, and it will take at least two months before funds can be set aside. Both results are very negative for the owners. Therefore, in practice, ship owners often resort to providing maritime security in a timely manner. Therefore, before applying for compensation limit fund, the lack of practicality in reality. Also in China,

278) Guan Zhengyi,"Issues Concerning the Procedures for Establishing the Fund for Limitation of Liability for Maritime Claims, published in the Annual Issue of China Maritime Law", Volume 2002, Dalian: *Dalian Maritime University Press*, 2003, p.308.

applying for liability limitation funds in litigation is also hard to work. Because in practice, the fund can not cover all the facts of the claim, Although China stipulates that the person in charge can apply for the establishment of the fund, there is no stipulation that the procedure of liability limitation proceedings is still not provided. The author suggested that China should learn from Korea and try to shorten the examination time of liability procedures for liability for oil pollution damage and set up procedures for the limitation of liability for compensation liability. The following basic principles should be adhered to: A separate maritime liability limitation procedure should be established, and the procedure should be independent of beyond litigation that claims a maritime claim. Before the litigation, to solve the issue of whether the responsible person can enjoy the right of limitation of liability.

4.3 Legal Problems of Compensation in Korea

4.3.1 Unreasonable Claims and Poor Evidence

The average percentage of the actual amount compensated by the Fund among the total amount claimed in several incidents which occurred from 1993 to 2003 in Korea is less than 14%.

The main reason for this result may be due to a lot of unreasonable claims submitted by fisheries groups even though their claims did not have sufficient close link to causation between the contamination and the loss or damage.

In addition, this problem occurred occasionally because most surveyors or law firms appointed by owners of fisheries did not fully understand the policy for the compensation of the Fund.

These unreasonable claims may result in more delay of compensation for the actual victims and a drop in the credit of overall claims against the IOPCFUND. Furthermore, the initial level of payment decided by the Fund may be lowered because of those excessive claims and actual victims may suffer as a result. Therefore, the Korean Government and Fisheries Associations should carry out proper education for fishermen and the owners of fisheries in order to prevent unreasonable claims or excessive claims without relevant evidence. Another important reason for the low compensation rate is caused by in adequate evidence in proving loss or damage of claimants.

According to the Claims Manual, the assessment of claims for economic loss in the fisheries, mariculture and processing sectors is based on a comparison between the actual financial results during the claim period and those for previous period" [279] .In the case of the Hebei Spirit incident, it is expected that the compensation rate is very low because there are big gaps between the estimated amount of KRW453billion of damage by the IOPC FUND and the submitted claims amount of KRW1,977billion.

The main reason for these problems is caused by false income tax returns of fishermen. Furthermore, small-scale fishermen and bare-hands fisheries (or capture fisheries) do not have any objective evidence to support their income claims nor any income tax returns. As a result, several figures regarding productions of various fisheries published by the Korean Government are different from the actual production statistics of the fisheries.

For example, in the case of the Nahodka incident which occurred in 1997, since a local government in Japan has recorded the actual production of fish and shellfish in their region every year during the past 30 years, fisheries could recover the actual loss caused by the

279) Claims Manual, 2008, p.30.

incident against the Fund without any problems[280].Therefore, the Korean Government should introduce mandatory measures for various fisheries and fishermen to implement their obligation of income tax return following relevant Acts, and try to ascertain the exact production of fisheries in the future.

4.3.2 The Ship owner of the Liability for Damages

'CODGA' applies the principle of strict liability to the owner of the ship. When the oil tanker causes an oil pollution accident, the relevant damages shall be made regardless of whether or not the owner of the ship has any fault. Cruise related to the occurrence of oil pollution damage, as long as there is the fact that pollution damage, and the existence of facts and damage between the causal relationship between the certification, then regardless of attribution is intentional or negligence should be carried out damage protection. But the general ship occurred in the oil pollution accident, not in the 'CODGA within the scope of the object, in accordance with the civil law on the wrongful act of negligence. In addition, the damage caused by the ship has the relevant provisions on the liability of the owner of the ship in the commercial law, and even if the owner of the ship is found to be negligent, the damage has a certain limit, even if the liability of the owner of the ship is limited reason, the general ship if the occurrence of oil pollution damage, in accordance with the provisions of the commercial law, then the victim will not get a good compensation. In this case, in particular for the pollution damage caused by the fuel oil of the general ship, the owner of the ship shall be subject to strict compensation provisions in accordance with the provisions of 'CODGA' to protect the interests of the victim, in the international force, Korea

280) Kim, Supra note, 2009, p.64.

should be on the general ship oil pollution damage compensation to pay attention to and modify its' CODGA.

The liability for compensation for pollution damage caused by ship fuel oil and the provisions on liability for damages are greater than those of the owner of the ship and the owner of the Korean nationality after the expansion of the CLC in 1992, although the compensation is guaranteed to a certain extent The expansion of the opportunity, but with the international conventions had a conflict, and from the victim point of view, also detrimental.

In addition, the Korean Oil Pollution Damage Protection Act is mainly for fuel oil, and to join the compulsory insurance of more than 1,000 tons of ships, but Korea's other 1,000 tons of the following ships, and did not receive protection. When these ships are damaged by oil pollution, it is difficult to protect.

4.3.3 The Limits of Liability and Liability Restrictions Procedures

In accordance with the Law on Limitation of Liability, the court shall, for the hearing of the limitation of liability procedure, declare the bond within 90 days after the commencement of the limitation of liability procedure. But if there are many victims, it is very difficult and unreasonable for the court to investigate all bonds within 90 days. In addition, the owner of the ship in order to limit the normal commencement of the procedures, the need to provide the amount of the amount of restrictions on the amount of restrictions, and restrictions on the application procedures need to apply for a guarantee, and the trust certificate in the court decision must be required cash supply. However, the owner of the ship, before the completion of the limitation of liability procedure, is limited by the fact that the funds are restricted

by joining the ship owner and the victim through the settlement and the payment of the funds to the victim, so that the victim can not be quickly compensated.

4.3.4 The FUND

The Taean Special Law was legislated to support victims who suffered from the Hebei Spirit incident temporarily as mentioned earlier. However, there is a need to consider a permanent solution to help with speedy compensation to victims in the case of huge oil pollution incidents in the future.

Even though Korea ratified the Supplementary Fund shortly after the Hebei Spirit incident, the delay in compensation can not be solved. Therefore, the application of an additional compensation scheme is essential. One solution is to establish a Korean Fund similar to that of the Canadian Compensation Scheme. The main problem with this solution is financial sources.

The SOPF in Canada imposes a levy on oil importers, but this measure is not easy fort he Korean Government to implement at the moment. This is because the oil industry in Korea has already undertaken a financial burden from joining the Supplementary Fund. The Korean oil industry is different from that of Canada and the US because there are no major oil companies to create much benefit from their business in Korea.

Korea does not have oil resources on land, so they depend only on imported oil. As a result, Korea is currently the fourth largest contributor to the 1992 FUND. Recently, the MLTM indicated it is planning to research this matter through an institutional review.

4.4 Improvement of Compensation in Korea

4.4.1 Increase the Compensation Rate

The average percentage of the actual amount compensated by the Fund among the total amount claimed in several incidents which occurred from 1993 to 2003 in Korea is less than 14%. The main reason for this result may be due to a lot of unreasonable claims submitted by fisheries groups even though their claims did not have sufficient close link to causation between the contamination and the loss or damage.

In addition, this problem occurred occasionally, because most surveyors or law firms appointed by owners of fisheries did not fully understand the policy for the compensation of the Fund.

These unreasonable claims may result in more delay of compensation for the actual victims and a drop in the credit of overall claims against the COPC FUND. Furthermore, the initial level of payment decided by the Fund may be lowered because of those excessive claims and actual victims may suffer as a result.

Therefore, the Korean Government and Fisheries Associations should carry out proper education for fishermen and the owners of fisheries in order to prevent unreasonable claims or excessive claims without relevant evidence. Another important reason for the low compensation rate is caused by in adequate evidence in proving loss or damage of claimants.

Therefore, the Korean Government should introduce mandatory measures for various fisheries and fishermen to implement their obligation of income tax return following relevant Acts, and try to ascertain the exact production of fisheries in the future. The Taean

Special Law was legislated to support victims who suffered from the Hebei Spirit incident temporarily as mentioned earlier. However, there is a need to consider a permanent solution to help with speedy compensation to victims in the case of huge oil pollution incidents in the future.

4.4.2 Solve the Financial Problems

The cost of pre-protection with the oil pollution damage compensation process and the efficiency of funds should be ensured, and to legalize the rules. If there is no sufficient prepaid funds, it is difficult to carry out the work, and it can not ensure that as soon as possible to prevent and reduce losses. In the case of legal provisions, it is recommended that various opinions should be sought, in particular the views of experts and civil society organizations involved in the prevention of governance. The prevention and control groups should have adequate funds to prevent them before they are secured by the International Fund. And in order to ensure the availability of funds, it is necessary to based on the marine environmental management law, the residents and the payment of funds should have specific provisions. Also in disaster-prone areas, it is need to make the prepare support funds for emergency preparedness. Because if there is no funds, it can not effectively control and prevent the occurrence and spread of pollution, emergency assistance, and if there is not enough funds, effectively implemented is also can't be take. Therefore, the need for the first to the relevant agencies a certain reserve. Specific implementation of the program, basically the use of the International Fund, the need for major ship owners have to pay a certain amount of funds to ensure that the victims can implement their own claims. This specific measure is best to in the "CODGA" on the provisions of a specific embodiment.

4.4.3 Reform of Procedural Order of Limitation of Liability

The first is the need to limit the duration of the bond and the duration of the investigation to extend the time for the court and the responsible person have sufficient time; Second, it is reduction or exemption of cash supply and contract money. In the case of cash supply and related liability restrictions procedure, the court may provide for exemption from cash supply if it can be secured by other certification when the allocation is carried out. Because there is no need for cash supply if the owner of the ship is unable to compensate for the insolvency of the ship or if the insurer has no funds to make compensation at the time of receiving the claim and has not received any compensation from the International Fund. In addition, before the commencement of the liability limitation procedure, funds are required for consultation with the victim. If they pay a donation, there is not enough money to compensate and compensate the victim. In the implementation of specific laws, the need for dividends to implement the provisions of a separate, for the scope of the supply of funds to be exempt from the specific provisions.

4.5 Explain the Korean Practice

4.5.1 Benefits and Current Protection Level

Based on the results of Chapter3, three types of countries have a high acceptance level regarding the international compensation regime for tanker oil pollution, which indicates they afford a high level of

protection to both victims and the marine environment. These country types are: (1) upper-middle or high income countries facing medium risk of oil spill and receiving limited shipments of crude and fuel oil; (2) upper-middle or high income countries facing high risk of oil spill and receiving limited shipments of crude and fuel oil and (3) upper- middle or high income countries facing high risk of oil spill and receiving a large amount of shipments of crude and fuel oil.

For all the three patterns, their economic development is a vital factor leading to a high acceptance level, because countries with strong economies usually have a better environmental protection strategy and stronger compensation ability to enable more environmental treaty ratifications so as to protect both victims and the marine environment. As far as the first two types are concerned, accession to the 1992 Fund Convention is advantageous, especially for those countries facing potentially high risks, yet who receive limited shipments of crude and fuel oil. This is because the IOPC can provide a substantial amount of supplementary compensation for victims without imposing a heavy financial burden on domestic oil receivers.

As mentioned in the UNCTAD report, even for those countries with a significant number of receipts for shipments of crude and fuel oil, the relevant cost-benefit may be attractive, given the potentially higher risk of exposure to oil pollution incidents.[281] The 1992 FUND calls for ex post contributions by each oil receiver in Contracting States corresponding to the percentage of aggregate risk.[282] This character is similar to that of the mutuality principle that is used to allocate risk based on pooled risks, thus reducing individual risk.[283] Moreover, due to

281) Supra note 1, p.28.

282) Andre Schmitt and Sandrine Spaeter, "Insurance and Financial Hedging of Oil Pollution Risk", (2004), Working Papers of La RGE Research Center from Laboratoire Recherche en Gestion et Economic (LaRGE), University de Strasbourg (France), available at:
http://www.huebnergeneva.org/documents/spater.pdf.(2016.05.14.).

283) Andre Schmitt and Sandrine Spaeter, Optimal Coverage of Large Risks:

the scale of major oil pollution incidents, there can be huge economic and environmental losses involved if such an incident occurs. As a result, from the perspective of risk-sharing, it is sensible to allocate the potentially high risks and economic losses involved by adopting the 1992 Fund Convention or the 2003 Supplementary Fund Convention. Typical cases of this path include Bulgaria, South Africa, Australia, Belgium, Denmark, Finland, Germany, Greece, Italy, Ireland, Japan, the Netherlands, Portugal, Korea, Spain, Sweden and the United Kingdom. At the same time, several upper middle or high income countries with high risk and significant receipts of crude and fuel oil have not acceded to the 1992 CLC or the 1992 Fund Convention, namely Cuba, Thailand, the United States, Romania and China.[284)]

Korean is a contoracting state of both 1992 CLC and 1992 FUND Convention,[285)] Signatory of supplementary fund convention 2003 considering measures to large oil pollution damage through the signatory of supplementary fund convention, In the process of entering into the Supplementary Fund Protocol, Korea also discussed whether to join the Protocol. If you join this protocol, Korea should pay a considerable amount of the contribution as a party to the Convention. Whether it would be possible to obtain compensation equivalent to the payment of

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Theoretical Analysis and Application to Oil Spill, 2007, Working Papers of BETA from Bureaud' Economie Théorique et Appliquée, UDS, Strasbourg, available at http://idei.fr/doc/conf/ere/papers_2007/spaeter.pdf.(2016.05.14.).

284) The 1992 CLC took effect in China on 5 January 2000, and in Romania on 27 November, 2001.

285)The contribution will be levied on the proportion of the country in which the total amount of crude oil is imported in the previous year, taking into account the import of the Contracting Parties to the Convention as a whole.
Korea ranks third in more countries. Japan accounted for 18%, Italy accounted for 10%, Korea accounted for 8%, the Netherlands accounted for 8%, France accounted for 7%, India accounted for 7%, Canada accounted for 6%, the United Kingdom accounted for 5% %, Singapore accounted for 5%, Spain accounted for 5%.
Since joining the 1992 fund in 1993, Korea has paid a total of $ 67 billion in contributions as of 2007 and received $ 90.4 billion in damages.

the contribution becomes a problem. Since the Supplementary Fund Protocol is applicable only if an additional amount is considered to be a relatively high number of fares, it is not included in the Protocol in view of the fact that there is almost no compensation for similar European countries in Korea, but the 2008 “Hebei Spirit“ After the accident, whether to join the supplementary fund has become the focus. Unlike the Supplementary Fund’s entry into force at that time, the Government of Korea joined the Supplementary Fund Protocol on 6 May 2010 and entered into force on 6 August 2010.

4.5.2 Risk of Exposure to Tanker Oil Spills

Korea facing potentially high risk of oil spill ratified the 1992 Fund Convention or the 2003 Supplementary Fund Convention, even though a heavy financial burden is associated with it. So the major determinant of adopting the 1992 Fund Convention in Korea is not whether the financial burden placed on the domestic oil industry is heavy, but whether the potential risk of exposure to tanker oil spill incidents is high. This might be because accession to the 1992 Fund Convention is undoubtedly a sensible method of spreading the high risk of major oil pollution incidents which could lead to huge economic and environmental losses.

Korea is the same as the continuous inflow of waste water into the sea pollution, the recent coastal landfill and oil pollution caused by leakage of the number of incidents is also increasing rapidly. Moreover, all the oil used in Korea are imported by sea transportation, and the proportion of oil in the whole sea transport material is the largest. Therefore, the marine environment pollution caused by oil tanker oil leakage is also frequent. Particularly in the 1990s, a series of large-scale oil pollution accidents, such as the Kam Dong, Unique, and Sea Prince accidents, have caused great losses to the whole country. The cost of

preventing eight major oil spills from 1993 to 2003 was 61.1 billion won, and the compensation for fishery damage alone was 32 billion won. During the same period, there were 4,304 oil spills and 41,409 liters of oil spills.[286]

The largest oil spill in Korea in 2007 – the Hebei Spirit accident has seriously polluted the fishing grounds and farms in the cities of Ruishan and Tai'an, and has caused a significant reduction in the number of tourists, which has greatly dealt a blow to tourism, lodging and catering. Industry, but also a serious threat to the livelihood of local residents. Therefore, Korea is also facing high risk.

4.5.3 Level of Economic Development and Financial Burden

Korea is an exceptional example of an aid recipient turned a high-income country, with GNI per capita increasing rapidly from US$ 67 in the early 1950s to US$ 22,670 in 2012. Now the world's 15th largest economy, Korea is a key development partner of the WBG and an important contributor to the International Development Association (IDA), the fund established to support the world's poorest countries.

The Korean Government may provide support for medical services, prevention of epidemics, clean-up and collecting wastes. The Korean Government also provides financial support for residents who had suffered damages from the Hebei Spirit incident but could not receive any compensation at all from the FUND or the ship owner.

In accordance with the decision rendered by the Taean Special Law, the Korean Government declared its decision to stand last in the queue (SLQ) in receiving compensation for clean up and recovery costs incurred by the central and local governments during the 41st session of

286) Jin Zhengxiu, *"Maritime Law"*, Seoul French Society, 2007, p.308.

the Executive Committee of the 1992FUND held in June 2008 (International Oil Pollution Compensation Fund, June 2008).

The Government of Korea began contributing to IDA in 1977. And as Korea positioned itself for an enhanced international role, the Government increased its contributions to IDA, entered into a co-financing framework agreement with the Bank, and created a number of trust funds.

Korea is the first former aid recipient to become a member of the Development Assistance Committee (DAC) of the Organization for Economic Cooperation and Development (OECD). Korea joined the DAC in November 2009. Korea also took the chairmanship of the G-20 summit in 2010.

Korea's experience in sustainable development, providing infrastructure and better services to improve the lives of the people, and its transition to a dynamic knowledge economy, provides lessons that can benefit many other developing countries.[287]

But Korea does not have oil resources on land, so they depend only on imported oil. As a result, Korea is currently the fourth largest contributor to the 1992 FUND. Recently, the MLTM indicated it is planning to research this matter through an institutional review.

4.5.4 Inspiration to China

1. China Pattern

(1) The Risk

From the Chapter 2 , the oil spill from ship in Chinese sea areas we

287) The World Bank In Republic of Korea
http://www.worldbank.org/en/country/Korea/overview.(2017.04.15.).

can see that In recent years, China has experienced an increase in pollution incidents, in part due to the rapid expansion of the Chinese economy and the rise in shipping. These incidents include bunker fuel spills from non tank vessels and can result in substantial environmental damage and fisheries claims.

With the rapid increase of tonnage of Chinese ships, the danger of oil spill accidents of super-large ships happens frequently. According to the risk of extra-large oil accident, China should consider joining 1992 FUND to provide the second level of fund compensation other than1992 CLCcompensation limit, So as to ensure that the overwhelming majority of oil spills in the shipping sector in China can be fully compensated.

(2) The Financial Burden

The FUND Convention was originally developed to facilitate the calculation of the quantity of "assessed oil". The calculation of the quantity of "assessed oil" for seaborne shipments accepted by the ports of the member states was taken as the cost of international oil pollution damage compensation mainly borne by oil consumers in industrialized countries. The convention makers think that the production needs of the recipient countries of petroleum have given birth to the development of the world's offshore oil transportation industry and indirectly led to the occurrence of oil spill accidents on ships. In addition, the International Oil Pollution Fund in its internal rules on how member states to reimbursement, the specific provisions of the FUND Convention member states failed to pay the required assessed oil contribution, the International Oil Fund will be recovered. For example, the International Oil Pollution Fund held its meeting in London, the headquarters of IMO from October 21 to October 25, 2013. The 1992 FUND management commission drew South Africa's attention to the 1992FUND obligations. South Africa's outstanding contributions accounted for the bulk of the 1992 FUND outstanding assessed contributions. In addition, the case of 1992 FUND and 1971 FUND suing Russia for the non-payment of

assessed contributions to the 1992 FUND and the 71 Funds has been completed. The Russian Supreme Court rejected the 71 Fund's request because the lawsuit requesting the remittee to fulfill its obligations was overdue according to Russian civil law and the Fund appealed the award.[288)]

Article 7 of the "Measures for the Administration of Oil-Pollution Fund" stipulates that the levying standard of the Oil Pollution Damage Compensation Fund for ship owners shall be 0.3 yuan per ton of persistent oil materials. 0.3 yuan per ton of the collection criteria for the data sources are as follows: 1992 FUND levied rates are floating, the rate in 2007 is about 0.02 pounds / ton, equivalent to 0.3 yuan. According to per ton of persistent oil supplies 0.30 yuan levied Chinese oil ship damages, in 2003 China imported 94.42 million tons of crude oil, 23.79 million tons of fuel oil, the two total annual actual amount of oil assessed contributions of 118.21 million tons, that is, each year Oil pollution damage may be levied on ships about 36 million yuan fund. According to statistics, from 1996 to 2003, the average annual occurrence of major oil tanker spills in China's coastal areas is 3 with a maximum loss of 20.68 million yuan. The oil pollution fund basically can meet the compensation needs for oil pollution damage at that time.[289)]

In recent years, China's crude oil production has been far behind domestic demand. Since 1993, China's demand for oil has surpassed that of oil production and has become an oil-importing country. In addition, according to the prediction made in the article "Prospect of China's oil supply and demand balance" in the "International Oil Economy", China's crude oil imports will reach about 220 million tons by 2020. If China calculates the amount of contributions to join the oil fund, it will be possible to do so Ranked second to third place in the world. Regarding

288) COPC FUNDs , Incidents involving the COPC FUNDs 2012, http : //www.iopcfunds.org/uploads/tx_iopcpublications/incidents2012_e.pdf. (2015.12.02.).
289) COPC, http://www.shmsa.gov.cn/copcfund/.(2015.12.02.).

China's assumption that the international oil and gas fund will bear a huge amount of assessed contributions, China can make reference to the approach taken by Korea, where Korea is a contributor to the 4th International Oil Pollution Fund and has joined the 2003 Supplementary Compensation Fund. After the Hebei accident in 2008, Korea received more compensation than its contribution.

(3) Level of Economic Development

China's socialist market economy is the world's second largest economy by nominal GDP[290] and the world's largest economy by purchasing power parity according to the IMF. Until 2015, China was the world's fastest-growing major economy, with growth rates averaging 10% over 30 years.[291] On a per capita income basis, China ranked 71st by GDP (nominal) and 78th by GDP (PPP) in 2016, according to the International Monetary Fund (IMF). The country has an estimated $23 trillion worth of natural resources, 90% of which are coal and rare earth metals.[292]

According to the World Development Indicator, Each year on July 1, the analytical classification of the world's economies based on estimates of gross national income (GNI) per capita for the previous year is revised. As of 1 July 2016, low-income economies are defined as those with a GNI per capita, calculated using the World Bank Atlas method, of $1,025 or less in 2015; lower middle-income economies are those with a GNI per capita between $1,026 and $4,035; upper middle-income economies are those with a GNI per capita between $4,036 and $12,475; high-income economies are those with a GNI per capita of $12,476 or more. The updated GNI per capita estimates are also used as input to

290) Report for Selected Countries and Subjects". International Monetary Fund. April 2014.

291) Nelson D. Schwartz; Rachel Abrams, "Advisers Work to Calm Fearful Investors". The New York Times. Retrieved 25 August 2015. Even the most pessimistic observers think China will still grow by 4 or 5 percent, 24 August 2015.

292) Anthony Craig, "10 Countries With The Most Natural Resources". *Investopedia*, 12 September, 2016.

the World Bank's operational guidelines that determines lending eligibility.

Since the 18th CPC National Congress, GNI per capita in China has risen sharply and has continuously reached a new high. According to the income grouping standards released by the World Bank, in 2010 China achieved a significant leap forward from the lower-middle income level to the upper-middle income level, with the per capita GNI equivalent to the average upper middle income country increased from 84.5% in 2012 to 93.7% in 2014 . The gap between China's per capita GNI and the world average has also drastically narrowed. The proportion equivalent to the world average has risen from 56.5% in 2012 to 68.6% in 2014, a decrease of 12.1 percentage points. In the GNI rankings of 214 countries (regions) released by the World Bank, China rose from 112th in 2012 to 100th in 2014, going 12 places forward. In 2012-2014, the average annual growth rate of GNI per capita in China reached 7.3%, much higher than the world average growth rate and the growth rate of high-income countries.

The latest value for GNI per capita, Atlas method (current US$) in China was $7,400.00 as of 2014. Over the past 52 years, the value for this indicator has fluctuated between 7,400.00 in 2014 and 70.00 in 1962.

China has had a remarkable period of rapid growth shifting from a centrally planned to a market based economy. Today, China is an upper middle-income country that has complex development needs, where Bank continues to play an important development role.

2. Summary

From the above analysis the China is as characterized by an upper-middle income, high risk exposure to oil spill incidents, and a potentially high financial burden like Korea, However, China has only acceded to the 1992 CLC and the Bunkers Convention; it has not acceded to the 1992 Fund Convention (currently, this has only been

acceded to by the Hong Kong SAR), nor the 2003 Supplementary Fund Convention. The current situation in China, like Korea, belongs to the third type. However, China's legal system of compensation for oil pollution damage is not perfect and does not comply with the development trend of international oil pollution damage compensation. Therefore, in this respect, China should make every effort to improve its legal system on ship oil pollution damage compensation.

Chapter 5 Suggestions and Conclusions

5.1 Suggestions

There are mainly two patterns of countries in the system of compensation for oil pollution damage. One is the countries that do not participate in the corresponding international conventions, such as the United States. The other is the countries participating in the corresponding international conventions, such as Korea, Canada and so on. Due to China's participation in the 1992 CLC, the current should be to improve China's current oil pollution damage compensation system. Through the full text, I have three feasible ideas of specific recommends:

The first approach is to consider acceding to the 1992 Fund.

The second approach is with reference to the practice of the United States and Korea, to Establish a oil pollution compensation law named "Civil Liability for Coastal Transportation Oil Pollution Damage Act," and support by "Oil Pollution Fund Law" .

The third approach is to develop a special adjustment of the compensation for oil pollution damage laws.

5.1.1 Consider Acceding to the 1992 Fund

The results of the Chapter 3 clearly show that, being classed as upper-middle income, and having a high risk of exposure to oil spill incidents along with a potentially high financial burden. China is inconsistent with most other countries of this pattern in terms of acceding to the 1992 Fund Convention. China's reluctance to become a party to the 1992 Fund Convention is mainly due to economic considerations. Contrary to the majority of upper-middle or high income countries, several reasons are attributable to the negative attitude of the Chinese government toward acceding to the 1992 Fund Convention. As follows: (1) Accession to the 1992 Fund Convention may be associated with a heavy financial burden. China imported more than 283 million tons of crude oil in 2016[293], and ranks as the second largest oil importing country in the world. It is therefore very likely that China will become one of the largest contributing countries to the 1992 IOPC FUND if it chooses to participate in the 1992 Fund Convention; (2) The cleanup cost in China was much lower than that in other countries.[294] In addition, there have not been any major oil pollution incidents in or near Chinese sea waters. In the majority of oil pollution incidents, the 1992 CLC limits are not exceeded; and (3) Evaluation of pollution damage in China is imperfect. The 1992FUND requires that a claim should be presented clearly with sufficient information and supporting documentation to enable the amount of the damage to be assessed.[295] Claims submitted to the 1992FUND could be unacceptable due to lacking sufficient evidence regarding the types of pollution damage sustained

293) Chunrong Tian, "China's Oil and Gas Imports and Exports", 2016, In*ternational Petroleum Economics* 3, 2017, http://www.cnoil.com/oil/20161125/n70479.html.(2017.06.15.).

294) Lixin Han, supra note 11, P.15.

295)Claims Manual of International Oil Pollution Compensation Fund, December 2008 Edition, available at: http://www.iopcfund.org/npdf/2008%20claims%20manual_e.pdf.(2017.06.15.).

and the amount of compensation claimed.[296]

To summarize, the Chinese government considers that it is not the right time to accede to the 1992 Fund Convention, because any contributions to the 1992 FUND are probably much greater than the benefits gained after a pollution incident. However, it has been realized that China is potentially exposed to an increasing risk of ship oil pollution incidents as a result of the rapid development of the marine petroleum industry and marine transportation.[297]

With its rapid economic development, since 2010 China has been categorized as an upper-middle income country.[298] At the same time, in line with its rising dependence on imported oil, the potential risk of oil spills is becoming higher in China.[299] Nevertheless, contrary to the majority of upper-middle or high income countries, China takes the cost of contribution as the main determinant of whether or not to accept the 1992 Fund Convention, rather than the potentially high risk of exposure to tanker oil spill incidents. As mentioned above, the main reason why China is reluctant to participate in the 1992 Fund Convention is that it considers that contributions to the 1992FUND are probably much greater than the benefits gained after a pollution incident.

This seems plausible if no major oil pollution incidents occur in the Chinese sea areas. However, there is no guarantee that such major oil pollution will not take place in the Chinese sea areas in the near future. On the contrary, with the continual increase in oil imports and the rapid

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296) Xiang kun Kong, "An Analysis on Establishing National Compensation Fund for Oil Pollution Damage from Ships in China", *China Water Transport 5* ,2007, pp.12-13.

297) Keyuan Zou, "Implementing Marine Environmental Protection Law in China Progress, Problems and Prospects", *Marine Policy,* 1999, pp.207-225.

298) World Bank List of Economies, July 2011.

299) According to the assessment of risk levels for the 19 regional sea areas mentioned in Chapter 2, the risk category of Chinese coastal regional seas is "high 3".

development of the oil transport industry, China may potentially face an even greater risk of major oil pollution incidents. A major oil spill incident is characterized as being of low frequency, but it could have significant consequences, including financial losses and irreversible ecological losses.

Thus, if such a disaster ever happened, it could cause a huge amount of damage, and the compensation provided by the COPC FUND would not be sufficient. The primary objective of the tort law is compensation for victims or injuries caused by others.[300] From a functioning perspective, the 1992 CLC, which has protection and compensation of victims as its top priority[301], has a relatively higher compensation capacity covering major oil pollution incidents, and can better achieve the compensation objective. In other words, acceding to the 1992 Fund Convention could provide greater protection in the long run, both for oil pollution victims and the marine environment.

Besides this, it can be clearly seen that unforeseeable risks can and do occur, although the uncertainty about what will happen may be genuine.[302] As a result, it might be preferable to spread out the risk, as well as the potential financial losses, over a number of oil receivers. The 1992 FUND calls for ex post contributions by each oil receiver in Contracting States corresponding to the percentage of aggregate risk.[303] Thus individual risk is reduced by spreading the risk over a number of

300) William Lloyd Prosser, W. Page Keeton, Dan B. Dobbs, Robert E. Keeton, David G. Owen, Prosser and Keeton on Torts, 5th ed. St Paul; *Minn: West Publishing*, 1984, p.37.

301) Yaw Otu Mankata Nyampong, "Insuring the Air Transport Industry Against Aviation War and Terrorism Risks and Allied Perils" ,*Berlin, London: Springer*, 2013, p.244.

302) Michael Faure and Goran Skogh, "The Economic Analysis of Environmental Policy and Law", Cheltenham, Northampton: *Edward Elgar*, 2003, p.281.

303) Andre Schmitt and Sandrine Spaeter, "Insurance and Financial Hedging of Oil Pollution Risk, 2004, Working Papers of LaRGE Research Center from Laboratoire de Recherche en Gestionet Economie (LaRGE), Université de Strasbourg (France), available at:
http://www.huebnergeneva.org/documents/spater.pdf.(2017.06.15.).

Contracting States, which is similar in character to the mutuality principle.[304]

Furthermore, the costs of an oil spill are determined by a number of factors, such as the type of oil, the location of the spill, the characteristics of the affected area and the spill amount.[305] In particular, intense economic development could lead to an increased number and amount of claims in the event of an incident, such as the increasing claims from the fishery and tourism sectors.[306] From the perspective of risk-sharing, acceding to the 1992 Fund Convention could be a sensible way to provide compensation for victims in China in the long term.

Given that China did not gain itself a position among upper-middle income countries until 2010, progress toward improving the situation of low compensation has to be made in steps rather than a sudden surge. It is suggested that a combined scheme would be a better alternative to provide supplementary compensation for oil pollution victims in China. Acceding to the 1992 Fund Convention, which is associated with a relatively high compensation ceiling but a relatively limited financial exposure,[307] could give stronger protection to oil pollution victims. At the same time, a domestic compensation fund could cover oil pollution damage that falls outside the international regime.

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304) Andre Schmitt & Sandrine Spaeter, Optimal Coverage of Large Risks: Theoretical Analysis and Application to Oil Spill, 2007, Working Papers of BETA from Bureau d'Economie Théorique et Appliquée, UDS, Strasbourg, available at : http://idei.fr/doc/conf/ere/papers_2007/spaeter.pdf.(2017.06.15.).

305) Erik Vanem, Qyvind Endresen and Rolf Skjong, Cost-effectiveness Criteria for Marine Oil Spill Preventive Measures, Reliability Engineering & System Safety 93, 2008, pp.1354-1368.

306) Andre Schmitt, Sandrine Spaeter, Hedging Strategies and the Financing of the 1992 International Oil Pollution Compensation Fund, (2005), Working Papers of BETA from Bureau d'Economie Théorique et Appliquée, UDS, Strasbourg, available at: http://www.beta-umr7522.fr/productions/publications/2005/2005- 12.pdf

307) According to the report by UNCTAD, the contribution per tonne of contributing oil to the 1992 FUND was GBP 0.0351858 in 2010.

To summarize, in comparison with a purely national compensation regime with an extremely high limit, such as the Korea CODGA, accession to the 1992 Fund Convention is associated with a relatively limited financial burden on the oil companies. At the same time, the COPC FUND can provide stronger protection for pollution victims in China, especially when a major oil pollution incident occurs. Nowadays, China potentially faces significantly greater exposure to such major oil pollution incidents, due to the ongoing increase in oil imports and the rapid development of the oil transport industry. As a result, it may well be high time that China participated in the 1992 Fund Convention. However, the COPC FUND, with its wider application scope, is also needed to cover oil pollution that is not covered by the international regime. Therefore, although the benefits brought about by the establishment of the COPC FUND cannot be denied, it is suggested that it is now more appropriate for China to set up a combined scheme, under which the 1992 FUND provides supplementary compensation for pollution damage caused by spillage of persistent oil from sea-going tanker vessels carrying persistent oil as cargo in bulk, while the domestic compensation fund provides supplementary compensation for other oil pollution damage not covered by the 1992 FUND.

5.1.2 Establish a New Oil pollution Compensation Law

If China does not join 1992FUND, with the increasing dependence on the crude oil, the problem of marine oil pollution damage caused by other sources, such as the offshore facilities, is also becoming more serious than before. There has not been any specific provision relating to the compensation for marine oil pollution damage caused by the offshore facilities in the domestic legislation in China. And if the first

approach to develop the laws is not adjust the China's development,

China needs to consider the second approach to established a law named "Civil Liability for Coastal Transportation Oil Pollution Damage Act," and support by "Oil Pollution Fund Law" .

In the specific program, we should bear in mind the protection of the environment to prevent pollution, with reference to international conventions China participated in and consideration of the development of shipping industry, the principle of oil pollution damage compensation system should at least include the subject of oil pollution compensation, liability principles, the compulsory insurance of liability, the establishment of liability insurance, the establishment of Chinese oil pollution compensation fund, etc.; Confirm the government agencies and departments who can carry out the claims on behalf of the state; Perfect the substantive law of the direct suit system against the insurer elated to the damage; And Establish a oil pollution compensation law.

Here is a clear advantage in the development of the Specialized Oil Pollution Damage Liability Act:

(1) It can stressed the characteristics of the ship oil pollution damage system, and in the relationship with the civil law, constitute a special relationship between law and basic law. Because the special law is superior to the common law, the special law has a prioritized effect in the event of a ship oil pollution damage case.

(2) To promote the development of "special compensation law for ship oil pollution damage". Scholars are mostly maritime law scholars, who in their research on oil pollution damage compensation system. It can pay more attention to the contents of the international conventions. therefore, it would be more in moving closer to the international standards.

But this approach is also inadequate:

(1) The development of the law is a separate stove practice, the legislative cost is too high. In general, the development of new laws is much more than the preparation of existing legal requirements, and the approval process is longer.

(2) If a single law of compensation for ship oil pollution damage is enacted, China will be faced with the question of whether or not a damage compensation law is enacted for the pollution caused by other toxic and hazardous substances.

Therefore, because of the current situation in China, in a short term, it is difficult to develop a special law. But in the future, with the development of China's economy, it would be need to refer to Korea and the United States and Canada and other countries, to develop a special oil pollution damage compensation law.

5.1.3 Develop a Special Adjustment Law

From the above analysis we can see that because of the current situation in China, in a short term, it is difficult to develop a special law. Based on the chapter 2 & compared with the Korea law and the international convention about the analysis of compensation from ship oil pollution damage, China needs to develop a special adjustment of the compensation for oil pollution damage law.

1. Clear the Subject

It is a very important problem which is the plaintiff or the defendant, in the legal relationship of the oil pollution damage compensation.

There has not been any specific provision relating to the compensation for marine oil pollution damage caused by the offshore facilities in the

domestic legislation in China. China needs to consider to develop a special adjustment of the compensation for oil pollution damage laws.

In accordance with China's marine environmental protection law and China's accession to the international convention, the ship owner and the oil pollution insurer and the guarantor shall be the first level of liability for compensation for oil pollution damage caused by Chinese ships. At the same time, in order to better protect the environment, and get China's oil pollution damage compensation as soon as possible, China should establish a fund as the second main responsibility of China's oil pollution damage compensation.

2. Doctrine of Liability Fixation

Application of the principle of no-fault rule is a major feature of ship oil pollution damage compensation, which is due to the huge maritime ship industry risk decision. At the same time, the ship oil pollution damage compensation and the introduction of the responsibility limit, not to bear the heavy liability of the ship. The principle of non-fault attribution and the limitation of liability balance the interests between the injured party and the liable person is very well. As a result, the imputation principle and responsibility limit in the ship oil pollution damage compensation system status, can be imagined. Of course, these two aspects of the content of the need for supporting the operation of various systems, such as compulsory liability insurance and fund system.

Because oil pollution is a kind of special tort, highly dangerous, combined with the provisions of the 1969 CLC. China's oil pollution damage compensation system should implement the principle of liability without fault. Then, as long as the oil pollution happens in the territory or the foreign oil pollution cases in China, its damage compensation should be demanded by its liability subject. As for general defenses, it should be proofed by the defendant.

3. Scope of Compensation

(1) Applicable Ships and Oil

The ship on the system of compensation for oil pollution damage from ships in China should draw lessons from the provisions of the Convention on civil liability. That means ship is any type voyage regulator, constructed or adapted to transport the bulk oil cargo.

Further ships should be these carrying oil and other goods, only in the actual transport of bulk oil cargo, not during it does not transport bulk oil. This definition is not only applicable for oil tankers, oil and other goods or ship carrying dual-use, but also for inland tanker.

The system of compensation for oil pollution damage from ships in China shall be governed by the existing laws. Oil is any kind of oil and its refined products.

(3) Applicable region

Combined with the provisions of 1969 CLC, any damage arising from the following areas shall apply to the system of compensation for oil pollution damage from ships in China. These damages are caused within the territory of China, including the territorial waters, in China's exclusive economic zone, also by the preventive measures in China in order to avoid or reduce the damage.

(4) Extent of compensation

China's current laws and regulations do not make provisions for the scope of compensation for oil pollution damage caused by ships. The scope of compensation for oil pollution damage shall at least include the costs of cleaning up and the loss and damage caused by pollution.

Further ships should be these carrying oil and other goods, only in the actual transport of bulk oil cargo, not during it does not transport bulk oil. This definition is not only applicable for oil tankers, oil and other goods or ship carrying dual-use, but also for inland tanker.

4. General Defenses

In accordance with the provisions of the CLC and the MEPL(PRC). The ship owner shall be liable for any of the following circumstances.

(1) Damage caused by natural phenomena, such as acts of war, hostilities, civil war, armed insurrection, or special, inevitable and irresistible nature

(2) Damage caused entirely due to the act of intentionally causing damage or not

(3) Damage caused entirely due to negligence or other wrongful acts of a government or other competent authority in charge of the administration of a lighthouse or other navigational aid

(4) If in the event that the damage to the oil pollution is entirely or partly due to the act or omission of the person, the offender may be exempted entirely or partly from liability.

Although the pollution damage caused by the above Disclaimer, if the responsible party knows or should know that the pollution accident, the parties shall not be exempted from liability if they fail to report in a timely manner or do not provide reasonable cooperation or assistance to the relevant pollution management department, or do not have sufficient reasons to fail to comply with the order of the competent authority. As there exist serious pollution person liable concealing, escaping and lack of timely measures of pollution in China, there should be the provisions to make the pollution person liable concealing to lose the right of exemption. So that the responsible person in serious legal consequences, timely reporting of pollution incidents, are conducive to the timely removal of pollution and prevent pollution damage.

5. Limitation of liability

In order to improve ship oil pollution damage liability system, China need to do two points: First, actively join the CLC and IOPCFUND, and

learn from Korea and other countries of the excellent legal system. Second, improve the domestic oil pollution damage compensation fund..

According to the current China shipping and oil cargo capacity and oil pollution damage compensation level, The author suggestions for ship oil pollution damage compensation system to low, low premium, low contributions, step by step, till to reach the international Convention on standards and limits. But there must be a minimum limit of liability, or the loss of the victim will not be compensated.

If the oil pollution accident is caused by collision between the international voyage and coastal ship, the parties shall determine the limits of liability in accordance with the applicable laws. The liability limit applies, only to the difference between the claims of both parties, according to the general principle of Chinese collision law- the principle of limitation of liability. When the joint and several liability is more than the proportion of the compensation, and get the compensation from the other part, because of the limitation of liability, the difference is partly supplemented by the fund when the latter's liability is not sufficient to compensate for the former.

6. Improve the Compulsory Liability Insurance System

It is not realistic to make China generally low level Shipping enterprises to follow the higher requirements of the International Convention on standards. Under the actual situation of China tanker, the author thinks that we should set different levels of insurance level and limitation of liability, according to the tonnage of ship size. Therefore, it is suggested to add the corresponding content in the system of compensation for oil pollution damage. Firstly, the owner of a ship in respect of an international route must be insured or obtain a financial guarantee. Secondly, to establish a unified insurance quota that the minimum amount of coastal tankers is not more than 500 tons. Thirdly, to establish a unified insurance quota that the minimum amount of

inland tanker is not more than 200 tons. Fourthly, to increase the terms of the liability of the insurer for direct prosecution, refer to the provisions of article first of the "insurance law" and the "Maritime Procedure Law of the people's Republic of China" in the ninety-seventh paragraph of the law of China.

7. Improvement of Oil pollution Dund System

To improve the fund for compensation for oil pollution damage in China. Specificly, oil pollution fund system should be improved in the following aspects

(1) Oil pollution fund system and management measures

(2) The principle of using the oil pollution fund

(3) Acquisition of oil pollution fund

(4) The fund's assessments and limitation of compensation

Chinese shipping oil pollution damage compensation fund system brings an important effect on both China and other countries. A legal theory is a basis and compass of the legal system, Based on an analysis of the legal theory level of the oil pollution fund legal system, the system value should be explained, and we should make efforts to achieve an ideal objective. And all sectors of the society are expected to pay attention to the development and progress of the Chinese oil pollution fund, and offer advice and suggestions for carrying out work in the Chinese Oil Pollution Damage Insurance Compensation Affairs Center, as well as to improve the work of "A Guide of Claim for Compensation" and "The Guide Rule of Insurance Compensation", in order to jointly promote the effectively and orderly development of the Chinese oil pollution fund work.

8. Application of Law

(1) Application of International Conventions

China must perform in good faith international conventions to which it has acceded.[308]However, the methods of applying international conventions in Chinese domestic legal settings are subject to domestic legislation. There is no article in the Constitution of the PRC[309] clarifying how to apply the international conventions in the Chinese legal settings. Besides this, there are no general stipulations concerning this issue in the Legislation Law[310] or the Law of Procedure of Conclusion of Treaties[311], nor are there such stipulations in any other domestic legislation. And, compared with the application law of Korea, China have to Revise this legal defect.

In the application of International Conventions, apart from the issue of limitation of liability, neither the Amended Regulations nor the Judicial Interpretation intend to directly apply the 1992 CLC and the Bunkers Convention to other liability and compensation issues in a domestic oil pollution incident.

(2) Application of Domestic Legislation and its Priority

Among the laws and regulations concerned with compensation for ship oil pollution damage in China, the Civil Law, CMC, MEPL and the Tort Law are the laws that have been enacted by the National People's Congress and its standing committee. In contrast, the Amended Regulations is an administrative legislation formulated by the State Council, and the Oil Pollution Liability Insurance Regulation and the Compensation Fund Regulation are rules formulated by departments of the State Council.[312]

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308) The Vienna Convention on the Law of Treaties, Article 26.

309) The current Constitution of the PRC was adopted by the 5th National People's Congress, and came into effect on 4 December 1982; amendments were made in 1988, 1993, 1999 and 2004.

310) The Legislation Law was promulgated on 15 March 2000 and came into effect on 1 July 2000.

311) The Law of Procedure of Conclusion of Treaties was promulgated and came into effect on 28 December 1990.

312) Zhang, Liying, "Compensation for Domestic Oil pollution in China's Coast:

The effect of laws is greater than that of administrative regulations, and the effect of administrative regulations is greater than that of rules formulated by departments of the State Council. Therefore, if there are conflicts, laws will prevail over administrative regulations which, in turn, will prevail over rules formulated by departments of the State Council.[313)]

5.2 Conclusions

In summary, this thesis comes to the conclusions that:

(1) This thesis contributes to the existing literature in that it not only reviews the basic theory of the legal framework of the compensation regime, but also explains the differing attitudes toward the international compensation regime for tanker oil pollution damage. According this theory to figure out and interpret the patterns of those countries with a high acceptance level of the international regime (i.e., countries accepting the 1992 Fund Convention or the 2003 Supplementary Fund Convention).

A legal theory is a basis and compass of the legal system, so if we simply discuss the operational legal system construction away from the legal theory, the system construction will go astray without direction, just like water without a source and a tree without roots. Based on an analysis of the legal theory level of the oil pollution legal system, the system value is explained, and we should make efforts to achieve an

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Which Law Shall Apply?, in Maritime Pollution Liability and Policy – China, Europe and the US, eds. by Faure, G. Michael, Han, Lixin and Shan, Hongjun (Alphen aan den Rijn, The Netherlands: *Kluwer Law International*, 2010, pp.359-369.

313) Dong Bingying. "Compensation for ship oil pollution damage in China", T*he Hong Kong Polytechnic University*, 2014, p.116.

ideal objective, in order to jointly promote the effectively and orderly development of the international oil pollution conversation use work.

(2) This thesis demonstrates that the establishment of the compensation regime for ship oil pollution damage has had a significantly positive effect in enhancing compensation capacity, and make Korea in moving closer to the international standards. The Korean Government need to concentrate on enacting a law on the detailed standards of the assessment for various types of claims, following the general standards of the assessment by the FUND in order for fair compensation to take place. Therefore, all related organizations including Government officials need to be educated and trained thoroughly and a group of Korean experts also needs to be formed and trained. Monitoring of unlicensed and illegal fishing is necessary, so the government should strongly enforce the implementation of relevant Acts on fisheries accordingly. Further, the government should maintain all of the income tax returns against all kinds of business in fisheries to present a clear record of their production in order to provide proper evidence for loss of damages from oil spill incidents. After the Korean Government joined the Supplementary Fund shortly, it is no need to worry about the limitation amount. Because the limitation amount has been raised. In conclusion, the Secretariat of the FUND and the Korean Government should develop their current Compensation Schemes as mentioned above in order to make speedy and fair compensations to victims suffering from oil pollution from ships in the future, taking into account the goal of the International Compensation Schemes.

(3) China has not yet formed a complete legal system of civil compensation for oil pollution. The contents of the relevant parties are mainly stipulated in the principles and procedures. It is difficult to coordinate many problems. The construction of laws and regulations lacks rigorous system support. The content is mainly stipulated in some laws and regulations with public legal natures. As a result, the judge

does not have a relatively common standard when dealing in the actual case which add difficulty to the trial of such cases. Maritime courts' decision often result in a great difference. At the same time, the victims almost can not get the corresponding responding compensation.

In the specific program, we should bear in mind the protection of the environment to prevent pollution, with reference to international conventions China participated in and in consideration of the development of shipping industry. The principle of oil pollution damage compensation system should at least include the subject of the oil pollution compensation, liability principles, the compulsory insurance of liability, the establishment of liability insurance, the establishment of Chinese oil pollution compensation fund and so on. Furthermore, it is necessary to perfect the substantive law of the direct suit system against the insure related to the damage and to establish a oil pollution compensation law.

On the basis of these problems, China clearly needs to establish the system of oil pollution damage compensation. This system should include such aspects as follows. First, the subject of liability in the legal relationship of the oil pollution damage compensation should be defined specifically. Second, in respect of scope of compensation, it is necessary to include the costs of cleaning up and the loss and damage caused by pollution because China's current laws and regulations do not make provisions for the scope of compensation for oil pollution damage caused by ships. Third, in respect of limitation of liability, China should be make a new standard to deal with non-foreign oil pollution cases because the 1992 CLC provisions of limitation of liability is too high for China.

5.3 Further Research

This research focuses on the ship marine oil pollution damage. With the increasing dependence on the crude oil, the problem of marine oil pollution damage caused by other sources, such as the offshore facilities, is also becoming more serious than before.

There has not been any specific provision relating to the compensation for marine oil pollution damage caused by the offshore facilities in the domestic legislation in China. It is interesting to explore whether the two-tier compensation regime for ship oil pollution damage could serve as a model to set up a compensation regime for oil pollution damage caused by offshore facilities.

The specific criteria of admissibility and assessment, such as the reasonableness of the operation and reasonable cost of measures, have not been clarified by any legislation. It is important to examine these issues and propose legislative suggestions in this regard.

Furthermore, in the process of ship navigation, oil leakage accidents lead to a series of losses. In these losses, researching on pure economic losses of oil pollution has an important theoretical and practical significance.

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