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WORLD MARITIME UNIVERSITY

Malmö, Sweden

Study on the Mechanism of Compensation Fund System for Shipping Oil Pollution Damage in China and International Oil Pollution Compensation Funds

By

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A dissertation submitted to the World Maritime University in partial Fulfillment of the requirements for the award of the degree of

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ABSTRACT

Title of Dissertation: Study on the Mechanism of Compensation Fund System for

> Shipping Oil Pollution Damage in China and

International Oil Pollution Compensation Funds

Degree: **MSc**

This paper, by analysing and summarizing the operational mechanism of the International

Oil Pollution Compensation Funds, draws on its successful practice and useful

experience. Suggestions on the improvement of Chinese ship-source oil pollution

compensation fund system are accordingly put forward including reviewing the ship oil

pollution accidents data systematically, assessing the risk management of the

compensation system, broadening the scope of compensation for Chinese ship-source oil

pollution compensation fund, increasing the compensation limit for Chinese ship-source

oil pollution compensation fund and strengthening the cooperation with International Oil

Pollution Compensation Funds.

Aiming at the institutional problems found in the claims settlement work of China's ship

oil pollution compensation fund, this paper analyzes the problems. By learning from

Chinese trial practice and the experience of similar funds in foreign countries, we put

forward some practical solutions to the above mentioned problems. Based on the principle

of balancing efficiency and fairness, we make proposals to revise The Regulations on Levy

and Use of the Chinese Ship-source Oil Pollution Compensation Fund that regulate the

claims work of Chinese Ship-source Oil Pollution.

KEY WORDS: oil pollution funds

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Study on the Mechanism of Compensation Fund System for Shipping Oil Pollution Damage in China and International Oil Pollution Compensation Funds

Introduction

China is a large oil transport country, and also faces serious oil pollution threat. In the past two decades, many major oil pollution accidents have occurred in China. For example, when the oil spill occurred in Tasman Sea in 2002, the overflow volume exceeded 20 tons, and the local aquaculture industry suffered heavy losses. In 2014, more than 300 people filed compensation claims to the court for the oil pollution accident on the "M/V ANNA", which cost nearly 100 million yuan. Compared with the huge loss caused by the ship oil pollution accident, the victims of the ship oil pollution cannot get the full amount of compensation from the ship-owners because of various reasons.

In order to protect the legitimate rights and interests of ship oil pollution victims, China promulgated the Marine Environment Protection Law of the People's Republic of China in 19991, which established China's implementation of a civil liability insurance system for ship oil pollution damage and a ship oil pollution damage compensation fund system, and successively issued the Management Regulations of Levy and Use of the China Ship-source Oil Pollution Compensation Fund (hereinafter referred to as "Regulations") and Implementation Rules for the Management of Levy and Use of China Ship-source Oil Pollution Compensation Fund (hereinafter referred to as "Implementation Rules") to regulate the levy and use of funds.

According to the statistics of the Chinese Ship-source Oil Pollution Compensation Fund Centre (hereinafter referred to as "Compensation Center"), where the author works, by July 1, 2018, the Chinese Ship-source Oil Pollution Compensation Fund (hereinafter referred to as "Fund") had successfully settled claims in 9 cases and paid compensation totaling more than 26.58 million yuan, benefiting 16 companies in total. The replenishment effect of the fund on oil pollution victims is remarkable.

With the rapid development of China's economy and society, on the one hand, the whole country attaches increasing importance to environmental protection and hopes that the fund can be used more widely and play a bigger role, while, on the other hand, the practice of fund claims also exposes the inadequacies of the claim system. In particular, the oil pollution accident on the "M/T SANCHI" in early 2018 highlighted the low limit of compensation and the limited scope of compensation in the current Regulations.

This paper intends to analyze the problems existing in the current system of the Regulations in combination with the practice of oil pollution claims of the fund, and puts forward some suggestions for improving the current system on the basis of learning from judicial experience and international practices.

Problems Existing in the Current System of the Chinese oil pollution fund.

Based on the practice of claims settlement and the opinions of relevant persons in the field of compensation for oil pollution damage from ships, the author believes that the Fund should play a greater role in solving the following problems:

1. The Fund has a lower limit of liability for single accident

Article 18 of the Regulations stipulates that "the compensation or compensation amount of the Chinese Ship-source Oil Pollution Compensation Fund for any ship oil pollution accident shall not exceed 30 million YUAN". The above-mentioned compensation limit is calculated on the basis of the compensation for the ship-source oil pollution occurred in China from 1973 to 2009, with reference to the ratio of International Oil Pollution Compensation Fund and Ship Owners' Oil Pollution Compensation, which is more in line with the ship-source oil pollution compensation at that time.

With the rapid development of China's economy, great changes have taken place in the current situation of offshore oil transportation, and the degree and scale of China's marine economic development are different from those of previous years. The amount of loss caused by oil pollution accident of a single ship in the sea areas under the jurisdiction of our country also shows a trend of obvious increase.

In recent years, the total amount of compensation for oil pollution victims from the "MEDITERRANEAN IRINA", "MISM" and "CMA CGM FLORIDA" oil pollution accidents have exceeded 100 million YUAN. In particular, on January 6, 2018, the Panamanian oil tanker "M/T SANCHI" collided with the Hong Kong cargo ship "M/V CF CRYSTAL" about 160 nautical miles east of the Yangtze River Estuary, resulting in the fire of "SANCHI". About 111400 tons of condensate oil on SANCHI leaked and exploded, causing large-scale pollution in the nearby sea area, great loss of marine ecological resources and fishery resources, and huge emergency disposal cost.

As far as concerned, the total amount of creditor's rights registered with the Shanghai Maritime Court by all relevant parties of the pollution accident has exceeded 1.9 billion YUAN. The public welfare nature of the Fund determines that it should play an active role in the SANCHI accident. The 30 million compensation limit stipulated in the Regulations is clearly too weak to give full play to the role of protecting the Marine environment and compensating parties affected by oil pollution.

2. The Scope of Fund Compensation Is Narrow

Taking the case of "M/V SHANHONG 12" which was settled by the fund as an example, on December 30, 2012, the inland oil tanker SHANHONG 12 carried about 400 tons of waste oil on its way from Taicang, Jiangsu Province to Jiangdu, but the ship self-sank in the water areas of Changshu section of the Yangtze River. The accident caused the waste oil spilled and spread to the water areas of Shanghai, and landed in the west section of the South Bank of Chongming Island, causing serious pollution to

the river surface and tidal flat of more than 20 kilometers wide and 80 meters along the Yangtze River water areas on the South Bank of Chongming Island. The total area of the polluted tidal flat is about 2500 mu. There is a large area of pollution from many sluices to the river mouth in Chongming, and the wharf, ship hull, revetment, riverbed and sluice gate in the port are also eroded by oil pollution.

After the accident, Shanghai Chenyang Company went to the site for emergency disposal according to the instructions of the emergency disposal unit. After the emergency disposal, Chenyang Company filed a lawsuit to the court because the person responsible for the accident has not paid the relevant emergency disposal expenses. The court decided to approve the emergency disposal cost of Chenyang Company of about 4.5 million yuan. Since the court found that the ship owner of the SHANHONG 12 had property available for execution, and Chenyang company subsequently filed a claim against the fund. Finally, after investigation and verification, the Fund paid compensation of more than 1.2 million yuan to Chenyang company. The reason why there is a big gap between the amount of fund claims and the amount of court decisions is that the scope of compensation is different in two aspects:

Firstly, in accordance with Provisions of Article 17 of the Regulations, the fund shall only compensate direct economic losses which have a direct causal relationship with the ship oil pollution accident. The Oil Pollution Fund shall not indemnify the claimants for indirect economic losses, such as income losses, litigation costs, taxes and other expenses related to the oil pollution accident caused by the ship, which the claimants may normally claim against the ship owner and the oil pollution insurance insurer.

Secondly, according to Article 12 of the Regulations and Implementation Rules, the geographical scope of compensation fund for pollution shall be: "the internal water areas, territorial sea, contiguous zone, exclusive economic zone, continental shelf and other sea areas under the jurisdiction of the People's Republic of China, among which, the internal water areas are all the sea areas on the inland side of the baseline of China's

territorial sea, including the coastal port water areas". It can be seen from the above provisions that the fund only compensates for ship-source oil pollution in China's sea areas, and the ship-source oil pollution in China's inland waters does not fall within the scope of the fund's compensation. Therefore, in the case of SHANHONG 12, the fund excluded the cost of oil pollution in the inner river basin. The damages awarded by the court also include pollution damage in inland waters.

3. The Advance Compensation System of the Oil Pollution Fund Is Not Perfect

Since the official operation of the Fund, 6 out of 9 cases settled have been oil pollution accidents of unowned ships. The Fund has already compensated the loss for such oil pollution victims who were unable to find the ship in question. However, for shipsource oil pollution accidents that have a clear perpetrator, according to the current provisions of the Regulations, the victims of ship-source oil pollution are currently going to experience "ship-source oil pollution—the oil pollution victim suing the ship owner (including the insurer)—the court judging that the ship owner who caused the accident had fulfilled its liability for compensation or had no actual ability to pay for compensation—the victim making insufficient claims to the fund—the claims of the fund—the compensation of the fund" and other links. The whole process of compensation from filing a case, holding a court session to making a judgment usually takes several years. Moreover, after the judgment of the court, according to the current regulations, it will take a certain period of time for the fund to make final compensation. The claims for major oil pollution accidents of ships such as CMA CGM FLORIDA and SANCHI mentioned above in recent years are all protracted wars. In the early stage of the claim, the victims of oil pollution will not only suffer economic damage, but also pay certain litigation costs and attorney fees for the start of legal proceedings. Moreover, they may face the embarrassing situation of bankruptcy and closure before the ship owner and oil pollution fund get compensation.

4. The right of subrogation to fund compensation is not clear

The first paragraph of Article 26 of regulations stipulates that "the Chinese ship-source oil pollution Compensation Fund Committee, within the scope of penalty or compensation, may subrogate and exercise the right to claim compensation from the relevant person liable for pollution damage from the unit or individual that accepts the penalty or compensation"

Taking the above mentioned SHANHONG 12 as an example, the Claims Center was informed that the registered owner of SHANHONG 12 may have property to execute, and the recovery procedure has been initiated. However, as the Fund Management Committee has no independent legal personality, it is unable to file a lawsuit in its name. However, Regulations shall not give the Claim Center the right of subrogation, so the Claim Center may face some legal obstacles.

The Establishment and Limits of the International Oil Pollution Compensation Fund

According to the fund convention, IOPC funds, a global intergovernmental organization, has been established internationally. According to Article 2.2.1[®] of the Fund Convention, IOPC funds shall be regarded as a legal person with rights and obligations under the domestic law of each Contracting State, and the director general of fund shall be the legal representative of IOPC funds.

IOPC funds currently has 115 member countries, of which, the fund comes from the assessment of oil cargo owners in member countries, and the smooth collection of annual assessment is the basic condition to maintain its good operation. In addition, IOPC funds limits the amount of compensation for each accident to a certain level, to determine the size of the fund, so as to avoid the burden of the oil industry caused by

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[®]International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, Article 2: "The Fund shall in each Contracting State be recognized as a legal person capable under the laws of that State of assuming rights and obligations and of being a party in legal proceedings before the courts of that State. Each Contracting State shall recognize the Director of the Fund (hereinafter referred to as "The Director") as the legal representative of the Fund."

the excessive size of the fund.

1. Assessment system of Member States

According to the provisions of the Fund Convention, oil cargo owners with annual sea oil transportation receipts of 150,000 tons in member countries are required to pay assessments², and the competent authorities of member governments are obliged to report to the Fund Secretariat the amount of oil consignor shipments in their territory. The Fund Assembly is responsible for determining the total annual assessment, and the amount is limited to meet the administrative costs of the operation of IOPC Funds and the amount of damages predicted for major oil spills. The Fund Secretariat calculates the assessed unit price of each ton of oil for the current year based on the total amount of assessed oil received by all member countries in the previous year, and then multiply the total amount of oil received by each oil consignor with an assessment obligation by the unit price per ton of assessment to obtain the amount of assessment that the oil consignor should pay. The amount of oil pollution damage compensation paid by IOPC Funds each year is determined according to the scale of the ship-source oil pollution accident. Therefore, the assessment of oil cargo owners varies from year to year. According to the assessment statistics from 2013 to 2017, in the year when there is no major oil pollution accident claim, the unit price of the assessment per ton of oil is usually between 0.001 and 0.006 pounds[®]. The work report released by IOPC Funds over the years shows that the countries with the largest amount of oil assessed are mainly the big oil importers, and the total amount and distribution of their oil assessed in 2016 are shown in Table 1 and Figure 1.

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[®] International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, Article 10: "Annual contributions to the Fund shall be made in respect of each Contracting State by any person who, in the calendar year referred to in Article12, paragraph2(a) or (b), has received in total quantities exceeding 150 000 tons."

[®] Refer to the 2018 Explanatory Note of the International Oil Pollution Compensation Funds.

Table 1 Oil Volume Distribution of the 2016 International Oil Pollution Compensation Fund®

Member State	Assessed oil volume (tons)	Proportion
India	212 786 573	14.01%
Japan	205 906 105	13.56%
South Korea	134 160 040	8.83%
Netherlands	121 317 141	7.99%
Italy	110 493 179	7.27%
Singapore	109 097 538	7.18%
Spain	72 084 160	4.75%
France	62 022 216	4.08%
Britain	51 878 812	3.42%
Canada	39 251 732	2.58%
Remaining 50 Countries	399 840 478	26.83%
Total	1 518 837 974	100 %

2. The Limits of the International Oil Pollution Compensation Fund

CLC and fund Convention set up a system in which "the ship owner and the oil cargo owner jointly bear the liability for oil pollution damage". While, IOPC funds became the second layer of compensation obligors besides the first layer of compensation subject, namely, the ship owner, so that the oil pollution victims get relatively full compensation. Among them, according to CLC, the ship owner can limit his liability to the amount of compensation calculated on the basis of the gross tonnage of the ship, with a maximum of 89.77 million SDRs[®]. IOPC funds shall limit its liability to a certain

[®] Refer to the 2017 Annual Report of the International Oil Pollution Compensation Funds.x`

[®] Special Drawing Right is a kind of reserve asset and unit of account of international Monetary Fund (IMF). On February 1,2019, the official website of IMF showed that one DOLLAR can be exchanged for 0.71393 Special

amount in accordance with the provisions of the fund convention, with a maximum of 203 million SDRs[®] (for countries that joined the 2003 protocol of the fund convention, the limit shall be increased to 750 million).

It should be noted that the international community's understanding of "the ship owner and the oil cargo owner jointly bear the liability for oil pollution damage" shall also include the equal compensation amount of both parties in oil pollution cases. The IOPC Funds and the International Group of P&I Clubs (hereinafter referred to as "IG Clubs") formulated the 2006 Small Oil Tanker Oil Pollution Compensation Agreement (STOPIA2006) and the 2006 Oil Tanker Oil Pollution Compensation Agreement (TOPIA 2006), stipulating that the compensation amount paid by the ship owner and the oil cargo owner in the ship-source oil pollution accident shall be evaluated every 10 years. If the claim proportion of either party exceeds 55%, the agreement can be revised; if the proportion exceeds 60%, the agreement must be revised to achieve the balance between the two parties and realize the average sharing of the oil pollution compensation cost.

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Drawing Right.

[®] International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, Article 4. 4(a): "Except as otherwise provided in sub-paragraphs (b) and (c) of this paragraph, the aggregate amount of compensation payable by the Fund under this Article shall in respect of any one incident be limited, so that the total sum of that amount and the amount of compensation actually paid under the 1992 Liability Convention for pollution damage within the scope of application of this Convention as defined in Article 3 shall not exceed 203,000,000 units of account."

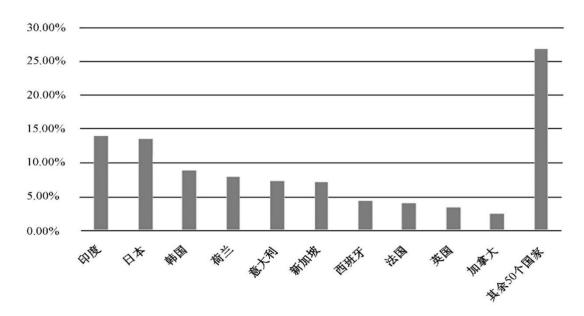


Figure 1. Member States' share of IOPC Funds' contributions in 2016

The signing of the two agreements of STOPIA 2006 and TOPIA 2006 actually increases the minimum liability limit of ship owners under CLC, and also expresses the ship owner's support for the system of "the ship owner and the oil cargo owner jointly bear international oil pollution damage compensation" under the framework of CLC and fund convention, as well as the cognition that the cargo owner who pays assessed contributions may bear more obligation of contribution under the framework of 2003 protocol of fund convention, thereby avoiding the modification of the existing convention by the parties to the convention.

Analysis on the Characteristics of the Operation Mechanism of the International Oil Pollution Compensation Fund

IOPC funds is currently dealing with 11 oil pollution compensation cases, ② including "M/V PRESTIGE", "M/V HEBEI SPIRIT" and other source oil pollution accidents that have a great impact on the global shipping industry. Its successful operation is not only due to the full collection of assessed contributions, but also to the efficient and reasonable organizational structure and complete and rigorous system design. The following is the analysis of the characteristics of the operation mechanism of IOPC

funds.

1. Reasonable Organization and Management Structure

IOPC Funds is responsible for the management of the international oil pollution compensation fund and the settlement of oil pollution accidents on ships. Its organization and management are composed of decision-making bodies and auxiliary bodies, of which, the decision-making bodies are composed of the Assembly, Executive Committee and Secretariat of the Fund, while, the auxiliary bodies include and the Joint Audit Body and the Joint Investment Advisory Body.

(1) The Decision-Making Bodies of IOPC Funds

The Fund Assembly is the highest decision-making body of IOPC Funds. It is composed of representatives of all member governments. It is responsible for determining the rules of procedure of the general assembly of the fund, appointing the Director-General of the fund, discussing the adoption of the annual budget and the determination of annual assessments, approving claims against the fund and determining the distribution of amounts to be used for compensation among claimants, determining the scope of authority to make interim payments on claims, and establishing any temporary or permanent subsidiary bodies it deems necessary. The Executive Committee of the Fund, elected by the general assembly of the fund and composed of 15 member states, is responsible for reviewing the claims in oil pollution cases and approving the compensation scheme.

(2) The Auxiliary Bodies of IOPC Funds

The joint audit body and the joint investment advisory body are the auxiliary bodies set up by the general Fund Assembly, among which, the joint audit body is responsible for reviewing the compliance and effectiveness of IOPC funds in key issues such as operation management and financial system, financial reporting, internal control, business procedures and risk management, reporting its work at each general Fund Assembly, and making appropriate suggestions, and the joint investment advisory body is responsible for making suggestions on the fund investment and cash management control procedures of IOPC funds, drawing the attention of the fund general assembly to any relevant factors that may justify the revision of the investment policy, so as to ensure the realization of a reasonable investment return without damaging the fund security of IOPC funds, and reporting its work at each general Fund Assembly.

2. To Perfect the Supporting Documents

IOPC funds maintains the normal operation of its institutions by holding Fund Assembly on a regular basis every year. As of October 2018, it has held 23 consecutive Fund Assembly and 71 Fund Executive Committee meetings, which are fixed in the spring and autumn of each year. In order to ensure the orderly holding of the meeting, IOPC funds has made clear provisions on the form, content, issues for deliberation and other matters of the Fund Assembly through the formulation of the procedures of the international oil pollution compensation fund. Every Fund Assembly will discuss and make decisions on major issues such as claims settlement, fund financial policy, implementation of the Convention, administrative matters of the Fund Secretariat, annual budget of the fund, etc., and form resolutions of the meeting for reference by Member States.

In addition, IOPC funds has formulated the Internal Regulations of the International Oil Pollution Compensation Fund and the Financial Management System of the International Oil Pollution Compensation Fund, which stipulate the fund assessment rate, the currency of assessment calculation, the issuance of assessment invoice, the assessment oil report, the fund compensation payment, the fund's involvement in legal proceedings, the fund account management, the fund investment and audit, etc. Among them, the payment of fund compensation is also authorized at different levels. For

claims within the compensation scope of fund convention, the director general of the fund is authorized to pay cases with the total amount of compensation estimated not to exceed 2.5 million SDRs without the prior approval of Fund Assembly, thus improving the efficiency of claims settlement in small claims cases and providing an effective system guarantee for the timeliness of claims payment.

3. Efficient Settlement of Claims Cooperation Mechanism

The settlement of claims in the ship-source oil pollution case is the main business of IOPC Funds. In order to quickly grasp the information related to the accident and ensure the smooth implementation of the claim settlement, IOPC Funds, IG Clubs, the International Tanker Owners Pollution Federation (hereinafter referred to as "ITOPF") and other bodies have maintained communication and contact for a long time, and formed a cooperative mechanism for joint investigation and evaluation of claim cases by signing a memorandum of cooperation.

When oil pollution accidents occur in the waters under the jurisdiction of member states, IOPC Funds will immediately actively intervene in the case that it is predicted that the second layer of compensation may be required to start, to investigate cases and assess oil pollution damage together with IG Clubs, and to work closely with them in dealing with claims, so as to effectively coordinate compensation solutions. In the event of a major oil pollution accident, owners' protection and compensation associations involved by IOPC Funds and IG Clubs would establish joint claims offices in the early days after the accident. The two parties jointly appoint ITOPF technical advisers and experts to the oil spill site. On the one hand, it ensures the effectiveness of cleaning measures to minimize the damage caused by oil pollution; on the other hand, it can collect on-site evidence materials, accelerate the submission and processing of claims, and promote the timely and amicable settlement of subsequent compensation disputes.

Since its establishment, IOPC Funds has attached great importance to public information services, striving to provide the most relevant and convenient information to member states, key partners, stakeholders and a wider audience. The carrier of the service not only includes traditional publications and official websites, but also extends to the emerging social media and micro-video. The content of the service covers all fields involved in oil pollution damage compensation, and the relevant information is constantly updated and upgraded with the development and changes of the industry. At the same time, its good public information service system has established a good reputation in the international shipping industry, bringing extensive influence.

Taking the publication as an example, IOPC Funds has successively launched the Claims Guidance Manual and Claims Demonstration Form to provide assistance for oil pollution victims to submit claims, and has also made a corresponding special claim guidance booklet for different projects, such as the cost of cleaning and prevention measures involved in oil pollution damage, economic loss of tourism, economic loss of fishing industry and Mari-culture and aquatic processing industry, and compensation for environmental damage. In addition, in order to promote the unified understanding of the Convention by the member countries, IOPC Funds has also formulated the Guidelines for the Facilitation Measures of Member States' Claims Submitted and Guidelines for the Measures for Closing and Controlling Fishery Waters after Oil Pollution Accidents, Guidelines for Interpretation of Definitions of Ships Applicable to the Convention and other reference documents. Almost annually, the Fund Assembly reviews the publication to ensure compliance with the latest international shipping industry regulations in response to changes in ship-source oil pollution compensation practices and shipping environmental laws and regulations.

5. Comprehensive Damage Compensation

CLC has defined "oil pollution damage", but the specific identification methods and ways of oil pollution damage in the practice of claim settlement have not been clarified in the Convention. In order to promote the consistent interpretation of the definition of the Convention and the common understanding of claim qualification, IOPC funds has formulated specific claim policies and guidelines for the scope of compensation, covering the main compensation objects regulated by the existing legal system. In fact, it also makes a detailed interpretation of the provisions of the Convention to ensure the effective implementation of the international oil pollution compensation system. According to the provisions of the Claims Guidance Manual, the oil pollution damages that the oil pollution victims can claim from IOPC funds include the costs of decontamination and preventive measures, property damage, income loss (indirect loss) caused by property pollution, income loss (pure economic loss) caused solely by pollution, environmental damage cost, etc. For multiple claims arising from the same oil pollution accident, IOPC Funds shall pay in accordance with the principle of equal proportion within the limit of compensation according to the reasonable amount determined, and shall take full account of the scale of the oil pollution accident and the amount of oil pollution damage, so as to determine the amount of compensation each year. For very large oil pollution accidents, the time span of its compensation can reach several decades. For example, the PRESTIGE and HEBEI SPIRIT oil damage claims mentioned above have not been completely closed. In addition, IOPC Funds allows a certain flexibility in the determination of the scope of compensation. To an acceptable extent, IOPC Funds will constantly adapt to the development and changes in the practice of compensation for damage to the global Marine environment, so as to respond to the international community and the governments of member states on the oil pollution damage gradually updated cognition and understanding.

Taking the pure economic loss caused by oil pollution accident as an example, in the compensation case of HEBEI SPIRIT accident on Fund Assembly in April 2017, it was mentioned that employees in the hotel and catering industry near the accident site suffered from the decrease of wages due to the oil pollution accident. According to the policy of IOPC funds at that time, such claims did not meet the requirements of claims

settlement. In the subsequent debate, some representatives of Member States thought that the loss should be classified as pure economic loss, and the director general of the fund decided to review and study the existing claims for loss of employees' income or dismissal due to accidents. After the meeting, the delegations of all members had further discussions on the issue, and suggested that the current claim standards should be modified in accordance with the following principles: "(1) the former employee claimant must be actually employed at the time of the pollution damage; (2) the employer's business activities must be affected by pollution, that is, there is an inevitable causal relationship between the losses and pollution; (3) employees must reduce losses by finding similar alternative jobs in the same geographical area; (4) the time period for payment of compensation shall not exceed the time period for payment of wages by the former employer; (5) the compensation shall be deducted from the social security money received by the claimant to avoid double compensation." The above principles were reviewed and adopted at the Fund Assembly in October 2017, and the decision on compensation for pure economic loss has become the basis for handling similar claims for pure economic loss in the future. It can be seen that IOPC funds has a large flexible operation space for the determination of pure economic loss and other claim items. In this way, it also further expands the scope of ship-source oil pollution damage compensation, to realize more adequate compensation for oil pollution victims under the premise of the maritime compensation liability limitation system.

6. Scientific Risk Management Method

IOPC Funds attaches great importance to its ability of sustainable operation, thus, it has established a set of scientific risk management methods. The joint audit body is responsible for conducting an annual risk assessment of the effectiveness of the Fund's management and financial system and reporting to Fund Assembly. IOPC Funds divides risks into two categories: operational risks and institutional risks, among which operational risks are further divided into five sub-categories, including risks of fund

finance and assessment, risks of institutional governance and management, risks of fund claims, risks of fund security and risks of public information services. In view of the above risks and the measures taken to deal with them, joint audit body will keep track of the daily work and keep close communication with the director general and the Secretariat of the Fund to ensure the stable operation of the whole system.

Taking the 2018 Fund Congress as an example, the joint audit body conducted an assessment of the financial risks caused by the effectiveness of Ship-Source Oil Pollution Compulsory Insurance. In the report, it pointed out that IOPC Funds were exposed to potential financial losses in the accident of the ship-Source Oil Pollution compulsory insurer that was not a member of IG Clubs. According to the data provided by the fund secretariat, the insurer was found in 103 of the 147 cases in which IOPC Funds participated, and no insurer or insurer was found in the remaining 44 cases. Of the 103 cases in which insurers were found, 20 cases had insurers who were not members of IG Clubs, and showed the following characteristics: "(1) The vessels involved are mostly small ships; (2) The proportion of accidents covered by ships by non-IG club members increased constantly; (3) The number of accidents insured by non-IG Clubs accounted for 36.4%, resulting in an economic loss of 8.26 million pounds, accounting for about 1.2% of the total compensation of IOPC Funds. The joint audit body considers it important that ship-owners and their insurers fulfil their obligations under the international oil pollution damage compensation system. The legitimacy of the existence of IOPC Funds would be questioned if they did not comply with CLC insurance terms or if insurers who were not members of IG Clubs took uncooperative actions. According to the Fund secretariat and representatives of member states, although the financial impact of this issue on the Fund is currently limited, it must still be taken seriously. It is necessary to establish an information sharing mechanism for the reliability of insurers from non-IG Club members, or to formulate codes of conduct for insurers and further guidelines for the issuance of compulsory Oil Pollution Insurance Certificates, so as to minimize the adverse impact of ship-source Oil Pollution accidents on IOPC Funds by non-IG Club members.

7. Detailed Strategic Development Plan

The fundamental goal of IOPC funds is to ensure adequate compensation to the victims of ship-source oil pollution. However, with the continuous development of offshore oil transportation industry, the pattern of international oil pollution compensation system is gradually changing. IOPC funds noted that in recent years, the large-scale ship-source oil pollution accidents have declined, but the compensation problems caused by the accidents have become increasingly complex, the importance of environmental protection in public opinion has become increasingly prominent, and the claimants' expectation of full compensation for all types of oil pollution damage is gradually increasing. IOPC funds has developed a detailed strategic development plan to ensure that it continues to operate effectively and fulfill its mission in a changing environment. In addition to the traditional tasks in the field of compensation for oil pollution damage, it also extends to promoting the unified understanding and application of international conventions related to oil pollution damage by Member States. And, its more forwardlooking strategic goal is to focus on the continuous process of the entry into force of the International Maritime Convention on Liability and Compensation for Noxious and Hazardous Material Damage (hereinafter referred to as "HNS Convention").

Since April 2010, IOPC funds has been authorized by the International Maritime Organization diplomatic conference to carry out a series of tasks for the implementation and entry into force of the HNS convention. It is committed to promoting the entry into force of the Convention as soon as possible, and reports the latest progress of the HNS convention at the annual fund conference thereafter. According to the latest work annual report of IOPC funds, as of September 7, 2018, four countries including Canada, Denmark, Norway and Turkey have become parties to the HNS convention. In 2017, the assessed cargo volume of HNS of the above-mentioned countries reached 29426779 tons, accounting for 73% of the total assessed cargo volume of the total account, and the gross tonnage of each Contracting State exceeded 2 million. At present, the entry into force conditions of HNS convention have met one third. The Fund Secretariat

predicts that HNS convention may enter into force in 2020 or 2021. For this reason, HNS assessment cargo reporting system, claim processing mechanism, financial management regulations, HNS fund operation rules, HNS convention conference and preparation of the Secretariat are all included in the strategic development plan of IOPC funds. Considering the successful operation experience of IOPC funds and the work carried out in the early stage to promote the entry into force of HNS convention, the director general of the fund proposes that the Secretariat of HNS fund and the Secretariat of IOPC funds can jointly work in the future.

Thoughts on Perfecting the Mechanism of International Oil Pollution Compensation Funds

The Chinese Oil Pollution Fund has been running smoothly for nearly 7 years, but the number of claims is still very limited currently. While strengthening the follow-up study of IOPC Funds, it is more necessary to learn from its advanced experience and effective practices to promote the continuous improvement of China Oil Pollution Fund system.

To optimize the operation mechanism of the use management structure of Chinese
 Oil Pollution Fund and improve the efficiency of claims settlement of Oil Pollution
 Fund

Although China is a contracting party to the CLC and Fund Convention, the Fund Convention is currently only applicable to the Hong Kong Special Administrative Region. In order to provide more protection for oil pollution damage victims in China, China has established a domestic Oil Pollution Fund based on its national conditions and practical interests. In accordance with the Regulations on Levy and Use of the Chinese Ship-Source Oil Pollution Compensation Fund (hereinafter referred to as "Regulations on Compensation Fund") and The Reply of The Central Compilation Office on The Establishment by The Ministry of Transport of a Center for Settling Claims for Oil Pollution Damage from Chinese Ships, the Oil Pollution Fund shall be

managed and used by the Fund Management Committee, the Fund secretariat and the China Shipping Oil Pollution Damage Claims Center. The fund Management Committee shall be composed of the Ministry of Transport, the Ministry of Finance, the Ministry of Agriculture and Rural Affairs, the Ministry of Environmental Protection, the Ministry of Natural Resources, the Ministry of Culture and Tourism, and the representatives of major oil shippers who have paid into the Oil Pollution Fund. The Secretariat of the fund is an organization under the fund management committee, which is responsible for specific compensation, compensation and other daily affairs. Under the leadership of the Fund Management Committee and the Fund secretariat, CSSC provides technical services and support for oil pollution damage investigation and verification and specific claims settlement.

At present, supporting documents related to the internal operation of Chinese Oil Pollution Fund include the Charter of the Ship-Source Oil Pollution Compensation Fund Management Committee, the Rules of Procedure of the Ship-Source Oil Pollution Compensation Fund Management Committee and the Expert Management Measures of the Ship-Source Oil Pollution Compensation Fund, and the Fund Management Committee holds regular meetings every year to review claims cases. Since the Chinese Oil Pollution Fund is managed by government-managed funds, the compensation of Oil Pollution Funds needs to strictly follow the complete process of government budget preparation and expenditure. However, the nature of government-managed funds leads to low efficiency in the compensation expenditure of Oil Pollution Funds. Compared with the relatively complete supporting documents and efficient operation and management of IOPC Funds, the current internal rules and regulations of Chinese Oil Pollution Fund are not scientific and reasonable enough, and the operation of Chinese Oil Pollution Fund has a strong administrative color. It suggests to further optimize and improve the internal operation mechanism of the Oil Pollution Fund, refine the division of authority between the decision-making level and the executive level of the fund management committee, and establish a hierarchical review system for specific matters such as claims cases to further improve the claim efficiency of the Oil Pollution Fund.

2. To Sort Out Ship-Source Oil Pollution Accident Data and Carry Out Risk Management Assessment of Its Compensation System

IOPC funds always pays attention to the collection and sorting of data, including the relevant data of assessed oil, claim amount, ship-source oil pollution accident loss of Member States, and regularly carries out statistical analysis, so as to provide necessary support for policy-making. It is based on the accumulation of long-term case data that the Fund Secretariat can assess the risks brought by the compulsory insurance system of ship-source oil pollution. With scientific and objective conclusions to guide the continuous adjustment and improvement of the overall system, a dynamic balance situation is formed between data management and system revision. In contrast, the operation time of the Chinese ship-source oil pollution compensation system is relatively short, and the total amount of offshore oil transportation, the scale of fleet transportation and large oil loading and unloading berths are among the top in the world. This also brings a huge potential pollution risk to the marine environment, because in case of a major ship-source oil pollution accident, it will threaten the capital security of the Chinese Oil Pollution Fund. However, the "M/V SANCHI" explosion pollution accident in the East China Sea is an obvious example, which is the real challenge of the ship-source oil pollution damage compensation system.

It is suggested to systematically sort out the situation of China's offshore oil transportation and compensation for ship-source oil pollution accidents, especially the comprehensive collection of relevant original data, and fully understand the overall number of ship-source oil pollution accidents in the waters under China's jurisdiction, the losses caused and the compensation of the victims, to find out the gap between the degree of oil pollution damage and the level of compensation in China, and is also a comprehensive test of the implementation of the ship-source oil pollution damage compensation system in China. Based on the comparative analysis of the above data, the risk management assessment of Chinese ship-source oil pollution compensation system is carried out.

3. To Expand the Compensation Scope of Oil Pollution Fund and Gradually Realize the Integration with the International Oil Pollution Compensation Fund System

IOPC funds has a comprehensive scope of compensation for oil pollution damage. In addition to the property damage regulated by the traditional maritime tort law, IOPC funds has also established a series of effective compensation standards for the pollution removal cost, pure economic loss and natural resource damage which are more controversial in the current legal system through compensation practice. Its provisions on the scope of oil pollution damage compensation object are relatively perfect, and there is no demand for compensation sequence for different claim items. Provisions of the Chinese Supreme People's Court on Issues in the Dispute over Ship-Source Oil Pollution Compensation, stipulates that the scope of compensation for the damage of ship-source oil pollution includes the damage to the property outside the ship caused by the ship-source oil pollution accident, the loss of income caused by the damage, the loss of income caused by the damage to the environment, and the cost of reasonable recovery measures to be taken for the polluted environment. According to the international customary practice and domestic judicial interpretation, the types of losses that oil pollution victims can get compensation are wide and diverse, and all claims are equally compensated. However, when Chinese oil pollution victims file a claim to the Oil Pollution Fund, they are not able to get compensation for all the above oil pollution damage, and they need to be compensated according to the types of claim items and in order.

The provisions of the Regulations on Compensation Fund on the compensation scope of the Oil Pollution Fund exclude the income loss caused by property damage to individuals or units and the expenses for reasonable recovery measures to be taken, and only include the direct economic losses caused by fisheries and tourism and the expenses for restoration measures already taken. The China Oil Pollution Fund will only compensate direct economic losses caused by ship-source oil pollution, and will

not compensate any indirect economic losses or pure economic losses that the oil pollution victims can claim against the ship owners. In the claim for ship-source oil pollution accident of SHANHONG 12 accepted by the Oil Pollution Fund in 2017, the interest loss, legal cost, management fee and other indirect economic losses applied for compensation by the three claimants were eliminated in the claim accounting process of the fund. In the case of "M/V TRANS SUMMER" ship-source oil pollution claims filed by the Oil Pollution Fund in 2018, hundreds of fishermen cannot be compensated by the Fund for their fishing losses, which are not direct economic losses. In addition, in the case of direct economic losses to fisheries and the costs of measures to restore damage to the Marine environment, the order of reimbursement requires that compensation be made against the remaining available limits only after the clean-up costs have been paid in full. Therefore, the indemnity scope of China Oil Pollution Fund is not only narrower than that of IOPC Funds, but also inconsistent with the stipulations on the indemnity scope of ship owner in the judicial interpretation.

The provisions on the scope of compensation in China's current Oil Pollution Fund system more reflect the protection of oil shippers, and to some extent, they are encroachment on part of the interests of oil pollution victims. However, in the long run, the imbalance between ship owners and Oil Pollution Fund compensation is also detrimental to the development of the shipping industry. It is suggested to amend Article 17 of Regulations on Compensation Fund to gradually expand the scope of compensation of Chinese Oil Pollution Fund and include indirect economic loss, pure economic loss and other items, to cancel the requirements on the priority of compensation, and finally realize the unification with the ship owner in the compensation scope, and integrate with the international oil pollution compensation foundation system, so as to give full play to the supplementary compensation role of Oil Pollution Fund for oil pollution victims.

4. To Increase the Compensation Limit of Chinese Oil Pollution Fund and Deal with the Risk of Major and Very Large ship-source oil Pollution Accidents

The compensation limit of Oil Pollution Fund stipulated in regulations on compensation fund is calculated based on the compensation situation of oil pollution damage of ships occurred in China from 1973 to 2009, referring to the ratio between the maximum compensation limit of IOPC funds and the maximum compensation limit of ship owners, which is more consistent with the compensation situation of oil pollution damage of ships at that time. However, in recent years, the oil pollution accidents of "TASMAN SEA", "MSC ILONA", "MAXI MA", "CMA CGM FLORIDA" and "SANCHI" occurred in China, of which, the claim amount of oil pollution damage exceeded 100 million yuan. In particular, the claim amount of the pollution accident of "SANCHI" even reached 1 billion yuan.

It is suggested that the compensation limit of Oil Pollution Fund should be adjusted according to the compensation demand of ship-source oil pollution accident, so as to improve the ability of Oil Pollution Fund to deal with major and very large ship-source oil pollution accident. Considering that the establishment time of Chinese Oil Pollution Fund is short and the total scale of the fund is limited, it is not suitable to adjust the compensation limit to too high limit by referring to IOPC funds, but it is suggested to adjust the compensation limit of Oil Pollution Fund for a single oil pollution accident to 200 million yuan. The reasons are as follows: Firstly, the Regulations on the Prevention and Control of Marine Environmental Pollution by Ships (hereinafter referred to as the "Regulations on Prevention and Control of Pollution") set the accidents with a direct economic loss of 100 million to 200 million yuan as major class ship pollution accidents, and those with a direct economic loss of more than 200 million yuan as major and very large ship pollution accidents. Considering that the oil pollution damage expenses paid by the Oil Pollution Fund include not only the direct economic losses but also the reasonable profit losses, among which the oil pollution damage expenses of major oil pollution accidents are likely to exceed 200 million yuan, and the maritime compensation liability limit of the ship owner is uncertain due to the gross tonnage, ship type and cargo type of the involved ships, the compensation limit of the Oil Pollution Fund for a single accident is set at 200 million yuan, which can basically meet the compensation needs of major and very large ship-source oil pollution accidents. Secondly, relevant data show that VLCC, VLCs and large-scale cruise ships are the most important ships in the world with a total tonnage of 200000-260000. According to the maritime law of the people's Republic of China (hereinafter referred to as the maritime law) on the limitation of the liability of the ship owner for maritime claims, the limitation of the liability for maritime claims of the ships in this tonnage range is about 20 million to 26 million SDRs, which is about 190 million to 240 million yuan, the compensation limit of the Oil Pollution Fund for a single accident is set at 200 million yuan, which is in line with the principle of "the ship owner and the oil cargo owner jointly bear the liability for oil pollution damage" as stipulated in the Marine Environmental Protection Law of the People's Republic of China (hereinafter referred to as the "Marine Environmental Protection Law").

5. To Strengthen Cooperation and Exchange with the International Oil Pollution Compensation Fund, and Share the Practice of Chinses Ship-source Oil Pollution Compensation with the International Community

In recent years, China has made great efforts to implement the CLC and the International Convention on Civil Liability for Fuel Pollution Damage. By promulgation and implementation of the Regulations on Pollution Prevention and Control, measures for Civil Liability Insurance for Ship Oil Pollution Damage, and Regulations on Compensation Fund, China has transformed relevant provisions of the Convention into its domestic law, and some provisions are even stricter than those of the Convention. In the current revised Maritime Law of the People' Republic of China (Draft for comments), the chapter of "ship-source oil pollution liability" is added, which comprehensively and systematically regulates the legal system of ship-source oil pollution compensation, In addition, the pollution damage caused by persistent oil, marine fuel oil and toxic and harmful substances transported by sea shall be included, which shows that the Chinese government attaches great importance to the protection of the marine environment, and at the same time fully embodies the responsibility of

China as a major maritime country.

IOPC funds, in its circular No. 2 of 2016, advocates that Member States share relevant domestic legislation on compliance, so as to promote communication and exchange between the competent authorities of Member States and the Fund Secretariat. At the 2018 Fund Assembly, when considering the issue of "Implementation Status of Fund Convention", the delegation of the Canadian government introduced the significant improvement of its domestic legislation on the ship-source Oil Pollution Fund system for the reference of Member States. It is suggested that the competent authorities of the Chinese government should sort out the relevant systems and latest legislative developments of the Chinese ship-source oil pollution compensation, and share the practices in the field of Chinese ship-source oil pollution compensation with the international community through the platform of the international oil pollution compensation fund conference.

6. To Learn from the Mature Experience of International Oil Pollution Compensation
Fund and Enrich the Service Measures of Chinese Ship Source Oil Pollution
Compensation Fund

The IOPC funds provides a relatively complete set of information service system for Chinese ship source oil pollution victims, which has a variety of service forms, rich content, and high consistency and consistency, making their professional image in the industry very distinct. In addition, IOPC funds has established a good interactive relationship with the relevant professional organizations in the international shipping industry during its annual operation. At present, 9 intergovernmental organizations, including the Baltic Marine Environment Protection Organization, the Mediterranean Regional Marine Pollution Emergency Response Center, and 16 non-governmental organizations, including the International Maritime Commission, the International Marine Insurance Union and the International Association of Independent Tanker Owners, have been granted observer seats. In addition, the operation system of the international oil pollution compensation fund will be widely publicized through irregular seminars and public welfare training courses with the above institutions. In

the core claims business area, IOPC funds and Ig clubs jointly carry out the investigation, verification and evaluation of the case under the framework of the memorandum of cooperation between the both parties, and their efficient and fast working methods enjoy good reputation in the industry.

The service measures of the China Oil Pollution Compensation Fund are somewhat weak, and manuals such as the Guidelines for Claims from the Ship Oil Pollution Compensation Fund and the Handbook for Claims from the Ship Oil Pollution Compensation Fund have been launched to provide assistance and guidance for oil pollution victims' claims. In addition, the China Oil Pollution Fund organizes special seminars on hot issues in the field of ship-source oil pollution compensation every year, and invites experts and scholars at home and abroad to exchange views and share experiences. In June 2018, the China Oil Pollution Fund was authorized to translate and publish the "International Oil Pollution Compensation Fund Claim Manual", which received a good response in the domestic shipping industry.

7.To Continuously Track the Entry into Force Process of HNS Convention and Plan China's Response Strategies and Schemes in Advance

HNS convention is the last link of international pollution liability and compensation system, and its entry into force has always been the focus of IOPC funds. At the recent fund conference, representatives of IMO also pointed out that promoting the entry into force of HNS convention has been an important issue in future work. In view of the optimistic process of the entry into force of the HNS convention, the Secretariat of the fund has started to prepare for the first HNS fund conference. The director general of the fund also proposes to establish a communication working group composed of countries that have joined the Convention, countries that have the intention to make a treaty, and other stakeholders to be responsible for the promotion and implementation of specific work.

China is a big country of HNS cargo transportation by sea, and the entry into force of HNS convention is bound to have a great impact on Chinese shipping. China should keep track of the progress of HNS convention, participate in the communication

working group set up by IOPC funds in advance, actively participate in relevant inter meeting discussions, learn the advanced international practices on HNS pollution compensation legislation, consider China's response strategies in advance, and carry out research on China's HNS cargo transportation in due time, to provide data support for the research and establishment of domestic HNS compensation system, and to build a complete legal system of China's ship pollution compensation.

Analysis of the Above Problems Based on China's Practical Experience and Relevant Foreign Practices

In order to analyze the above problems, the author studies the practical experience in China and relevant practices in foreign countries so as to find solutions.

1. To Increase the Compensation Limit of the Fund

It is imperative to increase the fund compensation limit to give full play to the role of the fund. In order to determine the new compensation limit, the author looks for the basis from the international conventions, Chinese laws and regulations and the provisions of foreign funds.

(1) The new compensation limit shall be determined in accordance with the direct economic loss data corresponding to the level of Pollution accidents caused by Ships as stipulated in the Prevention of Pollution from Ships Marine Environmental Management Regulations.

According to Article 35 of Prevention of Pollution from Ships Marine Environmental Management Regulations issued by the State Council, the classification of ship pollution accidents is carried out according to factors such as oil spill and direct economic loss caused by accidents. As far as the standard of direct economic loss is concerned, those with direct economic loss less than 50 million belong to general ship pollution accidents; those with direct economic loss more than 50 million but less than

100 million belong to serious ship pollution accidents; those with direct economic loss more than 100 million but less than 200 million belong to major ship pollution accidents; those with a direct economic loss of more than 200 million yuan are extremely serious ship pollution accidents. Absolutely, in practice, in addition to direct economic losses such as property losses, the actual losses suffered by the victims of ship oil pollution should also include some reasonable loss of profits. Hence, all losses caused by major ship pollution accidents may exceed 200 million yuan. At present, the compensation scope of the fund is only limited to direct economic losses, thus, for the fund, its compensation scope is basically consistent with the scope of direct economic losses specified in the Prevention of Pollution from Ships Marine Environmental Management Regulations, that is to say, the compensation limit of the oil pollution fund can be calculated by referring to the above-mentioned direct economic loss standard.

Whether in China or globally, the extremely serious ship pollution accident is a rare small probability event, so the fund can be positioned to basically meet the demand for compensation for the major ship pollution accident or below. The direct economic loss due to the serious pollution accidents caused by ships shall not exceed 200 million yuan. According to the China's principle of "Joint Liability of Ship Owner and Cargo Owner" 3, it is estimated that 50% of the ship-source oil pollution liabilities shall be borne by each cargo owner and ship owner respectively, the cargo owner's liability for damages will not exceed 100 million yuan.

The method of the cargo owner to take responsibility is to pay the oil pollution fund, and supplement the compensation for the insufficient part of the ship owner's compensation through the oil pollution fund. The Oil Pollution Fund, that is, the compensation limit for cargo owners for major and below oil pollution accidents does not exceed 100 million yuan.

[Plan 1] It is suggested that the indemnity limit of the Oil Pollution Fund should be set at 100 million yuan for a single oil pollution accident.

(2). To determine the limit of compensation in accordance with the relevant provisions on limitation of liability for maritime claims.

At present, most of the world's top ten gross tonnage ships are VLCC, VLCS and large cruises, and according to relevant data, their gross tonnage is between 200,000 and 260,000 gross tons. In case of fuel oil pollution on these ships, the limitation of liability for non-personal injury and death calculated in accordance with Article 210 of the Maritime Law, the limitation of liability for non-personal injury and death on the ships with a gross tonnage of 200,000 to 260,000 is about 20 to 26 million SDR, and the maximum amount after conversion is about 200 million yuan.

As pollution liability generally belongs to restrictive creditor's rights, ship owners can enjoy the above limitation of maritime compensation liability. According to the abovementioned principle of "Joint Liability of Ship Owner and Cargo Owner", the compensation limit of oil pollution fund can be compared with the maximum liability of ship owners, that is, the compensation limit for a single oil pollution accident of ships is 200 million yuan.

In special cases, such as VLCC sustained cargo oil spill, it can also refer to the practices of the international oil pollution fund and the United States oil pollution fund to increase the compensation limit of the fund, so as to meet the needs of compensation for the damage caused by oil pollution accidents of particularly significant ships. In special cases, the compensation limit of the fund can be determined by the following methods. Article 5 (1) of the International Convention on Civil Liability for Oil Pollution Damage, 1992(hereinafter referred to as "CLC"), stipulates the limit of liability of oil tanker owners carrying persistent oil cargoes for oil pollution damage caused by oil spills from tankers. It is stipulated that the total liability limitation of ship owners shall not exceed S87.77 million. If the oil pollution damage caused by a ship exceeds the ship owner's liability limit, and the oil pollution damage occurs within the territory of a contracting state of the Fund Convention, the International Oil Pollution Fund will compensate for the damage.

According to the provisions of the first item in fourth paragraph of Article 4 of the International Convention on the Establishment of An International Fund for Compensation for Oil Pollution Damage, 1992 (hereinafter referred to as the "Fund

Convention"), the sum of the international oil pollution fund plus the compensation actually paid by the ship owner in accordance with the CLC shall not exceed 203 million SDR for any oil pollution accident. For example, if a VLCC caused oil pollution damage, according to the CLC, the ship owner's liability limit is 89.77 million SDR. Then the compensation paid by the international oil pollution Fund does not exceed 113.23 million SDR, equivalent to nearly 1.1 billion yuan.

The compensation limit of the Oil Spill Liability Trust Fund (hereinafter referred to as "OSLTF")4 is US \$1 billion. According to relevant data released by the world bank, in 2017, the per capita national income of the United States was 58270 US dollars, and that of China was 8690 US dollars5. The compensation limit of the fund and the compensation limit of the United States fund are converted according to the ratio of the per capita gross national income of the United States and the per capita gross national income of China, and the compensation limit of the fund is about 1.02 billion yuan. Therefore, with a comprehensive reference to the limit of compensation from the International Oil Pollution Fund and the limit of compensation from the United States Fund, it is suggested that the limit of compensation from the Fund could be increased to 1 billion yuan under special circumstances (such as a particularly serious oil pollution

[Plan 2] It is proposed that the compensation limit of the foundation fund for the single oil pollution accident should be adjusted to 200 million yuan, and that the limit could be raised to 1 billion yuan for a very large ship-source oil pollution accident.

accident from ships).

(3). To determine the new compensation limit by referring to the compensation limits of relevant foreign funds.

Considering that in recent years, the claim amount of oil pollution accidents of ships has exceeded 100 million yuan, especially the claim amount of pollution accident of SANCHI has exceeded 1 billion yuan, in order to meet the actual compensation demand of oil pollution accidents of ships in China, we can learn from the operation mode of oil pollution foundation of ships in Canada (the limit of the fund in this country is the

remaining fund in the fund account), adjust the fund compensation limit to 1 billion yuan or the remaining balance of the oil pollution fund at that time, and take the lower as the standard.

[Plan 3] It is suggested that the compensation limit of the oil pollution fund for a single oil pollution accident should be adjusted to 1 billion yuan or the remaining balance of the oil pollution fund at that time, and take the lower as the standard.

The Regulations may consider one of the above three plans as the new compensation limit of the Fund.

- 2. To Expand the Use of Fund
- (1). To expand the scope of compensation Fund
- (a) The scope of ship owner's/insurer's compensation in China's judicial practice

According to the provisions on Issues Concerning the Trial of Ship-source oil pollution Dispute Cases (hereinafter referred to as "Judicial Interpretation of Oil Pollution") issued by the Supreme People's Court of China in 20116, the ship-source oil pollution damage compensated by the ship owner not only includes the cost of preventing or mitigating the ship-source oil pollution damage, the direct economic loss of property damage other than the ship caused by the ship-source oil pollution accident, but also includes the income loss caused by the oil pollution and the cost of reasonable recovery measures to be taken for the polluted environment.

(b) Scope of compensation from the International Oil Pollution Fund

The relevant conventions and manuals of the International Oil Pollution Compensation Fund also stipulate that oil pollution damage from ships includes expenses for cleaning and preventive measures, property losses, income losses caused by property pollution, income losses caused solely by pollution, and environmental damage expenses. It can be seen that both China's judicial interpretation and relevant international conventions

are relatively consistent in the scope and type of compensation for ship oil pollution damage. Moreover, in addition to direct economic losses such as property loss, indirect economic losses such as income loss are also included. The scope of compensation is extensive, varied and adequate.

(c) To expand the analysis of China's fund compensation scope

The main considerations for the China Fund not to pay for the loss of income caused by property damage and the cost of reasonable restoration measures to be taken are: the fund is levied from scratch and the levy standard is low, and the initial fund size is small, and provides a narrow scope of compensation for as many compensation cases as possible. With the increase of time, the foundation of the fund has been thickening, and the total plate has accumulated to a certain scale. In practice, there are also many voices that require the oil pollution fund to expand the scope of compensation and fully compensate the oil pollution victims. In the current environment, it is necessary to adjust the compensation scope of the oil pollution fund according to the actual situation.

(2) To expand the geographical scope of the fund

The provision that the fund does not compensate for ship-source oil pollution damage suffered by inland river waters is no longer suitable for the current situation. The main reasons are:

The risk of oil pollution accidents in inland waters is greater and the demand for compensation is stronger. There are a large number of inland rivers in China, with mixed water and roads. The Yangtze River, Pearl River and other major water systems gather many large cities and populations in China. There are many water intakes along the coast, and there are many ecologically sensitive waters. Although the amount of oil spilled from collision, stranding, sinking and other accidents is small, the loss is not small. There have been cases in which the polluted water area is close to the water

intake, which seriously affects the normal life of people along the coast. For example, in April 2011, an oil tanker in Zijiang River leaked, causing serious oil pollution at the water intake.

At present, inland water transport ships are scattered, small, disorderly and large in number. Most of the ship owners are self-employed, and their compensation ability is generally poor, which makes it difficult for the oil pollution victims to get compensation after the oil pollution accident. In the above-mentioned SHANHONG 12, the ship owner who caused the accident has poor compensation ability and has not insured the ship oil pollution insurance. Even if the oil pollution victim holds the judgment of the court, he cannot get compensation from the ship owner who caused the accident.

Some of the ship-source oil pollutions of inland rivers in China come from ships on the sea. Because many inland rivers in China are connected with the sea, and oil pollution has mobility, a ship-source oil pollution accident may not only cause oil pollution damage in the sea area, but also cause oil pollution damage in inland rivers. The oil pollution fund only pays for the oil pollution damage caused by the accident in the sea area, and the practice of not paying for the oil pollution damage suffered by the inland river is "compliant, but unreasonable", which is difficult to be accepted by the oil pollution victims.

Therefore, to expand the geographical scope of fund application is an important part of the revision of Regulations.

(3) To perfect the system of compensation in advance

In order to make the victims of pollution damage get compensation as soon as possible, the international oil pollution fund implements the system of compensation in advance. For example, in the case of "M / V HEBEI SPIRIT", the International Oil Pollution Fund has repeatedly maintained 35% of the proportion of compensation in advance.7

On the contrary, China's fund positioning is supplementary compensation in essence and procedural sense. After the victims of ship-source oil pollution exhausted all the ways of claim, they still can't get full compensation to claim from the fund, and the starting point of the system is more fairness. However, in practice, many victims of oil pollution are unable to get compensation in time due to the large amount of oil pollution damage and the long litigation time, which leads to economic difficulties. In order to give full play to the role of the fund, it is necessary to refer to the practice of the International Oil Pollution Fund to design the system of compensation in advance, improving efficiency while taking into account fairness, and helping the victims of shipsource oil pollution to overcome difficulties.

(4) To clarify the fund compensation subrogation right

Whether the person responsible for the oil pollution evades compensation or the victim of ship-source oil pollution benefits excessively, it will damage social equity. In order to balance the interests of oil pollution victims, ship-source oil pollution liability person and oil pollution fund in practice, the fund should have the right of subrogation, so that it can replace the status of the oil pollution victim who has obtained compensation from the oil pollution fund after performing the obligation of first compensation, and file a claim against the party who has not fulfilled the legal liability, so that the ultimate liability person for oil pollution damage, that is, the initiating party, will bear the final liability for compensation.

The International Oil Pollution Fund and other similar foreign funds all enjoy the legal right of subrogation. In contrast, although there are similar provisions in Article 26 of the regulations, the authorized body of the fund management committee is the fund management committee. In practice, the fund management committee is a deliberative organization composed of representatives of nine member units of the oil pollution fund, which does not have an independent legal personality and cannot exercise the right of subrogation as an independent civil subject. It is a problem that should be solved in the

revision of regulations to determine the qualified subject of exercising the right of subrogation.

Suggestions for Revision of the Chinese Regulations

In conclusion, it can be seen that the revision of regulations should focus on improving the fund compensation limit, expanding the fund compensation project and geographical scope, and improving the system of fund first compensation and subrogation.

- (1) Considering the actual situation of China's ship-source oil pollution damage and SANCHIi's compensation demand, it is suggested that the Regulations shall adopt the proposal of scheme II to adjust the fund's compensation limit for a single oil pollution accident to 200 million yuan, and the limit can be increased to 1 billion yuan for those very large ship-source oil pollution accidents.
- (2) It is suggested that Regulations shall refer to the provisions of judicial interpretation to expand the scope of fund compensation. The indirect economic loss (including reasonable profit loss and income loss) caused by the ship-source oil pollution accident and the reasonable cost of recovery measures to be taken for the polluted environment are included in the compensation scope of the oil pollution fund, so as to realize the unification of the compensation scope between the oil pollution fund and the accident owner / insurer.
- (3) It is suggested that Regulations shall expand the scope of application of the fund from pure sea area to sea area and navigable waters connected with the sea, so as to better protect the water environment protection nationwide and protect the legitimate rights and interests of the victims of ship-source oil pollution.
- (4) It is suggested that the Regulations shall establish a system of early compensation for the very large ship-source oil pollution accident, and for the case that it is determined that the oil pollution fund will be used to pay compensation, the oil pollution fund can, on the basis of preliminary assessment of the loss amount of the oil pollution victim, cooperate with the ship owner / insurer of the accident to give the oil pollution victim

a certain proportion of the early compensation fund. The practice of the international oil pollution fund shows that it can effectively help the victims to resume production and normal life as soon as possible, and reduce the adverse impact of the long claim period on the victims.

(5) It is suggested that the Regulations shall authorize the claims settlement center with independent legal personality to specifically exercise the fund subrogation right, and specify the method to turn in the compensation, so as to ensure the legitimate and normal performance of the oil pollution fund subrogation right.

With the development of social economy, the increasing demand for environmental protection and the increasing environmental risk in China have formed a new contradiction. In this context, on the one hand, it is necessary and capable for the fund to include more ship-source oil pollution victims into the benefit scope of the fund by expanding the geographical scope of the fund, increasing the compensation limit for a single ship-source oil pollution accident, increasing the compensation items, and formulating the current compensation system, so as to provide a more adequate financial guarantee for the water environment protection in China. On the other hand, the fund should also improve the existing subrogation system to better protect the rights of the oil pollution fund, and ensure that the principle of "who pollutes, who pays" pollution damage compensation is implemented, so as to achieve the unity of efficiency and fairness of fund compensation.

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