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### SHANGHAI MARITIME UNIVERSITY WORLD MARITIME UNIVERSITY



Shanghai, China

# Research on the regulation problem of the integration of Inland shipping in the Yangtze River Delta

By

#### **XIONG YIYANG**

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

## In MARTIME AFFAIRS

**International Transport and Logistics** 

2020

### **DECLARTION**

I certify that all the material in these research paper is not my own work has been identified, and that no material is included for which a degree has previously been conferred on me.

The contents of this research paper reflect my own personal views, and are not necessarily endorsed by the University.

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Supervised by:
Supervisor's affiliation.

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### **ABSTRACT**

### Title of research paper: Research on the regulation problem of the integration of Inland shipping in the Yangtze River Delta

Degree: MSc

In 2018, China proposed a strategy for the integration of the Yangtze River Delta and upgraded it to a national strategy. Inland river transportation is an important means of transportation for urban development. Integrate the management of the Yangtze River Delta River, formulate corresponding laws and regulations, and improve the management efficiency and market order of the Yangtze River Delta River. It is bound to play a positive role in the integration of the Yangtze River Delta and economic development. This paper mainly uses the literature analysis method and comparative analysis method, through analysis of Chinese and foreign literatures, to find out the main problems of management institution formulation and management regulations in China's inland river management, and then uses the comparative analysis method to carry out China's inland river shipping management and the EU In comparison, it proposes a new idea of applying the more successful management methods of the European Union to the integrated management of inland shipping in the Yangtze River Delta of China.

**Key words: Regulation, Inland Shipping Management, Integration, Shipping Market Supervision, Comparative analysis** 

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### 1.Introduction

### 1.1. Background of this dissertation

The Yangtze River Delta is rich in inland river resources and densely packed with water networks, which has unique advantages in developing inland shipping. And in the report of the 19th National People's Congress of the Communist Party of China, put forward the strategy of implementing coordinated regional development and establish a more effective new mechanism for coordinated regional development. The Yangtze River Delta region is one of the most dynamic, open, and innovative regions in China. It is an important intersection between the "Belt and Road" and the Yangtze River Economic Belt. It has a pivotal strategic position in the overall situation of national modernization construction and the all-round opening-up pattern. In the context of the country's vigorous promotion of economic integration in the Yangtze River Delta region, optimization of the regional development environment, reduction of development costs, and improvement of overall competitiveness, the first problem is to optimize the regional transportation network and integrate transportation resources. And inland navigation is an indispensable means of transportation for building cities and economic development.

Inland water transportation can reduce production transaction costs. Inland waterway shipping has the characteristics of large volume, low energy consumption, low cost, etc. The increase in transportation volume has brought about a reduction in transportation costs. Although China's water transportation costs are higher than those in foreign countries due to factors such as the class of inland waterways, it is still much lower than other transportation methods. It is estimated that the current cost of inland water transportation in the Yangtze River Delta is about 1/2 of that of railway transportation, and 1/3 of road transportation is the

most economical mode of transportation.

Efficient and strict supervision by government departments is the basis for a good development of inland waterway transport(IWT). However, there are still some problems in IWT management in the Yangtze River Delta region. For example, the Inland River Basin of the Yangtze River Delta covers three provinces and Shanghai, making it difficult for the IWT market Control. With regard to these issues, I conceived whether we can learn from the precedent of the European Union and set up a regional management organization similar to the Central Committee of Rhine Shipping to introduce an integrated supervision policy for inland shipping in the Yangtze River Delta and lay a solid foundation for the future development of inland shipping integration in the Yangtze River Delta.

### 1.2. The purpose of the dissertation

This article compares the current problems of inland waterway shipping in the Yangtze River Delta with relevant issues in the European Union and draws on some EU practices to formulate a more comprehensive regulatory policy for the integration of inland waterway shipping in the Yangtze River Delta.

The core idea of this article is to centralize and integrate the Yangtze River Delta waterway system currently distributed in Zhejiang Province, Anhui Province, Jiangsu Province, and Shanghai, and set up a specialized management organization to formulate standards for shipping companies and ships Entry policies and related management laws. The purpose of this article is to demonstrate the core idea through the analysis of this article.

#### 1.3. Research methods

This article mainly uses literature analysis and comparative analysis. The literature analysis method mainly analyzes and proposes articles that have deficiencies in the management of inland river shipping in China, and leads to the main problems to be solved in this article. Later, by analyzing the similar problems encountered by the European Union in the past development, what kind of regulations are introduced to regulate? Applying this management model or regulations to China's Yangtze River Delta can provide a new solution to the current problems. The comparative analysis method is to compare the differences between the current administrative settings and regulations of China and the EU to apply the EU's more advanced methods to China's inland water management.

### 1.4 Literature Review

The idea of unified management of inland rivers can be traced back to earlier *The Regime of the International Rivers: Danube and Rhine* by Joseph P. Chamberlain(1923), In this article Joseph list the Danube and the Rhine as two examples ,it mainly describes the positive role that the free shipping of these two rivers can play in the development of Europe. However, at that time, the European Union had not yet been established, and the management policies and related laws of the Rhine and Danube as rivers flowing through many countries have not been completely unified. Later,Louis B. Wehle.(1946) wrote in: *International Administration of European Inland Waterways*, saying that "Gaius and Charlemagne and President Truman seem to be working hand in hand across the centuries to bring

about coördination of European inland waterways. Under the law of the Roman Empire such waterways, when constituting or crossing international boundaries, were free to use by all nations within the Empire. Since 1815, as we shall presently see, there have been successive organized attempts, mostly unsuccessful, to revive and apply this principle of freedom of navigation of the Roman Law on the Rhine, the Danube, and elsewhere."The article proposes that relevant regulatory agencies should be established to achieve free shipping, and mentioned the emergency agencies that cooperated with the army at the time, the European Central Inland Transport Organization responsible for the restoration and coordination of land and water inland transportation. With the establishment of the European Union, the policies and rules of inland rivers that run through many countries have also been unified by the European Commission and the Council of the European Union. Biljana-Činčurak-Erceg. (2018) .Legal Framework of European Inland Waterways and Croatian Legislation on Inland Waterways Navigation – Problems of Non-Harmonized Rules mention, Impact of various provisions on EU inland waterway shipping.

So far, I have come up with an idea. If, like the European Union, unified management of inland shipping in a region is feasible in China?

If regional integrated river navigation management is to be carried out in China, the Yangtze River Delta should be the most suitable region. One is the Yangtze River Delta, where many inland rivers are suitable for the development of inland navigation. The second national policy emphasizes the need to vigorously develop the integration of the Yangtze River Delta. Some scholars on the integration of the Yangtze River Delta have also started research.

Liu Hui,(2002), Study on the Improvement Policy of EU Internal Shipping Structure, Expounded the advanced aspects of EU's management of IWT and analyzed the feasibility and rationality of its use in China. Zhang

Ming(2004), Research on Several Issues of Shipping Competition Legislation, it analyzes the differences between EU shipping competition legislation and China's shipping competition legislation, and provides a reference for the revision of China's shipping law. If the unified management of inland shipping in the Yangtze River Delta must be supported by relevant laws. Yang HuiFang(2004), Put forward that if we want to develop the Yangtze River Delta economic integration, we must first develop the inland shipping industry. Wang ChuanXu(2018), Thoughts on the Paths and Countermeasures of Port Integration in the Yangtze River Delta under the New Situation, mention the importance of rationally planning the integrated port group in the Yangtze River Delta, and mentioned that the system of each port should be unified with the policy, and inland navigation needs to improve the market-oriented operation mechanism of the enterprise. The realization of all this requires the premise of reasonable management and policy implementation.

## 2.The status and problems of inland waterway shipping regulation in the Yangtze River Delta

### 2.1 Analyze the problems of inland shipping in Yangtze River Delta

At present, China has not put forward the idea of unified management of the Yangtze River Delta River, so this chapter will analyze the current problems in the regulation of rivers in China, and by the way, the current regulatory and management models may have a negative impact on the integration of the Yangtze River Delta. . Only by identifying the problem and comparing it with successful cases in the world can we get better improvement measures. The following will show the regional scope of the Yangtze River Delta and the inland waters network.



Picture 1. Yangtze River Delta



Picture2.Main inland waterway network in the Yangtze River Delta

## 2.2 Status and Problems of Establishing Inland Waterway Shipping Management Institutions in the Yangtze River Delta

To form a perfect inland shipping market is inseparable from management, and the management agency decides how to manage. If there is a problem in the setting and division of labor between the management bodies of the inland shipping market, it will definitely make the management of the inland shipping market chaotic.

- 1. Establishment of China's inland shipping market management agency
- At present, the basic situation of the establishment of China's inland shipping market management institutions is:
- (1) As the Ministry of Transport of the State Council, the Ministry of Transport is in charge of the inland shipping industry across the country. Its main functions include: formulating the development strategy and guidelines of the inland shipping market, development plans, mid- and long-term plans, and supervising their implementation, maintaining fair competition in the inland shipping industry Order, responsible for the construction and maintenance of water transportation infrastructure
- (2) The transportation departments of local people's governments at all levels directly or through their affiliated shipping management departments implement the management of shipping affairs in the region. In addition to the direct management of the provincial transportation department in Guangdong Province, in other water network areas, at the provincial level The people's government's transportation department has a shipping management department to specifically implement waterway transportation management in the local area.
- (3) The setting of the shipping management organization of the transportation authority of the local city and county people's government is basically the same as that of the provincial people's government, but in Anhui and other provinces, the city

and county level shipping management organization is directly under the leadership of the provincial shipping administration

- (4) The Ministry of Transport has set up directly assigned agencies in the Yangtze River Trunk Line and the Pearl River Water System, the Yangtze River Navigation Administration and the Pearl River Navigation Authority, respectively, to manage and coordinate the waterway transportation of the Yangtze River Trunk Line and the Pearl River Water System, as commissioned by the Ministry of Transport
- (5) The National Development and Reform Commission and the Ministry of Communications directly manage and coordinate the transportation prices of central water transportation enterprises; the price authorities of local people's governments, together with the transportation authorities at the same level, manage local enterprises and Transportation price for individual boat people
- (6) Since the 1990s, as enterprises gradually entered the market, a small number of national or the local shipping association, as a self-regulatory organization, coordinates conflicts in shipping operations.

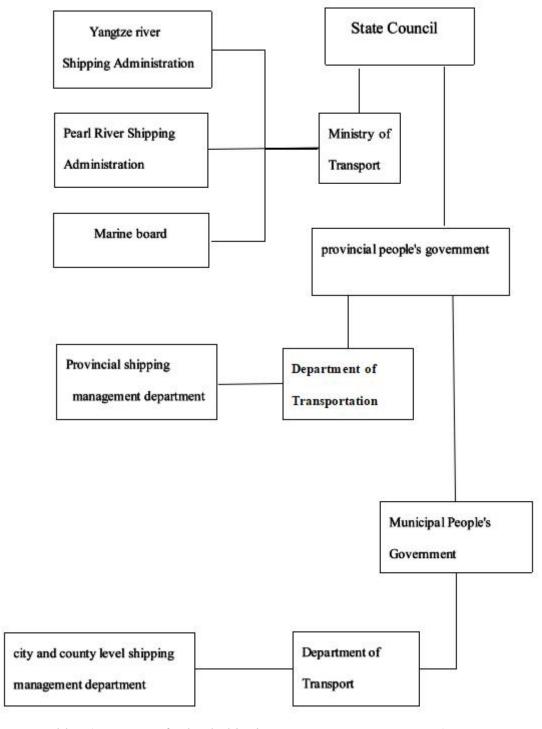


Table.1(Structure of Inland Shipping Management Department)

The establishment and management functions of the inland shipping management agency of the Chinese government mainly have the following drawbacks.

First, there is a lack of a strong inspection and supervision mechanism to ensure

the implementation of China's existing shipping laws and regulations. In terms of international shipping, there is no special agency to implement effective inspection and supervision functions for violations of existing regulations. In terms of domestic shipping, the agencies specialized in shipping management at various levels of the government's transportation departments do not have the qualifications of law enforcement subjects, and it is difficult to effectively perform the functions of shipping inspection and supervision. Therefore, the current laws and regulations in China's shipping management have not yet formed a high degree of seriousness and authority. This is one of the main reasons for the insufficient performance and standardization of China's shipping market.

Second, the current shipping management system has a clear division between regions, which is not compatible with the characteristics of a unified shipping market across the country. For a long time, China's shipping management has been implemented for enterprises according to administrative divisions. Therefore, there is protection between the central and local governments, local and local governments, and departments and departments, which is not conducive to the establishment of a fair and open unified shipping market. Especially in the case of collecting fees from shipping companies and individual boat owners as the source of funds for shipping management departments, such protection and unfair management make it more difficult for China's shipping market to truly move toward a standardized and orderly track.

Third, in terms of organizational structure, there are too many levels in the vertical structure, which affects administrative efficiency. Especially in regions where regional integration is more developed, inland transportation is frequent between different provinces and cities, and the inconsistency of management departments and management policies between different provinces and cities leads to inefficiency.

From the perspective of the long-term goal of the integration of the Yangtze River Delta, the establishment of the current inland shipping management departments has just slowed down this process. The Yangtze River Delta region is divided into three provinces and a municipality, and each province has an independent management agency. A large number of goods need to be transported by inland rivers in the Yangtze River Delta, and such institutional arrangements will inevitably lead to low management efficiency. In order to improve economic efficiency, different provinces may support shipping companies in this province, resulting in vicious competition.

## 2.3 Status and Problems of Inland Shipping Market Access in the Yangtze River Delta

### (1) Ship transportation market

The original regulations on market access for inland shipping were included in the Regulations on Domestic Water Transport Operation Qualifications promulgated by the Ministry of Transport on May 26, 2008, but the Ministry of Transport abolished it and promulgated The Regulations on the Administration of Domestic Waterway Transportation on January 3, 2014. At present, the current relevant regulations of the country on the market access of inland shipping mainly focus on the Regulations on the Administration of Domestic Waterway Transportation.

The regulation divides inland river transporters into individual businesses and waterway transport operators.

Article 6 of which regulates individual businesses.

Article 6 Individuals can only apply for inland river general cargo transportation business, and should meet the following conditions:

- (1) Individual businesses registered by the market supervision and management department;
- (2) There are ships that meet the requirements of this regulation, and the capacity of its own ships does not exceed 600 gross tons;
- (3) There are safety management systems such as safety management responsibility system, safety supervision and inspection system, accident emergency handling system, post safety operation regulations, etc.

Articles 7 to 10<sup>1</sup> regulate the market access of water transport operators.

Article 8 In addition to individual industrial and commercial outdoor, water transportation operators shall be equipped with full-time marine and engine management personnel who meet the following requirements:

- (1) The number of maritime affairs and locomotive management personnel meets the requirements of Annex 2:
- (2) The professional qualifications of maritime affairs and engine management personnel are suitable for their business scope:
- 1. Those engaged in the transportation of ordinary cargo ships should have a working experience of not less than that of the first officer and the second officer;
- 2. Those engaged in the transportation of passenger ships and dangerous goods ships shall have the qualifications of captain and chief engineer.
- (3) The business knowledge and management capabilities possessed by the maritime affairs and locomotive management personnel are compatible with their business scope, and their physical conditions are compatible

<sup>&</sup>lt;sup>1</sup> Article 7 Ships put into operation by waterway transport operators shall meet the following conditions:

<sup>(1)</sup> Adapt to the business scope of the waterway transportation operator. Those engaged in passenger transportation should use ordinary passenger ships, passenger cargo ships and ro-ro passenger ships (collectively referred to as passenger ships); those engaged in transportation of bulk liquid dangerous goods should use liquefied gas ships, chemical ships, product oil tankers and crude oil ships (collectively referred to as dangerous Cargo ship) transportation; those engaged in general cargo transportation, packaged dangerous goods transportation and bulk solid dangerous goods transportation may use ordinary cargo ships for transportation.

<sup>(2)</sup> Hold a valid ship ownership registration certificate, ship nationality certificate, ship inspection certificate, and other certificates that prove that the ship complies with the requirements of safety and pollution prevention and classification inspection in accordance with relevant laws and administrative regulations.

<sup>(3)</sup> Comply with the requirements of the Ministry of Transport on ship type technical standards, ship age and energy saving and emission reduction.

The Regulations on the Administration of Domestic Waterway Transportation also stipulate the waterway operators' own ship minimum capacity and the minimum quota for maritime and engine management personnel.

with their responsibilities.

Article 9 In addition to individual industrial and commercial outdoor, the proportion of senior crew members that should be equipped by water transportation operators in accordance with the relevant regulations, with whom they directly conclude labor contracts for more than one year, should meet the following requirements:

- (1) For general cargo ship transportation, the proportion of senior crew shall not be less than 25%;
- (2) For the transportation of passenger ships and dangerous goods ships, the proportion of senior crew shall not be less than 50%.

Article 10 The Ministry of Transport shall implement the following waterway transportation business licenses:

- (1) Business license for inter-provincial passenger ship transportation and inter-provincial dangerous goods ship transportation;
- (2) Business licenses of water transportation enterprises and their holding companies that perform state-owned assets supervision and administration institutions under the State Council.

		Within the		
	Yangtze river	Xijiang river	Others	province
General cargo ship(GT)				
Product oil tanker(GT	5000	3000	1000	600
Chemical tanker(GT)				
Liquefied gas vessels(m <sup>3</sup> )	2000			
Crude oil tanker (GT)	15000			
Tugboat (kilowatt)	2000			2000
Passenger ship ( persons		100		
capacity)				
Passenger-cargo vessel	1000 gross tonnage and 100 persons capacity			300 gross tonnage
ro-ro passenger ship				and 50 persons
		capacity		

Table 2.(waterway operators' own ship minimum capacity)

		1-5	6-10	11-20	21-30	31-40	41-50	>50 vessels
		vessels	vessels	vessels	vessels	vessels	vessels	
	General					•	•	One person for
Inland	cargo ship							every additional 50
river		1				2		ships,Less than 50
								is calculated as 50
	Dangerous	1		2	3	4		One person for
	goods ship							every additional 20
	Passenger	1						ships,Less than 20
	ship							is calculated as 20

Table 3. (minimum quota for maritime and engine management personnel(person))

### (2) Shipping transportation auxiliary industry market

Regulations on the Administration of Domestic Waterway Transportation auxiliary industries also made corresponding regulations for the Shipping agency, freight forwarder and other water transportation auxiliary industries.

Article 19 The operators of shipping agency, waterway passenger transportation agency, and waterway cargo transportation agency business shall, when entrusted to provide agency services, enter into a written contract with the principal and handle the agency business in accordance with relevant state regulations and contractual agreements.

Article 20 The port operator shall not designate an operator of an auxiliary business of water transportation for the ship owner, operator, and cargo shipper or

consignee, to provide services.

Article 21 The port operator shall accept the ship owner, operator, and cargo shipper and consignee to go through the port or cargo port entry and exit procedures on their own and provide convenience.

Article 22 The operator of the auxiliary business of waterway transportation shall not have the following behaviors:

- (1) Engaging in waterway transportation business activities as a carrier;
- (2) To provide auxiliary services for waterway transportation for operators who have not obtained the operation permit for the waterway transportation business in accordance with the law or exceed the scope of the permit;
  - (3) Failing to conclude a written contract, forcibly represent or do business;
- (4) Abuse of dominant position and restrict the principal from choosing other agents or ship management service providers;
  - (5) Release false information to solicit business;
- (6) Providing other water transportation auxiliary services in an improper manner or irregular behavior, disrupting market order;
  - (7) Other acts prohibited by laws and administrative regulations.

At present, I think there are still the following problems in China's inland transportation market access.

The domestic ship transportation industry, ship management industry, ship agency industry, and passenger and cargo transportation agency industry are all admitted through the approval process. The main problem with the approval process is the power it gives to administrative subjects, the power is too broad, especially when the relevant laws and regulations on the market access of inland transportation and its auxiliary industries in China are also relatively vague. In the abolished Regulations of the People 's Republic of China on the Administration of Water

Transport Services, there were requirements for the admittance of auxiliary services for water transport: "have a stable source of ship agency business", "have a stable source of customers or goods" Conditions, and the conformity of these conditions is completely judged by the inland navigation administrative licensing body, which has greater freedom. The result is easy to produce acts such as administrative bribery and administrative injustice.

In the subsequent *Regulations on the Administration of Domestic Water Transport Auxiliary Industries* issued on January 2, 2014, the following conditions were deleted: the establishment of water transport service enterprises should meet the following requirements:

- (1) There is a stable source of passengers, cargo and ships for water transportation;
  - (2) There are organizations and professionals suitable for the business scope;
  - (3) Having a fixed place of business and necessary business facilities;
- (4) There is a registered capital that meets the following minimum requirements:
  - 1. RMB 200,000 for shipping agency business;
  - 2. RMB 300,000 for passenger and freight transportation agency business;
- 3. 500,000 yuan for shipping agency and passenger and cargo transportation agency business.

However, I think it is difficult to remove these conditions to make the inland shipping market more orderly. The government-led shipping market access system is essentially a "threshold" issue, which mainly adjusts the subject qualification of shipping companies to enter the shipping market. So, is this "indiscriminate" suitable for shipping companies? If the "threshold" is too high, it is difficult for shipping companies to enter, and the market cannot operate normally and orderly, then this "threshold" is a failure; if the "threshold" is too low, the shipping companies will

flood in, then this "threshold" it is also invalid.

After removing the entry threshold and letting the market regulate, the number of various shipping agency companies and freight forwarding companies will increase greatly, which will lead to vicious competition in the industry.

Not only the water transportation auxiliary industry, but also the water transportation operation enterprises are affected by the lower threshold. Domestic inland waterway transportation has too many main bodies, small scale, and weak competitiveness. It is also not conducive to saving resources and protecting the environment. If the inland shipping transportation industry's access regulations are not standardized and lead to vicious competition, many small and medium-sized transportation enterprises will face the risk of bankruptcy, and the number of enterprises and the number of ships may show a downward trend.

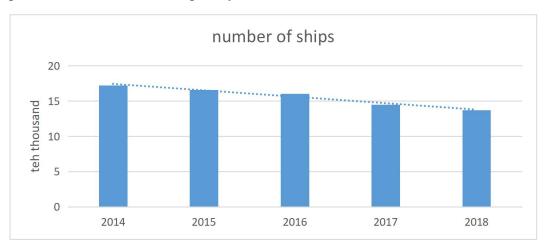


Figure 1. (Changes in the number of ships)

At present, the problem of excess capacity in China's inland rivers is also increasingly apparent. The serious excess capacity is the main reason for the current loss of the shipping industry, which has become the consensus of the industry.

Since 2012, coastal bulk freight prices have basically been operating below 30 yuan/ton. Especially in the past two years, the freight rates have fallen below 20 yuan/ton. The reason for the decline in freight rates is not only the sluggish demand,

but also the vicious competition caused by the excess capacity. Its severity is unprecedented.

How serious is the imbalance between supply and demand? A few days ago, the Water Transport Bureau of the Ministry of Transport released the analysis report on the capacity of China's domestic coastal freight ships in 2015. ) A total of 54.67 million deadweight tons, the capacity increased by 470,000 deadweight tons over the same period last year, an increase of 0.87%. Transport capacity is still increasing, but the coastal coal transport volume has shown a negative growth. The annual coastal coal transport volume was 61.123 million tons, a year-on-year decrease of 6.2%.

According to the released statistics, my country's coastal shipping capacity of over 10,000 tons has 54.67 million deadweight tons. According to rough calculations, excluding the transportation capacity of about 9 million deadweight tons such as iron ore and grain, the remaining 46 million deadweight tons can be used to pull coal. According to the calculation of 1.5 voyages per ship per month, the disposable capacity is 69 million dwt, while the monthly coal demand is only 51 million tons, which is more than 18 million dwt, which is equivalent to three-thirds of the current capacity.

Such a huge excess capacity is deposited in the market, a price war is inevitable, vicious competition is intensifying, and the crisis continues.

## 2.3 Status and Problems of Inland Shipping Market supervision in the Yangtze River Delta

Competition is one of the most important operating mechanisms of the market economy and the essential characteristics and requirements of the market economy. However, while competition promotes the economy, it inevitably leads to monopoly and unfair competition. Therefore, competition law occupies a particularly important position in the market economy, which is called the "constitution of the market economy." The diversification of value orientation, the regulation of the competitive behavior in the shipping market, cannot blindly pursue the improvement of the competition system, and the particularity of the shipping industry must be fully considered.

Competition law is the basic law of the market economy, and its position in the market economy determines that it should be at a higher legislative level. China passed the *Anti-Unfair Competition Law* in 1993, which is currently the most important law in China to regulate the competition behavior of market players. Unfortunately, this law has certain limitations when it applies to the shipping market. In addition, policy documents such as opinions and notices of the State Council and its ministries and commissions are often used as a basis for regulating the order of competition in the shipping market. These policy documents are usually random, lacking in stability, authority, and coercion. The level of shipping competition legislation is too low. As far as the inland shipping market is concerned, it is not conducive to regulating inland shipping companies, and it is very unfavorable to the orderly operation and healthy development of the shipping market.

The Anti-Unfair Competition Law enacted by China in 1993 regulates various acts of unfair competition (including several acts of restricting competition). It applies to all areas of the national economy and of course applies to inland shipping. However, China's laws on the supervision of inland shipping are still not perfect, and can only be regulated in accordance with the Anti-Unfair Competition Law. However, some situations arising from the characteristics of the inland shipping market cannot be adjusted temporarily. Moreover, regarding the management mechanism of unfair competition of inland shipping, the punishment method is still unclear. The following is a brief introduction to the behavior exemplified in the Anti-Unfair Competition

Law in the inland shipping market:

### (1) Commercial bribery

Commercial bribery refers to unfair competition in which market operators use property or other means to secretly buy trading objects or related personnel to obtain trading opportunities or favorable trading conditions. Its harmfulness lies in fundamentally denying fair competition, hindering the normal functioning of the market mechanism, thereby affecting the rational allocation of water transportation resources and technological progress, and at the same time becoming a hotbed of political corruption.

At present, in the domestic river shipping market transactions, bribery of various names, such as rebates, commissions, etc. More generally, the parties use this to achieve the purpose of seizing the market, controlling freight rates, intermediary exploitation, and profit-making. These bribery behaviors generally have such characteristics: the way is secret, such as secretly not being accounted for; the purpose is to obtain benefits that are difficult to obtain from legitimate channels, such as raising freight rates, controlling the supply of goods, etc.; the form includes money in addition to money other methods. The biggest difference between it and legitimate discounts and commissions in line with market practice is that the latter is conducted in an open manner, such as the conclusion of an agreement, and both the receiving and paying parties are accounted for as legitimate income or expenditure.

### (2) Infringement of trade secrets

Commercial secrets in the shipping field mainly include business strategies, management methods, supply conditions, customer lists, agreement contents, and financial status. It has the following legal characteristics: business secret is a kind of knowledge information, is the product of human intellectual activity, has non-material properties; has transferability and transferability; has not been directly protected by traditional intellectual property law; has secrecy, which It is the basis

and key to the existence of business secrets. It can only be the technical or business information that a certain person or a few people have or know within a certain range; it is valuable. The flow of shipping talents is relatively frequent, and violations of trade secrets are often accompanied by the flow of talents. For this reason, if an employee works for another company in the same industry through the flow of talent, the employee has the obligation to keep the original company 's business secrets, and may not disclose, use or allow others to use the company 's business secrets in his possession."

### (3) Commercial defamation

Commercial defamation refers to the operators themselves or using others, through fabrication and dissemination of false facts and other improper means to maliciously destroy and degrade the business reputation and commodity reputation of competitors, so as to weaken their market competitiveness and seek for themselves. The behavior of unfair interests is a typical behavior of unfair competition.

tion.

### (4) Unfair pricing behavior (predatory pricing, dumping freight rates)

Unfair pricing behavior refers to the shipping company's long-term monopolization of the market, the use of stage below the market's normal level, or even lower than the cost of freight to engage in waterway transportation, thereby squeezing competitors across the industry, resulting in an exclusive situation. There is no need to say more about the harmfulness of unfair pricing and the need to regulate it.

In the Yangtze River Delta's inland shipping market, there are mainly vicious bargaining prices, which squeeze out competitors' unfair competition methods. Due to changes in the way of cargo transportation, the diversification of waterborne cargo sources is gradually decreasing. Self-employed individuals can compete with their flexibility in ship tonnage and freight rates, and they can also obtain a large part of

the right to transport goods, which further aggravates the competition within the industry and reduces the market share of professional transport units. In order to squeeze out competitors, the freight rate is lower than the normal market level, and even lower than the cost to compete for the supply of goods. Many local cargo owners' wharves operate beyond the scope, and some cargo owners' wharves and public docks compete against each other to compete for cargo sources, occupy shorelines indiscriminately, and even require separate anchorage and navigation channels. Some cargo owner's wharves are leased to individual operators, and they do not charge fees, and low-cost activities not only disrupt the order of port operations, but also hinder the normal operation of law-abiding public docks and other cargo owner's wharves. All ports have exchanged huge returns for low returns, and the economic benefits have been severely declining. A relatively serious operating loss has occurred, which has exacerbated the contradictions between the ports and failed to form a strong alliance of port interests, which has hindered the further development of port product.

## 3.Comparison and Enlightenment of EU Inland waterway Shipping Regulation

### 3.1 Overview of the development of EU inland shipping

Europeans refer to inland water transport as a "water branch", and inland water transport in Europe has attracted worldwide attention.

The model for the development of global inland navigation "As early as 300 years ago, European countries began to dig canals to connect natural rivers to freely navigate; in 1868, the Mannheim Convention, the" Rhine Channel Convention ", was established. The rights and obligations of the countries along the Rhine River have achieved freedom of navigation along the Rhine River; and after World War II, countries have allocated a large amount of funds every year to increase investment in water transportation infrastructure, strengthen the renovation and maintenance of inland waterways, and initially form A relatively complete inland waterway network "But by the 1970s, due to deviations in people's understanding of the value of inland waterways, some countries ignored the construction of inland waterways, and the capacity of waterways was greatly reduced, which was not suitable for the development and application of modern shipping technology. Inland navigation stagnation. The share of EU inland shipping in the integrated transport system has declined.

Compared with roads and railways, inland river transportation uses natural rivers for transportation activities, basically does not occupy land, and even uses

dredging for waterway regulation! The channel can be made by cutting and straightening, and its infrastructure is not required It consumes a lot of raw materials such as steel and cement, and has the advantages of low unit energy consumption, low unit transportation cost, low investment cost, large throughput and high labor productivity. Moreover, in the process of developing inland waterway transportation, the construction and development of inland waterways can also take into account comprehensive and social functions such as flood control, flood discharge, waterlogging, irrigation, water supply, power generation, national defense, fish farming, tourism and ecological balance. The development of inland river transportation does not consume water resources, but also fully utilizes the comprehensive utilization of water resources. Moreover, problems such as shortage of natural resources, environmental pollution, global warming, and frequent natural disasters caused by excessive resource consumption and ecological destruction at that time had severely hindered the development of the EU<sup>2</sup> economy and the improvement of people's quality of life. In this grim situation, the EU's voice for promoting social sustainable development is increasing. Therefore, the EU formally started to formulate laws and policies on inland navigation in the 1970s. By the 1980s, the EU had formulated a relatively complete set of laws and regulations concerning the management of inland navigation markets such as waterway management, shipping safety and infrastructure construction.

In order to solve the restriction of infrastructure construction on the development of inland navigation, the European Union formally proposed in the Maastricht Treaty to establish a trans-European network system, encouraging countries to increase investment in the construction of transportation infrastructure including inland waterways. With regard to inland waterway shipping, the European

<sup>&</sup>lt;sup>2</sup> In fact, it was not called the EU at the time. For the sake of simplicity, this article uses the current name instead.

Union has established waterway grading standards, including all waterways above four levels in the EU waterway network, and subsidizing certain construction funds from the EU level. This policy has greatly promoted investment in inland waterway construction.

## 3.2 Supervision laws and policy-making bodies of the EU inland shipping market

### (1)European Parliament

With regard to the legislation and implementation of the management of the inland shipping market, the main functions of the European Parliament are: the power to give opinions and to have joint decision-making power with the Council; to oversee the expenditure of the committee; to agree to the membership of new members and to sign with third countries Agreement; enjoy the right of second review and modification of certain bills.

#### (2)European Council<sup>3</sup>

The European Council is the main legislative and decision-making body. It directly participates in the formulation of EU inland shipping regulations and makes relevant regulations, directives and decisions. Most of the regulations related to the regulation of the inland shipping market are made by the Council. "It decides some issues through a special majority vote, other relevant Issues need to be agreed

<sup>&</sup>lt;sup>3</sup> The Council of the European Union was the Council of the European Communities during the period of the European Communities, and the European Commission, which will be mentioned later, is consistent with the European Commission and changes with the name of the Commonwealth. Therefore, in the following text, the unanimous expression of the EU / EC Council and the EU / EC Commission is referred to as the Council and the Commission.

unanimously. The action taken by the Council on shipping depends to a large extent on which issues are of interest to its presidency, or whether there are certain emergencies that make the Council have to do Obvious response "Given the dual role of the Council in the EU, on the one hand, it is a ministerial conference body representing the interests of their respective countries, and on the other, it has the mission of safeguarding the overall interests of the EU, which makes the Council a A place where there is a direct conflict between the interests of member states and the overall interests of the EU, and ultimately a balance and compromise. Therefore, many EU shipping policies and regulations carry such traces of conflict and compromise. The success or failure of the EU's shipping policies and regulations depends largely on the efficiency of the balance and the tilt of the focus of the compromise on specific matters.

The special committee of the Council, the European Transportation Committee, is responsible for formulating the unified classification of European waterways and ship types, promoting the implementation of a series of canal projects in various countries, making the channel layout more reasonable, and integrating the original unconnected Rhine, Seine, and Luo rivers. The Na River, Danube and other water systems are communicated into a unified inland waterway network to plan the development of inland navigation in Europe from a global perspective, and to formulate a unified water diversion law, cargo transportation law and terminal loading and unloading in the European Union that can be used to coordinate the relevant regulations of EU member states Law, port import and export law, port service market law, etc.

#### (3) European Commission

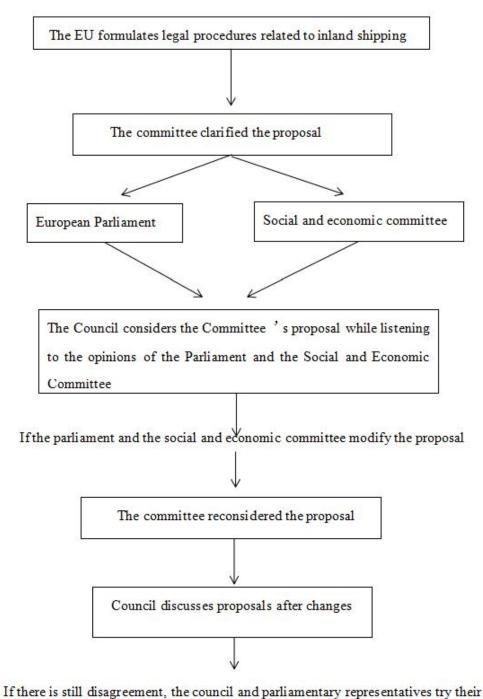
The European Commission is the maker and main executor of EU shipping policies and regulations, because the Council needs to get the Commission 's proposal before passing legislation. Without a legislative proposal from the European

Commission, the Council of EU Ministers cannot independently formulate and issue a policy Or regulations, EU law is mainly supported by the action of the committee. At the same time, the European Commission has the responsibility to ensure that all policies and secondary legislation are effectively implemented. When a member state, enterprise or individual violates the provisions of the treaty, the Commission has the power to investigate and deal with it. The European Commission can also accept the authorization or commission of the Council of Ministers of the European Union, which is specifically responsible for implementing a policy or decision made by the Council of Ministers. The European Commission has a number of general bureaus dedicated to the policy and regulation of certain fields! For example, the legislation on transportation is mainly under the 7th General Administration of the Commission, the competition law is mainly under the 4th General Administration, and some are also related to shipping, such as the Environmental Protection and Foreign Affairs Administration. The specific responsibilities of the European Commission are as follows: policy proposals; policy implementation and management; safeguarding EU treaties and

Implementation of the law. The Commission also has the general power to declare to the European Court that a member state violates the EU treaty or the rules adopted by the treaty, such as a violation of the EC Council against France, (EEC) No1017 / 68 Regulation, the Commission made a corresponding announcement that its imposition of charter tax on inland vessels violates competition rules. In particular, it has more specific powers regarding the state funding of the inland shipping sector and the control of competition rules, measures taken when necessary, and reporting to the European Council on the implementation of relevant regulations and directives.

#### (4) Rhine Shipping Central Committee

Although the Rhine Shipping Central Committee is only a non-governmental organization, it does not have significance at the EU level. But the Rhine is the most important channel in Europe and even the world! The most frequent shipping channel "and the water transport network within the EU is mainly concentrated in the waters between the six countries of Hungary, Belgium, France, Luxembourg, Germany and the Netherlands, which is the Rhine Most of the waterway area, so the complete liberalization of the Rhine network and the improvement of the management system of the inland shipping market have obvious effects on the development of inland rivers throughout Europe. In view of this, the European Parliament pointed out that the Central Committee of the Rhine Shipping should develop collaboratively In order to promote the development of the European unified transportation market, the "Rhine Shipping Central Committee" is composed of the members of each member country. The plenary meeting of the committee generally recommends the promotion of the prosperity and development of the Rhine shipping, the technical and management regulations on ship safety and their amendments, Appeals on issues concerning the application of the Mannheim Convention were voted on. The committee formulated a large number of normative documents and technical standards, and the "Rhine Regulations", "Shipment Law" and "Dangerous Goods Law" specifically set a unified Captain's certificate qualification assessment standard, crew qualification certification standard, ship survey Ship registration and environmental emission limits and so on. The Rhine River Shipping Central Committee's greatest contribution to the EU's inland water transport is the Mannheim Convention.



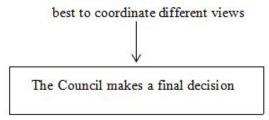


Table 5. (Procedures for promulgation of EU inland shipping regulations)

#### 3.3 EU inland shipping market access laws and policies

#### (1) Access of shipping companies

With regard to the access of shipping companies, the principled guidance at the European Community level is based on the European Council Directive 87/540 / EEC on the professional access requirements for national and international waterway carriers. There is an important legal article in the Directive, which clarifies the definition of "access to the occupation of carrier of goods by waterway in national and international transport": means that a natural person or any enterprise The water cargo transportation activities provided by rent or remuneration, even if the behavior is unscheduled. The directive does not apply to ships with net tonnage not exceeding 200 tons, but the directive gives Member States the right to reduce this restriction. It also does not apply to ferries.

With regard to access to professional qualifications, according to the directive, it means that a natural person or enterprise who wants to obtain a professional qualification for a waterway freight carrier must meet professional qualifications. Regarding the professional qualifications, the directive gives a list of relevant content in the annex, including laws, business and financial management of the enterprise, market access, technical standards and technical aspects of operation, safety and other content. Regarding the specific determination of professional qualifications, the relevant power bodies of member states stipulate the standards of the qualifications, and the relevant content is specified by each member state. The mastery of the necessary knowledge of water freight transportation can be obtained either through attending courses, through the practice of internal water transportation enterprises, or through a combination of the two. The procedural regulations concerning the access

of shipping companies are stipulated by the domestic laws of the member states. The market economy system is implemented within the European Community. Most national laws stipulate that shipping companies do not need to obtain government permission to enter the market. They only need to meet the conditions stipulated by law and go to the Chamber of Commerce for registration and other procedures. Inland water transportation has been fully marketized.

#### (2)Crew access

To ensure the fairness of competition in the entire EU inland market and the establishment of the EU common inland shipping market.

To improve and promote the safe navigation of inland water transport, the European Community has minimum requirements for the access of inland crew and practitioners. The EU has many general or specialized policies and regulations concerning the employment of seafarers, most of which are requirements for improving the quality and standards of seafarers, and are mostly directives. In terms of crew management, the EC Commission issued Directive No. 48 in December 1989, which established general principles for the recognition of officers. In June 1992, Directive No. 51 on the minimum standards for vocational training of seafarers was published. In 1994, Directive 58 was issued to establish a clear link between crew employment and navigation safety. It can be seen from this that the European Community is very determined to improve the competitiveness of its fleet and ensure the safety of navigation from the perspective of improving the quality of the crew.

As a result of a series of measures and decrees implemented by the EC since 1989 to actively open the EC 's inland shipping market, in particular, Commission Directive 91/672 / EEC<sup>4</sup> requires reciprocal recognition of the status of captain between countries in order to achieve navigation within the EC Freedom and

<sup>&</sup>lt;sup>4</sup> Official Journal L 373 31/12/1991 p29-32

convenience. However, due to the different requirements of entities and procedures for shipping certification in various countries, considering that companies and individuals may use this as a means to lead to improper international competition, and also to improve shipping safety standards, in July 1996, another provision issued the qualification The instruction of the minimum standard of the certificate is issued. That is, Council Directive No. 50 of July 23, 1996<sup>5</sup>, made provisions on the conditions for granting the qualifications of inland river cargo and passenger transport captains in EU countries.

Directive 50, like Directive 91/672 / EEC, makes a distinction between waters, divided into A & B.

Group A is a special certificate issued by the EU's waterway and maritime regions, while Group B is the issue of qualification certificates for EU inland water transport. Directive 50 applies to the issuance of captain qualification certificates for all inland vessels, whether it is a self-powered barge, tugboat, pusher ship, or ship that uses escort or side-by-side queues to transport goods or passengers, but is less than 20 meters Except for the qualification of the master of cargo ships or passenger ships carrying not more than 12 persons. As long as it is a qualification certificate that meets the minimum requirements of the directive, it is valid in all EU member states. The directive specifies the qualifications of captains as follows:

The minimum requirement to obtain a certificate is: the minimum age is 21 years old.

If they are over 65 years old, they need to have a full-body examination every year to ensure their physical and psychological fitness.

Have at least four years of professional experience as a crew in a deck department on an inland river vessel, but this requirement may be reduced as

<sup>&</sup>lt;sup>5</sup> Official Journal L 235 17/09/1996 p31-38

appropriate.

Must pass the examination of relevant professional knowledge specified in the annex of the directive.

Member States may make special provisions on passenger transport.

Through the common regulations on inland shipping market access for transport companies and crews, the EU imposes necessary and appropriate restrictions on the qualifications of operating entities in the shipping market, effectively avoiding the infinite diversity of operating entities and a large number of unqualified operating entities. Endangering the safety of shipping transactions and causing chaos in shipping economic order play an effective preventive role. It also coordinated the consistency among countries and prevented unfair competition within the EU due to differences in access rules. In the form of general minimum requirements, it not only guarantees the safety of inland navigation, but also maintains the order of inland navigation.

#### (3)Access and exit of ships

#### 1.Access of ships

In 1995, the Rhine Shipping Central Committee revised the "Rhine Regulations", raising existing technical standards to enhance the safety of inland transportation on the Rhine. This makes the laws of the European Union obsolete, and

Because the requirements of the European Union are lower than the amended 5 Rhine Regulation 6, this means that only ships with EU technical requirements certificates cannot carry out transportation activities in the Rhine basin. So in December 1997, the European Council proposed to amend the 1982 EU technical requirements for ships to adapt to the Mannheim Convention. The European Commission pointed out that it is reasonable to establish amendments to the

technical requirements for ships that are compatible with the latest "Rhine Regulations", which not only provide the latest ship safety standards, but also prove to be effective in practice, and The Economic Commission for Europe will also adopt it "and if the EU still does not take any action to formulate new rules, it will create a barrier to the EU's water transport and ultimately hinder the progress of the EU's single market. In addition, the European Commission also proposed that in order to prevent similar problems due to the revision of the "Rhine Rules" in the future, a supporting mechanism should be established to make EU laws change in accordance with the Rhine rules. Therefore, after watching the actions taken by the United Nations Economic Commission for Europe to adopt the "Rhine Rules" regarding the technical requirements, the European Commission and the European Parliament formally repealed Directive No. 1982/714 / EEC in 2006, and issued No. 2006/87 / EC Number instruction. Secondly, the directive also gave the committee the power to update technical requirements.

Directive 2006/87 / EC stipulates that the technical requirements of EU inland ships apply to ships longer than 20 meters and with a volume of not less than 10 cubic meters. The same applies to mobile devices, tugboats and pushers, and ships that can transport more than 12 passengers for passenger transportation. This article does not list its specific technical indicators here, but one thing that can be determined is that the European Union's standards on ship technical requirements are always updated according to the actual requirements of its inland navigation. Directive 2006/87 / EC <sup>6</sup>also provides for some exceptions. This directive continues the first

Directive 1982/714 / EEC divides the relevant EU waters into four navigable areas plus an R zone (also the Rhine waters specified by the Mannheim Convention), and different requirements apply to different navigation areas. Ships sailing in a

<sup>&</sup>lt;sup>6</sup> Committee 2006/87/EC Directive, Official Journal L 389 of 30/12/2006

navigable area must meet all technical requirements in that area. Any member country can change the classification of their waters by notifying the committee at least six months in advance. The directive provides for exceptions: any member country can reduce the technical requirements for ships operating only in specific areas after the advisory Committee.

The Directive also requires relevant certificates. "Ships sailing in EU waters also need to have EU qualification certificates. The EU Inland Ship Qualification Certificate meets all technical standards and can be valid on any seaworthy waterway in the EU including the Rhine. Vessels sailing on the Rhine must be equipped with an EU qualification certificate or a qualification certificate issued in accordance with the Mannheim Convention. Moreover, according to the amendments to the technical requirements of the Commission, the regulations issued to ships after February 30, 2008 The EU qualification certificate shall carry out a technical inspection before the ship is put into service to determine whether it meets all technical requirements in the annex of the directive.

The procedures for ship access are stipulated by each country, while most EU countries, such as Germany and the Netherlands, only

The certificate can be obtained if the shipping vessel meets the technical standards stipulated by law after being inspected by the ship inspection agency.

Through Directive 2006/87 / EC, a common ship technical requirements environment was finally established in the European Union. Because it maintained the requirements consistent with the "Rhine Regulations", that is, it effectively ensured the safety of inland navigation and also Arrangements for the European Union 's Common Inland Market.

#### 2.Exit of ships

The EU 's most successful example of regulation of the shipping market is its series of mechanisms that promote the withdrawal of old charterers from the market

when the shipping market is structurally overcapacity. In the 1980s, due to the decline of the basic industry, coal and steel industry, the share of inland river transportation in the entire transportation market continued to decline. Therefore, in the inland waterway transportation between Belgium, France, Germany, Luxembourg and the Netherlands, the contradiction of overcapacity supply is outstanding, which seriously affects the economic benefits of inland waterway transportation in these countries. The European Community believes that the implementation of a structural improvement plan in the inland waters at the level of harmonization of the European Community is the only way to significantly reduce capacity, and adjust the structure of inland water transport capacity accordingly.

On April 27, 1989, the Council of the European Communities adopted Regulation 1101/897 of Structural Adjustment in the Field of Inland Water Transport, which aims to reduce capacity through ship recycling and supports measures to avoid increasing existing capacity or future capacity. The purpose of establishing an inland waterway ship dismantling fund is to use economic means to implement capacity supply and regulation based on the needs of the inland waterway market: when there is excess capacity, a certain amount of shipbreaking subsidies will be given to the dismantling of old ships; when the capacity is tight, shipbuilding will be given subsidy. The mechanism mainly includes the establishment of ship recycling funds, shipowners paying annual assessments to ship recycling funds, ship recycling subsidies, trade-in replacements, special assessments, equivalent tonnage, common financial support and incentive measures.

The following are the main contents of Regulation 1101/89.

#### 1. Ships and exceptions to which the regulations apply

Ships to which the Regulations apply: Cargo ships and pushers that are registered in a member state and provide transportation of their own cargo or receive

<sup>&</sup>lt;sup>7</sup> EEC No 1101/89 rules, Official Journal L 116 28/4/1989, p.25-29

rent and other remuneration. If a ship is not registered in a member state, the ship must be operated by a member state enterprise. exception:

- 1. Vessels engaged in transportation only on domestic waterways not connected to other waterways of the Community;
- 2. For reasons of scale, ships that cannot withdraw from the domestic waterways they operate into other waterways of the Community and cannot compete with the ships to which the regulations apply;
- 3. Pushing ships with a power not exceeding 300 kW, including: only for domestic or international including cross-sea navigation

Inland sea ships or ship barges including secondary transportation; ferries; non-profit public service ships.

4. Member States may exclude them from the Regulations based on the economic and social conditions of ships with a deadweight of 450 tons or less, but they shall obtain the approval of the Committee.

#### 2. Establishment of ship recycling funds in relevant member states

The relevant member country refers to a member country whose inland waterway is connected to the inland waterway of another member country and has a fleet capacity of more than 100,000 tons. The relevant member states shall establish national ship recycling funds through national legislation and their administration, and the competent authorities of the relevant member states shall manage the ship recycling funds. Each fund should include two separate accounts, namely dry cargo ship and push ship account and tanker account.

### 3. Shipowners pay annual assessments to the Ship Recycling Fund to repay the Ship Recycling Fund raised in advance by the relevant Member States for the Ship Recycling Plan

The shipowner of each ship to which the regulation applies pays the assessed contributions to the two accounts of the aforementioned fund.

Ships registered in a relevant member state shall pay the assessed contributions to the fund account of the registered country; ships not registered in the member state but operated by a business of a member country shall pay the assessed contributions to the fund account of the member country where the enterprise is located. Registered in one member state and operated by a business of another member country, the shipowner can choose to pay the assessment to the fund account of the relevant member country, but the shipowner can only choose once, and the owner of the shipowner or the enterprise Applicable to all ships operated. Establish joint financial support for ship recycling funds to ensure that loans are returned at the same time between funds. The member states concerned used loans to raise funds for the funds established in their countries, so that the ship recycling mechanism would begin to operate. Funds raised in this way shall be returned by the fund without interest according to a pre-set schedule. In order to ensure the same timing of the return of funds, a joint financial support should be established for the ship recycling fund.

#### 4. Shipbreaking allowance

Any shipowner who dismantles a ship to which the regulations apply is entitled to ship recycling subsidies from the fund to which the ship belongs when the conditions stipulated in the regulations and the amount of financial funds allow. Conditions for obtaining ship recycling subsidies:

- 1. The shipowner proves that the ship to be demolished is part of its operating fleet;
  - 2. The ship's hull is completely removed;
- 3. The ship to be demolished has at least one voyage in operation within one year before applying for ship recycling subsidy and the airworthiness certificate or permit for domestic transportation issued or recognized by the national competent authority, or one before the application for ship recycling subsidy At least 10 voyage

operations during the year;

4. If the ship is dismantled due to shipwreck or other damaged ships that cannot be repaired, the ship recycling subsidy cannot be obtained.

#### 5. Relevant member states may adopt incentive measures

- 1. Relevant member states may adopt incentive measures to make it easier for inland waterway carriers to withdraw from the inland waterway industry and obtain early retirement allowances or switch to other economic activities.
- 2. Retirement allowances are given to workers who withdraw from inland transportation due to the ship recycling mechanism, and vocational training or retraining is organized for them.

#### 6. trade-in

Within 5 years of the entry into force of Regulation 1101/89, if a shipowner imports a new shipbuilding from a third country and puts it into operation, or a ship that does not previously apply to the Regulation does not operate within the channel specified in the Regulation, it is put into operation within the channel specified in the Regulation He must dismantle the capacity equivalent to the ship in operation and cannot receive a subsidy for ship recycling.

#### 7. Special assessment

If the shipowner does not dismantle the ship, the shipowner shall pay the relevant fund a special assessment equivalent to the shipbreaking allowance in terms of the tonnage put into operation. If the shipowner's tonnage is less than the tonnage put into operation, the shipowner shall pay a special assessment equivalent to the shipbreaking allowance calculated on the basis of the difference between the tonnage of the ship put into operation and the ship being dismantled.

The effects of the shipbreaking fund are as follows

1. Due to the termination of the implementation of fixed freight market interventions, freight rates have fallen sharply under the condition of freight rate

liberalization. However, through the above policies and measures, as a group of shipowners withdrew from the inland water transport market, freight rates have rebounded, alleviating the market's more intense fluctuations and vicious competition. For shipowners and crews who are turning to other industries, the government actively provides training and entrepreneurial loans to ensure social stability.

- 2. The target set by the European Union to achieve capacity reduction was achieved. "In 10 years, EU countries have dismantled 1.2 million tons of dry cargo ships, 247,000 tons of oil tankers, 67,000 tons of pushers, and exceeded the original goal of removing 1.5 million tons of capacity.
- 3. The average tonnage of transportation capacity has increased. According to the channel conditions, ships of 1000 to 3000 dwt in Europe are seaworthy. Compared with the capacity of 1989 and 1998, the proportion of capacity above 3000 tons increased from 7.9% to 9.2%; the proportion of capacity from 1500 tons to 3000 tons increased from 33.30% to 38.9%; the proportion of capacity from 1000 tons to 1500 tons increased from 22% to 27%; and the proportion of 650 tons to 1,000 tons capacity decreased from 19% to 15%; the proportion of 400 to 650 tons capacity decreased from 12.8% to 7.9%; the proportion of capacity under 400 tons decreased from 5.2% to 2.3 %.
- 4. The average age of ships has decreased, and a number of container shipping vessels have been developed to meet the needs of the market. In order to ensure that the imbalances in inland water transport can be resolved quickly and effectively after 2000, the EU has retained the reserve fund established by the inland water transport sector to form a reserve for emergency measures. To adapt, on the one hand apply an appropriate ship recycling plan, and apply the trade-in rules during unforeseen crises.

#### 3.4 EU laws and standards on inland shipping supervision

In order to promote the formation of the EU's unified inland shipping market, promote the free flow of inland shipping vessels of various member states, eliminate the obstacles caused by inconsistencies in the legal systems of various countries, and improve the competitiveness of inland shipping, the EU has formulated a series of inland shipping laws and regulations And technical standards, such as the Waterway Law, Labor Law, Water Diversion Law, Cargo Transportation Law,

"Wharf Loading and Unloading Law", "Port Import and Export Law" and "Port Service Market Law", etc. For some transnational major navigable rivers, countries have also jointly established special navigation management coordination committees, such as the Rhine Commission and the Danube Commission. Various river committees have also developed a large number of normative documents and standards. For example, the Rhine Commission established in 1815

The Inn River Regulations, the Ship Law, the Dangerous Goods Law, as well as the unified captain's certificate qualification assessment standards, crew qualification certification standards, ship inspection standards, and ship environmental emission limit standards. Because the Rhine Commission has long-term experience in transnational river basin management, many EU inland navigation regulations are based on its regulations. According to the unified regulations of the European Union and the Basin Commission, each member state has formulated its own inland navigation laws, such as Germany 's "Federal Waterway Law", "Ocean Law", "Inland Navigation Law", and the Netherlands '" Launch Time and Crew Law ". In the Law on Inland Navigation Ships, the inland navigation authorities of various countries have also formulated corresponding regulations and rules in accordance with their own laws. Therefore, the EU's inland shipping legal system mainly includes three levels: one is the legislation of the European Commission; the other is

the legislation of the basin committees; the third is the legislation of the member states.

The EU 's legislation on inland shipping and subsequent supervision is indeed at a leading level in the world.

# 4. Suggestions for improving the supervision of inland shipping in the Yangtze River Delta in accordance with EU regulations

## 4.1 Formulation of inland shipping management agency in the Yangtze River Delta

On November 5, 2018, China General Secretary Xi Jinping announced at the first China International Import Expo that he will support the regional integration development of the Yangtze River Delta and become a national strategy. On December 1, 2019, the Central Committee of the Communist Party of China and the State Council issued the "Outline of the Yangtze River Delta Regional Integration Development Plan", The outline of the plan is a programmatic document that guides the current and future integrated development of the Yangtze River Delta region and is the basis for formulating relevant plans and policies. The planning period is 2025, and the outlook is 2035. The planning scope includes the area of Shanghai, Jiangsu Province, Zhejiang Province and Anhui Province (area of 358,000 square kilometers). Shanghai, Nanjing, Wuxi, Changzhou, Suzhou, Nantong, Yangzhou, Zhenjiang, Yancheng, Taizhou, Jiangsu, Hangzhou, Ningbo, Wenzhou, Huzhou, Jiaxing, Shaoxing, Jinhua, Zhoushan, Taizhou, Hefei, Wuhu, Anhui The 27 cities of Ma'anshan, Tongling, Anqing, Chuzhou, Chizhou, and Xuancheng are central areas (with an area of 225,000 square kilometers), and radiation has led to high-quality development in the Yangtze River Delta region. Taking Shanghai Qingpu, Jiangsu Wujiang and Zhejiang Jiashan as the demonstration areas of ecological and green

integrated development in the Yangtze River Delta (with an area of about 2300 square kilometers), the demonstration leads the higher quality integrated development of the Yangtze River Delta region. Take Shanghai Lingang and other regions as the new area of China (Shanghai) Pilot Free Trade Zone to create a special economic function zone that is in line with international traffic rules and has more influence and competitiveness in the international market.

Although there is no obvious mention of the Yangtze River Delta inland integration policy in this rule, I believe that if the inland river integration can be truly realized, it will definitely promote the Yangtze River Delta regional integration.

China's current inland river shipping administrative system and its drawbacks have already been mentioned above, so I think that China's Yangtze River Delta can refer to the EU's Rhine Shipping Committee to establish a unified management of the Yangtze River Delta's inland shipping with higher autonomy Institutions.

In the EU, a Rhine runs through nine countries including Switzerland, Germany, France, Luxembourg, and the Netherlands, but it is the best managed river in the world and the most successfully managed relationship between people and rivers in the world. As a non-governmental organization, the Rhine Shipping Committee, which is responsible for managing the affairs of the Rhine, coordinates the interests of nine countries. It is quite difficult to imagine. The highest decision-making body of the Rhine Shipping Committee is a plenary meeting attended by ministers of various countries. It is convened once a year to decide on major issues, and the division of labor between countries shall be implemented at their own expense. There are fewer decision-making meetings and more executive meetings. Basically once a week, the execution efficiency is quite high.

China has also established the Yangtze River Navigation Management Bureau with reference to the Rhine Shipping Committee. Its functions are mainly: organizing or participating in the drafting of relevant regulations on the Yangtze River trunk

shipping, formulating the Yangtze River trunk shipping development strategy, and organizing the preparation of the mid-long-term planning and five-year plan for the Yangtze River trunk shipping. Supervision and implementation after approval; responsible for the administration of the Yangtze River trunk shipping administration, the macro-control of the shipping market and the supervision and management and regulation of the Yangtze River trunk waterway construction market, as well as the industry management of the construction of the Yangtze River trunk port and shipping facilities and the use of shoreline layout. However, the authority of the Yangtze River Navigation Administration is not very high. It is difficult to establish laws and regulations separately according to the Yangtze River Basin's own situation. In many cases, the local government is still the main management body in the management of inland shipping, its function is difficult to get a good performance.

The new management department that I propose to establish is to manage the inland river of the entire Yangtze River Delta as a whole. The benefits of this are:

- (1) The traditional management model with multiple vertical layers was cancelled, and the inland river management organization of the Yangtze River Delta directly obeyed the Ministry of Transport of the State Council, which would greatly improve administrative efficiency. At the beginning, an office can be set up in a larger city in the Yangtze River Delta to facilitate the people to handle inland river business, approval, complaints, and suggestions. In this simple management model. People's declaration, approval and complaints can be processed quickly.
- (2) The Yangtze River Delta Inland River Management Organization has strong powers to make relevant laws and regulations on rivers within its jurisdiction based on the Yangtze River Delta's own situation and implement them after passing the approval of the People's Congress and the State Council. For example: the conditions to be met by ships sailing in the Yangtze River Delta, the planning of ports and docks, the construction and maintenance of waterways, the regulations on

competition of various shipping companies, etc. In this case, the laws and regulations that will be better formulated will make the inland shipping of the Yangtze River Delta safer and more efficient.

(3) Finally, there is the issue of regulation. At present, the rivers in the Yangtze River Delta mainly have difficulties in supervision, inadequate regulation, and some places providing convenience for enterprises, which leads to unfair competition. I think these problems can be better solved after the establishment of a unified management organization. The unified management organization in the Yangtze River Delta will establish a special management department, and its branches will be extended to all parts of the Yangtze River Delta. The efficiency and professionalism of this management will greatly exceed the supervision instructions passed by the provincial governments. And after the inland shipping companies in the Yangtze River Delta accepted unified management, local protection would no longer exist.

#### 4.2 Suggestions on Inland Shipping Access in the Yangtze River Delta

(1) Inland water transportation industry and its auxiliary industry

At present, for the ship transportation industry, ship management industry, ship agency industry and passenger and cargo transportation agency industry in China, they are all admitted through the approval process. The EU countries have fully realized the liberalization of inland shipping market access, mainly based on the registration system, and can stipulate that enterprises that meet the relevant regulations on inland shipping market access can be established. I think that under the current national conditions of China, the approval system should still be adopted,

because China currently does not have effective laws governing inland shipping, and if the market access is too wide, it may increase the difficulty of managing the inland market. For example, Germany stipulates the relevant issues of inland shipping market access in its Inland Shipping Law, which has a high legal effect, so it adopts the registration system. However, if the Yangtze River Delta's inland shipping adopts unified management, I believe that after a period of time, the shipping market will be well managed and developed. In the long run, when management and supervision are in place, changing access to registration will undoubtedly Better stimulate market development.

(2)To enhance the competitiveness of inland shipping, first of all, we should strengthen the management of access to the ship market, and the newly established unified management organization controls the access and exit of inland ships in the Yangtze River Delta and standardization construction. With regard to the newly added and modified shipping capacity, ships entering the market must meet the conditions of ship age and ship type. It is strictly forbidden to purchase over-age ships and scrap steel ships from abroad to participate in inland water transportation, and it is forbidden to transform scrap steel ships. When a ship wants to withdraw from the market, it should promptly report to the shipping authority and establish a ship scrapping and cancellation registration file. The competent body shall administer in accordance with the law, strengthen market supervision, and standardize business operations; crack down on illegally transported ships, stop unfair price competition, and protect the interests of legally operated ships. It should also stipulate the ship's technical policy and speed up the optimization and adjustment of the capacity structure. Through the formulation of ship age standards, ship technical specifications, environmental protection standards, and adopt mandatory measures to implement ship technology policies, improve the structure of the inland fleet and ship structure, and improve the overall technical level. Through

the formulation of inland river vessel standards, the existing pulper ships are restricted. Cement ships and other backward shipping areas have accelerated their exit from the transportation market. If the Yangtze River Delta's integrated river management is adopted, the Yangtze River Delta, as one of the most economically developed regions in China, should also play a leading and demonstrative role in the replacement of inland river vessels and the adjustment of capacity. For example, the Yangtze River Delta region can make regulations in advance, adjust the sulfur content in the fuel of ships, and move the capacity structure to specialized ships of large ships, keeping up with the international pace.

Although China has formulated the "Outline of National Inland Ship Type Standardization Development", it manages the ships entering the inland shipping market, puts forward standardization requirements, and also makes arrangements for the old ships to withdraw from the capacity market. However, the specific safeguard measures and related fund preparations are not very specific. When the EU formulated the "trade-in" and "ship recycling fund" mechanisms, its relevant regulations were very detailed, including the rate of trade-in and the source of the ship recycling fund, which effectively solved the problem of excess inland waterway capacity in the EU, and also promoted Its ship standardization and large-scale development. China can learn from the specific arrangements in the EU on "trade-in for old" and "ship recycling funds", and use the Yangtze River Delta water system to establish relevant funds for different types of ships in the Yangtze River Delta. Through economic policies to regulate the total capacity and structure, multi-channel financing for ship capacity regulation is used to regulate the total capacity and optimize the capacity structure. Without the implementation of active economic regulation and control policies, it is difficult to ensure the smooth implementation of other capacity regulation and control policies. Therefore, it is necessary to raise funds through multiple channels, study and formulate operational management methods,

and use economic subsidies to encourage shipowners to update ships and dismantle capacity to achieve an optimized capacity structure.

### 4.3 Strengthening the supervision of inland shipping in the Yangtze River Delta

The fact that the operation of the inland shipping market is not standardized and unfair competition is serious also reflects the imperfection of the government's shipping management system and macro-control of the market, and the insufficient investigation and punishment of illegal activities, which affects China's trade and shipping "The overall interest of development" Therefore, we must strengthen the relevant legislation, through national coercion to regulate shipping misconduct to ensure freedom! Fair shipping market competition order. The main task of China's inland shipping market supervision is the same as the EU countries Finally, the national macro-control and legal regulations are adopted to regulate the competition rules of the inland shipping market. However, the current laws on the supervision of the inland shipping market and even the entire shipping market are based on the basic law, and there is no specific legal "Adjustment" in the European Union, specifically promulgated uniform competition rules on inland waterway, road and rail transportation to regulate it. However, at the current stage, China's "Law of Shipping" is also under intense formulation, which will include some unfair competition for the shipping industry, including inland shipping, according to the specific characteristics of the shipping industry. Therefore, accelerating the promulgation of the Shipping Law is very necessary to regulate the inland shipping

market and improve the supervision of the inland shipping market.

As mentioned above, the main body of inland shipping market management with reasonable division of labor is very important for the supervision of the inland shipping market. Under the condition of unified management of inland shipping in the Yangtze River Delta, there can be no local protection, transparent supervision and transparent punishment in order to more effectively manage and supervise unfair competition in the inland shipping market in the country. At this stage, it is even more necessary to increase manpower input to crack down on various illegal acts in the field of inland shipping market in accordance with relevant regulations, in order to maintain a good market order and protect the lawful rights and interests of law-abiding business owners and passengers and cargo owners. Strengthen law enforcement supervision, standardize the behavior of market players, combat disorderly competition and illegal operations, ensure fair market transactions, and create an external environment conducive to the effective functioning of market mechanisms. In order to ensure a free and fair order of competition in the shipping market.

#### 5. Conclusion

In the context of the integration of the Yangtze River Delta region, this article puts forward the idea of the integration of the Yangtze River Delta's inland navigation. First, it analyzes the current regulatory issues related to China's inland shipping, then compares the EU's leading aspects of inland water management, and finally puts forward the core idea of this article: integrated river management in the Yangtze River Delta and analyzes specific problems.

In terms of the establishment of inland shipping management agency, China has too many vertical management structures and is managed by three provincial governments and one municipal government in the Yangtze River Delta region. This will hinder the Yangtze River Delta integration in future inland river planning, market development and management efficiency. The establishment of the European Union's management agency is more concise, and the establishment of an independent management committee for rivers flowing through many countries has greatly improved management efficiency. Therefore, this paper proposes that unified management of the Yangtze River Delta's inland waters can be attempted, which can solve the problems of low management efficiency, difficult supervision, and local protection existing in the Yangtze River Delta's inland water management.

In terms of access to the inland shipping market in the Yangtze River Delta, there are still problems of low level of effectiveness, specific access conditions and procedures that are not operable, and the administrative discretion of the transportation authority is too wide. At the same time, under the background of excess shipping capacity and too strong market competition. You can learn from the EU's previous "ship recycling fund" and "trade-in" policies to adjust the inland waterway capacity structure of the Yangtze River Delta to make it more developmental and competitive.

In terms of inland waterway supervision, there are still issues such as commercial bribery, infringement of trade secrets, and unfair pricing. However, in the shipping industry, it is obviously not entirely applicable to rely solely on the Basic Law and the Anti-Unfair Competition Law to regulate. In response to these problems, combined with the EU's specific approach to the supervision of the inland shipping market and China's national conditions, it is necessary to formulate more effective laws and regulations, and step up the promulgation of the "Shipping Law" and related supporting department regulations.

In the context of China's increasing emphasis on the shipping industry, I believe that not only inland shipping in the Yangtze River Delta, but the nationwide shipping industry will develop well and quickly.

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