

# Study on the Problems and Countermeasures of Maritime Management Integration in Yangtze River Delta

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**Keywords:** Maritime management, integration, Yangtze River Delta

**Abstract.** Maritime management integration is conducive to regional maritime resources coordination, regional maritime security insurance, regional cooperation and development, and the development of port and shipping. This paper starts from the problems of maritime management integration of the Yangtze River Delta (YRD) in China, and put forward some countermeasures to actively accelerate the development of maritime management integration of YRD.

## Introduction

The Yangtze River Delta (YRD), as the object of research area, is one of the most energetic and prosperous economical areas in China and all over the world. The forming of its regional economy has an extremely important function to promote China's economy. Maritime integration, as one of the most important parts of economic integration, has become the topic which many people pay attention to in recent years. Maritime management integration of YRD refers to professional research, guidance, supervision and management of Maritime Bureaus in Anhui province, Jiangsu province, Shanghai and Zhejiang province in China. The key regulatory objects include two parts: The one is port enterprise, such as Shanghai port group, the other one is shipping company, such as Ningbo Shipping. The main job of the Maritime Bureaus concerns many aspects, including ship supervision, dangerous goods prevention, pollution prevention, crew management, navigation management etc. Under the existing vertical maritime regime, each Maritime Bureau manage their own business without considering the idea of integration of the Yangtze River delta, which reveals many problems, restricting the development of maritime [1].

## Present situation of Port in YRD

**Port cargo throughput growth continued to slow down.** In 2015, port cargo throughput of YRD is 36.79 million tons, rose by 2.15% with last year. The above scale ports cargo throughput accounted for 32.11% of the country and the main ports throughput growth rate declined. The negative growth has spread to many ports. However, the ports whose economic hinterland has a powerful industry cluster have good growth momentum.

**Port foreign trade cargo throughput was approximately flat with the previous year.** In 2015, Port foreign trade cargo throughput completed a total volume of 11.94 billion tons in YRD, with an increase of 0.3% compared to the last year, accounting for 33% of the country. In detail, the Shanghai port foreign trade cargo throughput volume was 3.78 billion tons, with Zhejiang Province

4.43 billion tons and Jiangsu Province 3.73 billion tons.

**Port container throughput grew steadily.** In 2015, the Yangtze River Delta port container throughput was 75 million TEU, with an increase of 4.85% year on year, accounting for 35.7% of the whole country. In detail, Shanghai port container throughput maintains the first in the world with 36.53 million TEU. The container throughput of major ports in Zhejiang province was 22.75 million TEU, while in Jiangsu province was 15.72 million TEU.

### Present Situation of Maritime in YRD.

**Registered operating ship.** At the end of 2015, the National Direct Maritime Bureau registered 59,323 ships in operation with a total volume of 97.7 million tons. Besides, there were 22,282 sea-going vessels with the volume of 72,280,000 tons among them. The amount and total volume of sea-going vessels registered by Maritime Bureau in YRD were 8,707 ships and 35,250,000 tons respectively [2].

Table 1 Vessel registration situation of Maritime Bureau in YRD at the end of 2015

Maritime Bureau	International navigation		Domestic navigation		Total amount	
	Number of ship	Gross tonnage	Number of ship	Gross tonnage	Number of ship	Gross tonnage
Shanghai	389	11,030,000	966	5,760,000	1355	16,790,000
Zhejiang	110	1,590,000	5084	1,0470,000	5194	12,050,000
Jiangsu	68	1,070,000	2090	5,340,000	2158	6,400,000
Total YRD	567	13,690,000	8140	21,560,000	8707	35,250,000
China	1260	26,690,000	20831	45,500,000	22282	72,280,000

Source: Statistical analysis report on the supervision and management of China's maritime administration

**Registered crew member.** At the end of 2015, there were all together 638,900 registered seafarers. The number of domestic seaman and international were 168,500 and 470,500 respectively. In Yangtze River Delta, the total registered number of seaman was 187,500.

Table 2 Seafarers registration situation of Maritime Bureau in YRD at the end of 2015

Issuing agency	Number of		Total number
	domestic seafarers	international seafarers	
Shanghai	7,700	55,200	63,000
Zhejiang	50,000	22,400	72,400
Jiangsu	10,400	41,800	52,100
Total YRD	68,100	119,400	187,500
China	168,500	470,500	638,900

Source: Statistical analysis report on the supervision and management of China's maritime administration

### Problems of Maritime Management Integration in YRD

**Lack of Information Sharing Platform.** According to the experience of EU maritime information management, lack of information sharing platform in the YRD maritime management is the largest limitation in the process of adapting to economic integration in YRD. The Maritime Bureau in Zhejiang province and Shanghai both have their own information management system for ship management, crew management and other information management system. This system plays an

very important role in the communication between different bureaus in YRD. However, due to the differences of those systems and no docking between them, the information sharing becomes a failure. In addition, both the Maritime Bureaus in YRD have regular meeting, but it does not belong to the normal management. Besides, the meeting mechanism is too loose to realize the interconnection and the intercommunication of the maritime information of YRD.

**Imperfection of joint maritime law enforcement management mechanism.** Due to the difference between administrative district divide and maritime law enforcement area divide, maritime law enforcement area divide becomes the standard of administration management and law enforcement in YRD. However, each bureau focus on the maritime incidents in their own jurisdiction, which lacks the joint maritime law enforcement and mutual recognition mechanism.

**Inconformity of enforcement of maritime management standard.** The current management of maritime affairs in YRD is based on their own standards of the maritime bureau in different parts of the area. Without the unified standard, it is difficult to realize the simplification maritime management in YRD. For example, safety management, pollution prevention management, maritime pilotage and the declaration of goods, all of which have different standards according to different Maritime Bureaus.

**Deficiencies of the laws and regulations in maritime area management.** The relevant laws and regulations of the maritime administration in the Yangtze River Delta mainly include the national legislation and local regulations. As the national legislation is not specifically for regional maritime management, local laws and regulations are not uniform, which brings the Yangtze River Delta regional maritime management integration some obstacles.

**Inability of maritime regional service.** At present, maritime service capability needs to be improved in the following three parts. Firstly, E-government service. The core character of E-government service is that it can realize the remote-service and self-service. With ships sailing to different places, crew members are difficult to return to the port of registry and the issuing authority for business. What's worse, there are lots of maritime handling points in YRD, and shipping enterprises have to run a long way to deal the government affairs. If we have E-government service system, all the problems will be solved. Now the E-government is still at its infancy stage, it is fragmented and incomprehensive, and needs construction and improvement. Secondly, crew service. The examination, assessment and certification for crew in YRD are separated. The training contents and methods as well as assessment results in regional training institutions are quite different. Thirdly, expert advisory service. At present, for the lack of maritime expert database system in YRD, it cannot provide the remote consultation for the crew members, ship and shipping companies, which has largely affected the maritime region service [3].

## **Suggestions**

**Establish the coordinating mechanism.** Establish a joint meeting system of maritime management in YRD. Important issues will be discussed and decisions will be made in regular joint meeting. The special committees are established under the joint meeting, such as strategic planning committee, navigation management committee, ship management committee, crew management committee, safety management committee and information platform construction committee etc. In these special committees, regular discussions will be made and relevant rules will be formulated [4].

**Establish the standardization system.** Standardize the implementation of laws and regulations in advance. Develop unified criterion for security technology, captain and crew technical assessment certification, vessel inspection, vessel emissions, information exchange, and pollution prevention. Develop standard system for crew management and vessel management according to crew's

training, examination, certification as well as ship registration, ship safety management and so on. Standardize navigation industry management, perform the function of navigation administration, simply administrative license of setting up navigations and shorten inspection time of it. Strengthen the study on integrated production system of indoor and field maritime survey. Promote the establishment of surveying and mapping industry management system in water transportation area, and unify datum in depth [5].

**Establish the integration mechanism.** Promote the unified planning of course, anchorage, VTS within Yangtze River Delta, make sure that the basic window of YRD can deal the entire area's relevant business and promote the establishment of single window in YRD; boost the mutual recognition of shipping company's integrity System, ship inspection results, crew competency certificates, packing inspectors and dangerous goods declarant in order to avoid repeated examination, repeated declaration and repeated assessment; set up a unified process mechanism system for oil pollution, ship accidents, maritime rescue and other emergency events; promote the sharing of relevant maritime security resources such as navigation, survey, maritime rescue, cruise power and so on; launch campaign aimed at legal violations.

**Exchange and share information.** First, promote the exchange of information in ship, crew, accident survey and other aspects between different maritime agencies in YRD. Second, establish the data sharing platform which can make Maritime Bureaus collaborative and seamless collect with each other and thus facilitate the convenience of maritime business within YRD. In addition, promote the "Internet plus maritime" of regional integration in YRD, and strengthen the application of data integration in order to build the big data of maritime. What's more, promote the mutual connection and communication on information with other administrations in YRD.

## Summary

The maritime management reform is a complex and ongoing process, involving the interests of all parties. It is not only closely related to the process of the reform of the administrative system, but also depends on the development of shipping industry. It cannot be done overnight. As long as we focus on the actual problems, keep a scientific attitude towards reform, and gradually refine the maritime management system in the exploring practice, we can achieve great results.

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