# The Cross – Century Construction of the Shanghai International Shipping Center

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Abstract: The construction of the Shanghai International Shipping Center is a prerequisite for building Shanghai into an international center of economy, finance and trade. Shanghai has excellent conditions for becoming an international shipping center, and, under the leadership of the national government, Shanghai is advancing towards this goal for the next century.

Key Words: Shanghai; an international shipping center; conditions; construction

# I. The Background of the Construction of the Shanghai International Shipping Center

Shanghai is favorably located at the intersection of China's coast and the largest river Yangtze. In ancient times it was only a fishing village. In the Sui and Tang Dynasties (about 600 to 900 A.D.) it gradually developed into a trading port During the Kangxi Reign of the Qing Dynasty (more than 300 years ago), a customs was founded in Shanghai, and this promoted Shanghai's development as a port. During the Jiaqing Reign of the Qing Dynasty (about 200 years ago), Shanghai was already known as "a hub port linking the Yangtze River with the sea as well as a large city in Southeast China". Today, Shanghai has become China's largest economic center, and Shanghai Port has become China's No. 1 port, and therefore Shanghai plays an important role in the national economy and foreign trade.

Since the 1990s the Chinese government has been striving to build Shanghai into "an economic locomotive of East China and an international economic, financial and trade center". Specifically, the government is focusing on the development and opening of the Pudong New Area of Shanghai and the opening of Yangtze River ports so as to build Shanghai into such a center and propel the economic boom in the Yangtze Delta and even the whole Yangtze valley. To realize these objectives, it is necessary to develop international shipping and turn Shanghai into an international shipping center. In the recent years the Shanghai Municipal Government has shown great concern for the transport developmental strategy. The municipal Party secretary Huang Ju pointed out that Shanghai's future lies in the construction of three ports: information port, airport and seaport. Of the three, seaport is of primary importance. Mayor Xu Kuangdi said at the 1997 International Maritime Affairs Forum: the construction of the Shanghai International Shipping Center is a cross – century task of great significance.

As is known to all, an international shipping center is an important node in the shipping network and a hub of logistics for international trade, and therefore has a great influence on the local economic growth and foreign trade. History has shown that the emergence of an international shipping center has always occurred with the emergence of an economic center. Since the 18th century, the economic center has

shifted again and again, from the Mediterranean to the Atlantic, and then to the Pacific. As a result, international shipping centers emerged in West Europe, North America, East Asia and Southeast Asia one after another. Since the 1980s the Asia – Pacific region has become the region with the fastest economic growth. China's reform and opening have increased its proportion in the world economy, and China has provided the world's largest container source. In the light of the conditions for the formation of international shipping centers and in view of China's participation in the global economy and international competition, it is necessary to build Shanghai into an international shipping center, which will take the Yangtze Delta, the Yangtze valley and the eastern coast as its interior and shall reach out to all parts in the world. This center should be a container transport hub port and a comprehensive system that integrates market, shipping information and logistics. In other words, it should be a third – generation shipping center with a comprehensive range of resources as defined by the UN Conference on Trade and Development.

# II. The Conditions for the Construction of the Shanghai International Shipping Center

A contemporary international shipping center, by definition, should be a port city with such hardware as dense container lines, deep – water navigation channels and a network of consolidation, evacuation and transportation as well as such software as shipping – oriented finance, trade and information. As China's economic center, Shanghai has the necessary conditions for becoming such a center.

# 1. The Favorable Geographical Location

Both the Yangtze River valley and the east coast are China's economically developed zones. Shanghai is favorably located at the middle of the coast and the Yangtze River mouth. Through river waterways, highways, railways and coastal transport, Shanghai's influence can spread to the Yangtze River valley, East China and even the whole country. Globally, Shanghai is also favorably located, with such important cities as Vladivostoc, Kaohsiung, Hong Kong, Tokyo – Yokohama and Osaka – Kobe within the range of 1000 sea miles. London is 10,422 sea miles to the west and New York is 10,576 sea miles to the east. Clearly, Shanghai is the bast gateway to China for foreign shipping circles.

# 2. The Vast Economic Interior and Abundant Container Sources

Shanghai's economic interior includes the vast, economically developed Yangtze Delta, the Yangtze valley and the east coast. According to statistics, the objectives for Shanghai's social and economic development are as follows:

For the first stage of development before the year 2000, Shanghai should establish the framework of an international economic, financial and trade center. Shanghai should maintain an average GDP growth rate of 11.4 percent between 1995 and 2000. So, at the end of the century Shanghai's GDP will reach 570 billion yuan, its tertiary industry will account for more than 50 percent of the total GDP, and the total export and import trade volume through Shanghai Port will amount to more than US \$ 80 billion, with Shanghai municipal exports and imports reaching more than US \$ 38 billion.

For the second stage until the year 2010, Shanghai will, on the whole, become an international economic, financial and trade center. It will have a total GDP of more than 2000 billion yuan and an average GDP growth rate of 9.8 percent. Its tertiary industry will account for more than 60 percent of the

total GDP, and the total export and import trade volume through Shanghai Port will amount to more than US \$ 240 billion, with Shanghai municipal exports and imports reaching more than US \$ 90 billion. The proportions of various transport modes for the future Shanghai:

transport/year	2000	2005	2010
railways	16.5%	15.29%	14.7%
highways	19.7%	21:54%	23.5%
waterways	63.5%	62.8%	61.4%
air routes	0.3%	0.37% .	0.4%

On the basis of the forecasts for Shanghai's total transport volume and the pattern of various transport modes, it is possible to predict its port throughputs:

Shanghai's total throughput will reach 180 million tons in 2000, 210 million in 2005, and 240 million in 2010. According to the principle of giving priority to container transport, Shanghai's predicted container throughputs will be: 3.5-4 million TEUs in 2000, 5.5-6 million in 2025, and 7.5-8 (or even 10) million in 2010. This will promote Shanghai's competitive power and lay the foundation for the international shipping center.

### 3. Numerous Shipping Lines and Frequent Voyages

The present Shanghai Port has 50 liner companies that operate 106 container transport lines and offer 437 voyages every month. These lines have covered all parts of the world, including West Europe, North Europe, the Persian Gulf, the Mediterranean, North America, South America, Australia, Southeast Asia, Japan, Korea, Vladivostoc, Hong Kong, etc. In terms of voyage density, Shanghai's container voyages account for 75 percent of all ports in the Yangtze Delta. Shanghai is the only port of mainland China that offers voyages to all the twelve navigation zones in the world. Voyages from Shanghai reach 110 ports, accounting for 77.5 percent of all ports China can'reach. Of these ports, 43 are connected with China only through Shanghai. For the cargo sources in the interior, Shanghai often offers the cheapest and fastest shipping line services.

### 4. The Superior Conditions for Consolidation, Evacuation and Transportation

On the whole, Shanghai has already had a comprehensive transport network consisting of railways, highways, waterways and air routes. Two trunk railways, the Shanghai – Beijing railway and the Shanghai – Hangzhou railway, connects Shanghai with various parts of the country. The Shanghai – Nanjing Superhighway, the Shanghai – Hangzhou Superhighway, the Nos. 204, 312, 318 and 320 national highways, the Shanghai – Jiading Superhighway, the Xinzhuang – Songjiang Superhighway and the city's outer – ring highway all link well with the national highway network.

Shanghai's transport is also facilitated by the Yangtze River and the Grand Canal. Furthermore, air transport is well developed in Shanghai. The Hongqiao Airport is among China's three largest airports. The Pudong International Airport that is under construction will enter operation in 1999. The total length of Shanghai's shoreline is 240 kilometers. The total area of the port zones is 3600 square kilometers. Shanghai Port has 13 container berths and 59 container transshipment depots and stockyards, covering a

total area of 1.69 million square meters. They can meet the needs of container stuffing and unstuffing as well as provide other services.

# 5. A Well - Developed Shipping Market

The Shanghai market is large, with widespread influence. This is a favorable condition for the establishment of a shipping market. Many famous domestic and international container companies have established their branches or offices in Shanghai to expand their business. The Shanghai Shipping Exchange has been founded to serve both domestic and overseas clients. So far, most of the world's top 20 liner companies have entered Shanghai. Foreign shipping companies have established 82 subsidiaries, branches and offices. The companies opening shipping lines in Shanghai and operating container transshipment include not only Chinese COSCO, Sinotrans, etc., but also foreign companies such as the American President Lines, the Sea – land, Maersk, P & O Nedllolyd, OOCL, the Japanese Mitsui O.S. K. Lines., the Evergreen, etc. Shanghai is also well developed in terms of cargo forwarding, with more than 200 Grade One forwarders.

# 6. Comprehensive Services

An international shipping center is usually integrated with an international center of finance, trade and information. As China's largest economic center, Shanghai ranks first in China in terms of such services as finance, trade and information. Its influence spreads all over the country. Since the 1990s Shanghai's tertiary industry has been developing rapidly. A market system consisting of securities, foreign exchanges, short – term loans, insurance, commodity exchange has basically taken shape. The door of Shanghai's tertiary industry is opening wider and wider to the outside world. By the end of 1996 there were already 193 foreign financial organs and offices in China, ranking first in all Chinese cities in terms of quantity and type. The United Nations Trade Information Network has established a China branch in Shanghai.

The VTS (vessel traffic superintendency system) started to operate in 1994. The EDI (electronic data interchange) serving the Shanghai container transport began to function in 1998. The information port project, one of the city's major infrastructure projects, is already under construction. Shanghai also ranks at the top of the nation in the application of electronic devices and information.

Besides, Shanghai is strong in ship building and repairing, logistics and recreational services. An important factor for Shanghai to attract container vessels is its complete range of services in finance, trade and information.

Shanghai's container throughput was 30,000 TEUs in 1980, 456,000 TEUs in 1994, and 1.97 million TEUs in 1996, thus ranking 17th in the world. In 1997 its throughput rose to 2.527 TEUs, ranking 12th in the world. For the past twelve years its container throughput has maintained a growth rate of 25 percent. Now, Shanghai has become a container hub port of China, and is expected to rank among the top ten in the world and top three in Northeast Asia in terms of container throughput.

# III. The Projects for the Construction of the Shanghai International Shipping Center

In May 1996 the Shanghai Municipal Government strengthened its leadership over the construction of Shanghai's port and shipping by establishing the Shanghai International Shipping Center Construction Administration, with an office dealing with the day - to - day work. Thus, the construction of the

Shanghai International Shipping Center started with the support of the State Council and with the coordination from the Ministry of Communications, Jiangsu Province and Zhejiang Province. The construction involves the following specific projects:

### 1. The Shanghai Shipping Exchange

November 28th, 1996 witnessed the founding of the Shanghai Shipping Exchange (SSE), the first one in China and an infrastructural supportive organization for the construction of the international shipping center.

Approved by the State Council and jointly organized by the Ministry of Communications and the Shanghai Municipal Government, SSE is a component of the large socialist market system with Chinese characteristics. It aims at "standardizing shipping transactions, regulating shipping quotations, and distributing shipping information", and therefore guides the development of China's shipping market. After more than a year's practice, SSE is approaching perfection in its operational mechanism and is performing its various functions normally: regularly releasing the China Containerized Freight Index (CCFI); providing member units with the comprehensive supportive services of "custom clearance, commodity inspection, animal and plant quarantine, and sanitary inspection"; making new arrangements of shipping services on the basis of the custom clearance reform; practicing the container freight tariff filing system with the authorization from the Ministry of Communications; focusing on the research and development of information and establishing an extensive network of information collection and distribution; starting the journal "Shipping Exchange Weekly", which offers enterprises and government agencies a comprehensive information service by means of modern science, technology and telecommunications devices. Before long, the Chinese shipping market will become a prize sought after by international competitors.

# 2. The Shanghai Composite Port

On September 18th, 1997, with approval from the State Council, the Shanghai Composite Port was formed by combining the container terminals of Shanghai, Zhejiang and Jiangsu. The composite port, while taking Shanghai as the center and the two provinces as the two flanks, reorganized the existing and planned container terminals so as to make full use of each terminal's capacity, rationalize the geographical distribution of the terminals, avoid duplicated construction projects, and distribute the resources rationally.

The Administrative Committee of the Shanghai Composite Port is a cross – regional organization in charge of the container terminals at various localities. Its office is housed in the Shanghai Port Tower in the Pudong New Area. The scope of the composite port includes the deep – water shorelines of the existing and planned container berths in the Yangtze water zone down the Wusongkou of Shanghai, the Yangtze water zone down the Nanjing Yangtze Bridge, and the water zones at Ningbo and Zhoushan of Zhejiang Province.

# 3. The Channel - Deepening Project at the Yangtze Estuary

The navigation channel deepening project at the Yangtze estuary is a trans – century national key project, which will improve the navigational conditions in Shanghai Port, promote the economic development in the Yangtze valley, use the resources rationally, and lay a solid foundation for the construction of the Shanghai International Shipping Center. At present, the Yangtze River mouth navigation channel needs

dredging to maintain a 7 - meter depth along the northern trough and a 6 - meter depth along the southern trough. The current channel deepening project aims at a 12.5 - meter depth. With one integrated plan, the project will be executed in several stages. In the first stage from July 1998 to the end of 2000 the channel will be deepened from 7 meters to 8.5 meters. In the first stage, a total of 3.27 billion yuan will be invested. The main structures are the 12.7 - kilometer - long northern guiding dike and the 20 - kilometer - long southern guiding dike, involving more than 1.3 billion yuan. After the completion of the dikes, the third - and fourth - generation container vessels can sail into and out of the river mouth at all times. Also, 10,000 - ton - class bulk carrier and oil tankers and the fifth - and sixth - generation Super - Panamax container vessels can sail in and out by taking advantage of the tides.

# 4. The Renovation and Construction of the Waigaoqiao Container Terminal

The first and second stages of the Waigaoqiao Container Terminal project have laid a good foundation for the development of international container transshipment. During the first stage, which was completed in May 1998, 450 million yuan were invested to convert the original four multi – purpose berths into three container berths with a total designed handling capacity of 600,000 TEUs. For the second stage, which is expected to be completed in September 1999, 2.2 billion yuan will be invested to build three new container berths with a total designed handling capacity of 600,000 TEUs.

# 5. The Selection of the Site for a Deep - Water Container Terminal

To suit the needs of transport on the trunk shipping lines and to reduce transport costs, the container vessels are becoming larger and larger. Some large and ultra – large container ships draw 13 – 14 meters. Such large vessels cannot sail into Shanghai Harbor with a full load. This affects their economic benefits and extends the transport period. Therefore, the construction of the Shanghai International Shipping Center requires a 15 – meter – deep container port zone. According to the preliminary plan, its site is to be outside the sandbar at the Yangtze River mouth and is close to the Pudong New Area. At present, a feasibility study on the site is being conducted, and important results have been obtained. Some experts have suggested starting the project in 1999 and completing it in 2003. The new terminal is expected to have a throughput of 1.5 million TEUs in the year 2005. But, the implementation of the plan is yet to be approved by the central government.

The construction of the Shanghai International Shipping Center is an important project for Shanghai's strategic development, and it will contribute a great deal to building Shanghai into an international metropolis. Once the Shanghai shipping center is completed, it, together with the Hong Kong International Shipping Center, will help to link China's economy with the world economy, the Chinese markét with the global market, and make great contributions to the development of China, the Asia – Pacific region and even the whole world.