

## Development of seaport service is a method to improve the capacity

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**Abstract:** Today, port services are an important and decisive role in improving the efficiency of the logistics process. The main goal of logistics port services is to focus on building port services areas to optimize logistics process by improving port compatibility in the logistics chain. In this article, LEC Group's logistics experts will help you better understand the information related to logistics port service model. Logistics is the process of planning, organizing, implementing and effectively managing capital flows to control the flow and storage of goods from raw material preservation to product completion as well as information involves this process from the first point of departure to the final destination of consumption to satisfy customer requirements. This completely means that logistics is a series of continuous activities, closely related to each other, mutual interaction is carried out scientifically and systematically through research and planning steps regulations, organization, management, implementation, inspection, control and improvement. Therefore, logistics is a process that involves many different activities within the same organization, from developing a strategy to specific, specific activities to implement the strategy. For the transportation industry, logistics includes all activities of planning, organizing the implementation of business services related to transportation (sea, road, air, inland waterways, etc.), warehousing, arranging, packing and packaging of goods ready for the process of transporting and distributing goods to places at the request of the consignor.

**Keywords:** port system, service

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### 1. Introduction

With 281 ports, a total capacity of 550 million tons / year, Vietnam's seaport system has "changed to a new page" with the investment and upgrading more and more modern after 20 years of planning. Vietnam's maritime shows, currently, the whole country has 281 ports with a total capacity of over 550 million tons / year. Port system is invested synchronously in infrastructure: wharves, buoys, loading and unloading equipment, basic development complete, fully functional, large scale and widely distributed by region. domain. Most seaports have made full use of natural conditions, met the requirements of transporting goods by sea, actively serving the socio-economic development process of coastal areas and the whole country. create motivations to attract and promote related industries and industries to develop together. Seaports are owned and operated directly by state-owned enterprises and other economic sectors. 4 ports invested with state budget and assigned the Vietnam Maritime Administration to act as representatives of state agencies to sign operating leases, including: Cai Lan port, CaiMep ODA container terminal, total port. The international market of Thi Vai and An Thoi – Kien Giang port has brought about remarkable results. Thanks to strong innovation, in the first 6 months of 2019, the volume of goods through Vietnam's seaport system is estimated at 308.8 million tons (excluding the volume of unloaded transit goods), an increase of 13% compared to with the same period in 2018. Exported goods reached 74.8 million tons, up 8% over the same period in 2018, imported goods reached 98.1 million tons, up 19%, domestic goods reached 134.9 million tons, up 11%. Passenger through the port reached 3.8 million passengers, up 32%. Most of the regional major ports: Hai Phong, Da Nang, Ba Ria - Vung Tau, Ho Chi Minh City ... have been upgraded to receive ships of up to 30,000 DWT. Typically, Cai Mep – Thi Vai port receives vessels up to 18,300 TEU (194,000DWT) to operate weekly, directly connecting Vietnamese import and export goods to the Northern European market. In the central region, the seaport is also on the "flourishing" momentum, especially the Danang port. Before 2014, Da Nang port had a limited wharf length, container ships had to queue for 6-8 hours. After equitization, the port focused on upgrading the wharf infrastructure and developing container services. The total investment for the period of 2014 - 2018 is more than VND 1,900 billion, 4 times higher than the previous period of 5 years (2009 - 2013). The port continues to put into use 2 new wharves in the project of expanding Tien Sa port phase 2, with a total investment of nearly VND 900 billion. Output of goods through the port in the past 5 years increased by an average of 10% / year. The receiving capacity has been raised from 1,800 TEU to 3,500 TEU, the situation of waiting ships is almost not available. Infrastructure is one of the constituent parts of the logistics service supply chain and in the constituent elements of the logistics chain, transportation is the most important. In total transportation cost, sea transport costs make up the largest proportion, simply because sea transport has outstanding advantages that other modes

of transportation do not have such as low cost, transport Loaded with large volume, long transport route, friendly with environment.

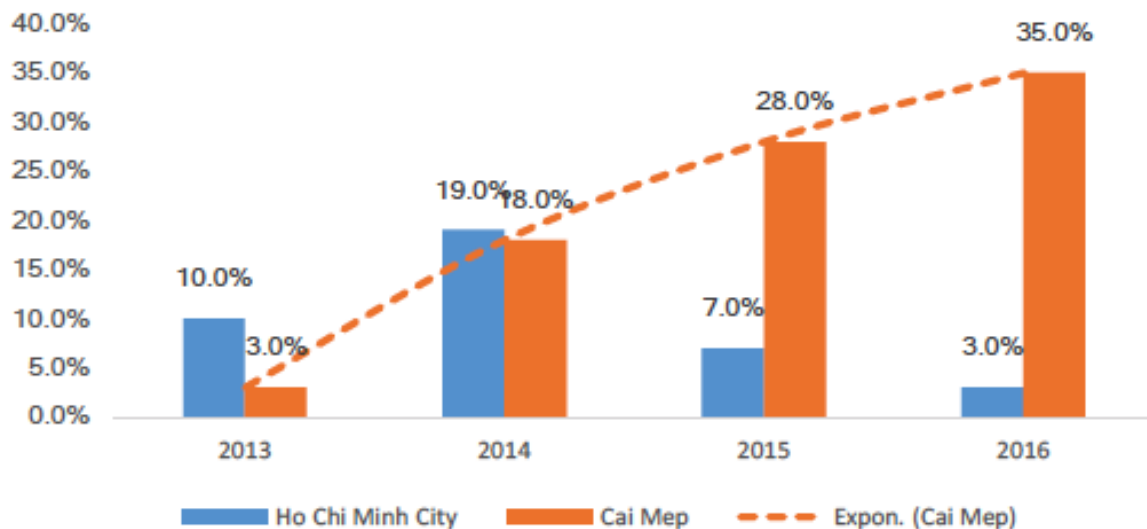


Figure 1. Container growth

A country with a coastline of over 3,200 km, there are many favorable locations for developing seaports, near international maritime routes and in the dynamic economic zone. Over the years, we have devoted a large part of our budget and ODA resources to investing in transport infrastructure to facilitate transportation of goods and logistics services. Vietnam's seaport system has also been invested in large-scale and modern construction. However, one of the major difficulties of seaports is the weak infrastructure linking with the concentration of goods. Therefore, it is necessary to develop a system of transport infrastructure in a synchronous and rational manner to create a complete network linking traffic modes in order to optimize the position and time. transport and storage of resources from the beginning of the supply chain to the consumer. Experience in the development of logistics services in the world has proved that logistics services are only developed in countries with strong infrastructure, especially port infrastructure. Seaports play an important role, deciding the development of the logistics industry in each country. The development of the port helps logistics to reduce costs, increase competitively, and improve service quality.

## 2. Vietnamese seaport system

In the past years, one of the topics that has been considered by the government authorities as well as enterprises is the development of Vietnam's logistics services. There have been many conferences, seminars, forums organized to exchange information, listen to opinions of enterprises, plan and manage policies in order to provide solutions for the development of logistics services in Vietnam. Logistics services are a highly developed and comprehensive development of multimodal transportation. The whole process of movement of raw materials, through production to circulation to meet market demand, serving customers are associated with multi-mode transportation. In transportation, infrastructure plays a very important role, including seaports, airports, railways, roads, inland waterways and other facilities such as warehouses, loading and unloading equipment, communication system. Recognizing the importance of logistics development in the coming time, the Ministry of Transport has assigned Vietnam Maritime Bureau to carry out research project "Development of logistics services in the field of Transport to 2020".

With its advantages located near the international sea route, sea transport plays a very important role in the transport of foreign trade of Vietnam. In recent years, due to the open policy of the State and the high growth rate of the national economy, the volume of goods through Vietnam's seaports has continuously increased. From 1999 to 2004 alone, the volume of imports and exports through Vietnamese seaports increased from around 17.425 thousand tons in 1999 to about 21.900 thousand tons in 2000 and 127.7 million tons in 2004. The number of ships arriving at the ports for cargo loading and unloading is also higher. The demand for ships also increases rapidly. Although the volume of goods exported and imported through Vietnamese seaports has increased rapidly, especially in containerized cargoes, most ports still have not utilized their capacity. The location of the port, the quality of the means and equipment as well as the layout of the production site in the port and the post-port transport system are factors that increase the time the vessel stops at the port, reduce the

ability to attract ships to work in Vietnam ports compared with other ports in the region. Moreover, the seaport system also shows many shortcomings: monopoly in loading, monopoly in pilotage services, time to wait for ships to flow. Port infrastructure and equipment are generally outdated, over-used and not renewed, equipment can fail at any time and repair work is prolonged. There is lack of equipment suitable for work in warehouses, other materials for loading and unloading are very old and lack (anchor, rope ...). Due to the lack of suitable equipment, repair shops usually take between 5 and 7 days to repair. In addition, port charges are quite high (port fees, handling charges, storage charges), charge for tugboat, charge for unfastening wire ...). Local ports employ workers with poor loading and unloading techniques, resulting in significant loss of cargo. With policies of the Party and State on international economic integration, trade liberalization, Vietnam has been a member of APEC, ASEAN, joining AFTA, signing the Vietnam-US Bilateral Trade Agreement and the future. It will be a member of the WTO. One of the mandatory requirements is to gradually eliminate monopoly, improve the quality of goods and services, research and improve the system of commercial law in accordance with international practices. As such, improving the quality of seaport services is also a task that needs to be implemented soon. Improved port services will attract more vessels into the pipeline and as such the port will have the capacity to provide and expand its services. Vietnam lies along one third of the length of the East Sea, located in the middle of Southeast Asia (Asean) all year round with sunshine, located between Asian dragons (Taiwan, Korea, Hong Kong, Singapore). About 80% of Vietnam's imports and exports are due to shipping. If in 1990 the share of imports and exports in GDP was just 42%, then in 1999, the share was 81% of GDP. In addition, the value of the amount of foreign currency brought about by import and export and the direct and indirect impacts of this source of capital on the Vietnamese economy will not be realized without the system of Vietnamese seaports. Male. With more than 110 ports under the management of many sectors such as local transportation. With the total length of the wharf line of the entire port system is 25,617 meters and 104 wharves loading and unloading goods directly to inland water transport means, the port system of Vietnam accounts for 90% of volume dry cargoes across national ports with an average increase of 12.5% per year. In 2004 the volume of cargo through the seaport was 127.7 million tons (in 1995, 36 million tons), the number of ships entering and leaving Vietnam's seaports was 74,527. The maritime sector is planning to develop and expand the seaport system, build deep-water ports, large specialized ports and international and regional ports, especially for Laos, Cambodia, Thailand, and Southern China with the goal of bringing cargo through the seaport system to about 250 million tons by 2010. In the maritime economy in general, marine trading in particular, the seaport system plays an important role, decides the global reach of every sea nation. For Vietnam - a country with large seas and long coasts, with many waist, lagoon and deep bay near big cities, tourism centers, islands and production areas. The world's busiest shipping lanes, the development of the seaport system is of great significance. Recognizing that, over the past years, the Party and State have focused on renovating, upgrading and building many national and international ports nationwide, creating positive changes in marine economic development. Up to now, 160 ports have been put into use, distributed in each area, the country, with the capacity of customs clearance of goods increasingly. By 2015, cargo throughput of the entire Vietnam seaport system is estimated at over 600 million tons. In particular, the shipping industry is managing, exploiting 35 channels into national ports, dozens of channels into specialized ports and over 330 berths, ... with a total length of up to 39,950 m, doubling In 1999, it contributed to bringing the productivity of cargo handling and customs clearance of goods of Vietnam seaport system up to other countries in the region.

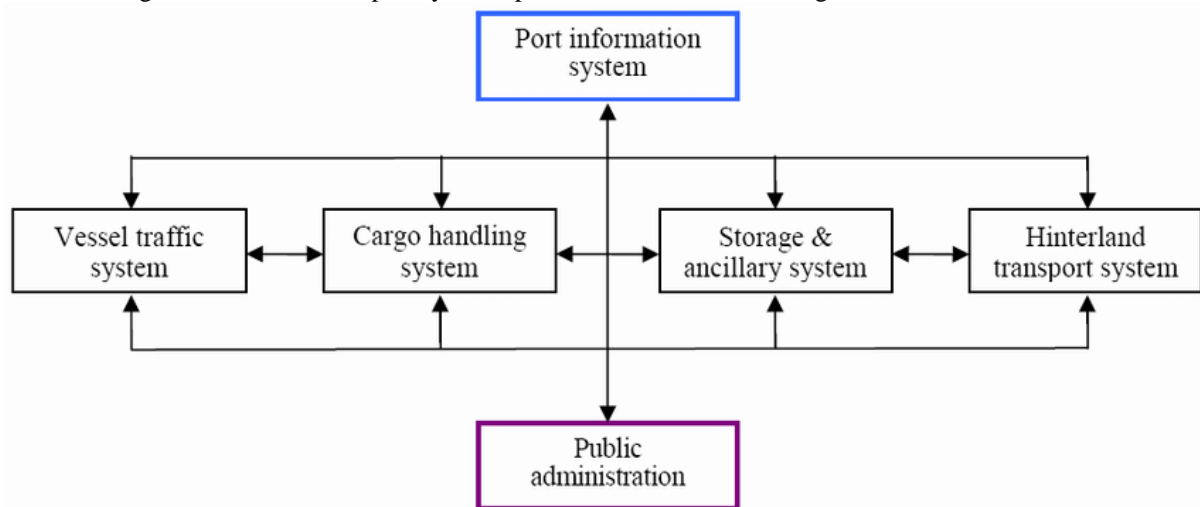


Figure 2. Service system in the port

However, due to many different reasons, both subjective and objective, the efficiency of using and exploiting the port system of our country is low, not corresponding to the potential and advantage. At present, most of seaports still use backward management and exploitation technology, productivity is limited (only 45% - 50% of the world advanced level). Meanwhile, some ports, due to lack of vision and heavy weight in dealing with local growth, are difficult to connect to establish a coherent national transport network. This not only leads to more port and less cargo, but also undermines the capacity to clear goods at major urban ports, but is under increasing population pressure and transportation infrastructure degradation. On that situation, on December 24, 2009, the Prime Minister issued Decision No. 2190 on approving the development plan of Vietnam seaport system up to 2020 with orientation to 2030. The development of the seaport system must be based on the territory and be classified in terms of scale, function and task of each type of port in the national seaport system in the following order:

- (1). The national general port is the main port in Vietnam's seaport system, including international transshipment port (Van Phong); International gateway port (HaiPhong, ThiVai - CaiMep); (Hon Gai, Nghi Son, Cua Lo, VungAng, Dung Quat, QuyNhon, NhaTrang, Saigon, Dong Nai ...);
- (2). Local ports with main functions within each province and city;
- (3). Specialized ports serve direct industrial facilities, specialized and specialized goods and are an item in the industry that it serves. In each port, together with the study and arrangement of the system of wharves, wharves and wharves in a scientific manner, it is necessary to concentrate on investing in modern equipment and equipment together with advanced management and operation technologies. regional and world-wide, constantly improve productivity, performance. With the planning and development of the above-mentioned seaport system, it is expected that by the year 2020, the volume of customs clearance goods will reach over 1,100 million tons / year, contributing to the country's marine economic development in the integration.

### 3. Seaport service

The development of reasonable, high quality service is a manifestation of a developed economy and a civilized society. Due to the great economic and social significance, the service sector has become an important economic sector and plays an important role in the economic structure of high growth countries, according to the OECD, a developed economy has a service ratio of about 70% of GDP and about 70% of the labor force in the service sector. Service proportion in the US economy accounted is for 85% of GDP, Hong Kong is 73.7%. Also at the Encyclopedia of Vietnam, we also meet the concept of external economic service. Foreign economic relations are defined as activities that promote and support foreign trade, production cooperation, economic and technical cooperation with foreign countries, investment, credit, international tourism and Serving customers in the aforementioned areas. Foreign economic relations services include services close to or accompanying the above mentioned external economic activities; insurance, transport of import and export goods, international payment, trade information, post office, telecommunication, warranty, repair and assembly of import and export machinery, ship repair and service. maritime services, aviation services, brokerage, consultancy in the field of external relations as well as export and import activities such as inward remittance, labor remittances and remittances.

In the world and even in Vietnam, there is no general concept of seaport service. Due to the general characteristics of the type of service as well as the complexity of the types of services in general and seaport services in particular, and the different interpretations between countries, the definition of services The most common form of this service is the more difficult. We look at the concept of seaport service in the broader scope of the World Trade Organization (WTO), the European Union (EU) and, to a lesser extent, in some areas. country specific.

- Ship agency service means the service of carrying out the following tasks as entrusted by the shipowner:

- To carry out procedures for vessels entering and leaving ports with competent agencies; Towing arrangement; arranging pilotage; Arrange berths, mooring places for loading and unloading of goods; pick up, pick up passengers, get off the train; To provide necessary information to the parties involved in the ship, cargo and passengers, prepare documents and documents on goods and passengers, arrange cargo delivery to the consignee; Carrying out customs and border-guard procedures related to the ship and procedures for loading and unloading cargoes and passengers up and down the ship; Carrying out the collection, payment of freight, compensation, bonus payment, ship release and other payments; Arrange the supply to the seagoing vessel at the port; To sign the charterparty, carry out the procedures for delivery and receipt of the ship and crew; Signing the contract of carriage, contract of loading and unloading goods; Carry out procedures related to maritime disputes; Settle other tasks as authorized.

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Sea transport agency service means the service of performing the following jobs under the consignees of goods owners: Organizing and conducting work in service of the process of transportation, goods forwarding and transportation passengers and luggage on the basis of a contract of carriage by sea or a multi-modal transportation contract; Leasing, renting of means of sea transport, loading and unloading equipment, warehouses, wharves, wharves and other specialized maritime equipment; Act as Container Agent; Settle other tasks as authorized.

Maritime brokerage service means a service providing the following jobs: Acting as intermediary in signing cargo, passenger and luggage transport contracts; Acting as an intermediary in signing insurance contracts; Acting as intermediary in the signing of the charter contract, the contract for the sale of the vessel, the towage contract, the lease and crew hire contract; Act as intermediary in signing other contracts related to maritime activities required by the trustee under each contract.

Ship supply service means the service of performing the following tasks related to the ship: Providing sea food, foodstuff, fresh water, materials, equipment, fuels, lubricants, linings, spacers; Providing services for the needs of life, medical care, entertainment and recreation of passengers and crew members, transportation, entry and exit and crew transfer.

Goods counting service means the service of counting the actual quantity of goods delivered to a seagoing vessel or other means as entrusted by the shipper, the consignee or the carrier.

Ships towing service means the service of carrying out the operation of towing, towing, propelling or supporting ships and other floating means at sea or in water areas related to seaports permitted by sea-going ships. work.

Ship repair service at the port: means the service of repairing and maintaining ship when the ship is stationed at the port.

Vessel cleaning service is a service for the collection and treatment of garbage, waste oil and other wastes from seagoing vessels when anchored or moored at ports.

Cargo loading and unloading services at seaports: means services for performing loading and unloading of cargoes at ports according to technological processes for loading and unloading of each type of cargo. In addition to the services mentioned above, a number of other services have already entered the country.

International container transshipment service is the container transshipment service when the container is unloaded from the ship into the transshipment port for a certain period of time and then loaded onto another ship for transportation to another port.

Logistics services: According to the approach of the Logistics Management Board in the US, the concept of logistics is understood as part of the supply chain, planning, implementing and controlling. control the movement and storage of goods, and the related services and information from originating point (O) to place of consumption (D) effectively to meet the requirements of customers.

Non-Ship Carriage Services (NVOCC): Under British law, a common carrier is a carrier who issues cargo services between ports on a given route and must carry all goods, except dangerous goods, at a reasonable price. - Maritime Cargo Warehousing Services is a warehouse rental service.

In many developed countries such as the US and EU, industrial logistic growth has always exceeded 10% and is considered as a key sector to promote production development, distribution system and domestic commodity circulation. Vietnam is a "go after" country, but looking at the "competitive edge" of a maritime nation will be a springboard for modernizing the logistics sector, especially shipping. On the basis of the analysis about the factors affecting the success of the seaport as well as the trend of seaport development in Asia-Pacific and Vietnam, together with the basis of the planning on development of Vietnam's seaport system, by 2020, orientations for maritime development and seaports of Vietnam will focus on improving the quality of sea transport services, meeting the demand for inland shipping, increasing the market share of goods transportation. Import and export will reach 27-30%, combined with renting foreign goods on the international transport. The volume of Vietnam's ships will be around 110-126 million tons by 2015; 215-260 million tons by 2020 and by 2030, 1.5-2 times more than in 2020; The number of passengers will reach 5 million by 2015; 9-10 million in 2020 and 2030 increase 1.5 times compared to 2020. To develop Vietnam's modern fleet, attaching

special importance to the development of specialized ships and large tonnage ships. So far, there is no definition of a globally accepted service. The intangible and elusive of services, the variety and complexity of service types make service definition difficult. In addition, different countries have a different understanding of services, depending on the level of economic development of each country. To better understand the difficulty of defining the concept of service, we can see that even in the General Agreement on Trade Services (GATS), only the concept of service By listing the service into 12 major industries and 155 different sub-sectors. According to the GATS classification, the key services sectors are: business services, communications services, construction and construction services, distribution services, education services, environmental services, financial services, health and social services, tourism and travel-related services, leisure and sport services, transportation services, and other services. In Vietnam, the service is defined as follows: Services are service activities that meet the production, business and living. Depending on the case, the service includes: a more or less specialized job, the use of a temporary or permanent property, the use of a durable asset and the product of a job, loan capital, production, business and services are closely intertwined. Service is a condition for the development of production and business.

#### 4. Conclusion

Currently, connecting major ports in the world is using large modes of transport such as railways and highways. However, the Vietnamese seaport system has only Hai Phong port connected to the railway (Cai Lan port has invested but has not been able to operate due to lack of synchronous gauge), and there is no separate highway for transportation loading goods. Traffic connecting waterways is restricted by the static of bridges crossing the river. Therefore, the efficiency in transporting goods to the seaport has not been optimized in terms of time and transportation costs. Therefore, a problem posed is the need to link the seaport with multimodal transport for the port system to develop sustainably, logistics costs are pulled down. The Vietnam Maritime Administration is continuing to study the development of a dry port system - the extended arm of a seaport to both support port services and to contribute to the efficient organization of the transport network. The Department also noted that the planning must also spend the appropriate land fund behind the port to build a distribution center for goods and services after the port, convenient connection with the national transportation network. The Vietnam Maritime Administration will propose the implementation of new points in the seaport development planning, including the viewpoint: "Ship size as planned" as a basis for investment and construction of public port infrastructure. , only permit vessels with specifications suitable to the receiving capacity of the wharf, technical standards of the channel, ensuring safety and quality of exploitation at the seaport.

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