# Solutions to support the establishment and development of an international logistics center in Hai Phong city, Vietnam

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***Abstract:*** ***The study analyzes factors influencing the establishment and development of an international logistics center in Hai Phong, a vital port city in Vietnam. Hai Phong enjoys a strategic geographic location and a modern seaport system but needs improvements in infrastructure, policy, and workforce. The article proposes solutions to optimize the city's potential, including infrastructure development, enhanced international cooperation, policy improvements, workforce development, and technology application. These measures aim to position Hai Phong as a significant international logistics hub, contributing to the region's and the country's sustainable economic growth.***

***Keywords:*** *Hai Phong; international logistics center; seaport; supply chain; establishment; development; Vietnam.*

## 1. Introduction

With its strategic geographic location and modern seaport system, Hai Phong is being presented with a significant opportunity to become a prominent international logistics hub in the region. The rapid growth in import-export activities and the demand for optimized global supply chains have made establishment of an international logistics center (ILC) in Hai Phong an urgent need. This center would serve as a crucial link in Vietnam's logistics network and promote sustainable economic development for Hai Phong and the country as a whole. This objective aligns with the goals outlined in the Politburo's Resolution No. 45-NQ/TW dated January 24, 2019, on Hai Phong's development by 2030 with a vision towards 2045. However, to realize this goal, the city must overcome various challenges in infrastructure, policies, workforce, and competitiveness. Through a comprehensive research approach, this article evaluates the factors influencing the establishment

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of an ILC in Hai Phong, thereby proposing solutions to support its development.

## 2. The necessity of establishing and developing an international logistics center in Hai Phong

*2.1. Overview of International Logistics Center (ILC)*

As transportation and logistics evolve, numerous definitions exist for logistics centers (LC). Many researchers have provided definitions of ILC from various perspectives:

From a globalization perspective, an ILC is a facility that offers customers a range of value-added logistics services, supports trade services and connects directly to global transport networks (Notteboom et al., 2016).

In terms of operational scale, an ILC is highly developed in terms of organization and functionality to operate within an extensive international distribution network on a global scale. These centers are typically located at key transportation nodes or global economic-trade hubs, covering areas from 100 to 500 hectares and providing logistics services for a continent or the whole world (Higgins et al., 2012).

In Vietnam's context, an ILC is a zone where multiple entities conduct activities related to transport, logistics, customs procedures, clearance, and import-export distribution. This center is closely connected with domestic logistics nodes and international gateway ports within a specific economic geography (Government News, 2023).

According to Wiegmans et al. (1999), logistics centers can be classified as follows:

(1) XXL-class terminals or international gateway centers: These centers can connect via sea, rail, road, and inland waterways across the continent and with international destinations.

(2) XL-class terminals or continental gateway centers: These centers can connect across the entire continent via sea, rail, road, and inland waterways, serving as international distribution hubs.

(3) L-class terminals or national-class centers: These centers can connect via rail, inland waterways, and roads within the nation.

(4) M-class terminals or regional-class centers: These centers provide low-cost services with simple technology for small volumes of goods. They serve as distribution hubs for small production areas within a region and country, using road, rail, and inland waterway transport.

(5) S-class terminals or local-class centers: These centers primarily connect via road to receive and deliver goods to the final destination. These centers may also connect via simple rail and inland waterways.

ILCs play crucial roles, such as supporting global supply chains, optimizing transportation costs, promoting international trade, and supporting regional economic development. Their main functions include:

(1) Transportation and distribution: ILCs manage goods transportation from production sites to final consumption destinations, coordinating transport modes such as road, rail, sea, and air.

(2) Storage and inventory management: ILCs provide warehousing services, ensuring storage of goods under specific conditions (temperature, humidity, etc.), and managing inventory using advanced automation systems.

(3) Provision of value-added services: In addition to transportation and storage, ILCs offer value-added services, such as packaging, assembly, quality inspection, and labeling before distribution to the market.

(4) Supply chain management: ILCs play a critical role in global supply chain management, from planning and coordinating to optimizing logistics activities, ensuring goods are delivered on time, to the right place, and at reasonable prices.

(5) Application and innovation of information technology in logistics: ILCs often implement advanced information technology solutions, such as Warehouse Management Systems (WMS), Transport Management Systems (TMS), and tracking technologies to enhance operational efficiency and improve supply chain transparency.

*2.2. Necessity of establishing and developing an international logistics center in Hai Phong*

Hai Phong is one of Vietnam's largest and most important port cities, serving as the Northern region's primary gateway to the sea, with advantages in geographical location, economic positioning, and natural resources. Located in the Northern coastal region, about 100 km from Hanoi, Hai Phong can easily connect to major markets such as China, Japan, South Korea, and ASEAN countries while providing access to international shipping routes through the East Sea. The city's natural deep-sea port allows large vessels to dock without significant investment in infrastructure upgrades, helping reduce costs and maintain a competitive edge. Thus, establishing an ILC in Hai Phong is both necessary and a strategic step to drive comprehensive economic development for both the region and the whole nation. The reasons are specifically as follows:

*Firstly,* Hai Phong's modern port infrastructure has received substantial investment, notably Lach Huyen Port, which can accommodate vessels with a capacity of up to 100,000 DWT. Establishing an ILC here will help optimize the port operations, enhance international competitiveness, and attract more international shipping lines and investors.

*Secondly,* a modern ILC will drive regional and national economic growth, creating thousands of new jobs and boosting demands for infrastructure, housing, and other services. This center will position Hai Phong as a leading economic driver in the North and support the growth of neighboring provinces.

*Thirdly,* an ILC in Hai Phong will optimize logistics costs, thereby enhancing the region's international competitiveness in goods and businesses. Integrated and modern logistics services at the center will help reduce transportation, warehousing, and related costs, creating favorable conditions for exports and participation in international markets.

*Fourthly,* the ILC is crucial in strengthening Vietnam's integration into the global supply chain. It will enable domestic businesses to connect more effectively with international partners, improving the transparency and control of the supply chain, a quality highly valued by global partners.

*Fifthly,* developing a modern ILC will contribute to the nation's sustainable development strategy by applying advanced technology and management processes to minimize environmental impacts, aligning with Vietnam's commitment to environmental protection and climate change response.

In addition, developing an ILC in Hai Phong is also based on key policies and legal frameworks, such as the Politburo's Resolution No. 45-NQ/TW dated January 24, 2019, on Hai Phong's development by 2030 with a vision towards 2045; the Prime Minister's Decision No. 1012/QD-TTg dated July 3, 2015, on approval of planning for nationwide logistics center system development by 2020 and orientation towards 2030; and Decision No. 1516/QD-TTg dated December 2, 2023, on approval of Hai Phong City planning for the period 2021-2030 with a vision to 2050. These policies strengthen the legal foundation for developing an ILC and create favorable conditions for Hai Phong to grow significantly in the logistics sector and the global supply chain.

### 3. Conditions for establishing and developing an international logistics center

To establish and develop an ILC in a port city, several fundamental conditions need to be met based on economic, policy, geographical factors, and the supply chain for import-export goods. These conditions create a solid foundation, ensuring the feasibility and sustainability of the ILC development.

*Firstly, regarding economic conditions.*

In order to develop an ILC, a port city needs solid and sustainable economic conditions. Specifically, a robust economy with developed supporting industries such as manufacturing, processing, and import-export is essential to provide a steady flow of goods for logistics activities. The presence of industrial parks and export processing zones is necessary to maintain a large flow of goods serving domestic and international demands, thereby promoting efficient logistics operations. Additionally, the city must attract domestic and foreign investments in logistics infrastructure and related services, including port development, warehousing, and logistics companies.

*Secondly, regarding policy conditions.*

Logistics development policies play a decisive role in establishing an ILC. The government should offer preferential policies, such as tax reductions, land support, and infrastructure improvements, to attract investments in this sector. Stable, transparent, and investment-encouraging policies will create confidence for investors. The port city needs to improve customs procedures and import-export processes, simplify administrative procedures, and reduce processing times in order to promote the flow of goods and enhance competitiveness. The government should also have a long-term planning for port development, logistics activities, and connectivity with major economic zones, accompanied by a sustainable development strategy to balance economic growth and environmental protection.

*Thirdly, regarding geographical conditions.*

The geographic location of a port city is a crucial factor determining the success of an ILC. The city must be situated on major international shipping routes, connecting to key global markets, to become a transit and trade hub linking regions such as East Asia, Europe, and the Americas. Proximity to manufacturing hubs, industrial zones, and critical economic regions creates favorable conditions for domestic and international goods circulation, reducing transportation costs and delivery times. To develop an ILC, the port city needs a modern seaport system capable of handling large vessels and a well-developed network of road, rail, and air transport, creating close connections between modes of transport.

*Fourthly, regarding import-export supply chain conditions.*

An ILC should be built based on an efficient import-export supply chain with a diverse range of goods, from industrial and agricultural products to consumer goods, ensuring continuous operations and economic efficiency. The port city needs to adopt advanced technologies such as Transport Management Systems (TMS), Warehouse Management Systems (WMS), and real-time tracking to optimize processes and reduce costs. In addition to transportation and storage, the ILC should offer value-added services, such as packaging, quality inspection, handling, and distribution of goods to meet the diverse needs of businesses.

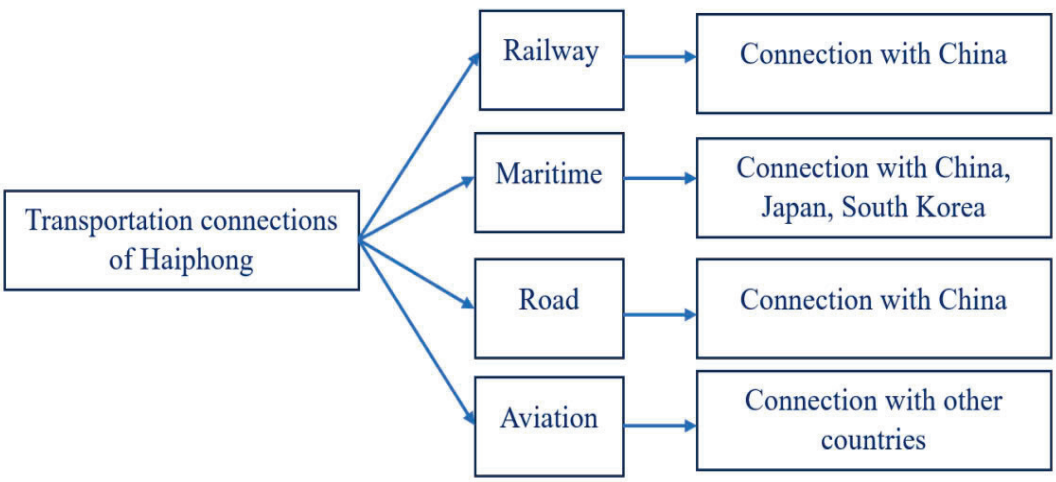
### 4. Factors influencing the establishment and development of an international logistics center in Hai Phong

*Firstly, regarding Hai Phong's economic conditions.*

As a major city with a strategically important

role in Vietnam, Hai Phong is experiencing rapid growth due to favorable macroeconomic conditions, particularly in the import-export and logistics sectors. With its advantageous geographical location in Northeast Vietnam, near major economic centers such as Hanoi and vital industrial zones, Hai Phong has become the primary trade gateway in Northern Vietnam and a crucial transit point in the global supply chain. The city also has modern infrastructure, including the most significant port system in Northern Vietnam, such as Tan Vu, Chua Ve, Dinh Vu, and Lach Huyen ports. This robust port and transport network enables Hai Phong to meet domestic and international transportation demands, positioning it as a prospective international logistics hub (see Figure 1).

**Figure 1: International connectivity of Hai Phong through three major transportation modes with high cargo capacity**




*Source: Developed by the authors (2024)*

Hai Phong's economic growth has achieved notable success through infrastructure development and investment attraction. In 2023, the city maintained a high GDP growth rate of 10.34%, ranking fifth nationwide and second in the Red River Delta region (Thu, 2024). Hai Phong's economic structure is diverse, with industries and services being its two key sectors, supported by major industrial zones such as Dinh Vu-Cat Hai Economic Zone, Trang Due, and VSIP Hai Phong. The city also leads the country in attracting FDI, with 975 active FDI projects and the total registered capital reaching US$30.65 billion (Thu, 2024). These projects primarily focus on processing, manufacturing, and logistics industries, contributing to job creation and economic growth. The Hai Phong government has introduced various incentive policies to facilitate investment, including tax exemptions and reductions, infrastructure support, and efficient administrative services.

Hai Phong's industrial and seaport service sectors are crucial in boosting import-export activities for both the city and the other Northern provinces. The modern seaport system makes Hai Phong a critical domestic and international goods transshipment point. Furthermore, the strong development of logistics services and supply chains has positioned Hai Phong as a regional hub with significant growth potential (see Table 1).

Table 1: Types of goods through Hai Phong port

| Year | Container cargo (million TEUs) | Coal (million tons) | Cement (million tons) | Steel and metals (million tons) | Fertilizer (million tons) | Crude oil and petroleum products (million tons) | Wood and wood products (million tons) |
|---|---|---|---|---|---|---|---|
| **2013** | 2.55 | 15 | 10 | 7 | 3.5 | 5.5 | 1.5 |
| **2014** | 2.87 | 15.5 | 11 | 7.2 | 3.8 | 5.6 | 1.7 |
| **2015** | 3.25 | 16 | 11.5 | 7.5 | 4 | 5.8 | 1.8 |
| **2016** | 3.92 | 17 | 12 | 8 | 4.2 | 6 | 1.9 |
| **2017** | 4.3 | 17.5 | 12.5 | 8.5 | 4.5 | 6.2 | 2 |
| **2018** | 4.8 | 17 | 13 | 8 | 4 | 6 | 2 |
| **2019** | 5.1 | 18 | 14 | 9 | 4.5 | 6.5 | 2.2 |
| **2020** | 5.5 | 19 | 14.5 | 9.5 | 5 | 6.8 | 2.5 |
| **2021** | 5.8 | 19.5 | 14.8 | 9.8 | 5.2 | 7 | 2.6 |
| **2022** | 6.2 | 20 | 15 | 10 | 5.3 | 7.2 | 2.7 |
| **2023** | 6.2 | 20 | 15 | 10 | 5 | 7 | 2 |

*Source: Developed by the authors (2024)*

*Secondly, regarding policy conditions.*

Economic development policies have significantly impacted Hai Phong's growth, transforming it into a critical economic and logistics hub in Northern Vietnam. The following policies have positively influenced Hai Phong:

(1) The policy on developing Dinh Vu - Cat Hai Economic Zone

The Dinh Vu - Cat Hai Economic Zone was established under the Prime Minister's Decision No. 06/2008/QD-TTg dated January 10, 2008, to develop Dinh Vu - Cat Hai into a multi-sectoral economic area, focusing on industry, services, and logistics. This policy has attracted large-scale domestic and foreign investment projects, turning the area into a leading industrial hub with manufacturing plants, automotive assembly, and supporting industrial zones. Hai Phong has attracted significant corporations, including LG, Bridgestone, and other FDI companies, creating tens of thousands of jobs and substantially contributing to the city's GDP.

(2) The policy on developing port system and logistics

The Government has implemented policies to develop Hai Phong's port system, including Lach Huyen Port, a crucial international gateway of Northern Vietnam. The Prime Minister's Decision No. 1037/QD-TTg, dated June 24, 2014, approving the revised Vietnam port system planning for 2020 with a vision towards 2030, has enabled Hai Phong to expand and modernize its port infrastructure, enhancing its capacity to handle large vessels and improve regional competitiveness. Lach Huyen Port is designed to accommodate large vessels, helps reduce logistics costs, increase economic efficiency, and attract more international shipping routes through Hai Phong.

(3) The policy on attracting foreign direct investment (FDI)

Hai Phong has benefited from the Government's policies encouraging investment, particularly in the manufacturing, processing,

and high-technology sectors. The Government's Decree No. 118/2015/ND-CP, dated November 12, 2015, on guidelines for some articles of the 2014 Law on Investment, provides foreign investors with tax, land, and infrastructure incentives. The Hai Phong government has also actively implemented administrative reforms to create a favorable business environment, attracting significant FDI projects in industrial zones such as VSIP Hai Phong and Trang Due Industrial Zone.

(4) The policy on developing transportation infrastructure

Hai Phong has gained from the Government's policies on transportation infrastructure development, including constructing new highways and port bridges. The Hanoi - Hai Phong Expressway, inaugurated in 2015, is one of the most modern expressways in Vietnam, significantly reducing the travel time between Hanoi and Hai Phong, facilitating goods circulation, and promoting regional economic development. The Tan Vu - Lach Huyen Bridge, the longest sea-crossing bridge in Vietnam, connects the Dinh Vu - Cat Hai Economic Zone to Lach Huyen Port, facilitating logistics activities and international cargo transport.

(5) The policy on developing urban areas and urban infrastructure

Urban planning and development policies have transformed Hai Phong into one of the cities enjoying the most modern infrastructure in the country. The Politburo's Resolution No. 45-NQ/TW, dated January 24, 2019, on the construction and development of Hai Phong by 2030 with a vision towards 2045, aims to develop this city into a leading service, industrial, and high technology center. Hai Phong has launched numerous projects of urban infrastructure development, including new urban areas, water supply and drainage systems, and healthcare and education facilities, aiming to improve its residents' quality of life and attract a high-quality workforce.

*Thirdly, regarding the conditions of geographic location, natural features, and transportation.*

Hai Phong's geographic conditions play a significant role in logistics development and creating a regional logistics center. Hai Phong's strategic location offers several advantages for the city in terms of connectivity and development of transportation and logistics activities:

(1) International gateway location

Located in the Northeast region of Vietnam, near the Gulf of Tonkin and the East Sea, Hai Phong has an ideal position for maritime trade. As the largest international port in Northern Vietnam, Hai Phong serves as a crucial gateway connecting Vietnam with international markets, especially those in East and Southeast Asia. This strategic location makes Hai Phong an attractive destination for international shipping routes, facilitating the development of logistics centers for import-export activities.

(2) Convenient connectivity to major economic centers

Hai Phong is only about 100 km from Hanoi. It is connected by a modern expressway (Hanoi - Hai Phong Expressway) and railway, which facilitates cargo movement between Hai Phong Port and the capital and vice versa. Additionally, Hai Phong is well-connected to other industrial provinces, including Quang Ninh, Bac Ninh, and Hai Duong. This proximity to the key industrial zones increases the demand for logistics services, positioning Hai Phong as an essential transshipment hub for goods.

(3) Integrated transportation infrastructure

Hai Phong has a comprehensive transportation infrastructure, including seaports, roadways, railways, and airways. Its port system, particularly Lach Huyen Port, is designed to accommodate large vessels for international transport routes. The port is directly connected to the Dinh Vu - Cat Hai Economic Zone, where numerous industrial zones and major manufacturing plants are located, creating ideal conditions for constructing and developing large-scale logistics centers.

(4) Potential for expanding development space

Hai Phong has extensive landmass and coastal areas, thereby allowing logistics infrastructure expansion. With its well-planned industrial zones and ports, the Dinh Vu - Cat Hai Economic Zone is ideal for building modern logistics centers and meeting the increasing demand of domestic and international markets.

(5) Favorable natural environment

Located along the coast, Hai Phong benefits from favorable natural conditions with minimal impacts from major storms and natural disasters. This ensures uninterrupted port and logistics operations, reducing risks associated with cargo transport.

These geographic conditions make the city an attractive destination for logistics investors, driving the development of large-scale, modern logistics centers that significantly contribute to Vietnam's supply chain and trade system.

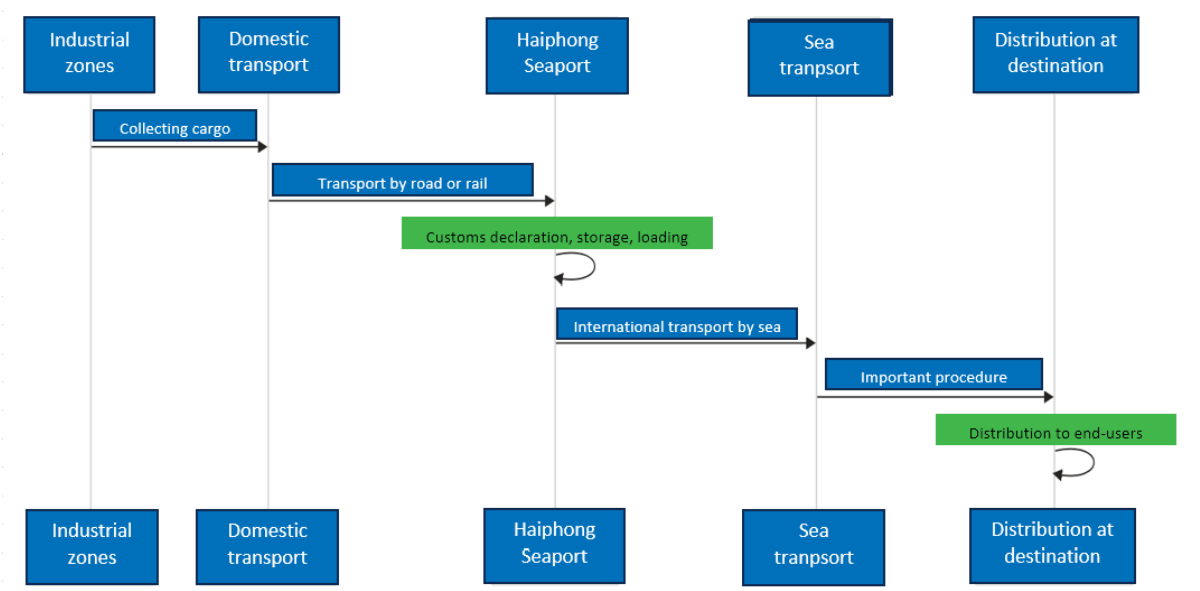
*Fourthly, regarding the supply chain for import-export goods.*

(1) Export goods supply chain

Hai Phong plays a vital role in the export supply chain, serving as the main gateway for industrial products from areas of Northern Vietnam, including Bac Ninh, Hai Duong, Thai Nguyen, and Hanoi. These industrial zones are not only production centers but also integral parts of the global supply chain. The supply chain through Hai Phong requires close coordination among production, transportation, port handling, international shipping, and distribution. After production, goods are transported by road or rail to the port, facilitated by developed infrastructure (such as the Hanoi - Hai Phong Expressway), which helps optimize transportation time and costs.

At Hai Phong Port, export goods go through customs procedures and are handled at warehouses or logistics centers near the port. Its modern technology expedites loading processes onto ships, reducing warehousing time and costs. Goods are then transported internationally. Lach Huyen Port, capable of receiving large vessels, directly connects to international ports, enhancing efficiency and reducing transportation costs. After completing import procedures, destination ports distribute goods to final customers via local logistics networks, ensuring timely and efficient delivery to consumers (see Figure 2).

**Figure 2: Export supply chain through Hai Phong**



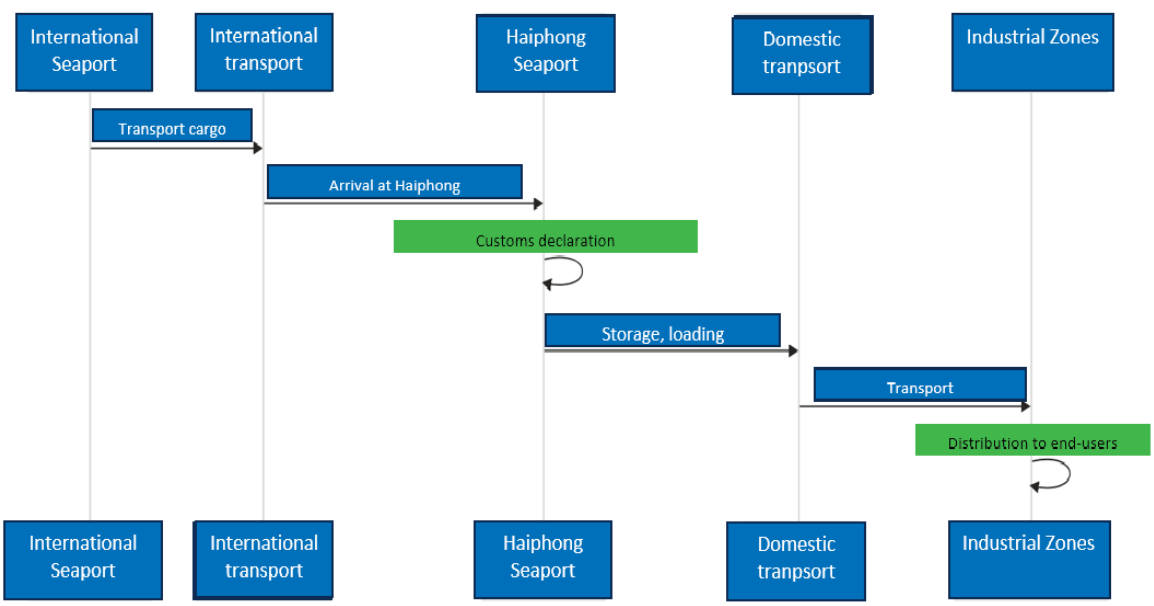

*Source: Developed by the authors (2024)*

Electronics and components are among the key export industries through Hai Phong (Son & Nga, 2023). Major corporations such as Samsung and LG have established large-scale manufacturing plants in Bac Ninh and Thai Nguyen, mainly producing mobile phones, electronic components, and other high-tech products, contributing significantly to Vietnam's export turnover. These products are transported from factories to Hai Phong Port, loaded onto ships, and exported to major markets such as the United States, the European Union, and Japan. Utilizing Hai Phong Port enables these corporations to optimize transportation costs and ensure timely deliveries, maintaining their competitiveness in the global market.

The textile and garment industry is also a key pillar in the export supply chain through Hai Phong. Vietnam is one of the largest textile and garment exporters globally, with factories in Hai Duong, Nam Dinh, and Hanoi (Son & Nga, 2023). Textile products such as clothing and fabrics are produced in large volumes and exported through Hai Phong Port. The primary markets of Vietnam's textile and garment industry include the United States, the European Union, and Japan, where demands for high-quality garment products remain consistently high. The convenience and efficiency of Hai Phong Port help Vietnamese textile enterprises ensure that their products reach international consumers quickly and at reasonable shipping costs.

Agricultural products also hold a significant proportion of the export turnover through Hai Phong. Products such as rice, coffee, and fruit from northern agricultural areas, including Thai Binh, Hung Yen, and Bac Giang, are collected and transported to Hai Phong Port for export. These agricultural products meet domestic demands and reach multiple international markets, particularly China, Japan, and ASEAN countries. With Hai Phong's advantageous geographic location and modern logistics system, transportation time and costs are minimized, thereby

**Figure 3: Import supply chain through Hai Phong**




*Source: Developed by the authors (2024)*

enhancing the competitiveness of Vietnamese agricultural products in the global market.

(2) Import goods supply chain

The import supply chain through Hai Phong also plays a crucial role in providing materials and goods for domestic production and consumption. In the import supply chain, goods are transported by sea from international ports to Hai Phong, where they undergo import customs procedures, including inspection, declaration, and tax payment. Once these procedures are completed, goods are stored and sorted in warehouses before being transported domestically to factories, industrial zones, or consumer markets. The robust connectivity between the port and industrial zones ensures that imported materials reach production sites quickly and efficiently (see Figure 3).

Raw materials are among the primary imported goods through Hai Phong Port (Son & Nga, 2023). To sustain and develop manufacturing industries in Northern Vietnam, raw materials such as metals, chemicals, plastics, and textiles are imported from major markets such as China, Japan, and South Korea. Once imported through Hai Phong, these materials are transported to regional factories for further production. Hai Phong's efficient logistics system optimizes transportation and ensures a steady supply of raw materials for factories, maintaining stable and sustainable production activities.

Machinery, equipment, and consumer goods are essential imports through Hai Phong port. Businesses in Northern Vietnam import machinery from Japan, South Korea, and Germany to upgrade production lines, enhance productivity, and improve product quality while saving costs through efficient transportation. Hai Phong is the main gateway for importing premium consumer goods, such as automobiles, household appliances, and processed foods from Japan, South Korea, and Europe, to meet domestic consumption demands. Hai Phong's modern port and warehousing facilities can support storage and quick distribution to major cities such as Hanoi and Hai Phong.

Factors influencing the effectiveness of the import-export supply chain through Hai Phong port include infrastructure, technology and management, policies and customs procedures, and the business environment. The development of Lach Huyen Port and the expressway system has improved the supply chain performance. Information technology applications reduce time and costs, while favorable policies and customs reforms shorten the clearance process. A stable business environment also attracts investment, increases cargo flows, and enhances the efficiency of the import-export supply chain.

## 5. Advantages and challenges for establishment and development of an international logistics center in Hai Phong

*Firstly, regarding the advantages.*

The logistics system in Hai Phong benefits from a modern port infrastructure and strong domestic transport connections, which play a crucial role in optimizing the supply chain and developing an ILC. Lach Huyen Port, capable of receiving large vessels, connects international shipping routes with the industrial zones in Northern Vietnam, helping reduce costs and increase the supply chain efficiency. Hai Phong also enjoys convenient road and rail connections, particularly the Hanoi - Hai Phong Expressway, which shortens transportation time and costs. Modern warehouse and logistics services in Hai Phong offer storage, packaging, and distribution services, enabling businesses to optimize costs and enhance market responsiveness.

*Secondly, regarding challenges.*

The current legal framework for logistics remains incomplete and has not kept pace with the industry's rapid growth. Existing regulations have not fully met the practical

needs of businesses in the context of globalization and the advancements of Industry 4.0 technologies. Administrative procedures, particularly customs ones, remain complex and time-consuming, creating significant obstacles in import-export processes. This lack of flexibility increases costs for businesses and reduces Hai Phong's competitiveness on the international stage.

Determining a strategic location for the ILC requires careful consideration of numerous factors, such as land costs, transportation planning, and connectivity to the critical economic areas. However, this faces obstacles due to high land costs in potential areas and the need for integrated transportation infrastructure. An unfavorable location can hinder efficient and quick transportation of goods, leading to higher logistics costs.

A significant challenge in designing logistics services is the lack of value-added services and the capacity to integrate modern technology. Many logistics centers in Vietnam only provide essential services, such as transportation and storage, without offering more complex services such as packaging, quality inspection, assembly, or handling goods according to international client requirements. Additionally, the current limited application of modern management technologies, such as Warehouse Management Systems (WMS) and Transport Management Systems (TMS), reduces the efficiency and transparency of logistics management.

Financing development of logistics centers poses a significant challenge due to high investment needs and limited financial resources. Logistics infrastructure projects require substantial funding, yet access to capital can be difficult due to an opaque financial framework and intense competition from other projects. Many investors are cautious due to perceived risks and investment efficiency. Furthermore, Hai Phong's logistics sector faces a shortage of highly skilled labor, as current training programs still need to fully meet market demands, especially for positions requiring specialized knowledge. A lack of qualified personnel can impact the operational efficiency of the ILC.

## 6. Recommendations to support the establishment and development of an international logistics center in Hai Phong

*Firstly, selecting the location for the ILC.*

Choosing the location for establishment of an ILC must take into account strategic factors to optimize operations and minimize logistics costs. The ILC should be located near major ports such as Lach Huyen Port and key industrial zones such as Dinh Vu - Cat Hai. This would facilitate quick transportation of goods between production areas and international consumer markets while, at the same time, reducing transportation time and costs.

Additionally, such a location should be well-connected to inter-regional transportation networks, including highways, railways, and air routes. A tight connection between the ILC and major transportation networks will ensure smooth cargo flows, enhance the overall efficiency of logistics activities, and improve Hai Phong's competitiveness in the international market.

*Secondly, improving the policies and legal frameworks for logistics services.*

Revising and updating policies and laws is crucial to developing logistics services in Hai Phong. The legal framework should be updated to keep pace with international logistics development, especially in globalization and Industry 4.0 technologies. Simplifying customs procedures, reducing legal barriers, and shortening processing times for the import-export process are all necessary adjustments. Additionally, the Government should implement investment incentives such as tax reductions, land provision, and dedicated support processes for logistics

businesses, encouraging investment in logistics infrastructure in Hai Phong. Vietnam also needs to strengthen international cooperation by joining more global trade agreements and expanding logistics services of international standards, thus helping domestic businesses participate more effectively in international supply chains.

*Thirdly, designing comprehensive and diverse logistics services.*

Designing services for the ILC should ensure comprehensiveness and the ability to meet customers' diverse needs, including primary and value-added services. The logistics center must offer core services such as cargo transportation, warehousing, and distribution, supported by effective management systems to optimize time and costs. A critical feature should be multimodal connectivity, allowing goods to be transported flexibly via road, rail, sea, and air, optimizing international transportation processes.

The ILC should also design value-added services such as packaging, assembly, quality inspection, and product labeling, which not only increase product value before export but also meet the requirements of global supply chains. The center should integrate advanced technologies such as Warehouse Management Systems (WMS), Transport Management Systems (TMS), and real-time tracking technologies to improve operational efficiency. These systems ensure accuracy, efficiency, and transparency in goods management, thus enhancing the competitiveness of the ILC.

*Fourthly, mobilizing diverse financial resources for logistics development.*

Hai Phong should attract investment from multiple domestic and international sources, including significant logistics and transportation sector corporations. Public-private partnerships (PPP), foreign direct investment (FDI), and government bond issuance might be utilized to create abundant financial resources for developing logistics infrastructure. The city should also leverage preferential loans from international financial institutions such as the World Bank (WB) and the Asian Development Bank (ADB) to invest in modern logistics infrastructure, from seaports to domestic transportation networks.

*Fifthly, preparing a skilled logistics workforce.*

For human resource development of the ILC, Hai Phong should focus on specialized training for the logistics sector. Universities, notably Vietnam Maritime University, should collaborate with businesses to provide intensive, practical training courses in logistics, covering technology skills, supply chain management, and foreign languages. In addition, partnering with international logistics companies and inviting global training experts will enhance local workforce expertise. At the same time, encouraging exchange and international internship programs will offer students and logistics staff opportunities to gain real-world experience in international environments.

## 7. Conclusion

Establishing and developing an ILC in Hai Phong is a strategic step to enhance Vietnam's international competitiveness and contribute to the region's sustainable economic development. The proposed solutions in this article, including infrastructure development, strengthened international cooperation, policy improvements, workforce development, and technological applications in logistics, aim to optimize Hai Phong's potential and advantages. Successfully implementing these solutions requires close coordination among the government, businesses, and other stakeholders to position Hai Phong as the region's leading international logistics hub.

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