The Development Process and Practice of Inland Ports in China

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Inland ports are a type of port that have emerged due to the development of trade, driven by economic factors. Coastal ports, facing intense competition, are extending their business areas towards the source of goods to tap into the inland market.

Inland regions, in order to increase their degree of openness to the world, require platforms to mitigate their geographical disadvantages, enhance trade, and promote regional economic development.
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The concept and characteristics of inland port
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Inland regions, in order to increase their degree of openness to the world, require platforms to mitigate their geographical disadvantages, enhance trade, and promote regional economic development.
Inland port descriptions

**Inland port**
- Originated in the United States and initially referred to *river ports that contrasted with seaports*
- The U.S. Army Corps of Engineers (USACE) defined inland ports as "ports that are located on rivers and do not handle deep draft ship traffic."
- Include inland nodes located inland but with *seaport functions*

**Dry port**
- Originated in Europe and North America in the 20th century, and was defined by the European Commission in 1991 as "an inland terminal directly connected by rail, road or inland waterway to a seaport."
- In Germany, dry ports are often referred to as "*inland freight villages.*"

**Inland container transport station**
- In China, inland ports or dry ports are often defined as "*logistics centers established in inland regions with port service functions such as customs declaration, inspection and quarantine, and issuance of bills of lading.*"
- In countries such as Tanzania, India, and Pakistan, the term "*inland container depot*" is commonly used to refer to inland ports or dry ports
Inland ports are transportation hubs in inland areas connected to ports via land transport. They are comprehensive logistics centers with port service functions, having supervisory agencies like customs, inspection, and quarantine to provide customs clearance services.

Inland ports shorten the distance between inland regions and international markets by connecting highways, railways, and coastal and river ports.

Inland ports are logistics centers with supply chain services and three main attributes: front—moving port functions, comprehensive logistics hub services, and inland industrial agglomeration.
The concept of an inland port

Freight forwarders, shipping agents, and companies establish branches to facilitate cargo collection and issuance of multimodal bills of lading. Inland ports rely on information integration and multimodal transportation to operate.

Importers and exporters located inland can complete procedures locally and directly load cargo onto ships at seaports, avoiding the need to handle export procedures at the seaport.
The concept of an inland port

Schematic diagram of entrance and exit layout and traffic flow line organization of inland port functional area
Inland ports have strong regional characteristics and are located in regions with large-scale container cargo sources. Inland ports are important public facilities that require government support and provide good public services.

They have different levels of functionality.
Types of inland ports

- Nearby inland ports
- Mid-range inland ports
- Far-range inland ports
- Highway-type container inland ports
- Railway-type container inland ports
- Comprehensive-type container inland ports

Three methods of classifying inland ports

1. Geographical location
2. Port of destination
3. Mode of transport

- Sea port supply type
- Airport supply type
- Border port supply type
Function of inland ports

- Providing one-stop customs clearance services
- Providing container multimodal transport services
- Providing bonded warehouses
- Providing logistics value-added services
The role of inland ports

- Achieving a win-win situation for coastal ports and inland enterprises
- Proving the inland investment environment
- Enhancing the competitiveness of the circulation service industry
- Promoting coordinated regional economic development
Development status of inland ports in China
1994
5 ports; 14 provinces and 11 major transportation channels

2002
Chaoyang Port with inland port properties
Jinhua inland port

2011
1st China—Europe freight train Chongqing—Duisburg, Tuanjie Village railway port

2018
41 national inland ports
In 1994, the National Economic and Trade Commission and the World Bank conducted a study on China's international container transport system, focusing on 5 ports and 14 provinces, autonomous regions, and municipalities along 11 major transportation channels. The study proposed construction plans for container berths and intermodal transport systems at ports to improve the efficiency and effectiveness of international container transport and simplify customs clearance procedures. The study also carefully studied the layout and construction plans for regional container transfer stations, or "inland ports."
Development status of inland ports in China

In 2002, Beijing set a precedent by establishing the Chaoyang Port with inland port properties, and in its first year of implementation with direct access to the Tianjin Port, the container throughput doubled from the previous year. Ningbo Port established the Jinhua Inland Port and implemented one—stop full—service customs clearance and issuance of bills of lading in Jinhua.

In 2003, the Shenyang East Freight Station, which was rebuilt and invested in by Dalian Port, became the largest inland port for rail—sea intermodal transport in the country. Later, it entered a period of rapid development, and Tianjin Port signed inland port cooperation agreements with 13 cities such as Shijiazhuang and Zhengzhou. Ports such as Qingdao, Lianyungang, Shanghai, Shenzhen, and Xiamen are also actively seeking inland port locations in various cities.
The National Development and Reform Commission and the Ministry of Transport jointly issued a document identifying 41 national inland ports, marking the promotion of "inland ports" to a national strategy.

Shijiazhuang, Baoding, Taiyuan, Datong, Linfen, Hohhot, Ulanqab, etc.
Development status of inland ports in China

- Inland ports were initially established as cargo bases for basic logistics functions.

- Inland ports in China were driven by the need for import and export services in inland regions.

- Inland ports provide good support for national or regional development.
Challenges & difficulties and related policies
Inland ports in China face several challenges that hinder their development:

- Coordination problem
- Insufficient investment
- Lack of suitable models
- Lack of railway access
- Lack of industrial agglomeration
Related policies

- Integrated planning
- Rational layout
- Coordination and cooperation
- Perfect function
Development suggestions

1. Strengthen the development of various transport modes and choose the appropriate mode.

2. Develop international logistics business with the "One Belt and One Road" initiative.

3. Strengthen the connection between inland ports and surrounding regional industries.

4. Explore new models for the development of inland ports and free trade zones.
Signing of mutual Agreements
In December 2019, Liaoning Port Group collaborated with Russian Railways JSC to construct the largest logistics center railroad yard in Russia — Moscow Berelast Logistics Center (inland port). Customs was established in April 2020.

17 general warehouses, a large logistics center integrating railroad loading and unloading, transit, warehousing, distribution, customs clearance, and bonded services. becoming the main node of China—European express train outside China.
Signing of mutual agreements

1. China builds inland ports abroad

2. Horgos—East Gate Port

Khorgos East Gate Port is located in the “Khorgos—East Gate” Special Economic Zone of Kazakhstan.

It is an important logistics channel node for the strategic docking of China's "One Belt and One Road" initiative and Kazakhstan's "Bright Road" new economic policy.
3. Eurasian Supply Chain Aktau Base

The site is selected as Lot 1 of Aktau Special Economic Zone, with a total land area of about 100 hectares and a total construction area of about 300,000 square meters, providing three business components of bonded logistics, assembly and processing, and supply chain.
In April 2021, China Wuwei Bonded Logistics Center cooperated with Georgia Partnership Foundation to build an overseas warehousing and distribution center in Poti Port. Wuwei opened to reach Georgia railroad international train.
In September 2013, Lianyungang Sino-Kazakhstan Logistics Company was established by Lianyungang Port Group Co., Ltd. and Kazakhstan Railway Express JSC with joint investment (51%:49% share ratio between China and Kazakhstan, registered capital of RMB 420 million), with 220,000 square meters of container yard, 1,763 container positions, 3.8 kilometers of special railroad line and maximum annual loading and unloading capacity of 410,000 TEU.
Signing of mutual agreements
II. Foreign construction of inland ports in China

2. Kazakhstan to build inland port in Xi’an

An agreement was signed between representatives of Kazakhstan State Railways (KTZ) and Xi'an Free Trade Port Construction and Operation Co.

Xi'an will provide 8 hectares of land for the construction of the Kazakhstan terminal (inland port) at the Xi'an International Dry Port.
Classic cases
It is an important support platform for Shaanxi Province and Xi’an City to deeply integrate into the general pattern of "One Belt and One Road" and a window to open up to the west, as well as the core area of China (Shaanxi) Pilot Free Trade Zone.
Classic cases
1. Xi'an International Inland Port

Aiming at "building a world-class inland port and establishing the Xi'an hub for China—European express train, only inland port in China with both international and domestic codes."

the demonstration project of China—European express train hub Center, the first batch of national logistics hubs of dry port type, national import trade promotion innovation demonstration zone, "One Belt One Road" international commercial legal service demonstration zone, national processing trade industrial park, etc.
Classic cases

1. Xi'an International Inland Port

It has the comprehensive location advantages of prominent hub position, accessible logistics network, beautiful ecological environment, advanced planning and construction, distinctive industrial characteristics, and superior development space.
Relying on the radiation drive of Xi'an International Port, the park has formed special **industrial clusters** such as port—side manufacturing, trade and logistics, cross—border e—commerce, digital economy, recreation, sports, culture and tourism, and new finance, realizing the integrated development of port production, port trade and port city.
Classic cases
1. Xi'an International Inland Port

- An area of 5,600 mu, with a designed container throughput of 5.4 million TEUs.
- A capacity of 66 million tons, 59 railroad lines, 690,000 square meters of container yards.
- 180,000 square meters of standard warehouses.
- 4 major operation areas: container operation area, express operation area, special cargo shipment operation area and whole truck cargo operation area.
1. Xi'an International Inland Port

Xi'an Comprehensive Free Trade Zone of 4.67 square kilometers, a complete port system with first—class railroad and second-class highway ports, and designated ports for grain, meat and vehicle imports, as well as the first inland automated unmanned terminal in China, Xi'an Railway Container Center Station has become the first station with 3 bunches and 6 lines in China. It can meet the demand of 10,000 trains of China—EU Chang'an.
At present, Xi'an International Port has introduced such projects as China Minmetals "Belt and Road" Commodity Trading Center, COSCO Shipping "Belt and Road" Sea-Rail Transportation Center, China Forestry "Belt and Road" Timber Trading Center, Shandong Port Group "Belt and Road" Cold Chain Trading Center, Shaanxi Investment Group "Belt and Road" Public-Rail Transportation Center and Aiju "Belt and Road" Grain and Oil Trading Center, and is building an international trade and logistics hub facing Europe and Asia and reaching the whole world.
Classic cases

1. Xi'an International Inland Port

First opened in 2013

- 2018: 1235 trains
- 2019: 2133 trains
- 2020: 3720 trains
- 2021: 3841 trains
- 2022: 4639 trains
17 trunk routes from Xi'an to Kazakhstan, Uzbekistan, Germany, Poland, Russia, etc. have been opened on a regular basis to the west, basically covering the entire Eurasian continent.
Classic cases
1. Xi'an International Inland Port

Xi'an International Port Area

To the east, railroad scheduled trains from Xi'an to Ningbo, Qingdao, Shanghai, Lianyungang and other coastal ports are operated, through sea—rail transport.

Qingdao, Ningbo

Land and Sea Freight Liner

"Xi’an-Ningbo"、Departure of "Xi’an-Qingdao"

Loading the ship for sea
Classic cases

1. Xi'an International Inland Port

Circle of friends of "+Western Europe" expands again

19 domestic consolidation lines such as Guangdong-Shaanxi, Guizhou-West Europe, Xiamen-West Europe, etc.

The "+West Europe" consolidation system weaves lines into a network.
In the node construction, combined with the characteristics of inland areas, relying on special customs supervision areas, make full use of the special functions and advantages of the comprehensive security zone inside and outside the customs, railroad ports and integrated planning and construction of the comprehensive security zone, with non-supervised goods, supervised goods and bonded goods seamless conversion advantages.
Development of Changchun International Inland Port type national logistics hub, the improvement of node function and multimodal transport into the construction of the system.
Jilin Province is located in the **inland area**, the industrial structure of automotive, rail transportation and other equipment manufacturing industries and grain.
In 2015, Changchun International Inland Port opened sea-rail intermodal transport (Dalian Port and Yingkou Port). In 2019, under the “Changchun-Tianjin Counterpart Cooperation”, built a two-way sea-rail intermodal train. Cooperated with COSCO, Maersk, Mediterranean Shipping, build the sea-rail intermodal transport "one single system".
Conclusion

01 Infrastructure connectivity
Promote the interconnection of transportation corridor & hubs, efficiency of cross-border transit.

02 Planning & standard connectivity
Promote the interconnection of rules, policies, and standards etc..

03 International supply chain stability
Enhance stability of international logistics supply chain.
Thank you

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