Research on Countermeasures of Multimodal Transport under "The Belt And Road"

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Abstract: Multimodal transport can integrate the advantages of various types of transportation, improve the efficiency and quality of transportation, meet the requirements of personalized demand for commodity transportation. It is an inevitable trend for production enterprises to cope with the increasingly fierce global competition. Starting from the "The Belt And Road" strategy and the current situation of China's multimodal transport, this paper analyzes the development of China's multimodal transport under the "The Belt And Road" strategy. The development of international multimodal transport is analyzed. The countermeasure under "The Belt And Road" is put forward.

1.Introduction
In the background of the national economic development, especially the supply-side structural reform, the new and old driving energy conversion, the industrial transformation and upgrading and the adjustment of the freight structures, the multimodal transport began to show an upward trend. Multimodal transport plays an important supporting and leading role in the change of dynamic mechanism. Particularly in the chain management and service, multimodal transport not only connects production and consumption closely, but also joins China and the world intensely, breaking the traditional pattern of piece and low-efficient connections in the past. It is effective, by reforming the multimodal transport services, to guide the demand release which has the features of the transformation of old and new functions and reflects the supply-side structural reform.

2.Analysis of development on multimodal transport in China

2.1. The state strongly encourages the development of multimodal transport
In recent years, the scale of China's transportation facilities has expanded rapidly, and the state has vigorously developed multimodal transport through various policy measures. The relevant policies issued by the state in recent years are shown in Table 1.

| Year | Policy |
|------|--------|
| 2009 | The State Council issued the "Regulations for the Adjustment and Revitalization of the Logistics Industry", which listed the multimodal transport and transshipment facilities as the first of the nine key projects. |
| 2011 | The Ministry of Transport and the Ministry of Railway jointly signed the "Cooperation Agreement on Joint Promotion of the Development of Railway-Water..." |
2.2. Unbalanced proportion of various modes of transport in multimodal transport

It was learned from the 6th China Multimodal Transport Cooperation and Development Conference that in 2017 China's multimodal transport volume was 1.368 billion tons, accounting for 2.9% of the total social freight volume. According to the plan, by 2020, China's multimodal transport volume is expected to reach 3.02 billion tons, and the scale accounts for about 6% of the total freight volume, and the proportion is still low. There are many deep-seated problems in the development of multimodal transport in China, such as the unbalanced, incoherent and non-integrated development of various transport modes, the over-single distribution of traditional logistics channels, and the ability to support the expansion of economic space. The percentage of freight traffic by mode of transport in 2014-2018 is shown in figure1.

![Figure 1: Proportion of freight volume by various modes of transport in 2014-2018](image)

According to the data of the past five years, among the four modes of transportation, road transport is the dominant one, and the proportion of the freight volume borne by road transport is much larger than other modes, accounting for about 70% of the total; railway transport is the main mode of multimodal transport. Accounting for about 10% of the total, far to meet expectations; other modes of transportation are obviously insufficient. Generally speaking, there is a serious imbalance in the proportion of various modes of multimodal transport in China, and it is urgent to adjust the proportion of various modes of transport.

2.3. The potential demand for the multimodal transport market is huge

In recent years, multimodal transport has entered a period of accelerated development, with the issuance of numerous relevant policy documents and the rise of the national strategy for multimodal
transport, which has become an important measure to promote cost-reduction and efficiency-increase in China's logistics industry and logistics supply-side Reform as a key to solve the structural contradiction in the transportation of goods in the whole society, multimodal transportation has been developing in depth continuously in our country, the operation quality has been gradually improved, and the comprehensive benefits have been preliminarily revealed, playing an active role in promoting cost reduction and efficiency increase in the logistics industry Lay a solid foundation for building a logistics power. China's intermodal freight volume forecast for 2020 is shown in figure 2.

![Figure 2 Forecast of China's Multimodal Transport Freight Volume in 2020](image)

According to the chart above, the volume of multimodal freight in China is increasing year by year. It is expected that by 2020, the total volume of freight will reach 3.028 billion tons. Under the strategy of “the Belt and Road”, China's international cooperation projects have spread all over Asia Europe and Africa countries and regions, and actively cooperate with North American countries and regions in order to expand the market of multimodal transport and further promote the development of multimodal transport.

3. Analysis on the development of international multimodal transport.

3.1. The role of liner companies in international multimodal transport is growing.
Among all kinds of transportation modes, sea transport has the largest volume, and the vast majority of international intermodal containers have to go through the link of shipping, so many large international liner companies have been formed. In the long-term operation process, with the intensification of competition, liner companies began to expand their business to the land instead of only getting the profit of shipping. With their powerful scale and negotiation ability, giant liner companies are gradually becoming the center of international multimodal transport and playing an increasingly important role.

3.2. Integration of International Multimodal Transport and Production
With the increasing recognition of the importance of modern logistics, multimodal transport has become an important part of the enterprise strategy formulation. More and more enterprises choose to outsource the transport business, especially the international trade commodity transport business to the international multi-modal transport operator, which provides integrated services. In addition, some multimodal transport enterprises have penetrated their business into the production field, connecting the basic processes of procurement, production, sales and terminal customers more closely.

3.3. Internationalized Network as a Core Resource for International Multimodal Transport Competition
International multimodal transport provides cross-border "door-to-door" service, which requires the operator of international multimodal transport to set up branches or cooperate with foreign companies
to expand the network of international multimodal transport and construct its own international network system. To set up a branch in a joint transportation node requires a strong economic strength as a support, and also consider the size and stability of the supply of goods. The cooperation with foreign companies should consider the credit risk, after a period of running-in and inspection to form a cooperative partnership of mutual trust. Either way, international multimodal transport networks, once formed, will become the core resources of enterprises, providing them with strong service capabilities and credibility guarantees to better complete multimodal transport services.

3.4. The proportion of LCL is increasing, and the LCL technology is required more and more

LCL can save the space and reduce the cost to the greatest extent, but LCL technology and experience requirements are higher, LCL is the highest rate of profit in container transport. With the increasing personalization and diversification of consumer demand, the volume of goods has been greatly reduced while the variety has been greatly increased. Less than container load of goods will be increased, the fit-box goods more and more need to be packed to carry containers. Less than container load of goods will be increased, its added value will be higher and higher. Of course, a wide variety of personalized goods also put forward higher requirements for LCL technology, and how to ensure the safety, timely and accurate delivery of goods to the consignee, not only for the multi-modal transport operators put forward challenges, but also provide opportunities.

4. The development strategy of multimodal transport under “The Belt and Road”

4.1. Optimize existing transportation network and solve the problem of seamless connection of infrastructure.

We will accelerate the construction of stations and the upgrading of facilities, upgrade the technical level of the infrastructure for multimodal transport corridors, encourage the development of specialized and general-purpose transport equipment, make full use of advanced science and technology, and use advanced machinery and equipment in the development of multimodal transport. We will adjust and optimize the layout of container handling stations and strengthen the construction of logistics centers. When planning and designing railway transport routes, the railway transport department shall consult with the port department and provide the best transport conditions. In the transformation and construction of transshipment stations, inland cities adhere to the overall planning and combined with the planning of local logistics parks, so as to build railways into the main passageway for mass cargo and long-distance transportation in and out of the parks and promote the development of regional logistics.

4.2. The government has played a leading role in improving the policies and regulations on multimodal transport

We should improve the laws and regulations on China's transportation and multimodal transport, regulate the operation order of the multimodal transport market, establish sound market rules and codes of conduct, streamline the examination and approval procedures, and protect the legitimate interests of logistics enterprises. Due to the current domestic regulation of multimodal transport less relevant laws and regulations, therefore, need to speed up to establish and perfect the multimodal transport in terms of regulatory laws and regulations. By means of legislation to determine the intermodal transport related operation process and matters, to ensure that the intermodal transport has a sound system to guide China's scientific, sustainable and standardized development of intermodal transport.

4.3. Reconstruct the value chain of multimodal transport cooperation and competition

The multimodal transport operator is an important link in the multimodal transport value chain. It can profit by finding the imbalance of the transport market, so that the industry resources can be more effectively allocated. The multimodal transport operator can achieve the seamless connection of
transport modes by changing the mode of transport organization so as to achieve the external
connection between transport modes. When the multimodal transport operator accurately grasps the
transport demand of the transport market, it starts from the customer demand and future opportunities,
exploring the mutually beneficial relationship with the multimodal transport operator, reconstructs the
value chain of the multimodal transport, jointly develops new markets, and realizes the strategic goal
of expanding business opportunities and common development.

4.4. As soon as possible into the "The Belt And Road", seize the multimodal transport market
In 2016, multimodal transport was elevated to the national strategy, and more than 10 excellent
multimodal transport projects were included in the list of the first batch of "multimodal transport
demonstration projects" jointly issued by the ministry of transport and the national development and
reform commission. In the first year of 2017, 18 national departments jointly issued the "notice on
further encouraging the development of multimodal transport", marking the top-level design of China's
multimodal transport development.

4.5. To accelerate the application of advanced information technology in multi-military transport
Information technology is widely used in the field of multimodal transport is the trend of advanced
information technology application can not only shorten the customs clearance time, improve the
efficiency of cohesion. And it can make people get more data in road transport process and transport
operations, even help enterprise supply chain make intermodal transportation mode selection, design
of management decisions, provide optimal multimodal transport solutions.

5. Conclusion
The core component of "The Belt And Road" proposed by general secretary Xi Jinping is the
establishment of closer economic and trade ties with countries along the land route. In many countries
in the land-linked regions of the West and southwest of China, the efficient development of
multi-industries and operational intermodal transport have cost comparative advantages over maritime
transport in terms of efficiency and operation mode. For many countries in the inland areas of central
and western China and southwest China, multimodal transport has cost advantages compared with
maritime transport in terms of efficiency and operation mode. For China's central and western inland
areas to open up to bring better opportunities.

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