Features

The New Asia-Europe Land Bridge—Current Situation and Future Prospects

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In September 1990, China's Bei-jiang Line linking Urumqi and Alashankou was connected to Kazakstan Railways, thereby linking Lianyungang and other ports in east China directly by rail with Rotterdam, Holland and other European ports (Fig. 1). Freight and passenger services were inaugurated on 1 December 1992. This New Asia-Europe Land Bridge spans two continents, a link made possible by the work of the Chinese government and ministries, and commercial business enterprises.

The completion of the New Land Bridge not only contributes to the economy of northwest China, it also invigorates the national economy and contributes to the nation's Open Door policy. In addition, it makes a significant contribution to economic and cultural exchange between the Asia-Pacific nations, Europe and the Middle East. The line is benefitting the development of the regions it serves.

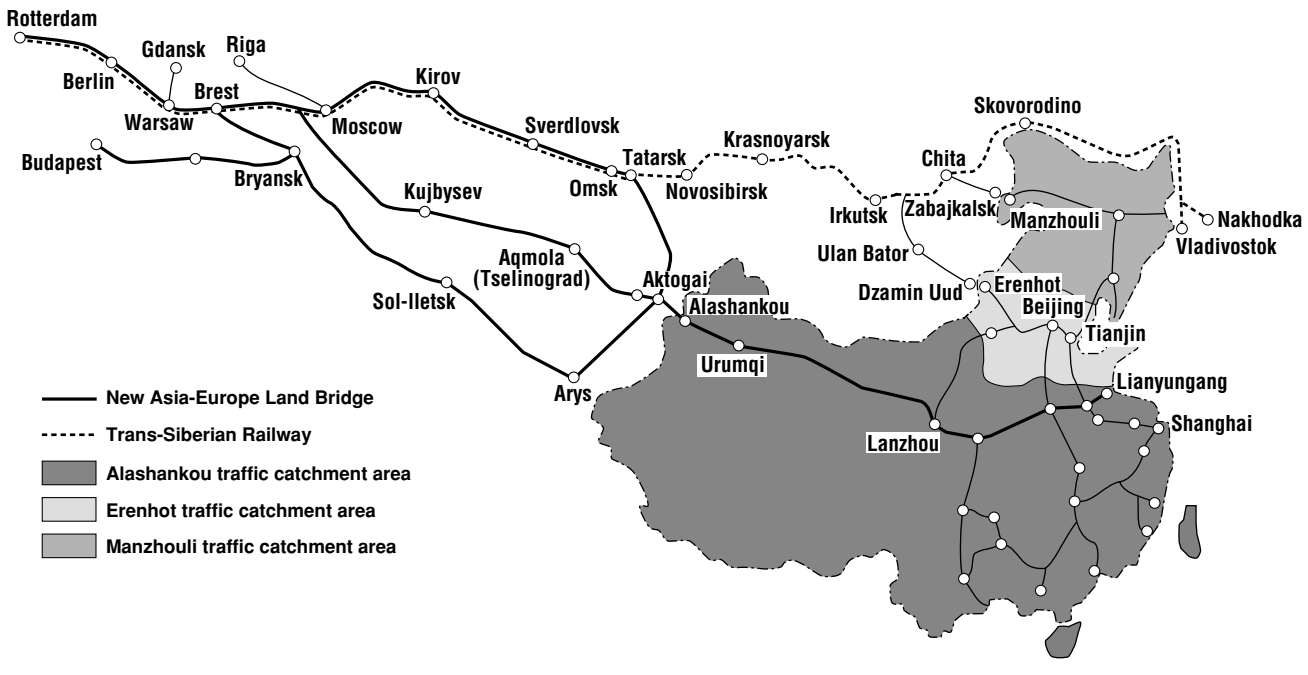
At an ASEAN conference in Bangkok in March 1996, attended by European leaders, it was stated that Europe and Asia should make a concerted effort to catch the favourable tide and redouble their efforts to meet the 21st century with new amicable relations. The meeting called for increased dialogue, a deepening of economic ties, and increased cooperation in light of common aspirations and needs. In 1996, the New Asia-Europe Land Bridge Railway Regional Economic Development Group held an international conference in Beijing and pointed to the favourable start of an international economic zone spanning two great continents—Europe and Asia.

Concept of New Asia-Europe Land Bridge

Regional cooperation and development is an important trend in current world affairs. The new economic zone spans the central land mass of Eurasia from the west Pacific coast to the east Atlantic coast. The 10,900-km link is a hugely important international route uniting over forty nations covering 39.7 million km^2 or 26.6% of the world's land area. The population of this area is 2.2 billion, or 36% of the total.

The New Land Bridge has a number of outstanding and unique characteristics. It runs from the major economic centres of Europe to the major economic centres of Asia, both of which are highly developed but lacking in space and natural resources. These two poles are con-

Figure 1 Route of New Asia-Europe Land Bridge and Trans-Siberian Railway



nected by an extremely long and narrow corridor crossing the belly of the Eurasian heartland.

With the exception of a few countries, the intermediate nations and regions between these two poles are undeveloped. These regions are characterized by transportation shortages and a severe natural environment, but there is abundant space and resources. Development of these regions and their natural resources would greatly benefit the local people and the world as a whole. For example, the regional coal reserves are estimated to exceed 2000 billion tonnes. Oil reserves are estimated at 150 billion tons, and natural gas at 750 billion cubic feet—no wonder this region is called 'the world's energy supply.' For this reason alone, the New Land Bridge is extremely important just in economic terms.

Over the span of history, Eurasia has been blessed with a long and fruitful tradition of economic and cultural exchange and cooperation. The conceptual basis for the New Land Bridge can be found in the historic Silk Road, which connected the great civilizations of Europe and Asia over 2000 years ago. The economic and cultural development and international cooperation along the route of the Silk Road, played a vital role in the classic civilizations of mankind. It also left a lasting legacy influencing the arts and culture of pre-modern and contemporary civilizations. Even today, the Silk Road is an important spiritual link between Europe and Asia. Consequently, the New Asia-Europe Land Bridge Railway is sometimes called 'The Modern Silk Road.' In the future, the Railway will play an important role in expanding economic and cultural exchange, and will promote further development in Europe and Asia.

Within China, the Railway covers 4131 km passing through Jiangsu, Shandong, Anhui, Henan, Shanxi, Shaanxi, Gansu, Ningxia, Qinghai, Xinjiang, and influencing nearby Hubei, Sichuan, Inner Mongolia and other areas. The total population of this region is 400 million or 30% of China's total. It encompasses 3.6 million km^2 or 37% of the national territory. This area occupies a very important position in China's social and economic development. Remote sensing by satellites, surveys and aerial prospecting along a swathe of land 100 km wide on both sides of line shows an incredibly rich territory with energy resources, ores and minerals. The coal reserves along the Railway represent 63.2% of China's total estimated reserves. Oil reserves comprise nearly 40% of the national total, gas reserves form fully 50% of all China's known reserves. Metal reserves include vast amounts of gold (40%), nickel (76.9%), bauxite (60.3%), and copper (30%). Chemical products and construction materials stand at roughly 40%–70% of the nation's total. The agricultural rim around the Railway is also extremely fertile, level and broad; soils are rich, sunshine and water are plentiful. The annual amount of underground water that can be tapped in northwest China totals 112.4 billion m^3. More importantly, the water quality is high and the quantity is stable. If one takes a frank and honest look at the part of mainland China crossed by the Railway, the economic and manpower resources are still backward and limited, largely for historic reasons. The production structure is not rational, thus limiting China's overall economic development. Consequently, speedy opening up and development of this region is a serious priority of the Chinese government, which is devising careful policies appropriate to the region.

After international traffic started moving over the rails, it was decided in 1993 to lay more track to open up and develop the region. By 1994, the Railway had become a top development priority project within the guidelines of the 1991 United Nations Environment and Development Meeting. To accord with this Meeting, development of the Railway was included as a top priority in *China in the 21st Century—A White Paper on China's population, environment and development in the 21st century*.

In 1995, the Chinese government promulgated a policy designed to develop the zone crossed by Railway reflecting the fact that the Chinese part of the Railway has the necessary pre-requisites for future development. Clearly a railway line crossing China from east to west, will promote development of both regions and due priority should be assigned to opening it up as an international rail corridor. It is also hoped that the Railway will become an international business venture, marked by open-style development along the corridor.

Current Status of Transportation on Railway

Completion of the Railway greatly strengthened China's freight links with Central and West Asia and Europe, facilitating diversified transport and accelerated economic development of all countries along the Railway. The Railway is highly appreciated and vigorously promoted by the governments, businesses, education, and media of all related countries, including China. However, in terms of actual freight movement, it is far from reaching its potential despite a steady increase in usage, and needs more development. In 1993 and 1994 combined, the line carried only 111 TEU (standard 20-foot containers); 1995 saw 257 TEU, and the total increased to 12,000 TEU in 1996. Most of these container shipments were headed to Uzbekistan and Kazakhstan but there was virtually no east-bound freight. The volume of freight carried by other routes between Europe and Asia is huge, so why is so little transported along the Railway? Research into this question has highlighted the following problems:

Monument at Lianyungang reading 'The Eastern Terminal of the New Eurasia Continental Railway' (M. Saito)

Passenger and freight trains passing on Trans-Siberian Railway (a major competitor of the New Asia-Europe Land Bridge) at Irkutsk (TASS)

Different land and sea freight tariffs

The Chinese section of the Railway from Lianyungang to Alashankou covers 4131 km. Rail freight costs calculated at Chinese rates total about US$850 per TEU. Miscellaneous fees, port fees, handling fees, etc., total another US$1100. Adding the freight costs in the other countries and the additional costs for transfers, etc., brings the final total to transport 1 TEU from a port on the east coast of China to a European port to US$3500. Shipping by sea from a Chinese port to a European port for a similar-size container totals about US$1200 and prices by sea are falling due to severe competition. Consequently, the Railway route costs about three times as much as the sea route.

Land freight takes too long

Previously, it was thought that the Railway would be faster and cheaper than the sea route between the Asian-Pacific region and Europe. From a geographical point of view, the journey by sea from Lianyungang to Rotterdam is about 19,900 km, whereas the land route is 10,900 km. In other words, the Railway is about half the distance of the sea route. Furthermore, trains are faster than ships. Consequently, the land route should represent a huge saving in time, but it doesn't work out that way. Currently, the speed of rail freight in China is very slow, and the journey time from Lianyungang to Alashankou is about 18 days. Since the break up of the old USSR, the Railway route must traverse several new countries, which imposes time and cost penalties dealing with customs procedures, etc. In fact, non-containerized freight from Lianyungang to Rotterdam takes a little more than 40 days, but containerized freight still takes more than 30 days. Although the distance by sea is twice as long, the size of ships coupled with speed increases and navigation improvements has cut the journey time to 25 days.

Poor infrastructure and complex paperwork

The Railway freight requires two total transfers and repackings: once at the China–Kazakhstan border, and then again on the Polish–Belarus border. According to China's Ministry of Foreign Trade, three problems are restricting development of the Railway.

- Alashankou has inadequate facilities; transfer capacity and storage are limited. In early 1996, over 4000 rail carriages were backed up in Kazakhstan alone.
- Alashankou inspections and formalities are unduly bureaucratic, creating a situation where goods are held for far too long and sometimes for up to 6 days.
- Various fees charged at Alashankou are extremely taxing, running up to US$600.

Poor freight tracking

In 1991, the Chinese government allocated US$400,000 to install freight movement tracking equipment at all main stations along the Lianyungang-Alashankou route, but the system is still not in use and the freight owners cannot track movement of goods in a timely fashion. Furthermore, there is no guarantee that goods will be dispatched on time. Owners and shippers have reacted strongly to these problems.

Fierce competition from Trans-Siberian Railway

The Trans-Siberian Railway is the main land competitor to the New Asia-Europe Land Bridge Railway. It has the advantage of running almost entirely within Russia, whereas the New Asia-Europe Land Bridge Railway has only a small section running through Russia. Since more freight travelling on the New Asia-Europe Land Bridge Railway will cause great losses for the Trans-Siberian Railway, it is no surprise that Russia is negative about this. The Russian government has made it clear that because it has allocated the best manpower, supplies, and finances to the Trans-Siberian, its priority is on the Trans-Siberian, and it views the New Asia-Europe Land Bridge Railway more as a future project. To compete with the New Asia-Europe Land Bridge Railway, Russia lowered the Trans-Siberian fees to US$0.15 per km. Conversely, to constrain development of the New Asia-Europe Land Bridge Railway, the fees for the Russian section have been raised to US$0.30 per km. Furthermore, the Trans-Siberian has one less track transfer due to the uniform gauge, which simplifies shipments along the line.

Future Development Measures

To develop the Railway into a truly international traffic corridor between Asia and Europe, it is necessary to fully integrate the system to make it more convenient, speedy and safe. It will serve as a bridge between the governments of each country along the route and increase links between relevant railway authorities, customs inspections, etc. The scope of the work is broad, and the easy problems should be tackled first before moving on to the harder ones. Step-by-step planning must put into effect.

The first step: The Railway must establish a unified management organization responsible for integrating the various elements including planning and project implementation, problem solving, unified dispatching, customs inspection, management, and arbitration.

The second step: An international system should be established for settling accounts, and there should be unified schemes for raising and spending capital. Both line infrastructure and rolling stock technology must be unified to solve current problems of insufficient capacity.

Based on these changes, there should be new track construction involving the Commonwealth of Independent States (CIS) in order to unify the rail gauge and facilitate two-way through traffic.

The third step: A high-speed train service should be planned.

Unification of services and management on the Railway involves complex construction reaching into the next century; it is an important project with long-term benefits, but faces some problems. First, the different political, economic and idealogical systems of the various countries along the line pose a daunting challenge. Second, there is the problem of competition with the Trans-Siberian Railway and the new Trans-Asian Railway (*JRTR* 12, pp. 31–35). Third, there is the problem of coordinating management and international business practices between China and the CIS.

Therefore, making the Railway a success requires changing opinions and solving political, economic and ideological differences. The project must be approached in the spirit of 'preserving common points and respecting differences'. Research and study of the problems must be strengthened. It is imperative to improve cooperation with the Trans-Siberian and Trans-Asian railways, as well as to develop market style economics to promote cooperation between China and the CIS. A project of this scope also requires all parties to get in step with international practices. All of the above are essential tasks to be tackled immediately. In summary, the major tasks facing us now are as follows:

(1) Establish a permanent international research institute for regional economic development along the New Asia-Europe Land Bridge Railway,
(2) Establish a New Asia-Europe Land Bridge Railway Forum,
(3) Establish acceptable management practices using an international transport group to integrate the organizational structure, and
(4) Establish an international system for funding the Railway management and infrastructure. ■

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