

SUPPORTING “THE BELT AND ROAD” INITIATIVES: BUILD UP AN INTERCONNECTED TRANSPORT AND LOGISTICS SYSTEM

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Abstract

“Vision and Actions on Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road” has been published by China government, dedicated to promote the openness and cooperation between countries and regions, and improve infrastructure connectivity and transport effective and efficiency. This paper describe how the national and local transport department to make plans and launch related initiatives to prepare for implementation of B&R in Infrastructure interconnection, Information exchange, and transport facilitation. The paper try to make common understanding the possible way and strategies to build up an interconnected and high efficient transport and logistics system between countries in Asia and Europe

Keywords: Belt and Road (B&R), infrastructure, transport service, logistics, Neal-Net, interconnected, efficiency, Information exchange

The "the Belt and Road" initiative has been put forward by China, which is dedicated to the interconnection of the mainland of Asia, Europe and Africa and their adjacent water, through policy coordination, facilities connectivity, unimpeded trade to promote the economic prosperity of the countries along the Belt and Road. Facilities connectivity is a foundation area for implementing the Initiative, to improve the transportations network, to jointly establishment customs clearance mechanism and international logistics road, and will promote trade facilitation, improve logistics and transport efficiency.

The "the Belt and Road" initiative mainly involves 66 countries and regions. The first three quarters of 2015, China's export value to countries along the route to reach 455 billion US dollars, accounted for 27.3% of total export value of China over the same period. Export value of ASEAN, India and South Africa increased by 6%, 9% and 8% respectively. The first quarter of 2016, export value (with RMB) of Pakistan, Egypt, Russia and other relevant countries growth of 26.3%, 6.3% and 6.1% respectively. "The Belt and Road" initiative related countries investment in china established new enterprises 558, an increase of 21.6%, with the actual amount in foreign investment USD 1.84 billion, an increase of 10.9% over the same period of last year. Through transportation infrastructure construction in "the Belt and Road" initiative, it can further promote the relevant countries to further increase trade and investment, and economic activity is more active. At present, there are already more than 30 countries signed a "one way all the way" cooperation agreement with China. The Asian Infrastructure Investment Bank, "Silk Road Fund" and "China - Eurasian Economic Cooperation Fund" were established, to promote "the Belt and Road" initiative construction and to provide financial security for Development of emerging economies in the region.

Policy documents issued by the government

To promote the implementation of the "the Belt and Road" initiative, in 2015, the National Development and Reform Commission, Ministry of Foreign Affairs, and Ministry of Commerce of the People's Republic of China jointly issued the "Vision and Actions on Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road" to determine infrastructure construction connectivity as priority areas of the "the Belt and Road" initiative. In 2016, China, Mongolia, and Russia jointly signed the "Construction Plan of the Economic Corridor of Mongolia and Russia", which is the first multilateral cooperation plan under the framework of "the Belt and Road" initiative, to mainly focus on promoting the development of transportation infrastructure and connectivity, strengthening port construction and supervision of customs, inspection and quarantine. Recently, the National Development and Reform Commission of China (NDRC) has issued the "Construction and Development Plan of China Railway Express (2016-2020)". The objective is to optimize the transportation organization to reduce the whole logistics cost and to improve the comprehensive service capability. Provinces and autonomous regions of China have also drew up the action plan convergence with the "the Belt and Road" initiative. In order to improve

the international logistics roads and improve the level of transport services, the General Administration of Customs and the Ministry of Transport of the People's Republic of China (MOT) have implemented the corresponding action plan in infrastructure construction and customs clearance facilities.

Implementation Schemes of China Customs, MOT China

General Administration of Customs of the People's Republic of China has released implementation plans for advancing the Belt and Road Initiative, including sixteen supporting measures and related measures of facilitation of customs clearance, mainly focus on the following issues:

1. Multimodal logistics supervision center established in the transportation hub, through the exchange of information to achieve once declaration, once inspection at place of receipt (delivery).
2. Based on the electronic port to promote the "single window" construction, simplify and unified document formats and data standards, to promote "one-stop operation".
3. New Eurasian Land Bridge and China-Mongolia-Russia Economic Corridors as the focus to promote integrated regional customs clearance on "the Belt and Road", to realize connectivity between cross-regional customs step by step.

As transportation is a priority area of the "the Belt and Road" initiative, the China's Ministry of Transport has issued a "Implementation Plan of "the Belt and Road" Strategic Layout" to enhance the level of transport infrastructure connectivity between China and neighboring countries, to format integrated regional transportation. Through the "13th Five-Year Plan", the China's Ministry of Transport will push forward the construction of international trunk passageways, and cooperate with countries along the Belt and Road, to determine priority areas and key cooperation projects to promote infrastructures which under construction project and new construction projects in railway, highway, waterways and air transport. While forming a coherent transport standards and a common facilitation transport services with countries along the Belt and Road.

Transport infrastructure

The development of "the Belt and Road" needed effective supporting of transport infrastructure. In the land, the main work is to link up unconnected road sections, to remove transport bottlenecks and gradually to form a connectivity transport network. In the sea, the main work is to create a safe and smooth corridor of sea transport. In transport services, is to create a convenient international transport environment.

(1) Planning of six major economic corridors

Under the framework of "the Belt and Road" initiative, China will plan and construct six economic corridor, which are China-Mongolia-Russia economic corridors, new Eurasian land bridge, China-Central Asia-West Asia, China-Indochina Peninsula, China-Pakistan, and Bangladesh-China-India-Myanmar economic corridor, based on

the common interests of the relevant countries.



Figure 1 Six major economic corridors

a) China-Mongolia-Russia Economic Corridor (CMREC)

China-Mongolia-Russia economic corridor connected with Trans-Eurasian Railway and Mongolian Grassland Road, which means to create a China-Mongolia-Russia economic corridor connecting China, Russia and Mongolian. It includes two important strategic roads. The first one is from Jing-jin-ji regional to Hohhot, from the border city of Erenhot to Ulan Bator of Mongolia, and connected with Russian Far East Railway network. The other is along the old Middle East railway from Dalian, Shenyang, Changchun and Harbin to Manchuria and Chita of Russia. Two strategic roads link the Bohai economic circle, the China-Mongolia-Russia Economic corridor and European economic circle. Compared with the Silk Road Economic Zone from the northwest region of china to New Eurasian Land Bridge, This economic corridor has advantage about lower transport costs, short time, less through the country, lower cost of customs clearance.

b) New Eurasian Land Bridge Economic Corridor (NELB)

The New Eurasian Land Bridge is an international railway transportation corridor, which extends from Lianyungang of Jiangsu province of China to Rotterdam port of Netherlands, a distance of 11,870 kilometers, radiation the world more than thirty countries and regions. The New Eurasian Land Bridge linked the pacific economic circle and European economic circle. Compared with transported cargo through North Eurasian Land Bridge, the transportation distance reduced by 3,000 kilometers. While by passed the Indian Ocean and Suez Canal, the water transportation distance reduced by 10,000 kilometers, freight saving of 20% and the transportation time reduced by half At present, China, Russia, Belarus and other countries has reached an agreement of development planning on the Silk Road Economic Belt and Eurasian Economic Union.

c) China-Central Asia-West Asia Economic Corridor (CCWAEC)

China-Central Asia-West Asia Economic Corridor is the main energy route connecting countries along the China, Central Asia and West Asia. Domestic part of China and the new Eurasian Land Bridge overlap, started from Alataw Pass or

Horgos border ports out of China, and then from Kazakhstan to Uzbekistan, Kyrgyzstan, Tajikistan, Turkmenistan, Iran, Iraq and Turkey. At present, China-Central Asia natural gas pipeline is the longest gas pipeline in the world, from Turkmenistan on the right bank of the Amu River and Uzbekistan border, and through central Uzbekistan and southern Kazakhstan, Horgos border of Xinjiang Province into China. In this economic corridor, there will be a number of logistics parks, express customs clearance of agricultural products and border ports have been started or opened.

d) China-Pakistan Economic Corridor (CPEC)

China-Pakistan Economic Corridor linked the city of Gwadar port in southwestern Pakistan to Kashgar in south Xinjiang region of China, across the Karakorum Mountains. China-Pakistan economic corridor is a mega project of USD 46 billion, taking the bilateral relationship between Pakistan and China to new heights. The connectivity of infrastructure facilities, including collaboratively construct highways, railways, oil and natural gas pipelines and telecommunications from Kachi of Xinjiang province to Gwadar port of Pakistan will be promoted. A number of construction projects have been in progress, to make Gwadar port to become a critical node in the China-Pakistan Economic Corridor.

e) Bangladesh-China-India-Myanmar Economic Corridor (BCIMEC)

China, India, Bangladesh and Myanmar jointly established the Joint Working Group of Bangladesh-China-India-Myanmar Economic Corridor, to sign the joint research program.

f) China-Indo-China Peninsula Economic Corridor (CICPEC)

China consider cooperate with ASEAN to construct a economic corridor, along Nanning-Guangzhou, Guilin-Guangzhou Highway, east starting from the Pearl-River Delta economic circle, through Nanning, Pingxiang of Guangxi province, Hanoi of Vietnam to Singapore. This economic corridor will relying on core cities along the route to construct international transport routes, which are mostly focus on railway and highway, to format a cooperation, mutual complementarily and common development of the regional economy. At present, Guangdong and Guangxi province have actively promote cooperation among major cities along the routes, development of industrial park and infrastructure connectivity.

(2) Infrastructure Planning and Construction

To support the six economic corridors, many transport infrastructures such as railways and highways has been planned and under construction. In order to support "the Belt and Road" initiative, the authorities of the Ministry of Transport consider relying on the Jing-jin-ji regional, the Yangtze River Delta, the Pearl-River Delta; Dalian, Tianjin, Qingdao, Shanghai, Ningbo-Zhoushan, Fuzhou, Xiamen, Shenzhen and other coastal ports as nodes, construct a comprehensive transport connecting inland river, highway, railway from internal, and radiation global Maritime Silk Road corridor from external.

a) The New Eurasian Land Bridge (NELB) is the most convenient road between Asia and Europe. It is connected by Longhai(Lanzhou-Lianyungang) Railway,

Lanzhou-Xinjiang Railway from China and Kazakhstan Railway, east from Lianyungang in Jiangsu province, through Zhenzhou of Henan, Xi'an of Shanxi and other railway stations in the Longhai (Lanzhou-Lianyungang) Railway; Lanzhou of Gansu, Urumqi of Xinjiang, and other railway stations in Lanzhou-Xinjiang Railway to the west, to the North through Railway in north of Xinjiang into Kazakhstan, Russia, Belarus, Poland, Germany, and the port of Rotterdam in the Netherlands in the end.

Due to the New Eurasian Land Bridge (NELB) Economic Corridor, China-Pakistan Economic Corridor (CPEC) and China-Central Asia-West Asia Economic Corridor (CCWAEC) in Xinjiang of China, achieve the "three corridor in one" and along the railway line, connected with the Bohai Economic Circle (North Route), Yangtze River Delta economic circle (Middle Route), the Pearl River Delta Economic Circle (South Route). Xinjiang has become the core transport infrastructure province in "the Belt and Road" initiative. Also, Xinjiang has developed an implementation plan based on "the Belt and Road" initiative. The north route is through the main highway G7 (Beijing-Xinjiang Highway) which the planning mileage of 2727km, and open mileage of 134km, from the Jing-jin-ji regional, through Shanxi, Inner Mongolia, MingShui (GanXinJie) into Xinjiang, and then to the west through Yiwu, Beitun, Jeminay to Kazakhstan, Russia. The G7 highways started from Beijing and ends at Urumqi, Xinjiang. It passes through Beijing, Hebei, Inner Mongolia, Gansu and Xinjiang. The total length is about 2,738 km. When the whole highway will be opened to traffic after 2017, the distance between Beijing and Urumqi will be reduced by 1,300 km. The middle route is through the main highway G30 (Lianyungang-Horgos Highway) which the total length of 4395 KM, linked Lianyungang of Jiangsu province to Horgos of Xinjiang province. And middle route started from the Shanghai through six province of Midwest of China along the New Eurasian Land Bridge (NELB), via Xingxing canyon into Xinjiang, and then respectively through Hami, Turpan, Urumqi, Jinghe, from the Alataw Pass and Horgos exit to Europe. The south route started from the Guangdong, through Hunan, Chongqing, Sichuan, Qinghai, from Yitunbulake into Xinjiang, and then by Ruoqiang, Hotan, Kashi, from Hongqilafu border port out of Xinjiang to Gwadar port of Pakistan. In Xinjiang Uygur Autonomous Region, the highway from Yitunbulake to Hongqilafu border port has already built, and other related highway project has already started.



Figure 2 Three routes planning for "the Belt and Road" to in Xinjiang (Source: Internet)

b) As the important provinces in China-Indo-China Peninsula Economic Corridor (CICPEC), Yunnan and Guangxi provinces have built a number of highway or railway connecting with Indo-China Peninsula, and a number of sea routes. Guangxi province made Nanning as a transportation hub to focus on construction of south road and north road. To the south, Guangxi province will focus on transport infrastructure from Nanning to Vietnam, Laos, Cambodia, Thailand, Malaysia, Singapore and other Indochina Peninsula countries, means connecting the 21st-Century Maritime Silk Road. Meanwhile, Beibu Gulf port of Guangxi has been linked 46 ports of ASEAN countries, a total of 35 regular container liner routes. To the north, Guangxi province will focus on Guiyang, Chongqing, Chengdu, Xi'an, Lanzhou, Urumqi and other domestic cities connectivity, means connecting the Silk Road Economic Belt. In addition, from Kunming of Yunnan province, a number of railways are planning and constructing. It is Trans-Asian Railway (TAR) which has three international railways from east, middle and western, through Vietnam, Cambodia, Myanmar, Thailand, Malaysia, and finally arrived in Singapore.

Beibu Gulf port of Guangxi has been linked 46 ports of ASEAN countries, a total of 35 regular container liner routes. In addition, from Kunming of Yunnan province, a number of railways are planning and constructing. It is Trans-Asian Railway (TAR) which has three international railways from east, central and west, through Vietnam, Cambodia, Myanmar, Thailand, Malaysia, and finally arrived in Singapore. The middle line of Trans-Asian Railway (TAR) is a major international railway route of China-Laos-Thailand, from Kunming of China, via Vientiane of Laos to Bangkok of Thailand, total length of 1830 KM. In Yunnan region, the last railway of Intermediate line of Trans-Asian Railway (TAR) is Yuxi-Mohan railway, started from Yuxi of Yunnan province, through Pu'er, Jinghong, and end at Mohan border port. In Laos by Boten to Vientiane, and through Vientiane-Bangkok railway to the Nongkhai-Marta Pu railway, and then connected with Malaysia, Singapore through Thailand railway. The government of China will also plan to design a high-speed railway which speeds of 250 km per hour from Nanning of Guangxi province to the land border port city of Pingxiang

City, and plan to start construction before 2017.

Road construction in the China-Indo-China Peninsula Economic Corridor (CICPEC) has gradually developed. Kunming - Bangkok Road has been opened to traffic by the end of 2013, the whole traffic mileage of 1880 KM., started from Kunming, by Yuxi to Mohan border port, the traffic mileage 827KM in China. After leaving China, from Boten to Houayxay of Laos, a total length of 247 KM; across the Mekong River, from Houayxay of Laos into Chiang Khong city of Thailand; the total length of 813 KM from Chiang Khong to Bangkok. The highway is also under-planning and under-construction from Guangxi to Vientiane, to form Nanning-Bangkok highway route, started from Nanning of Guangxi, via Vientiane, Laos into Bangkok of Thailand. At present, four land border ports of Guangxi and Vietnam have been connected with National Highway Network. Highways of Nanning to Youyiguan land border port and Fangcheng to Dongxing border port have been opened, and highways of Jingxi to Longbang border port and Chongzuo to Koushui border port is under construction. Nanning to Hanoi highway plan completed within five years. Highway from Hanoi and Youyiguan border port has already been staged built, and expected to open before 2020, meanwhile, the highway from MongCai to Hanoi of Vietnam is in planning. In the interconnection of inland waterway, the government of China also plans to carry out the river course construction of Lancang-Mekong River. In the airway, Guangxi has fully realized the full coverage of the ASEAN countries except Brunei.

- c) Northeast three provinces and Inner Mongolia of China are the core provinces of the China-Mongolia-Russia Economic Corridor (CMREC). The government of China will improve the routes between Heilongjiang and railways of Russia, and carry out land and sea multimodal transport cooperation between Heilongjiang, Jilin, Liaoning and the Russian Far East. The governments of China actively promoted the China-Russia high-speed railways cooperation, mainly focus on Middle-east railway, through Vladivostok – Suifen river - Harbin - Manchuria - Chita into the old Eurasian Continental Bridge and the other way through Dalian - Harbin - Manchuria - Chita into the old Eurasian railway.

China-Mongolia-Russia Economic Corridor (CMREC) has two routes, through Manzhouli, Erenhot to west and north respectively, or through Arxan, Huichun, Suifenhe, Tongjiang to Mongolia or Russia. The east route is from northeast China to Manzhouli, then to Mongolia and Russia. The West route is from Jing-Jin-Ji region via Hohhot to Erenhot, then to Mongolia and Russia. Tianjin is the main node of China-Mongolia-Russia economic corridor and maritime cooperation strategy, because it connected with The New Eurasian Land Bridge (NELB) and China-Mongolia-Russia Economic Corridor (CMREC). Meanwhile, Tianjin is only port in China connected with three Land Bridge boundary crossing route through Manzhouli, Erenhot and Alataw Pass respectively.

The West route is connected Mongolia and Russia. The one road started from domestic cities of China via Erenhot to Mongolia, and then through Russian Siberian railway to Europe. Another road is from Manzhouli, west to connect with Siberian railway, then to Europe. Erenhot land port border with Zamyn-Uud of Mongolia. It is an important transit road of goods between China, Mongolia and Russia, which started from Jing-Jin-Ji region by railway, via Hohhot, Baotou, Ordos to Erenhot border port, and connected with Zamyn-Uud port of Mongolia by railway, and then through Ulan Bator of Mongolia to Ulan-Ude of Russia by railway. This international railway route linked the Jing-Jin-Ji economic circle, the Bohai ports group, Mongolia and Russia, hence, the transport mileage reduce more than 1000 KM from Russia to China. In addition, Manzhouli as an important land border port of Inner Mongolia, east to the domestic city Harbin, and exit to the Russian Zabaikalye railway line, then to Chita. Ceke port of China also has three railway routes from Bayannur to Ceke, Jiayuguan to Ceke and Baotou to Ceke. In the future, three railway routes of China can be connected with the Mongolian railway.

In highway aspect, a number of land border ports such as Manzhouli, Erenhot and Ceke connected with Mongolia and Russia, also through highway connected with eastern coastal ports of China. Manzhouli border port linked with Tianjin port through G10 or G301 highway from Manzhouli to Harbin, then through G1 to Beijing; Erenhot has G55 highway, started from Shanxi of Taiyuan, Louyang of Henan, Xiangyang of Hubei, Changde of Hunan and other places, to the southernmost Guangzhou, total length 2685 KM; Ceke border port of Inner Mongolia currently construct S315 highway, from Wuhai via G6 to Beijing or G18 by Hebei to Tianjin, and then to Yantai and Weihai of Shandong, connected to the National Road Network. The other land ports of Inner Mongolia are also planning and constructing high-grade highway to access the National Road Network. In aviation aspect, Hohhot, Hailar, Manzhouli, Ordos of Inner Mongolia as air border port has open a number of international air routes to Ulaanbaatar, Qiba Hill, Chita, Irkutsk, Ulan Ude, Krasnoyarsk and other Mongolia and Russia cities. Erenhot also plan to open a number of international air routes.

Heilongjiang as the core of the East road, through the eastern provinces of Russia, directly through the Trans-Siberian Railway to Europe, linked Bohai Economic Circle, Yangtze River Delta economic circle, the Pearl River Delta Economic Circle. There are four main railway lines. The first one is Suifenhe -Manzhouli railway line, through Suifenhe, Harbin, Manzhouli to Zabaikalsk, connected with Trans-Siberian Railway, west to Hamburg and Rotterdam ports. The second one south started from Dalian port, through Harbin-Dalian railway line and Harbin-Kiamusze railway line to Tongjiang, and then from Tongjiang railway land bridge to Birobidzhan connected with Trans-Siberian Railway. The third one south started from Harbin land port, through Harbin-Beianand and Harbin-Heihe railway line to Heihe, and then from Heihe land bridge to Blagoveshchensk of

Russia. The last one along the side of the railway from Dongning, through Suifenhe, Tongjiang and other land ports to Mohe border port, with the Trans-Siberian Railway connected.

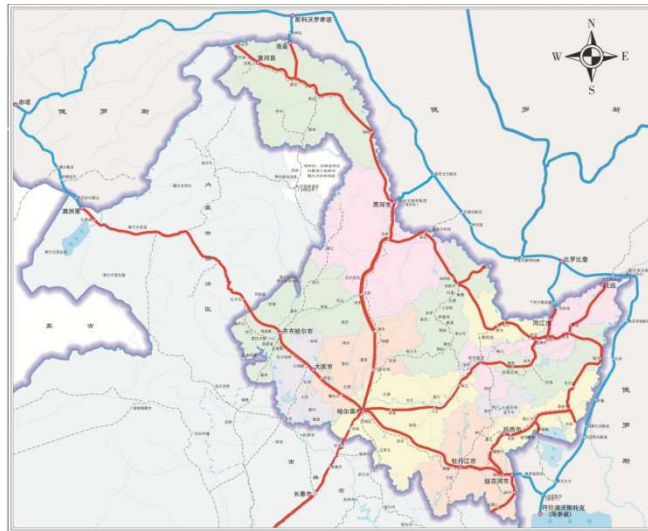


Figure 3 Heilongjiang Sea-Rail Combined Transportation for B&R (Source: the website of Heilongjiang Provincial People's Government)

Highway road mainly linked border ports to Heilongjiang province and the National Road Network. Suifenhe and Dongning border port can be connected with Manzhouli through the G10 highway, also through G10 highway access to G11 or G1 highway to arrived Bohai ports group and Jing-Jin-Ji Economic Circle respectively. Tongjiang, Fuyuan and Heihe border ports also linked Heilongjiang province and the National Road Network respectively through G1011 and G1211 highway, and then arrived to Bohai ports group and Jing-Jin-Ji Economic Circle. The Sea-Rail Combined Transportation of Heilongjiang province can be connected with Japan, Russia and South Korea. This road started from Guangzhou, Ningbo and Shanghai sea port of China, Busan of South Korea, Niigata of Japan and other sea port to Vladivostok, Nakhodka, Vostochny sea port of the Far East by waterway, and then to Suifenhe, Harbin by railway, to Manzhouli after the exit with the Trans-Siberian Railway connected, west to Hamburg and Rotterdam ports. Harbin international airport as a hub of the Aviation line, Qiqihar, Mudanjiang, Heihe, Fuyuan and other regional airports as the node, to strengthen the international air routes to Russia, Japan and South Korea and Northeast Asia.

- d) Yunnan province of China bordered with Burma. At present, Yunnan province has been implemented “the Greater Mekong Sub-region Cross-Border Transport Agreement (CBTA)”. The agreement involved domestic section of three highway routes in the Bangladesh-China-India-Myanmar Economic Corridor (BCIMEC). The first one started from Kunming via Ruili exit to Kyaukpyu of Burma. The second one started from Kunming via Tengchong exit to Burma, and then to India. The third one started from Kunming via Qingshui river exit to Burma. “Medium-and long-term railway network plan” also improved the China-Burma railway corridor, starting from Kunming, through Dali, Baoshan of Yunnan and

finally arrived to Ruili border city, is the west section of Trans-Asian Railway (TAR) in Yunnan province. Dali-Ruili railway total length is 330 kilometers and design speed is 140 kilometers. Dali to Baoshan, Baoshan to Ruili section has started construction. Meanwhile, if railway from Ruili to Lashio section can be started construction, it will be access to Yangon through Burma Railway Network.

Transport Services

China Railway Express is an international intermodal train running along the Siberian Land Bridge (SLB) and the New Eurasian Land Bridge (NELB). Since the first operation in 2011, the operating line has reached 39 routes. At present, there are three transportation routes from west, central and east separately to Europe, the major exit border ports is Alataw Pass, Horgos port of Xinjiang, Erenhot, Manzhouli port of Inner Mongolia and Suifenhe port of Heilongjiang province. Some China railway express connected with coastal ports to operate international sea-rail combined transportation, and some of it connected with Chinese inland supply sources to operate road-rail combined transportation. By the end of June 2016, the total number of China Railway Express was 1881 trains, of which 502 trains were return trip, the number of domestic departure cities were 16 cities, and the number of overseas arrival cities were 12 cities. The total import and export trade value was about 17 billion US dollars.

Table 1 Statistics of major border ports of entry-exit express trains (Jan. – Sep. 2016)

Border ports	Total express trains(units)	Container volume (TEU)/ Freight volume (TONS)	Cargo Value (Million Dollars)
Alataw Pass	549	252100 (TONS)	-
Manzhouli	764	43620 (TEU)	1998.383
Erenhot	101	4684 (TEU)	270.793
Suifenhe	10	1028 (TUE)	13.647

China Railway Express made full use of the New Eurasian Land Bridge (NELB) and the railway advantages to improve the efficiency of transportation. With “Yuxin Europe” international transport express for example, it departed from Chongqing of China, through Alataw Pass out of border, and finally reached Duisburg of Germany. Meanwhile, transportation time is as long as 16 days, compared with seaway from Chongqing via Shanghai to Europe saved nearly 30 days, and transportation costs are only one-fifth of air transport. In order to further improve the efficiency, the “Construction and Development Plan of China Railway Express” shown the aim to optimize transport organization structure. By 2020, the freight volume of China Railway Express in the total freight volume of container rail international transport will be accounted for 80%; the running kilometer will reach the level of about 1300KM per day; electronic goods inventory, documents electronic data exchange and “single window” will be promoted, the waiting time in border ports will be not more than 6 hours; the application level of the whole process of GPS monitoring system and intelligent security technology for container will be improved.

Except China Railway Express, the improvement of highway infrastructures also promoted trade cooperation. Road freight volume also increased correspondingly from Horgos border ports of Xinjiang to Central Asian countries and land border ports of Inner Mongolia to Mongolia and Russia.

Table 2 Statistics of import and export road freight volume of major border ports of Inner Mongolia (Jan. – Sep. 2016)

Border Ports	Freight Volume (Million Tons)	Growth Rate(%)
Horgos	13.93	23.69
Manzhouli	1.04	34.7
Erenhot	1.41	-38.5

Notes 1: Railway import and export freight volume of Erenhot increased, road freight volume decreased; the statistical interval of Horgos is from January to June of 2016.

Notes 2: Traffic volume of Alashankou border port of Xinjiang was dominated by railway, Horgos border port was mainly road freight. Manzhouli and Erenhot of Inner Mongolia were mainly railway freight.

By improving transportation infrastructures, import and export freight volume from China to Southeast Asia has a corresponding increase. As can be seen from table 3, the import and export value of Yunnan province has completed 6.76 billion US dollars, a 19.6% increase year-over-year. The number of entry-exit reached 18.63 million from border ports crossings to Vietnam, Myanmar, Laos border, a 8.8% increase year-over-year, and freight volume has increased significantly.

Table 3 Statistics of Yunnan province import and export freight volume (Jan. - June, 2016)

	Export	Import	Total Volume
Freight Volume(million tons)	2.77	7.38	10.14
Growth Rate of Freight Volume (%)	37.4%	32.2%	33.6%
Vehicles(million units)	1.98	1.87	3.85
Growth Rate of Vehicles(%)	30.7%	21.9%	26.2%

Table 4 Statistics of Guangxi province import and export freight volume (Jan. - June, 2016)

Border Ports	Freight Volume (Million Tons)	Growth Rate(%)	Import Freight Volume(Million Tons)	Export Freight Volume(Million Tons)
Fangcheng	72.787	-4.1%	60.529	12.257
Beihai	74.815	-14.5%	5.620	1.860

Freight Index of "the Belt and Road"

As reaction the Belt and Road freight operation situation, "Silk Road Freight and Trade Index" and "Maritime Silk Road Freight Index", which made by Shanghai Shipping Exchange, has begun trial operation. Qingdao International Shipping Service Center also has begun to release "the Belt and Road" Qingdao Shipping index to reflect shipping market trends about Qingdao and countries along the Belt and Road.

Logistics Information Platform

To improve transport and logistics efficiency and transparency, LOGINK (National Transport & Logistics Public Information Platform) has been developed, funded by MOT China and The People's Government of Zhejiang Province, which tries to create a transport and logistics information service network to fulfill the requirement that more and more SMEs need to use ICT with little cost to improve their managerial effectiveness and cut operational costs in China.

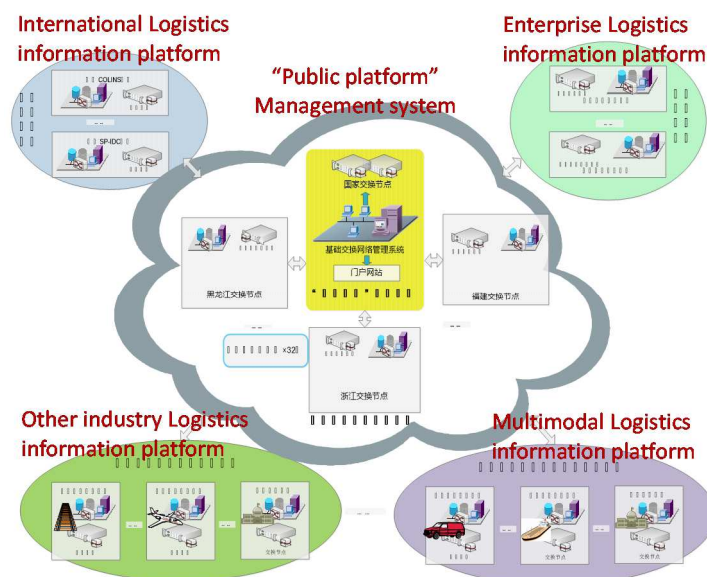


Figure 4. The Architecture of LOGINK

The goal of LOGINK is to build up a logistics public information service portal and logistics information interchange networks which will cover the whole country and then extend to the world to communicate with other international networks in the future. LOGINK also develops a set of standards to help business partners exchange and share logistics information across the whole supply chain more efficiently and securely.

In order to break up the information sharing barrier among international trade players, and bottleneck in logistics process, China, Japan, and Korea have also established a regional cooperation and exchange mechanism to promote Northeast Asia logistics information sharing on the basis of the mechanism of China-Japan-Korea Ministerial Conference on Transport and Logistics. Through LOGINK (China), COLINES (Japan)

and SPIDC (Korea), Neal-Net can provide standardized query interface for supply chain partners to obtain logistics status data. Companies can make use of container vessel arrival and departure time, container dynamic status and further more for them to make their operational decision like booking the shipping space, handling operation, production etc. At present, Neal-Net has connected twenty ports belong China, Japan and Korea, and communicated with Malaysia ports to promote information sharing.

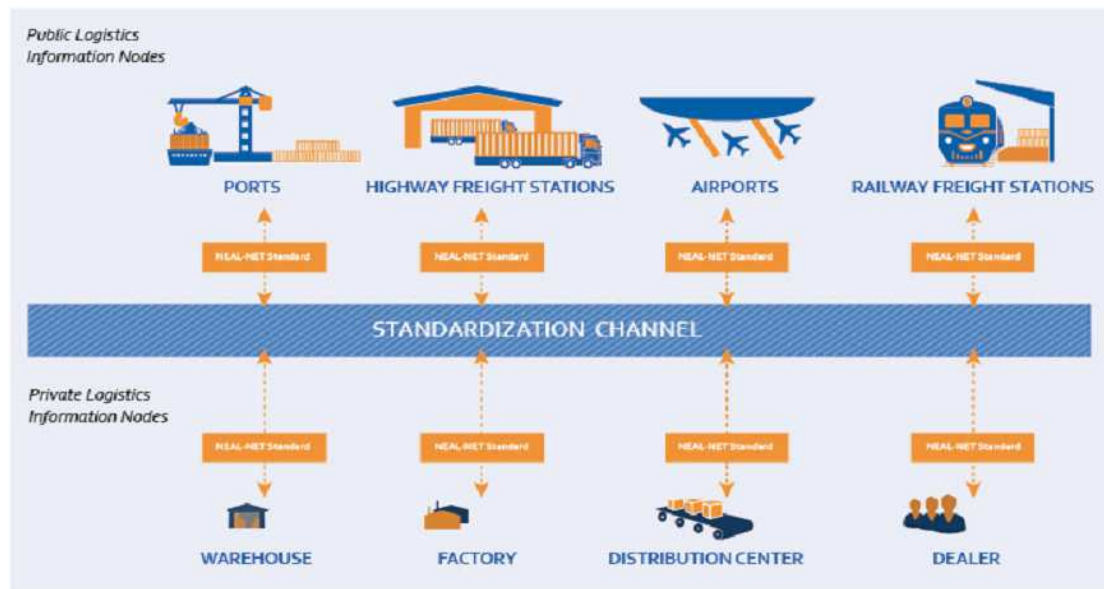


Figure 5 Neal-Net Application Frameworks

Conclusion

The China's Ministry of Transport will cooperate with countries along the Belt and Road, to determine priority areas and key cooperation projects to promote infrastructures which under construction project and new construction projects in railway, highway, waterways and air transport. While forming a coherent transport standards and a common facilitation transport services with countries along the Belt and Road, to improve the efficiency of transport services.

“The Belt and Road” initiative propose connecting the world, stimulating investment, promoting industrial cooperation and infrastructure construction, to provide a new way and new motive power. In the further, it is a hope that more and more countries and regions to join “the Belt and Road” initiative and mutual benefit.