# Chapter **3**

# The Development of China's Transportation Infrastructure and International Links in China's Northeast Region

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# **CHAPTER 3**

# The Development of China's Transportation Infrastructure and International Links in China's Northeast Region

Northeast China includes three provinces of Liaoning, Jilin, Heilongjiang and three cities and two districts in eastern Inner Mongolia (Chifeng, Tongliao, Hulunbeier, Hing'an, and Xilin Gol). The region covers 1,458,000 square kilometers, accounting for 15.2% of the country's land area.

From a global point of view, Northeast China is located in the west bank of the Pacific Ocean as well as the northeast end of Eurasia, and is also adjacent to Russia, Mongolia, Korea and Japan. Being the core area of Northeast Asia, the region can be connected with the neighboring countries through the Bohai and Yellow Sea with coastal ports and inland ports around almost every corner of the region.

# 1. Development of Infrastructure in the Northeast Region

Since 1978, the infrastructure has been developed very fast in the region, especially in recent years. Expanding and integrated transportation networks have connected this region and also to the outside regions in the form of railways, highways, waterways, pipelines, aviation and other kinds of transportation.

#### **1.1.** The Development of Highway Network

There are 14 state highways total in Northeast China region, consisting of the "four vertical and five horizontal" trunk road network. "Four vertical" means G102 (through

Central Northeast), G201, G202 and G203. "Five horizontal" means G301, G302, G303, G304 and G305 $_{\circ}$ 

No	From	Cities on the Road	То	Mileage (km)
101	Beijing	Miyun-Luanping-Chengde-Lingyuan-Chaoyang-Zhangwu	Shenyang	879
102	Beijing	Sanhe-Fengrun-Shanhaiguan-Suizhong-Huludao-Beining- Ximin-Shenyang-Tieling-Siping-Changchun—Shuangcheng	Harbin	1311
111	Beijing	Huairou-Chifeng-Tongliao-Ulan Hot- Zalantun	Jiagedaqi	1974
201	Hegang	Jiamusi-Qitaihe-Mudanjiang-Dunhua-Fusong-Baishan- Tonghua-Kuandian-Dandong-Zhuanghe	Dalian	1860
202	Heihe	Sunwu-Kedong-Mingshui-Lanxi-Harbin-Yushu-Jilin-Panshi- Meihekou-Qingyuan-Fushun-Shenyang-Anshan-Haicheng- Dashiqiao-Gaizhou-Pulandian	Dalian	1719
203	Mingshui	Anda-Zhaozhou-Songyuan-Changling- Kangping-Faku	Shenyang	712
221	Harbin	Binxian-Fangzheng-Yilan-Jiamusi-Fujin	Tongjiang	662
222	Harbin	Hulan-Suihua-Tieli	Yichun	358
301	Suifenhe	Mudanjiang-Shangzhi-Harbin-Daqing- Qiqihar-Yakeshi-Hailar	Manzhouli	1608
302	Tumen	Yanji-Antu-Dunhua-Jiaohe-Jilin- Changchun-Nong'an-Da'an-Baicheng	Ulan Hot	981
303	Ji'an	Tonghua-Meihekou-Liaoyuan-Siping-Shuangliao- Bairin Left Banner-Linxi- Hexigten Banner	Xilin Hot	1255
304	Dandong	Fengcheng-Benxi-Shenyang-Xinmin- Zhangwu-Tongliao-Jarud Banner	Huolingele	874
305	Zhaunghe	Gaizhou-Yingkou-Panjin-Aohan Banner	Linxi	816
306	Suizhong	Jiangchang-Lingyuan-Harqin Banner	Hexigten Banner	531

 Table 3-1.
 List of National Highways in Northeast

*Note:* The National Highway is marked by three digits, in which the first digit means the category of the national highway, and the second and the third one mean sequence. National Road is divided into three categories: the radial National Road with Beijing as the center is marked by "1"; the vertical north-south National Highway is marked by"2", and the horizontal east-west National Highway is marked by "3".

The structure of the Northeast China highways takes "T" shape, combining Suiman Expressway (Suifenhe - Harbin - Manzhouli) for the horizontal axis with Jingha Expressway (Harbin - Changchun - Shenyang - Beijing) for the vertical axis. By this standard the expressway can be divided as follows: northward Nentai Expressway from Qiqihar to Nehe; northward Heha Expressway from Harbin to Suihua; northward Hatong Expressway from Harbin to Jiamusi and Tongjiang; eastward Huiwu Expressway from Changchun through Jilin, Tumen, to Hunchun; southward Daguang Expressway from Tongliao to Chifeng; southward expressway from Changchun to Liaoyuan; southward Changshen Expressway from Siping to Zhangwu, Fuxin, Chaoyang and Lingyuan; southward Heda Expressway from Shenyang to Zhangwu; eastward Danfu Expressway from Shenyang to Dandong; southward Shenhai Expressway From Shenyang to Dalian; westward Fujin Expressway from Jinzhou to Fuxin; Danxi Expressway from Jinzhou to Chaoyang westward and Yingkou eastward and so on.

In 2009, the total mileage of highway in Jilin Province reached 88, 000 km and highway mileage break up 1,000 km. Currently, 8 expressways are under construction and the length of the highway under construction is 1,750 km. The planned highway project can be completed timely, including railways from Tumen to Hunchun, Changchun to Songyuan, Songyuan to Shuangliao, Songyuan to Baicheng, Yingchengzi to Fumin, Jilin-Caoshi section of highway, Yingchengzi to Meihekou, attempting the projects coming into operation from Wangqing to Yanji, timely starting the expansion of the highway from Siping to Changchun and Changchun to Jilin. Jilin Province will make every county connecting by the expressway. The other projects include building 350 km of first-class and second-class roads, 7,000 km of rural roads and the cement (asphalt) road for 94% of administrative villages. The province will achieve the goal of every county connecting expressway by 2014 with total mileage of expressways reaching 4,800 kilometers by that time.

The length of the highway in Heilongjiang Province in 2009 reached 78,000

kilometers and the highway network is of radial distribution with Harbin as the center along Harbin to Qiqihar, Harbin to Jiamusi (Tongjiang), Harbin to Mudanjiang (Suifenhe), Harbin to Yichun (Jiayin), and Harbin to Heihe. The length of highway directly to Russia is 6,342.8 km, of which expressway is 388.4 km, first-degree highway is 585.6 km, and second-degree highway is 3,007.5 km. In 2009, the expressway in Heilongjiang Province reached 1218 km. Currently, the strength of railway operating to Russia in Heilongjiang Province is 4,083 km and the highway is 6,343 km. There are 13 land transportation routes to Russia.

In 2009, the total mileage of the highway of Liaoning Province reaches to 10,0645 km, with 2,883 km expressway. Currently, 14 expressways have been under construction, including those from Dandong to Tonghua, Zhangwu to Tongliao, Fushun to Meihekou, Fushun to Tonghua, Chaoyang to Chifeng, Kaiyuan to Liaoyuan, Liaozhong to Xinmin, Xinmin to Tieling, Dandong to Haicheng, Shenyang to Kangping (Stage 2), Yongling to Huanren, Tieling to Benxi Highway etc, with the length for 1,182 kilometers. By the end of 2010, the total mileage of expressway will exceed 3,000 km, basically forming the open network structure of the "three rings, seven radiations, five links, six trunk lines". In detailed, it includes 3 loop lines of expressway in Shenyang, cities in central part of Liaoning, and the Yellow Sea-Bohai, 7 expressways with Shenyang as the center, 5 highway within network and external port, 6 inter-provincial highway lines. The province will have a comprehensive connection to the highways of neighboring provinces.

#### **1.2. The Development of Railway Network**

The total mileage of railway in Northeast China is 16,000 kilometers, accounting for 26.4 percent of the total railway mileage of China. The rail density is equivalent to 2 times of the whole country.

Harbin is the connecting point for the Northeast railway networks, with the horizontal lines of "Bin Sui Line (from Harbin to Suifenhe)" and "Binzhou line (from

Harbin to Manzhouli)", with the "Hada line" (from Harbin to Dalian) as the vertical line, as well as "Shenshan Line" (from Shenyang to Shanhaiguan) from northeast to southwest. There also exist "four vertical and four horizontal" lines to match it. "Four vertical" lines include Oigihar-Tongliao–Jinzhou Line; Daging-Tongliao-Chifeng Line; Jiamusi-Mudanjiang-Tumen-Tonghua Harbin-Jilin-Shenyang Line: Line. "Four horizontal" lines include Jiagedaqi-Suihua-Jiamusi-Shuangyashan Line; Iersi-Baicheng-Changchun-Tumen Line; Tongliao-Siping-Tonghua Line; Chifeng -They form the basic pattern of the Northeast rail Shenyang - Dandong Line. transportation, connecting to the rest of the railway lines of the whole country by 3 Jingshen Line, Jingtong Line and Jingcheng-Jincheng Line. railways:

### 2. The International Infrastructure Connectivity

The main framework of international transportation corridors in Northeast China can be summarized as "five verticals and five horizontals" lines. Basically, the trunk lines are in the form of railways, highways, aviation, waterways and ports.

"Five -Vertical" International Channels Eastern With eastern railway of the Northeast as the main line, from Fuyuan, Tongjiang, Hegang to Corridor Mudanjiang (Suifenhe), Tonghua (Ji'an), Dandong, Zhuanghe and Dalian southward. Central With the Hamei Railway as the main line, from Jiayin, Mayiling, Yichun to Harbin, Jilin, Corridor1 Meihekou, Shenyang, Yingkou and Dalian southward. Central With the Hada Railway as the main line, from Heihe, Beian, Suihua to Harbin, Changchun, Corridor2 Siping, Shenyang, Yingkou and Dalian southward. Western With the Fuxi Railway as the main line, from Mohe, Tahe, Huma, Duobao to Jiagedaqi, Nenjiang, Corridor 1 Qiqihar, Daqing, Taipingchuan, Shuangliao, Siping, Shenyang, Yingkou and Dalian southward. Western With the Yalini Railway as the main line, from Mangui, Yitulihe to Yakeshi, Qiqihar, Baicheng, Corridor 2 Taiping River, Tongliao, and Jinzhou southward.

 Table 3-2.
 International Corridors of Transportation Infrastructure in Northeast

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"Five- Horizontal" International Corridors			
Horizontal	With Binzhou Line and Binsui Line as the main line, from Suifenhe, Mudanjiang to Hulun buir		
channel 1	and Manzhouli westward, with Harbin as core city on the line.		
Horizontal	With Changtu Line as the main line, from Hunchun, Tumen to Baicheng, Ulanhot, Irshi westward,		
channel 2	with Changchun as core city on the line.		
Horizontal	With Simei Line as the main line, from Ji'an, Tonghua to Tongliao Huolinguole westward, with		
channel 3	Siping as core city on the line.		
Horizontal	With Shendan Line as the main line, from Dandong to Fuxin westward, with Shenyang as core		
channel 4	city on the line.		
Horizontal	From Dalian, Yingkou to Chifeng, Bairin Left Banner westward, with Jinzhou as core city on the		
channel 5	line.		

Heilongjiang Province shares 3,200 km long border lines with Russia and is an important corridor connecting to Russia and European continent by land. Along the border line, there exist 25 first category national level ports, among which there are 15 waterway ports, 4 highway ports, 2 railway ports and 4 air ports. There are mainly 15 waterway ports including Tongjiang, Fuyuan, Raohe, Luobei, Jiayin, Xunke, Sunwu, Heihe, Huma and Mohe; 4 highway ports including Dongning,Suifenhe,Mishan and Hulin; 2 railway ports including Suifenhe and Manzhouli. Except the railway ports in Huma, Sunwu, Fuyuan and Suifenhe, all other ports are open to the international transportation.

At present, there are 45 international passenger and cargo transportation lines between Heilongjiang Province and Russia's 5 border regions being adjacent to China, among which there are 22 passenger transport line, 23 cargo transport lines and 38 regular passenger bus lines.

For Jilin Province, the border line with DPRK is 1,206 km, 232 km with Russia. Currently there are 14 ports and three temporary channels, two of which is the first category ports with Russia and six with DPRK. The border line between Liaoning Province and DPRK is 306 km. There are one land port, five sea ports and two airports. The main Land ports of the north part in Northeast region are Mohe, Huma, Heihe, Luobei and Tongjiang. Mohe is adjacent to Russian Chita and Amur across the river. Mohe Port is of national level category with two cargo transit accesses all the year round. Border trade is very active in recent years and increases year by year. Luogu River Bridg between China and Russia is the main channel.

Huma is adjacent to Russian Smanov Oblast crossing the river with 378 km border line as a national category passenger and cargo port. So far, there is no cross-border road bridge.

As the only sister city on the 7,000 km border, Heihe Port is adjacent to Russian Blagowershensk, the capital of Amur across the river. So far, there is railway and highway connecting to Russian Belogorsk Station of Trans-Siberian Railway.

Being located in northeastern Heilongjiang Province, Luobei port is adjacent to Russia and a golden waterway because of the excellent depth, width and the water level. The trade with Russia and other Eastern European can be achieved by waterway and conducted by the sea combined transport arrangements. In addition, it can be connected to the rest region of China by Haluo Highway and Hebei Railway conveniently.

Being located in the south bank of junction of Songhua River and River of Heilongjiang, Tongjiang is adjacent to Russian Jewish Autonomous Region across the border River of Heilongjiang with 170 km and also the starting and ending point of the highway from Tongjiang to Sanya. As international transport corridors, highways have been connected to Nizhneleninskoyr, Birobidzhan, Khabarovsk and other places of Russia. The railway has been put to use since 2005. To build Tongjiang as an international corridor, the construction of the cross-river railway bridge from Hayu Island to the ports listed below are under way. By finishing it, the Tongjiang Railway can be connected to Trans-Siberian Railway. The waterway can be connected to Jiamusi, Harbin and Jilin.

The Eastern ports mainly include Suifenhe, Dongning, Hunchun, Tumen, Ji'an,

Dandong and Dalian. Suifenhe is located in southeast of Heilongjiang Province, and is adjacent to Primorsky Krai in Russian Far East. In 1992, it was ratified as the first open city along the border. The Sino-Russian frontier trade zone was set up in 1997. Suifenhe is the starting point of both Binsui Line which is the trunk line of the railway in Northeast China region and the state highway NO.301, which is the second-degree highway with one railway, two highways connecting to Russia. Suifenhe is an important hub of land and sea transportation network between China and foreign countries, as well as the main mechanism for China's participation in international cooperation in the Northeast region.

Being located in downstream area in the eastern part of the Tumen River in Jilin Province and also known as the "geographical hub and the transportation throat", Tumen is adjacent to Wenchengjun of Hamgyeong Bukdo in DPRK across the river, as well as being adjacent to Hunchun which is a national category open city. It is the largest border port city of Jilin Province, being close to the border, the river and the sea. It can be directly connected to the hinterland of DPRK through the border railway and highway bridge across the Tumen River. Tumen Railway, connecting with eastern railways of DPRK through the border railway bridge over the Tumen River, has been a major transport hub between the Northeast region and Korean peninsula since 1954.

There are four ports in Hunchun, of which Changlingzi port is for trade with Russia and Shatuozi and Quanhe ports are for trade with DPRK. Being the national category port, Changlingzi port is the only land port in Jilin Province bordering with Kelasijino in Russia. Besides, there is also one local railway line links to Far East railway of Russia- the 81 Km Tumen- Hunchun railway. The first international cargo transport railway to Russia was completed in early 2000. The line is the third line of major railway lines between China and Russia, following the Manzhouli –Baykalsk Lline, Suifenhe – Bogenaqineiyi Line in the Northeast region.

Being located in the southeast of Jilin Province, JI'an is one of the three Sino-DPRK railway routes. There are two trains to DPRK (back at the same day) daily.

Ji'an railway is connected to domestic Meiji Railway and Northeast railway network, and also connected to the railway loop line of northern part of DPRK by linking Manpu Railway of DPRK across the border.

Being located on the Yalu River of southeast of Liaodong Peninsula and the Yellow Sea, Dandong Port is one of an important meeting points for the Northeast Asian economic area and the Bohai Economic Rim, as well as a major land corridor connecting the Korean Peninsula and the Eurasian continent. It goes to Sinuiju in Korea with railway and highway. Dadong is unique with the advantage of being close to the sea, the river and the land border. Dandong railway is an important part of the Europe-Asia railway artery connecting DPRK, South Korea, Russia and Japan. Dandong Railway is the main channel for international trains between China and the DPRK and also between the DPRK and Russia, connecting the Gyeongui Line of the western Korean Peninsula to the Yalu River Bridge. The Dalian-Dandong and Tonghua — Dandong Railways are under construction and the new railway lines (1490 km, the east Road) from Heilongjiang to Liaoning Dadonggang will improve the Dandong Railway's layout significantly. Meanwhile, the project of passenger line from Shenyang to Dandong has been approved.

Dandong Port is a very convenient sea corridor to link South Korea and Japan, only 245 sea miles from Incheon port. According to the blueprint, an international corridor will start from Tokyo, through *Japan-Korea tunnel*, across Korean Peninsula to Dandong, and further to Moscow and Europe.

Dandong is the regional hub for road transportation. The Dandong expressway is directly connected to Shenyang and Dalian. The expressways of Dandong –Haicheng line and Dandong - Tonghua line are under construction.

The main port in the western region is Manzhouli. Being located in the strategic passage of the Eurasia continent. Being in the Sino-Russian-Mongolia triangle and north to Russia, west to Mongolia, backed by the Northeast Economic area, Manzhouli is the major land port of China as well as being the most convenient and most important

large land and sea transport channel and gateway of Bohai ports to Russia, Central Asia and Europe. A railway, highway and aviation transportation network extending in all directions has taken shape.

# 3. The Development of International Connectivity

Presently, the construction of the Northeast regional network includes three major lines: the first is the railway in the eastern part of Northeast China, the second is the passenger railway from Harbin to Dlian, and the third is the railway to Mongolia horizontally west.

The total length of eastern railway from Mudanjiang, Tumen Tonghua and Dandong to Dalian is 1,380 km. The project started in early 2009 and now is proceeding smoothly. The line from Biahe to Helong has been completed and the other two lines from Tonghua to Guanshui and from Qianyang to Zhuanghe are under construction and expected to be completed in the mid-2011.

Running through the whole northeast region, the passenger railway line from Harbin to Dalian is an important part of the Beijing-Harbin railway network in the country. The total length of the line is 914 km and the project will cost about 98 billion Yuan, and the speed of the train is 350 km/per hour. Beginning in August, 2007, the line is expected to be finished by the end of 2011. By then, the transportation capacity of Northeast railway will be greatly enhanced and it will give full play to the lines from Dlian to Binzhou Line, Changbai Line, Baia Line to DPRK.

The railway from Aersha in Inner Mongolia to Choibalsan in Mongolia will provide the third outgoing sea port for Mongolia after completion. This line will be constructed first and then be connected to Ulan Bator or other locations on the trunk railway. Currently, there is a railway line called Baia to Aer Mountain directly. The length of Baia Line is 354.7 km, and it is an important horizontal transport route in Eastern Inner Mongolia, as well as an important line connecting Inner Mongolia and Northeast China. Baia Railway refers to the railway line from Baicheng, through Ulanhot, Suolun, Aer Mountain to Iershi. It is called the "Baia" Line because of the passenger vehicle is not available from Aer Mountain to Iershi. By completing the construction, it will be connected to Eastern Mongolia very soon in the future, forming the second Eurasian continental bridge in Northeast China.

In addition, the international corridor projects which are beginning or about to start include: the construction of cross-border highway bridge between Hunchun River Port and DPRK and the construction of Dandong Port and the new boundary bridge of DPRK. On February 25, 2010, China and the DPRK also signed an agreement in Dandong city to jointly build a new Yalu River highway bridge. The construction of Sino-DPRK border railway, and the new cross-border bridge over the Yalu River, will further strengthen the connection between China and the DPRK, benefiting personnel and economic exchanges between the two countries. It will also help to build a new Europe-Asia railway major line from Northeast Asia to Europe. Since April 2010, DPRK has been the tourism destination for Chinese citizens. Being close to DPRK across a river, Dandong is the largest travel center to DPRK. Last year, the total number of tourists to DPRK through Dandong is 2.5 million.

In addition, there are two lines started construction in 2010: the passenger railway line from Shenyang to Dandong and the express railway line from Dandong to Dalian. The length of the passenger line from Shenyang to Dandong is 207 km and the designing speed is 250 km/ per hour and the time duration for completing the project is 4 years. It will only take 1 hour from Dandong to Shenyang. The length of the high speed railway line from Dandong to Dalian is 295.9 km and the time during for the project is 3 and a half years. After the operation of Danda Railway, Dandong port will become the nearest eastern outgoing- sea-port in Northeast China, connecting the railway corridor in the eastern region of Northeast China.

investing more than 50 billion Yuan will make Dandong to become Northeast Asia's major transport hub. Bordering with DPRK across the river, Dandong is a city that has the most economic and trade ties with the DPRK. Almost 70% of Sino-DPRK border trade is done in Dandong port and most of the tourists to DPRK are through Dandong.

#### 4. Prospects for Future Development

As infrastructure construction in the Northeast region is entering an unprecedented period of fast development, the highways, railways, ports, airports and other transportation infrastructure development will continue to maintain a high growth trend in the future.

The main directions of the investment can be summarized as the following:

Firstly, to expand the "two-vertical and one-horizontal" highways and railways. The "two-vertical" refers to the connection between eastern and western railway in Northeast China by constructing three major lines to Shanhaiguan, and the connection of border points along the border line by easing the pressure of Jingha Line (Beijing-Harbin) and Hada Line (Harbin-Dalian). The "one horizontal" refers to the railway and highway expansion transformation from Tumen to Iershi to form the second east and west corridor and to connecting the new Eurasian Continental Bridge for the future.

Secondly, to complete construction of the branch lines, including the intercity passengers transport line, to form a highly efficient and convenient highway network. The mileage of the railways that Shenyang Railway Bureau currently operates is 5,863.88 Km. According to *Mid-long Term National Railways Network Plan*, the total mileage of which will reach 8700 km during the next three to four years, which is equivalent to the sum of railway construction of Shenyang Railway Bureau built during

the past 120 years. The passenger dedicated line intercity transportation network will be built roughly within next three years in Northeast. During the *Twelfth Five-Year Plan* period, the structure of highway of Northeast region will be significantly improved and the capacity of transportation will be increased greatly.

As for the future major international connections, the construction of international railway corridor between China and Mongolia will be given to high priority. It is expected that an international railway corridor (1300km) from Arihashate Port of Inner Mongolia Autonomous Region to Jilin Hunchun will be built, which will connect Northeast China, Mongolia, DPRK and Russia.

The starting point of the 1388 km long China-Mongolia international railway corridor is located in Arihashate Town (port), which is on the south of Manzhouli and very close to Mongolia Choibalsan, and then along the highway line southward, from Xin Barag Youqi, through Xin Barag Zuoqi to the Aer Mountain, then into the Baia Line by the way of Ulanhot, Baicheng, Changchun, Jilin, Tumen, finally reaches Hunchun (Port). The project will cost 96.4 billion Yuan. After the completion of project, the international railway corridor will come into being from Korean Peninsula, Mongolia, Russia to Europe.

At present, Changji passenger dedicated line is under construction. The dedicated high-speed railway line from Jilin to Hunchun will come into operation in 2010. After completion, these railways will become an important component of the international transportation corridor from Mongolia to the region of Japan Sea.

The "Chang-Ji–Tu" (Changchun-Jilin-Tumen) international corridor is a new initiative. It consists of two parts: the first part is to connect Russia and the second part is to DPRK. Currently both projects have made substantial progress. Hunchun highway port is increasingly convenient for customs clearance to Russia and the connection has been greatly improved in the Hun-Ka railway port. The four countries' passenger--freight combined transport from Hunchun, through Zalubinuo Port, South Korea Sokcho to Japan Niigata. The 48 km-long secondary road construction projects

from Quanhe in Hunchun Highway Port to DPRK have been launched.

The construction of the railway port from Hunchun to DPRK is now under study. There was an old railway between Shuaiwanzi station of Hunchun and Hunyung-ri station of DPRK. The total distance of this line is less than 7 km, with only 4.5 km in China. Upon the completion of project, Hunchun railway will connect to the northern railway of DPRK, forming the structure of two major international corridors. On the one hand, it links to Russian Far East railway northward and coastal ports, while on the other hand, in the south, Hunchun railway will connect to the DPRK's east coast railway and coastal ports. By completion, the railway ports of Hunchun and Tumen will connect with Korea's north and south railways. This international railway connection has important strategic meaning, not only promoting the development of "Chang-Ji-Tu" economic zone, but also improving "Great Tumen" regional cooperation and development.

## 5. Prospects for International Cooperation

With great improvement of international connectivity in the region, the economic cooperation will be further strengthened. The ports such as Manzhouli, Suifenhe, Dongning and Heihe will further promote the development of the trade with Russia in northeast region, and various cross border economic and technological cooperation in these areas will further promote economic and technology cooperation between China and Russia. In addition, Hunchun Port and other ports, such as Tumen, Ji'an and Dandong will promote economic and trade cooperation with North and South Korea and Japan. And further reform of the ports such as Dalian, Yingkou and Dandong will lead the trade of Northeast region into the global level. With the completion of passenger dedicated line of Hada (Harbin-Dalian), the ports such as Dalian, will play a more

important role in expanding the international exchanges.

It is anticipated that the completion of the eastern railway crossing northeast will greatly promote the link of eastern border ports and promote the coordination and development of various ports, and promote foreign economic and trade cooperation. In addition, the progress of Sino-Mongolian "Liangshan" railway will enhance the cooperation for trade and energy resources between northeast China and Mongolia. In December, 2009, the Lin he-Ceke railway of the "Sino-Mongolian trade corridor" (length 768 km), which is located in western Inner Mongolia, was opened and put into operation. It forms the land transport link through Mongolia and northwest China.

As "Chang-Ji-Tu" initiative has become a national strategy and DPRK's external economic policy has become more active, the "highway-port-district" integration between China and DPRK and the "highway-port-point" integration between China and Russia have made substantial progress. In particular, the DPRK's active attitude and participation in regional cooperation will further promote the cooperative attitude of Russia and encourage Republic of Korea and Japan to be more active in participating in the regional cooperation in the Tumen River area.

Recently, the 48 km high-class highway from China Hunchun to DPRK Rason Port was completed. It is anticipated that it will help to link the inland area to sea port. The reconstruction of original railway from Hunchun to DPRK which is now being under study will form a China-Russia-DPRK triangular railway network in Tumen River outgoing sea port area. It will link up inland and coastal ports together, and also link up the eastern railway in Northeast China and northern and the eastern coast railway of DPRK with Far East coast railway in Russia together. By then, the international corridor cooperation in Chang-Ji-Tu will be basically completed and the east corridor of the new Eurasian Land Bridge will also be completed roughly, which will echo the railway in western "Liangshan" railways in northeast region.

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