# The Prospects for the Trade and Distribution Routes between East Asia and Russia

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#### Overview

- 1 . East Asia (Japan, China and the ROK) and Russia's trade is expanding rapidly. In particular, the export of industrial products to Russia from the countries of East Asia is showing explosive growth and the demand for container and finished car transportation is increasing.
- 2 . The enhancement of distribution infrastructure is required, such as ports and railways, to meet the increase in trade goods. In the Russian Far East each port has set out its own individual development plan, but in terms of identifying the requirements of the region as a whole the government needs to plan the development and upgrading of ports comprehensively.
- 3 . Regarding the transportation toward Moscow of finished cars, which predominate in exports to Russia from Japan, the utilization of the Trans-Siberian Railway, with being able to realize a cut in the number of days for transportation, is promising. To cope with the rising demand, the marrying up in the area of infrastructure, such as special rolling stock, could be hurried up.
- 4 . There is active movement in developing the inland railway transportation route from China to western Russia and Eastern and Central Europe. Attention is also being focused on transportation from Japan to the interior via China or as an alternative for Japanese firms which have production bases in China.
- 5 . As the trend for 2008, with the frequent increases in rail fees and the effect of a drop in the Deep Sea rate from the summer, the Trans-Siberian rail route is rapidly losing economic competitiveness. A review of the setting of the TSR's prices is probably urgently needed.

#### Introduction

The trade between Russia, with its continuing high growth rate, and the three countries of China, the ROK and Japan, the principle countries of East Asia, is posting remarkable growth. The three countries of East Asia, with their strength in manufacturing industry, and the resource colossus Russia have a complementary relationship and are mutually ideal trading partners.

What options are there and what criteria are used in selecting the distribution route that carries the rapidly increasing trade of each country with Russia? Is the development sufficient of the distribution infrastructure which will carry the trade envisioned to be expanded in the future?

In this piece I will introduce the current situation of the trade of the three countries of East Asia with Russia, focus on the distribution and infrastructure supporting the trade, acquaint you with the current situation and give a view of future developments and challenges.

1 . The Expansion of Trade between East Asia and Russia In this section I will pronounce on the expansion of Russia's trade with the three countries of East Asia.

For bilateral trade statistics a large disparity can be seen between the figures released by the countries on either side. Here I will exploit the trade data from both sides, and make it my business to pronounce on the overall trade

trends

Russia's trade has continued its high growth from 2000 on. In the five years from 2002 to 2007 exports have increased by a factor of 3.3 and imports by a factor of 3.7.

The value of Russia's trade with the world in 2007 increased by 25.8% on the previous year. While staying in the black overall, the increase in imports (45.0%) exceeded the increase in exports (16.9%) and the amount in surplus declined. (Table 1)

If one focuses on Russia's trade with the three countries of East Asia the following distinguishing features can be seen.

The Increasing East Asian Presence within Russia's Trade Partners

The value of Russia's trade with the three countries of East Asia in 2007 increased by 49.8% on the previous year and greatly exceeded Russia's increase in total trade value of 25.8%. There was an increase of 45.1% in the East Asian statistics. From 11.5% in 2006, the share of the three countries in Russia's total trade has increased its presence with 13.7% in 2007. (Table 1)

The Sharp Increase in Imports to Russia from East Asia and the Trade Balance Reversal

Exports to Russia exceeded imports in trade with the three countries of East Asia in 2007. On this point the same

<sup>&</sup>lt;sup>1</sup> In the case of Japan-Russia trade, for example, the value of Japan's imports is 20% greater than the value of Russia's exports. There is a similar tendency, also, regarding ROK-Russia trade. As a contributing factor to this it has been noted that there is a big difference in the value of trade in fisheries. Regarding China-Russia trade also, a tendency can be observed for China's statistics in both imports and exports to exceed those of Russia.

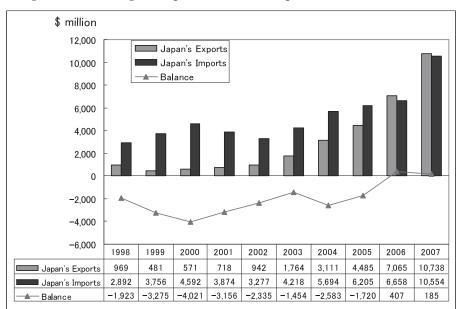
Table 1 The Value of Russian Trade with the Three Countries of East Asia

US\$ million

	2006				2007			
	Imports and	Russian Exports	Russian Imports	Russian Balance of	Imports and	Russian Exports	Russian Imports	Russian Balance of
	Exports			Payments	Exports			Payments
Japan	12,409	4,620	7,788	-3,168	20,133	7,418	12,715	-5,297
China	28,659	15,752	12,906	2,846	40,297	15,892	24,405	-8,513
ROK	9,293	2,512	6,780	-4,268	14,991	6,155	8,836	-2,681
Three-Country Total	50,351	22,884	27,474	-4,590	75,421	29,465	45,956	-16,491
(Share)	(11.5%)	(7.6%)	(20.0%)		(13.7%)	(8.4%)	(23.0%)	
World	439,153	301,450	137,703	163,747	552,288	352,568	199,720	152,848

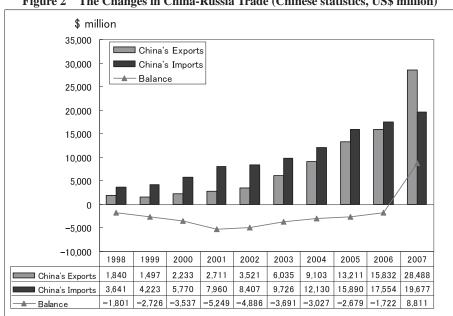
Source: Russian customs clearance statistics

Figure 1 The Changes in Japan-Russia Trade (Japanese statistics, US\$ million)



Source: Japanese trade statistics

Figure 2 The Changes in China-Russia Trade (Chinese statistics, US\$ million)



Source: China Statistical Yearbook

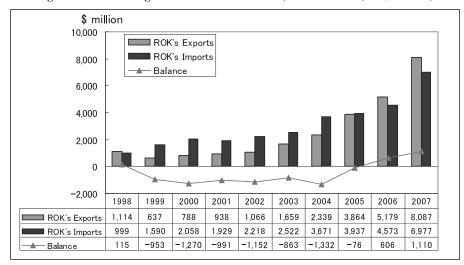


Figure 3 The Changes in ROK-Russia Trade (ROK statistics, US\$ million)

Source: Korea International Trade Association

trend is corroborated in both the Russian and East Asian statistics. For the three countries of East Asia, trade with Russia was in the red for a long time, but according to the statistics of each East Asian country, shifted into the black from 2006 with regard to Japan and the ROK and in 2007 with regard to China. (Figures 1, 2 and 3)

In 2007 the exports from Japan to Russia increased 52.0% in the Japanese statistics and 63.3% in the Russian statistics, and this was noticed in Japan, yet they pale in comparison with exports from China to Russia. They recorded increases that defy all imagination of 79.9% in the Chinese statistics and 89.1% in the Russian statistics. In monetary terms also, China's exports to Russia amounted to 2.6 times those of Japan. Exports from the ROK have also posted growth of 56.1% in the ROK statistics and 30.3% in the Russian statistics. This demonstrates the high demand for imports supported by the healthy Russian economy.

The Distinctive Features of the Composition of Trade Commodities

Russia's trade is composed of its exports of resources, such as energy, timber and marine products, and metals to the three countries of East Asia, and of its imports of industrial products, such as automobiles, electrical equipment, and machinery.

Japan's principal import items from Russia (in 2007) were crude oil and petroleum products (35.4%), metals (29.3%), coal (9.0%), timber (9.0%) and marine products (9.9%). The increase in crude oil from Sakhalin is prominent. In export items to Russia, automobiles make up the overwhelming portion (76.5%), and export of general machinery (12.1%) and electrical equipment (3.7%) followed. Although approximately 330,000 of Japan's exported cars are new and approximately 440,000 are used, on a monetary basis new cars account for approximately 70% of the total. From Russia's viewpoint, Japan is its largest import source for automobiles.

The ROK's principal import items from Russia (in 2007) were crude oil and minerals (53.4%), metals (28.6%), and marine products (6.0%). Here too crude oil from

Sakhalin makes up an overwhelming portion. In export items to Russia, transport machinery, such as automobiles and shipping, make up more than half of the total (56.5%), and export of electrical equipment and general machinery (22.1%) and plastic resin (9.6%) followed. In transport equipment the ratio of finished cars to components is fifty-fifty, and tells of the progress in local production by ROK automobile manufacturers. From Russia's viewpoint, the ROK is its largest import source for automobile components and bodies.

China's principal import items from Russia were crude oil and petroleum products, timber and pulp, fertilizer and metals, etc. From Russia's viewpoint, China purchases more than half of the timber exported. In export items to Russia, electrical equipment makes up more than 30% of the total, and export of automobiles and consumer goods (clothing, footwear, bags and toys, etc.) followed. The greatest single export item is mobile phones, and they amounted to 41 million phones in 2007 (10.3 times the number for the previous year). For Russia, China is its largest supplier for electrical equipment, including televisions (7.7 million sets, seven times the previous year), personal computers and copying machines, and is rising phenomenally. Most Chinese-produced electrical items are as ROK, Japanese and European brands, and China has become the world's household appliance factory for original equipment manufacturing.

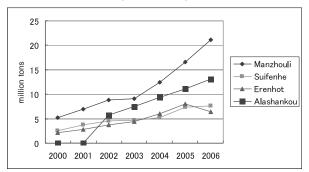
# 2 . Distribution between East Asia and Russia

Russia has a large land-area and the center of economic activity is in its European part. Additionally an overland trade route has been in existence between China and Russia from the time the Silk Road prospered. Consequently there exist many options for trade routes which link East Asia and Russia.

Exports from Russia to East Asia—Non-Container Freight

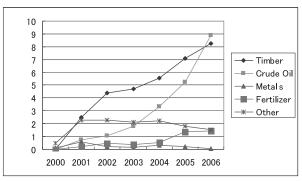
As mentioned previously, most of the export items from Russia to East Asia are resources and metals. Most

Figure 4 Freight Volumes in Trade Handled at China's Principal Railway Border Stations (million tons)



Source: Year Book of China Transportation & Communications

Figure 5 Freight Volumes Imported at the Manzhouli Railway Border Station (million tons)



Source: Year Book of China Transportation & Communications

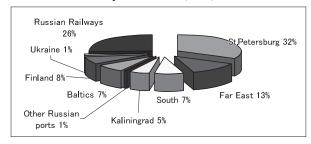
resources, including crude oil, coal, timber and marine products, and metals, including aluminum, are produced in the Russian Far East and Siberia. Most of these resources are unsuitable for containerization and are being exported in combination with rail and special ships.

In freight transport to Japan and the ROK from Russia, ships are exclusively used, and to China a direct cross-border route by rail is used. At national-border railway stations, including Manzhouli, Suifenhe, Erenhot and Alashankou, import items from Russia, such as crude oil, timber, mineral ores and fertilizer, are flooding in. In 2006 the trade freight handled by the above four railway ports of entry was 48.26 million tons, of which 89% was China's imports and 11% was exports. When one looks at the example of the largest port of entry, Manzhouli, the import volumes of crude oil and timber have increased rapidly. (Figures 4 and 5)

Russia's International Container Distribution

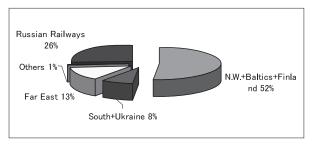
In contrast, the import items from East Asia to Russia are largely industrial products, and they are transported to

Figure 6 The Volume Handled of Russia's International Container Freight: By Port/Route (2007)



Source: Compiled based on the data from InfraNews," Container Logistics in Russia and Neighboring States: Results of 2007"

Figure 7 The Volume Handled of Russia's International Container Freight: By Region (2007)



Source: Compiled based on the data from InfraNews, op.cit.

the final point of consumption in ordinary containers. In the case of automobiles, transportation is by special ship, rail, or trailer, etc. The principal points of consumption for industrial products are in the European part of Russia, west of the Urals.

First let's take a look at by what routes import containers, etc.—from around the world to Russia—arrive.

The total volume of Russia's import and export containers in 2007 was 5,272,000 TEU, and increased 26.7% on the previous year.<sup>2</sup> The entry point into Russia is selected by the place of embarkation and place of destination. In vast Russia there exist various trade routes from east, west and south.

If one looks at the breakdown by route, freight is estimated at 3,072,000 TEU (58.3%) via Russian ports, constituting the majority, 383,000 TEU (7.3%) via the ports of the Baltic States, 399,000 TEU (7.6%) via Finnish ports, 50,000 TEU (0.9%) via Ukrainian ports and 1,378,000 TEU (25.9%) via rail overland. Freight via rail overland is considered to be freight from China, Central Asia, and Central and Eastern Europe.

If one looks further at the breakdown by region for the container freight via Russian ports, Saint Petersburg Port (Authority)<sup>3</sup> is the largest at 1,697,000 TEU (32.2%),

<sup>&</sup>lt;sup>2</sup> Estimated figures from InfraNews, "Container Logistics in Russia and Neighboring States: Results of 2007", 2008. Includes empty containers.

<sup>&</sup>lt;sup>3</sup> Saint Petersburg Port (Authority) is comprised of eight ports of varying sizes. The three principal ports are the First Container Terminal (56.5%), Petrolesport (21.7%), and Moby Dick (13.1%). (Shares in 2007)

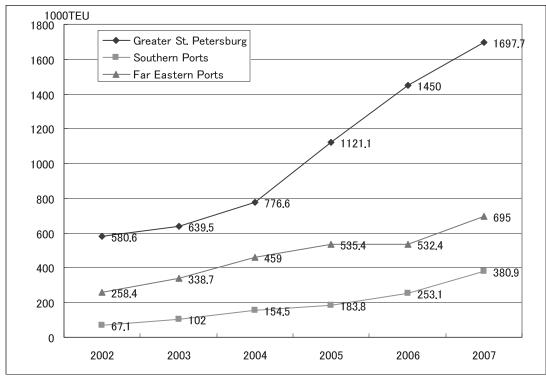


Figure 8 The Changes in the Container Volumes Handled at the Principal Russian Ports

Source: The Port Authority of Saint Petersburg Website (www.pasp.ru) and InfraNews, op.cit.

followed by the Far Eastern ports at 695,000 TEU (13.2%), the Black Sea coast ports of the southern region at 381,000 TEU (7.2%) and Kaliningrad Port at 252,000 TEU (4.8%). (Figure 6)

If one looks at the breakdown by region for the totaled freight via Russian and foreign ports, then the freight via northwestern ports, including via Saint Petersburg Port, Kaliningrad Port, Finnish ports and the ports of the Baltic States, constitutes 52%, via Far Eastern ports 13%, via the Black Sea coast, which includes southern Russian and Ukrainian ports, 8%, and rail overland 26%. (Figure 7)

If one looks at the trends of recent years, the container volume handled has continued to increase no matter the import route.

In the five-year period 2002-2007 the volume of freight handled at Saint Petersburg Port increased 2.9-fold, that at the Russian Far Eastern ports 2.7-fold and that at the southern ports 5.7-fold. This is something which reflects the Russian economy with its continuing high-growth rate and the expansion of the volume of trade. (Figure 8)

For Saint Petersburg Port, Russia's largest port for imports by container, there are naturally imports of freight from Europe and the Americas, but freight from Asia is also flooding in, making best use of its prime location near to a major consuming region. Over the past few years it has been chock-a-block, and although its failings have been highlighted, such as the narrowness of its channel, winter freezing, and the traffic congestion within the city,

the volumes handled are increasing year on year. 2007 recorded a growth of 17.1% on the previous year and 2008 is continuing this upward trend.<sup>4</sup>

In order to compensate for Saint Petersburg Port, where there is little leeway for enlargement due to space constraints, in the environs of Saint Petersburg the construction is progressing of Ust Luga Sea Port, to become one of Russia's largest ports. Ust Luga Sea Port is a multipurpose port possessing multiple dedicated wharves and a number of the wharves, including a coal terminal and a rail-car ferry terminal, have already begun operations. Construction began on a container terminal in April 2007 and operations are slated to begin in 2009. Its annual throughput is planned to be 500,000 TEU. Longer-term, blue-prints have been drawn up for it to become the biggest container terminal in Russia with a throughput of 3,000,000 TEU, as well as the foremost in Europe.

### Container Distribution Routes from East Asia

When one considers the geographic relationship of the trading partner and the ports used, the possibility is high that cargo imported from the Americas will go via Russia's northwestern ports. Regarding freight from the countries of Europe, utilization of the northwestern ports, the southern ports and rail routes overland is possible. At the same time, in imports from East Asia to Russia, all of the abovementioned routes are being utilized. Although no corroborating data are available, the following examples

<sup>&</sup>lt;sup>4</sup> The figures for January-September 2008 increased 21% on the previous year. (www.rzd-partner.com/news/2008/10/20)

<sup>&</sup>lt;sup>5</sup> See "Ust Luga Sea Port, to Become One of Russia's Largest Ports.", Russia & NIS Business Monthly, May 2008 issue. [in Japanese]

can be observed.

Electrical equipment imported from East Asia to Russia has traditionally been mostly via Finnish ports. Close to Finland's border with Russia are many bonded warehouses, and transportation to the major consuming region of Moscow is also convenient. Furthermore, recently the instances of cargo being brought into the Russian marketplace via the ports of the Russian Far East have increased, and in the case of China, the rail route overland is also being utilized.

With regard to the components for the manufacturing of automobiles originating in Japan and the ROK, Saint Petersburg Port, the ports of the Russian Far East or the southern ports are utilized, differing depending on the destination

For example, for the manufacturing components bound for the Taganrog plant of the ROK's Hyundai Motor Company, the TSR route via the Russian Far East ports and the Black Sea coast southern ports route are used in combination. I listened in on plans, however, that regarding the components bound for its Saint Petersburg plant, the same company will transport them directly to the local plant, which is planned to be in operation in 2011, via the Deep Sea route. For the components bound for the Izhevsk plant of Kia Motors, part of the same Hyundai Group, they are utilizing the TSR route for the total volume, as the destination is in the interior.

As for automobile components from Japan, in the case of those bound for the Isuzu Motors Ltd. plant located in Yelabuga in the interior, the total volume is transported by the TSR route. At the same time, Toyota Motor Corporation, which has started operations at a plant in Saint Petersburg, has utilized the Deep Sea route, and is using Saint Petersburg Port as its port of discharge. The same company, regarding the TSR route, has carried out a trial transport, and is examining its utilization in the future.

In another example, in consumer goods (clothing, footwear, bags and toys, etc.) imported to Russia from China, it can be seen that the Deep Sea route, the TSR route and additionally rail overland are being utilized. Furthermore, the TSR route is being utilized in the exports of resinous materials manufactured in the ROK too.

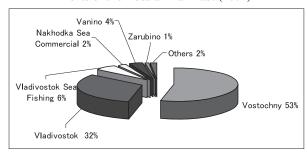
#### 3 . Container Distribution via the Russian Far East

In this section I will acquaint you with the current situation of the container distribution route via the Russian Far East, which for the nations of East Asia is geographically the nearest part of Russia and has deep historical links.

The Current Situation and Initiatives in the Ports of the Russian Far East

In the mid 1990s when the Russian economy was in utter confusion, it was widely held that the ports of the Russian Far East had a lot of spare handling capacity. After 2000, however, along with the growth in the Russian

Figure 9 The Shares in Containers Handled by the Ports of the Russian Far East (2007)



Source: InfraNews, op.cit.

economy, the freight at the ports of the Russian Far East has continued to increase. In the five years from 2002 to 2007 the volume of container freight handled has increased by a factor of 2.7 and in 2007 amounted to 695,000 TEU (up 30.5% on the previous year). (Figure 8)

If one looks at the share by port in 2007, Vostochny Port with 371,000 TEU and the Commercial Port of Vladivostok<sup>7</sup> with 225,000 TEU when put together constitute 85% of the whole for the Russian Far East. Actually these two ports are the only ones which have the large cranes used for containers. (Figure 9)

Because of the anticipated increase in container freight volumes in the future as Russia's eastern gateways, the enhancement of facilities at existing ports and the development of new ports are getting started. At the existing ports, the Commercial Port of Vladivostok is expanding its container terminal under the direction of FESCO. In addition, although construction projects for new container terminals—at the Marine Fishery Port Nakhodka, the port at Zarubino, and Rajin Port in the DPRK, etc.—have been announced one after another, a vision based on the estimates of demand for the region as a whole is not in sight. I will acquaint you with the initiatives for each port.

Vostochny Port (handled by VICS/VSC): The volume of containers handled in 2007 amounted to 371,000 TEU (up 27.3% on the previous year). Of this, loaded international containers were approximately 250,000 TEU. Parties involved with the port said that 80-90% of the international containers which Vostochny Port handles are transported all over Russia by rail from the adjacent rail freight station of Nakhodka Vostochnaya. The port's container terminal has four berths, with a total length of 1,284 meters, and the area of the terminal is 73.4 hectares. It is equipped with all manner of cranes, including six STS cranes and six rail transtainers, and its annual handling capacity as at the end of 2008 will be 650,000 TEU. According to the development plan of the port, it plans to invest a total amount of \$500 million, and to increase its handling capacity to 1,100,000 TEU up to 2012 and to 2,200,000 TEU up to 2020.

<sup>&</sup>lt;sup>6</sup> Information from an ROK forwarders' hearing, September 2008.

<sup>&</sup>lt;sup>7</sup> The figures for the Commercial Port of Vladivostok are the total of the freight handled at Vladivostok Container Terminal (VCT) and Vladivostok Container Service.

Commercial Port of Vladivostok (VMTP): The container handling volume in 2007 was 225,000 TEU (Vladivostok Container Terminal had 200,000 TEU, an increase of 35.7% on the previous year, and Vladivostok Container Service had 26,000 TEU). Most of the containers which the Commercial Port of Vladivostok handles are transported overland by truck after unloading. Those transported long-distance via rail remain at around 15% of the total.

The port became a subsidiary of FESCO in 2008, and has been actively undertaking investment in port facilities. Of the current 16 berths, Berth 16 is the only one dedicated to containers and has two STS cranes. As the existing facilities are crowded, the port is redeveloping the two neighboring conventional berths (Berths 14 and 15) as a container terminal. In September 2008 two new Chinesemanufactured STS cranes were brought in. In addition it is planned to bring in all manner of cranes during 2008. It is envisioned that via the expansion in container berths the port's container handling capacity will grow to 600,000 TEU, three-times what it is currently. Presently, in addition, work is underway on upgrading approximately four kilometers of railway line to bypass the line running in the opposite direction within the city, and in the near future it is expected that the making-up of block trains will be able to be undertaken smoothly.

Aside from this, as expected Russkaya Troyka, a FESCO subsidiary, is reclaiming land off Berth 16 of the Commercial Port of Vladivostok, and has announced plans for the construction of two new berths. Thereby it will be possible to handle 120,000 TEU by 2010 and 250,000 TEU by 2014.

The Commercial Port of Vladivostok, however, has the basic problem of adjoining the urban center and of being limited in the land required for development. Consequently, VMTP in collaboration with its parent company, FESCO, is promoting a plan to construct a new logistics center, the "Southern Primorsky Transport and Logistical Terminal" at a point 40 kilometers north of the city and 15 kilometers from Vladivostok International Airport. It is a concept with a total area of 100,000 square meters, providing the functions of a container terminal with a 1,200,000-TEU handling capacity and a vehicle distribution center handling 150,000 transport units annually, and that connects to VMTP by rail.

Marine Fishery Port Vladivostok: In 2007 it handled containers of 41,000 TEU (an increase of 8.1% on the previous year). As the transport volumes of marine products and iron scrap, which were hitherto the principle freight handled, have decreased, it is displaying a position of actively pursuing container transport services, including

the attraction of new shipping routes.9

**Nakhodka Commercial Sea Port**: In 2007 the volume of containers handled was 16,000 TEU (an increase of 4% on the previous year), and utilizing the TSR from the rail transshipment station of the adjacent Vostochny Port is linked with all areas domestically. Active initiative relating to the handling of containers, however, is not to be seen.

Marine Fishery Port Nakhodka: The principle freight handled at the Marine Fishery Port Nakhodka is timber, marine products, cement, and steel, etc., and container stevedoring does not take place. With the influence of the tariff reduction on log exports, there is little prospect for the export of timber, and in 2007 DVTG (the Far Eastern Transport Group), the major Russian railway forwarder, acquired 90% of the shares in the port, and has a policy of redeveloping it as a container terminal, in cooperation with ROK firms. Of the nine existing berths, five are slated for redevelopment, and there is a plan to give it the functions of a gateway to the TSR, putting in place a railroad spur. Services are planned to begin in 2009, and it is expected that the handling capacity will be 400,000 TEU at the outside. For the ROK partners, the participation of Busan Port Authority (BPA) and Daewoo Logistics, forming the core, and Pantos Logistics, Sinokor Merchant Marine, and Glovis, etc., is being considered. 10

The port at Zarubino: The container volume handled in 2007 stayed at approximately 5,000 TEU. The port is not equipped with the necessary cranes for the loading and unloading of containers, and has been handling secondhand cars and bulk freight. Recently, as will be described below, it has been receiving attention as a port for the import of new cars. TransContainer, however, which has paid attention to the potential of the fine natural harbor at Zarubino, has agreed on the construction of a new container terminal in collaboration with TransGroup AS, which owns the port. Both companies plan to establish a consortium to handle the construction of the terminal and its operation. The planned throughput of the terminal is 400,000 TEU annually, and the terminal's area is planned at over 18 hectares. 11 In addition to the two companies, the participation in the project of Japan's Kintetsu World Express and Kamigumi is planned. 12

Rajin Port: The DPRK's Rajin Port, a port built under Japanese rule in the 1930s, prospered before the war as a gateway port from Tokyo via Niigata to Manchukuo. The railway running from Rajin via Tumangang to Khasan links up with the Trans-Siberian Railway at Baranovsky. The modernization of port facilities, however, is lagging behind, and the railway between the DPRK and Russia is also not being made full use of, due to its increasing superannuation. At the Russia-DPRK summit meeting in

<sup>&</sup>lt;sup>8</sup> From a local hearing, and "Daily Kaiji Press" special feature articles, October 2008.

<sup>&</sup>lt;sup>9</sup> Dalny Vostok Tsushin, 21 April 2008, No. 747. [in Japanese]

<sup>&</sup>lt;sup>10</sup> From a hearing at an ROK firm, and the "Daily Kaiji Press", 3 October 2008.

<sup>&</sup>lt;sup>11</sup> Dalny Vostok Tsushin, 26 May 2008, No. 751. [in Japanese]

At the "TransContainer 1st International Business Forum" held in Seoul on 26 September 2008, jointly advancing the project was confirmed by the four companies of TransContainer, TransGroup AS, Kintetsu World Express and Kamigumi. (www.rzd-partner.com/news/2008/10/09/331733.html)

<sup>&</sup>lt;sup>13</sup> See Shingo Narumi "A Visit to Rajin Port in the DPRK", ERINA Report Vol. 68, March 2006. [in Japanese]

2001 the construction of a rail transport corridor to link the Korean Peninsula with Russia and Europe was agreed, and an initiative began toward the modernization of the railway between the DPRK and Russia.

On 4 October 2008 modernization work began on the Rajin-Khasan railway (55 kilometers). <sup>14</sup> The composite standard- and broad-gauge tracks on this stretch will be upgraded, and tunnels and bridges will be renovated. In parallel, a container terminal will be built at Wharf 3 at Rajin Port. The goal for 2009 is initially to handle 100,000 TEU annually, and in the future aim for 400,000 TEU annually. This will take the form of the €140-million overall cost of the project required for the upgrading of the railway and port being contributed by the Russian side, and the DPRK contributing the existing facilities in kind. It is planned that the ROK side will shoulder part of the costs contributed by the Russian side. <sup>15</sup>

For the time being in the planning to activate a distribution route where cargo is transported by sea from Busan to Rajin, and then transferred to the rails to join up with the Trans-Siberian Railway, a consortium of six ROK firms has already been set up which is looking forward positively toward the route's use. <sup>16</sup> In addition, the ROK firms have made a point of welcoming cargo from Japan too.

In the long term, it is a concept to bring about the opening of the Trans-Korean Railway, and connect the Trans-Siberian Railway with one railway line from the ROK.

In the background of this plan, Russia, the DPRK and the ROK each have their own ulterior motives.

On Russia's part, it will be able to secure the right to use Rajin Port. Russian Railways for some time past has wished to possess its own port in the Far East, and this is the first step toward that. Also, concerning the Russian government, the political design of strengthening its influence on the DPRK is fleetingly glimpsed.

On the DPRK's part, it is an opportune episode where it can get its decrepit infrastructure upgraded free of charge.

On the ROK firms' part, they have their eye on securing a new TSR route gateway port. Although most ROK firms utilize the TSR route via Vostochny Port, Vostochny Port has a bad reputation of having high port charges and being crowded. Distance-wise too, Rajin Port is closer to the ROK, and in the area of services, they speak the same language and there is the expectation that laborcosts will be low. For the ROK government, it probably judges it positively in the improvement in North-South relations, as a North-South cooperation project.

## Container Transport on the Trans-Siberian Railway

For the container freight that arrives at the ports of the Russian Far East from the three countries of East Asia, trucks are used for short-range delivery, and rail is used for that bound for long-distance destinations. It is considered that 80-90% of the containers unloaded at Vostochny Port and some 15% of those unloaded at Vladivostok are transported by rail, to all points domestically. Other than those, it appears that freight flowing onto the Trans-Siberian Railway, entering Siberia overland by rail from China, is also increasing.

According to the estimates of Russian Railways, the number of containers being brought in by various routes from the east or the west onto the Trans-Siberian Railway was 421,000 TEU in 2006, and 621,000 TEU in 2007, and in one year increased an astounding 47.6%. Further, for the first half of 2008 the growth rate has slackened off

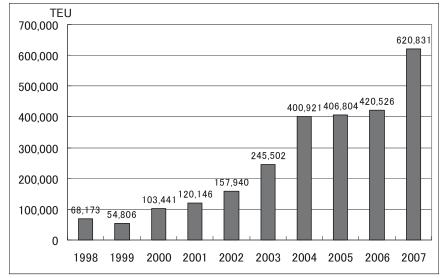


Figure 10 The Volume of Container Transportation on the Trans-Siberian Railway (TEU)

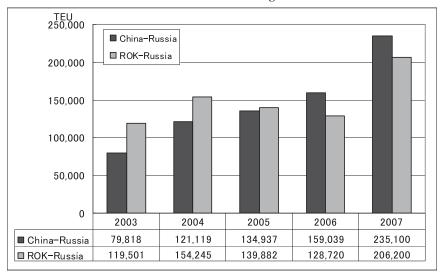
Source: Russian Railways/CCTT

<sup>&</sup>lt;sup>14</sup> For information on the project from the ROK side see the Kyeoresarang Ltd. Website (www.krlove.net/).For information from the Russian side see the Russian Railways Website (www.eng.rzd.ru/) and *Dalny Vostok Tsushin*, 14 October 2008, No. 770 [in Japanese].

<sup>&</sup>lt;sup>15</sup> Asahi Shimbun, 1 October 2008. [in Japanese]

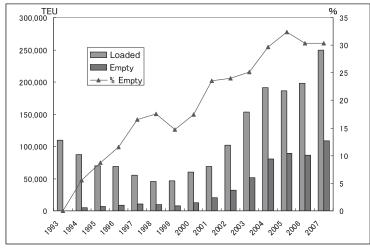
<sup>&</sup>lt;sup>16</sup> The six companies of Korail, Sinokor Merchant Marine, Woojin Global Logistics, Pantos Logistics, Glovis, and Hanru.

Figure 11 The Volume of Container Transportation on the Trans-Siberian Railway: China and ROK Freight



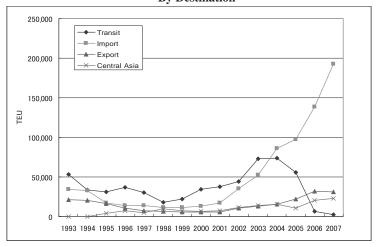
Source: Russian Railways/CCTT

Figure 12: Containers Handled at Vostochny Port: Loaded versus Empty Containers



Source: VICS/VSC

Figure 13: Containers Handled at Vostochny Port:
By Destination



Source: VICS/VSC Note: Loaded containers only. somewhat, and was up 26% on the same period for the previous year. (Figure 10)

If one looks at the breakdown by country of East Asia, after 2006 freight originating in or destined for China exceeded freight originating in or destined for the ROK, and in 2007 China was at 235,000 TEU and the ROK at 206,000 TEU. Further, the data from Russian Railways includes empty containers. (Figure 11)

On the other hand, the share by country of containers handled at Vostochny Port, the biggest of the Russian Far East ports, has the ROK at 68% against China at 29%. <sup>17</sup> Interpreting the data overall, it is inferred that containers joining the Trans-Siberian Railway overland by rail from China are increasing rapidly. In fact it is unanimously stated that the freight from ROK and Russian forwarders also, which uses the overland rail route from China, has increased in recent years.

In addition, the data on the containers handled at Vostochny Port can be analyzed in more detail and interesting movements of goods can be read. Firstly, concerning containers utilizing the Trans-Siberian Railway, as the ratio of west-bound to east-bound is skewed at 88:12, empty wagons and containers return in the east-bound. The 2007 empty-container rate reached approximately 30%. Then again, looking by direction of loaded containers, whereas Russian imports are surging, exports and freight bound for Central Asia are sluggish, and in large part Finland-bound transit freight has all but vanished. The effect of eliminating the discount for transit in 2006 was pronounced. Russia's rapidly rising principle import items are considered to be the transportation of components bound for the local plants of ROK automobile manufacturers, household electrical appliances made in the ROK and China, plastic resin, and consumer goods. (Figures 12 and 13)

Trends in Transportation by Inland Rail Destined for or Originating in China

I have already touched on the fact that China's exports to Russia are rapidly increasing, along with the fact that inland rail routes are increasing in importance.

There are four routes considered as inland rail distribution routes between China and Russia. Each has equipment for transshipment from China's standard gauge tracks (1,435 millimeters) to Russia's broad gauge tracks (1,520 millimeters) and the discontinuities of the procedures necessary for transshipment and waiting times which impede smooth transportation have come to be seen as a problem. If the problems related to transshipment and border-crossing can be solved, then there will be the promise of transportation routes connecting interior regions,

such as China–Russia and China–Eastern and Central Europe. Below, I will acquaint you with the most recent developments for each route and snippets of information regarding the near future.

Manzhouli-Zabaykalsk-Chita: This route is used in exports to Russia from northeastern China and Huabei [north China]. According to information from the Russian side the containers which passed through at this border in 2005 totaled 34,571 TEU (down 7.5% on the previous year). 18 In October 2008 TransContainer opened a container terminal in Zabaykalsk equipped with rail transshipment facilities. 19 The company invested 1.5 billion rubles (US\$60 million) and the upshot of the upgrading of the container terminal was that smooth border transportation became possible and the container handling capacity for imports from China was enhanced from 164,000 TEU to 600,000 TEU. For example, it has become possible to transship three block trains at the same time. Furthermore, DVTG (the Far Eastern Transport Group) is also constructing a terminal in Zabaykalsk and is planning to begin operations in 2009.

Trials are proceeding for transport to Europe using the TSR and using this route from Japan via Dalian, Harbin and Manzhouli.<sup>20</sup> The Japanese distribution service company *i*-Logistics has tied up with the European rail forwarder Far East Land Bridge (FELB), and is examining rail use as far as Hungary.

**Erenhot-Mongolia-Naushki**: The Mongolian route is used for exports to Mongolia and Russia from Beijing. An international project to extend this route to Europe has begun.

In January 2008 a 49-freight-car trial train departed Beijing, passed through Mongolia, Russia, Belarus, and Poland, and traveled 9,780 kilometers in 15 days to Hamburg in Germany.<sup>21</sup>

The transportation company DB Schenker, a subsidiary of Deutsche Bahn, will commence a regular rail service between Germany and China from February 2009, under the name "Trans Eurasia Express." Two services per week between Germany and China, linking the two in 20 days, are planned.<sup>22</sup> In September 2008, the first commercial-transport train loaded with the products of Fujitsu Siemens Computers departed Xiangtan in Hunan Province and covered the approximately 10,000 kilometers to Hamburg in 17 days.

Alashankou-Kazakhstan: China's largest land port of entry, the growth in containers bound for Kazakhstan and Russia from China is striking. The volume of containers transiting has progressed from 93,000 TEU in 2005, to 143,000 TEU in 2006, and 191,000 TEU in 2007, approximately one third of which is China's imports, and

<sup>&</sup>lt;sup>17</sup> According to the VICS/VSC shares by country of loaded containers, the ROK has 68%, China 29% and Japan 3%. For the freight transshipped at Busan and transported to Vostochny port, however, within the freight originating in or destined for Japan, the possibility is high that it has been treated as ROK freight, and caution is needed.

<sup>&</sup>lt;sup>18</sup> Transportweekly, Special Edition, No. 4(12), 2006.

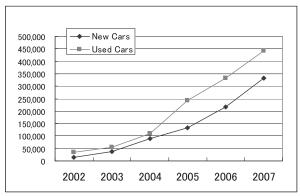
<sup>19</sup> www.trcont.ru/, 7 October 2008.

<sup>&</sup>lt;sup>20</sup> "Daily Kaiji Press", 7 October 2008.

<sup>&</sup>lt;sup>21</sup> Russian Railways Website, 25 January 2008.

<sup>&</sup>lt;sup>22</sup> Deutsche Bahn Website, 17 October 2008.

Figure 14 The Number of Passenger Cars Exported from Japan to Russia



Source: Trade statistics

two thirds her exports. In recent years, international freight other than to Kazakhstan, such as to Russia, has been increasing.<sup>23</sup>

**Suifenhe-Grodekovo**: A route which links Heilongjiang Province in China with the Russian Far East. According to information from the Russian side, containers of 272 TEU (down 57.1% on the previous year) crossed the border in 2005.<sup>24</sup> Trucks are mainly used for container transportation on this route and use of rail is limited.

#### 4 . Transportation of Automobiles

As mentioned previously three quarters of exports from Japan to Russia are automobiles. (Figure 14) The largest export item from the ROK to Russia is also automobiles. According to statistics from the Russian side, in 2007, 640,000 passenger cars from Japan and 180,000 from the ROK were exported to Russia. Shifting one's gaze further, to motor trucks, 35,000 have been exported from China, 16,000 from Japan and 6,000 from the ROK.

Ordinarily, finished cars (new cars) are transported on specialized ships, trains and trailers, etc.

Generally, automobiles (new cars) to be exported to Russia from Japan and the ROK go via the Suez Canal by automobile carrier ships, are unloaded at the Finnish ports of Hanko and Kotka, and are carried thence across the border to Russia on car transport trailers. Along, however, with the sharp increase in Russia's imports of vehicles, there is a lack of car transport trailers, and problems have arisen, such as rental fees leaping. On the route via Finland, it requires approximately 50 days from Japan to Moscow, and it is often said that purchasers of Japanese cars are being kept waiting. The problem is considered to be the concentration on the Finland route, and a diversification in



Mazda Passenger Cars Awaiting Rail Transportation at the Port at Zarubino (Photographed 25 October 2008)

routes has been pointed out.

In February 2007, Russian Railways entered into a joint venture with the international transportation major "TransGroup AS" (TGAS) and established "RailTransAuto" (RTA) to specialize in car transportation by rail.<sup>25</sup> RTA has equipped the port at Zarubino<sup>26</sup> in the southern part of Primorsky Krai with a new-car yard, and laid out a framework for transport by special block train toward Moscow, using the existing railroad spur. Already a 2.1-hectare new-car yard has been completed as a first stage, and 1,300 cars can be held.<sup>27</sup> A rail terminal is also being built in the environs of Moscow.

At the end of September 2008 Mazda began car transportation to Russia utilizing the Trans-Siberian Railway. Weekly, they move approximately 1,000 passenger cars by specialized ship from Mazda's domestic production base to the port at Zarubino. Thence 330 cars at a time, split into three runs leaving every other day, are transported to Moscow in special double-decker block trains made up of 30 wagons. The length of time for rail transportation to Moscow is 10 days, and they arrive in Moscow from the port in Japan in 18 days. Compared to the established route via Finland, the approximately 30-day transportation time has been reduced.<sup>28</sup> Transportation costs are said to be at the same level as the established route. Taking on board Mazda's success, every Japanese automobile manufacturer is showing interest in the utilization of the route, and they are also beginning trial transport runs.

Meanwhile, secondhand cars exported from Japan to Russia are mostly moved by ro-ro vessel or conventional ship, and the proportion containerized has remained at the 3% level. If one excludes those bound for Russia, however,

<sup>&</sup>lt;sup>23</sup> Taken from the presentation materials of Che Tanlai, Economic and Planning Research Institute of the Chinese Ministry of Railways.

<sup>&</sup>lt;sup>24</sup> *Transportweekly*, Special Edition, No. 4(12), 2006.

<sup>&</sup>lt;sup>25</sup> The capital formation of RTA is 51% from Russian Railways and 49% from TransGroup. According to the company's literature, as of October 2008 they have 2,500 wagons for vehicle transportation, and plan to increase the number to 5,100 by 2010. (www.railtransauto. com/)

<sup>&</sup>lt;sup>26</sup> Also called Troitsa Port. (www.trgr.ru/)

<sup>&</sup>lt;sup>27</sup> In the second stage, it is planned to expand it to 6.1 hectares, and enable 3,800 cars to be parked.

<sup>&</sup>lt;sup>28</sup> See www.rzd-partner.com/comments/2008/10/15/, www.railtransauto.com/, etc.

the proportion containerized exceeds 50%.<sup>29</sup>

5 . Challenges for Distribution between East Asia and Russia

Lastly I want to pronounce on a number of factors impeding the development of distribution between East Asia and Russia.

The Moving Watershed in Price Competition

The case of transportation to Russia from Japan and the ROK, what decides whether entry is via the Far Eastern ports in the east or via the ports of the northwestern region in the west? The advantage to transportation on the TSR, entering from the east, is speed. For transport to Moscow, it arrives in 20-25 days on the TSR route, whereas for the Deep Sea route 40 days plus are required. This difference in the number of days is larger the further east the destination, and smaller the further west. For the cargo owner speed is certainly an attraction, but cost is also important. Even if it took some time most cargo owners would choose the cheap route. In cost too, the further east the destination the TSR route has the greater advantage, and the further west the Deep Sea route has the greater advantage. In addition, transportation costs are relative after all, and are also affected by the market condition of the competing Deep Sea route.

Consequently, putting together the two factors of cost and time, where is the so-called "watershed," where entering from the east and entering from the west are equal?

If one traces back through history, in the Land Bridge's heyday of the 1970s and 1980s the watershed was in Europe, having leapt clear of Russia. Subsequently, when Russian Railways entered the turbulent period in the 1990s, the watershed is said to have shifted east to the vicinity of Irkutsk. From around 2000, thanks to the transit discount fees, in the case of freight originating in the ROK, the TSR's territory was limited to Finland, but when the transit discount was done away with in 2006 the watershed again moved east.

If one looks at the developments in 2007-2008, with Russian Railways' continued fee increases and the weakening of the market condition of the Deep Sea route, the TSR route has been losing price-competitiveness. ROK forwarders have moaned that "Russian Railways contact us once every three months with a fee increase."

Actually there were three increases in Russian Railways' freight fees in just the first half of 2008, the annual average was a fee increase of 16.3%.<sup>30</sup>

In September 2008, at the TransContainer international forum held in Seoul, Hong Kee Rhee, the General Manager of Glovis which is a logistics subsidiary of the ROK's Hyundai Motor Company, raised first "freight cost changes

through the unilateral fee increases from the Russian side" as a problem on the TSR route. Second was "customs clearance difficulties" and third was "the deficiencies of the Far Eastern ports and high fees." As a solution to these things, he revealed the idea of the necessity of TransContainer having its own port.

On the other hand inflation is continuing in Russia, Russian Railways must also increase its employees' pay, and it's a situation where increases in freight fees cannot be avoided. Further, Russian Railways has come to have a structure where the red figures of its passenger operation are cancelled out by the black figures of its freight operation.<sup>31</sup> Even in freight transportation, it is considered that domestic rates, which have a direct effect on the national economy, are difficult to raise, and there is a tendency to make international freight fees the target of fee increases.

In September 2008, there was an opportunity to hear the opinions of ROK forwarders, yet in the global view the watershed is in the vicinity of Moscow, and up to that divide the TSR is competitive. In fact, what the ROK forwarders see as their new target is the freight bound for LG Electronics, which has begun operations at an assembly plant in the environs of Moscow, and Samsung Electronics, which is building a plant in Kaluga to the south of Moscow. Planning is ongoing to construct railway container terminals in Moscow and Kaluga.<sup>32</sup>

In contrast, for freight bound for Saint Petersburg to the west of Moscow, the Deep Sea route's economic efficiency is prized. For example the Hyundai Motor Company, which is building a plant in Saint Petersburg, appears to have cemented its policy of using the Deep Sea route in its transportation of components. What will happen to Japanese automobile manufacturers, planning to expand en masse into the same area, will be carefully watched.

If Russian Railways' fees continue to rise, the watershed will shift east from Moscow, and the TSR transport volume could suffer a setback. With the continuing trend of declining Deep Sea rates from the summer of 2008, the feeling that the TSR is relatively expensive has strengthened further. For Japan in particular, the cargo owners are at the stage where they have finally begun to take an interest in the TSR route, and if the reputation spreads that "The Trans-Siberian route is expensive," precious business could be nipped in the bud. A review of the fees for the TSR route is called for.

The Planning within Port Infrastructure Development Although it seems strange seen from Japan, the owners of each of Russia's privately-owned ports have decided on development plans, and a port development plan for the nation and the region as a whole is practically non-existent. For a country which until not so long ago had a planned

<sup>&</sup>lt;sup>29</sup> *The Japan Maritime Daily*, 27 February 2008. [in Japanese]

<sup>&</sup>lt;sup>30</sup> Dalny Vostok Tsushin, 7 July 2008, No. 757. [in Japanese]

<sup>&</sup>lt;sup>31</sup> According to the Russian Railways Annual Report 2007, the earnings of the freight operation were 115.5 billion rubles, whereas the passenger operation was in the red by 50.5 billion rubles.

<sup>&</sup>lt;sup>32</sup> At the "TransContainer 1st International Business Forum" held in Seoul on 26 September 2008, the three companies of TransContainer, Kintetsu World Express and Unico Logistics agreed to co-fund and construct a railway container terminal in Kaluga. Aside from this, in a joint venture by DVTG and Pantos, an inland terminal, built at Tuchkovo in the environs of Moscow, began operation in June 2007.

economy this is an unthinkable absence of planning. At the opposite extreme are the ROK and China, and the ROK, under a national policy which aspires to be "a nation central to Northeast Asia," has developed the Port of Busan as the hub-port for Northeast Asia and built Incheon International Airport as a hub-airport. China also, as national policy, has constructed a large port off Shanghai.

Regarding Russia's Far Eastern ports, as mentioned previously each port is undertaking development in a disconnected manner, the ports are constantly in competition and a national policy is not in sight. As a result, as the ROK's Glovis points out, the deficiencies of the Far Eastern ports and the poorness of services have become obstacles to trade.

Regarding the railway sector domestically in Russia too, the structure from the Soviet-era, even post-privatization, has been inherited in the form of Russian Railways, and planned investment is taking place. "The Strategy of Development of the Russian Railways to 2030," approved nationally in 2008, is one example. Concerning the development of ports too, such mid-to-long-term planning should be approved nationally, and set forth domestically and internationally.

The Solution of Discontinuities

In the discussion on international distribution in Northeast Asia, the existence of discontinuities—from maritime transportation onto land, and transshipment

between railways with different track gauges—has come to be viewed as a problem. Currently also, as the ROK's Glovis points out, the simplification and speeding-up of customs clearance have become challenges.

On the other hand, improvement can be seen in the transshipment between railways with different track gauges. The Zabaykalsk railway container terminal completed in October 2008 is attracting attention. I would want to follow up on the use and effectiveness of said terminal.

[Translated by ERINA]

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