

The Expanding Trans-Siberian Railway International Container Transport:

The Anticipated Revival in Japanese Cargo

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1. Introduction

The international multimodal transport system (TSR route), which uses the Trans-Siberian Railway (TSR) and marine transport to link East Asia to Russia, Europe and Central Asia, is booming. The same route was widely used in the 1970s and 1980s as a transport route connecting Japan to Europe and Iran, etc. At that time, as it had the image of a bridge to Europe overspanning the Soviet Union, this transport route came to be called the “Siberian Land Bridge” (SLB) in Japan.

With the internal chaos in Russia accompanying the collapse of the Soviet Union, in the 1990s the TSR route stagnated, but since 2000 Russia has returned to political stability, and as the economy picked up, with the influence of cargo originating in and destined for the ROK and China, this transportation route came back to life. Further, in the last few years there has been a structural change, where the traditional transit transport has been replaced with Russia’s import and export (bilateral) cargo taking the lead-role. In this paper I will outline the recent trends for the TSR route.

2. Overview and Workings of the Route

The TSR route links East Asian ports and Russian Far East ports (principally Vostochny) by feeder-boats, and after unloading, cargo is transported to its destination using Russian railway lines and those connecting them to other countries. Though the frequency of sailings and the ports of call of feeder-boats, which are reflected in the fluctuation of cargo volumes, are constantly changing, as of March 2007, eight companies (groups) have entered the business, and approximately 40 ships operate per month. Mostly with Busan as the hub, they also call at Shanghai, Ningbo, Ulsan and Masan. From Japanese ports, a collaboration between Mitsui O.S.K. Lines, Ltd. and FESCO (Far Eastern Shipping Company) is providing a shipping service with two sailings per month.

Rail transportation has three routes with a different destination at the western end.

- (1) Russia – Domestic: Although transportation is possible literally anywhere domestically, using block trains, transportation speed has become a weapon. Block trains are operated to Taganrog, which has a Hyundai car-assembly plant, to Izhevsk, which has a Kia Motors plant, and to Moscow. All originate in Vostochny, and shipments arrive at their destination in 10-15 days after departure. The competing route to western Russia is the sea-route via Europe (Deep Sea route).
- (2) Central Asia: Branching off from the Trans-Siberian Railway and going to Kazakhstan and Uzbekistan. Block train services run from Vostochny to Tashkent and Almaty as appropriate. Is

in competition with the Chinese route (TCR) to Central Asia via Lianyungang to Alashankou.

(3) Finland Transit: Links Vostochny and the Finnish border by block train (approximately 11 days), and Finnish Railways having inherited the same track-gauge as Russian Railways, most cargo, after being temporarily stored in bonded warehouses in Finland, is transported by truck to its ultimate destination in Russia. Compared to the Deep Sea route, speedy transportation service has become a weapon. However, because of the January 2006 sharp hike in transit fees, it has lost its economic competitiveness, and transport to Finland has shifted to the competing Deep Sea route. Currently, due to insufficient cargo volume, block train services have even been cancelled.

From among these, (3) is handled as transit, as it only passes through Russia, and has been granted privileges in customs clearance and freight charges. (2) also only passes through Russia, though, as Central Asia was once part of the Soviet Union, it has been handled as bilateral, and yet traditionally the same as within Russia.

3. Trends of 2006: From Transit towards an Import-Export Focus

As the TSR route container cargo predominantly has Vostochny Port as its base, I looked for trends using internal documents from VICS (Vostochny International Container Services), an unloading service company at the same port. Moreover, as VICS merged with VSC (Vostochny Stevedoring Company) in February 2006, caution must be taken when comparing 2006 data with that for 2005 and earlier.

Taking the lowest year of 1998 as the base, the combined cargo volume of transit and imports and exports saw rapid growth – a 2.4-fold increase to 2002, and a 4.1-fold increase to 2004. However, there was a downward trend with 2005 seeing a decrease on the previous year of 2.7%, and a further decrease of 8.3% in 2006. The volume of international container trade handled by VICS and VSC (loaded containers) was 197,952 TEU, and including empty containers was 284,295 TEU.

The latest trends can be more clearly discerned from the changes in cargo volume, broken down into transit, imports and exports (Figure 1).

Firstly, import and export cargo has grown constantly since 2000. The results for 2006 were imports of 159,140 TEU (an increase of 24.6% on the previous year), and exports were 32,159 TEU (an increase of 35.5% on the previous year). As I will mention below, examples of factors in the expansion of import and export cargo include Russia's healthy trade, the increase of direct investment into Russia mainly by ROK businesses, improvement in block train services, and congestion on alternative routes such as via Saint Petersburg Port and the Zabaikalsk border station. The manner of the powerful growth in import and export cargo comes through clearly from the month-on-month cargo movements (Figure 2).

Meanwhile, transit cargo has fluctuated wildly, and although there was a rapid increase from 1999 into 2003, it subsequently underwent a sharp fall. Competition with alternative routes may be a factor in the fluctuation. Although the competing route for transit transport to Finland is the Deep

Sea route, for containers bound for Europe the relative economic competitiveness, which fluctuates wildly, changes at a dizzying pace. In talk with an ROK manufacturer of household electrical appliances I heard that the geographical “border line”, when deciding whether to use the TSR or the Deep Sea route for exports bound for Finland, shifts according to the relative transport cost and the time competitiveness at that point in time. By way of example, in 2003-4, the period when Deep Sea route freight costs soared, the “border line” moved southward from the vicinity of Shanghai. However in the latter half of 2005 sea-freight costs dropped, whereas the TSR ran into delays arising from insufficient container freight wagon supply and the congestion of freight in Vostochny, and the “border line” moved to the north, with Chinese cargo to the north of Shanghai shifting to the Deep Sea route for the first time.

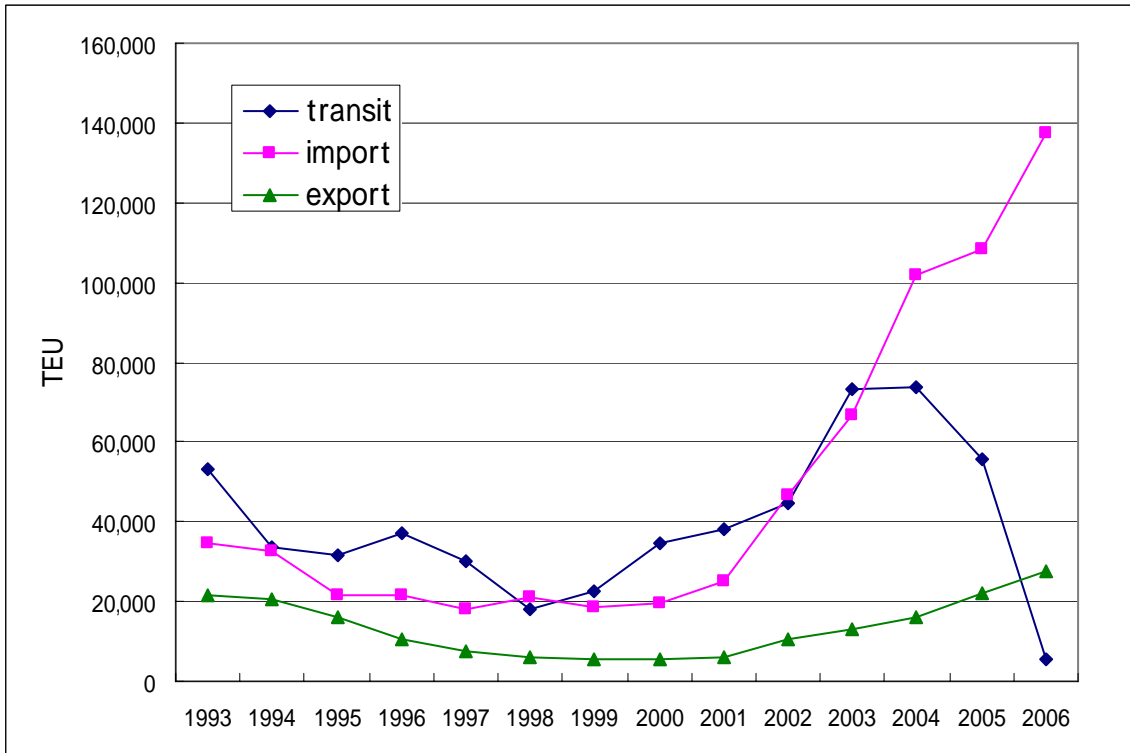
Furthermore, in January 2006, as a result of the sharp hike in transit fees, it was said that for the costs of transport from Busan to Finland, the TSR became approximately 40% more expensive compared with the Deep Sea route, and the transport of household electrical appliances and the like to Finland, including cargo from the ROK, has mostly shifted over to the Deep Sea route. How fast the reaction to the price rises has been is clearly shown in the month-on-month cargo volumes (Figure 2). As a result, the transit cargo volume for 2006 fell dramatically to 6,292 TEU (a decrease of 90.2% on the previous year). The proportion of total cargo in loaded containers for which transit accounted shrank to a mere 3.2%. As the cargo bound for Europe has vanished, the former moniker of “Land Bridge” has fallen out of step with reality.

Is there a possibility that transit cargo will again return to the TSR? Firstly, on the Russian side, the Finland Transit cargo’s ultimate destination in the past had been Russia, and a negative perception built up of a “false transit”, but the idea of supporting it with the payment of subsidies has come to an end. Therefore the possibility is low of returning to the former low level of transit fees. In January 2007 there was some reduction, within the transit fee, in the cost of returning empty containers, but the applicable conditions became stricter, and the general view was that this wouldn’t result in substantial price reductions. Concerning Finland Transit, if future ocean freight charges look likely to increase greatly, the possibility of a return of hasty cargo from the Deep Sea route to the TSR is probably undeniable, but at the time of writing the ROK and Russian carriers are skeptical regarding the possibility of a large-scale resurgence.

If we look at the direction of cargo, because exports from East Asia to Russia and Central Asia are large, the ratio of westbound to eastbound cargo in 2006 was extremely lopsided, at 82:18. Therefore, empty containers must be returned in the eastbound direction, and approximately 30% of the total containers sent are empty ones.

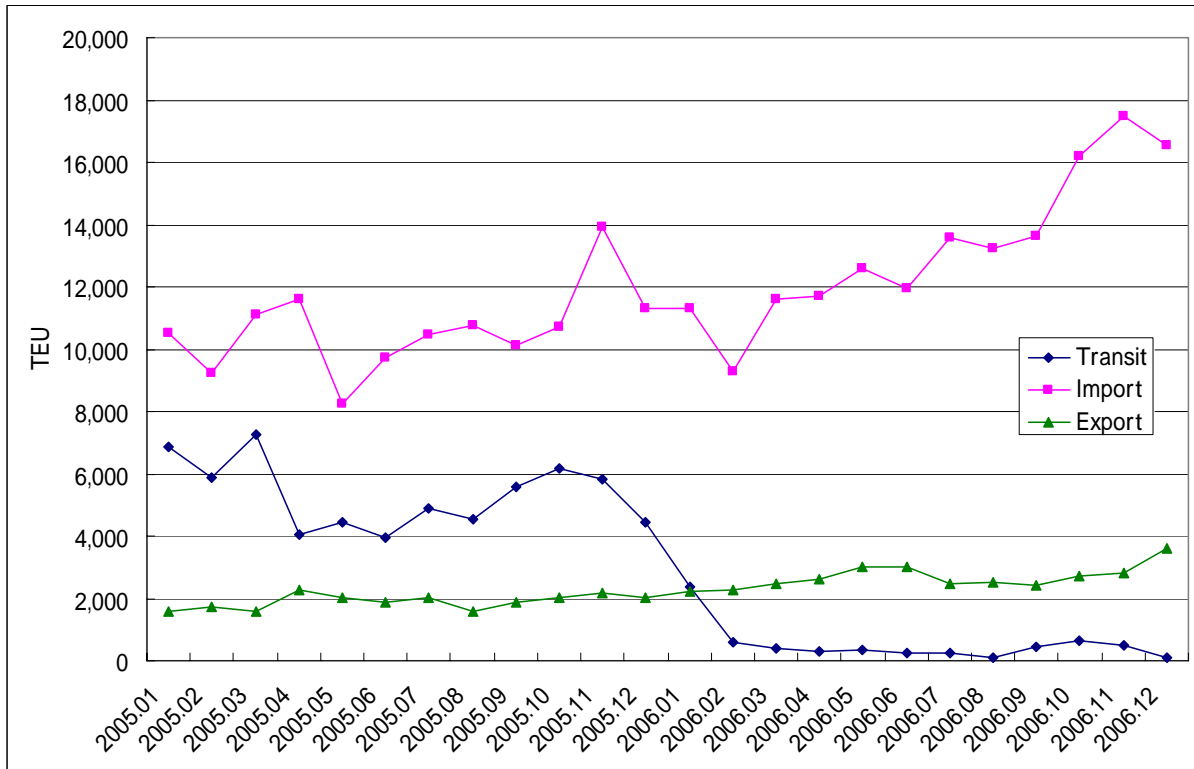
If we look at the country of origin and destination, for 2006 this was 63% for the ROK, 33% for China and 4% for Japan, with the ROK as ever in the lead, with it having to be said that Japan is all but invisible.

Figure 1 Changes in International Container Freight Handled at Vostochny Port (1993-2006)



Note: Former VICS handled loaded international containers only. In February 2006, VICS and VSC merged, and the data for 2006 were corrected, applying the previous years' trends to the data from after the merger.

Figure 2 Changes in International Container Cargo Handled at Vostochny Port, by Month (January 2005 – December 2006)



Note: VICS and VSC handled loaded international containers

4. Factors in the Increase in Import and Export Cargo

I will summarize the factors in the continuing rapid growth in the use of the TSR for import and export cargo since 2000.

- (1) The strong Russian economy: Underpinned by the soaring of prices of natural resources, the Russian economy is booming, and has brought a voracious demand for imports, such as consumer goods, household electrical appliances and cars.
- (2) Direct Investment: The investment environment within Russia is gradually continuing to improve, and direct investment by ROK businesses is moving apace. The Hyundai Motor Company (in Taganrog), Kia Motors Company (in Izhevsk), the SsangYong Motor Company (in Naberezhnye Chelny) and LG Electronics (in Ruza), amongst others, have commenced local production. Moreover, in Uzbekistan, GM Daewoo is manufacturing locally. Most of these production plants use knock-down production, with the TSR being used for the delivery of mass-produced parts from the ROK.
- (3) Congestion on Competing Routes: Saint Petersburg Port and the Zabaikalsk border station, which are alternative routes for imports and exports, are both congested and inconvenient.
- (4) The Improvement in Block Train Services: The companies Russian Troika and TransContainer were established and the block train services improved. Russian Troika was set up with equal investment by Russian Railways and the Far Eastern Shipping Company (FESCO), and began operating in March 2005. Its transport of cargo reached 51,230 TEU in 2006. TransContainer meanwhile, is a subsidiary of Russian Railways, and was its container

operations division before becoming a separate company, set up in March 2006. The company, in partnership with forwarders in the ROK, operates a block train service to the GM Daewoo plant in Uzbekistan. Furthermore, F.E. Trans operates block train services for the Kia Motors Company and SsangYong Motor Company plants.

Block Trains under operation (As of March 2007)

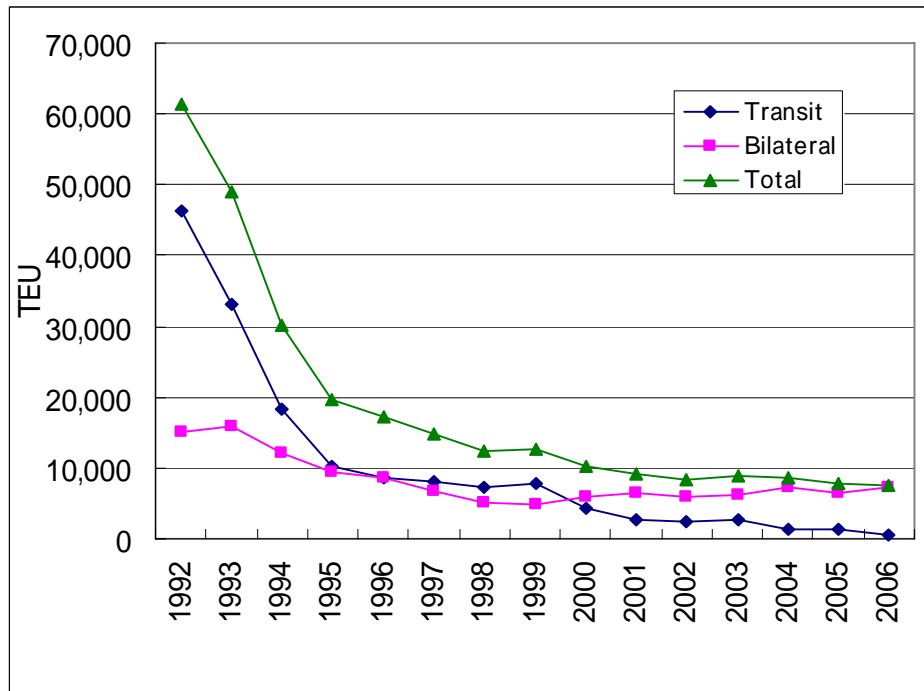
Destination	Origin	Trains/week	Days	Operators	Major Consignors
Taganrog	Vostochny	3	11	Russian Troika	Hyundai Motor Company/ "TAGAZ "
Izhevsk	Vostochny/ Nahkodka	7-8	9	Russian Troika F.E. Trans	Kia Motors Company/ JSC "IzhAuto "
Moscow	Vostochny	1	10-15	Russian Troika	LG Electronics
Saragachi (Uzbekistan)	Vostochny	2	14	TransContainer/ Unico Logistics	GM Daewoo
Naberezhnye Chelny	Vostochny/ Nahkodka	3	9-10	F.E. Trans	SsangYong Motor Company/ JSC "ZMA "

Consequently, as long as the winds remain favorable, will the TSR route be able to develop as a major trade route? Considered to influence the competitiveness of the TSR route are most likely a situation where price-competitiveness weakens with a rise in railway fees, when delays occur from lack of supply in container wagons, or the case of the alternative routes, such as Saint Petersburg Port, being upgraded.

5. Can a New Business-Model Attract Japanese Companies to the TSR Route?

As mentioned earlier, the support for the expansion of the import and export cargo on the TSR is largely from the ROK and China, and Japan is overshadowed. The low level of cargo originating in or destined for Japan continues, and in 2006 was 7,637 TEU (a decrease of 2.6% on the previous year) (Figure 3). For direct shipments to Vostochny Port, Japan's share of the total TSR cargo was 27% in 1999, as against 17% in 2000 and has continued falling, down to 4% in 2006. Aside from this, Japanese cargo moving via ROK ports has been estimated to be sizeable, but it hasn't been possible to substantiate the actual situation.

Figure 3 Changes in the Cargo Volume Originating in or Destined for Japanese Ports (in TEU)



Source: Navix Transport

On the other hand, Japan's trade to Russia is growing, and total trade in 2006 at ¥1,594.9 billion set a new record and showed a 35% increase on the previous year. In particular, exports from Japan increased 66% and overtook imports. It should come as no surprise that part of the expanding trade would utilize the TSR route.

In 2007, a great expectation that Japanese cargo would return to the TSR surged up between the interested parties in both countries. Expected was the transport of parts from Japanese car manufacturers to local production in Russia being planned by Toyota, etc., the successful model for which is the ROK's Hyundai Motor Company which commenced knock-down production in 2002 in Taganrog on the Black Sea Coast. The Hyundai Motor Company ships parts from the ROK simultaneously on the TSR route and the Deep Sea route, and along with pitching the two routes into competition, is also helping it offset the risks.

On the TSR route, shipping takes approximately 23 days from Ulsan, via Vostochny, to Taganrog. The sea leg is overseen by FESCO and the rail leg by Russian Troika, and FESCO's containers and Russian Troika's freight wagons are supplied on a priority basis. In addition, in the area of customs clearance, the convenience of customs clearance in one go for whole trains bound for Taganrog is allowed for.

The Deep Sea route is overseen by CMA CGM, and shipments are made from Busan via Constanța, with transshipment in feeder-boats to Taganrog. Initially, it took 40 days, but with the efforts of the ship companies this was reduced to 30 days. This can be said to be the result of competition between the two routes.

Regarding transport costs, as special discounts are applied for long-term contracts for guaranteed fixed volume consignments, there is widely held to be almost no difference between

the Deep Sea route and the TSR route. Regarding the reputation of the TSR route for shippers, even if there are no noticeable delays or trouble, there is unease about past cases of seasonal delays and price rises, and they consider it essential to use it in parallel with the Deep Sea route.

What Russian Railways has as its next target is the planned local production in Saint Petersburg by Toyota and Nissan Motors. From the summer of last year it has already carried out several trial transports.

If we consider transport from Japan to Saint Petersburg, for the number of days transport the TSR route (approximately 25 days) is even shorter than the Deep Sea route (approximately 40 days.) Further, in the case of the Deep Sea route, the problem of the decay and deficiencies of Saint Petersburg Port is highlighted. The challenges for the TSR are customs clearance and costs, but if it is possible to secure a discount on fees via negotiation, and simplify the customs procedures along the lines of the Hyundai Motor Company, then the revival of Japanese cargo is probably no dream. On Russia's part, if Toyota were to use the TSR, then the route's trustworthiness would rise, and there is the great expectation that its use by other Japanese companies would receive a boost.

(27 March 2007)