

## The Booming Russian Economy Leads the Way in International Use of the Trans-Siberian Railway

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Use of the Trans-Siberian Railway (TSR) is thriving to an unprecedented degree. Reflecting bumper exports to Russia, there has been rapid growth in cargo from the ROK and China, and there has even been a recovery in the volume of cargo from Japan, which underwent a prolonged decline. This is the result of conditions favorable to the TSR being put in place, such as strong consumer demand supported by the booming Russian economy and soaring marine freight charges, particularly from China. The following is an overview of the state of TSR use in 2003.

### The State of TSR Use in 2003

Since 2000, the volume of international container cargo using the TSR has been growing steadily (Fig. 1). According to data published by Vostochny International Container Service (VICS), which is the cargo-handling company at Vostochny Port, there have been significant increases, with a rise of 49% on the previous year in 2002<sup>1</sup> and a further rise of 53% on that level in 2003. 177,167 TEU of containers was handled in 2003; this rises to 204,650 TEU if empty containers are included, eclipsing the volumes handled during the port's heyday in the 1980s.

Due to the increase in cargo volumes, five companies entered the marine freight market between Vostochny and ports in the ROK, while another three began competing on routes between Vostochny and ports in China, with services operating several times a week. In contrast, there is only one company involved in freight transport between

Vostochny and ports in Japan, operating services twice a month.

Looking at a breakdown of the figures, we can see that transit and bilateral cargo are both growing, with the balance between transit and bilateral standing at 55:45 in 2003.

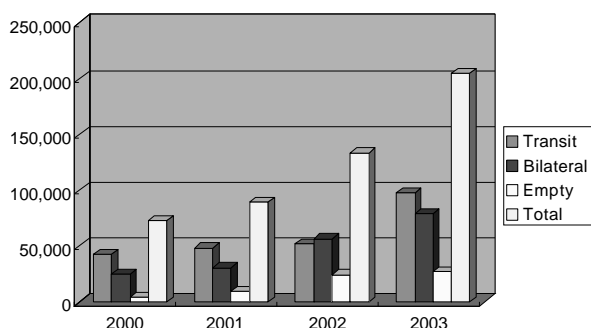
In terms of the direction taken by this cargo, both westbound and eastbound cargo volumes are increasing, with the balance between westbound and eastbound cargo standing at 69:31; in other words, westbound cargo, i.e. export cargo from the ROK and China, continues to outstrip import cargo by far (Fig. 2). Although there is a relatively even balance between westbound and eastbound transit cargo, at 58:42, there is a marked directional bias in the case of bilateral cargo, at 84:16 (Figs. 3 & 4). This can be attributed to the fact that although there is return cargo in the case of transit cargo to Finland, little progress has been made in developing return cargo in the form of exports to Russia and Central Asia that are handled as bilateral cargo.

As a result of the lack of eastbound cargo, the volume of empty containers transported is increasing annually and around 27,000 TEU was returned to Vostochny Port by rail in 2003 (Fig. 5). This equates to 13.2% of all cargo transported. It goes without saying that the rise in the transport of empty containers is a burden on ports and railways. Forwarders from the ROK, who have a large volume of their own containers, are trying to generate import cargo, but there are limits to what they can achieve and the transport of empty containers is a thorny issue.

Looking at the cargo in greater detail, the majority of westbound cargo is ultimately destined for Russia in the cases of both transit and bilateral cargo; one factor in this is the strong demand for imports that has been supported by high economic growth.

Westbound transit cargo mainly consists of household electrical appliances manufactured by ROK companies and destined for Russia. These exports are usually transported by sea to Vostochny Port from the ROK or the companies' manufacturing bases in China, before being transported to Finland via the TSR; after being stored for a time in bonded warehouses in Finland, they are transported to Russia by

Figure 1. Growing Container Volumess (TEU)



Source: VICS

<sup>1</sup> Hisako Tsuji, *Growing International Use of the Trans-Siberian Railway: Japan is Being Left Out of the Loop*, ERINA Report Vol. 52, June 2003.

truck. According to forwarders in the ROK, the Finland route has greater advantages for them in terms of the customs situation. There are very few examples of the TSR being used for transport from East Asia to European countries other than Finland.

Westbound bilateral cargo consists of cargo destined for Russia and that destined for Central Asia. The majority of the former is accounted for by Chinese-made consumer goods. Products such as clothing, shoes, bags and accessories manufactured in a variety of places in China are transported to Vostochny Port from such ports as Shanghai, Ningbo, Tianjin, Dalian and Yantai, either directly or via Busan. These Chinese-made consumer goods are mainly handled by Russian forwarders. In addition, resin (used in the manufacture of plastic) is exported to Russia from the ROK.

The majority of cargo destined for Central Asia is accounted for by exports from the ROK. Companies in the ROK have plants for the assembly of cars and household electrical appliances in Uzbekistan and Kazakhstan, so there are many exports of raw materials and components.

Eastbound cargo includes logs and paper pulp from Finland destined for the ROK and Japan, and cotton produced in Uzbekistan bound for the ROK.

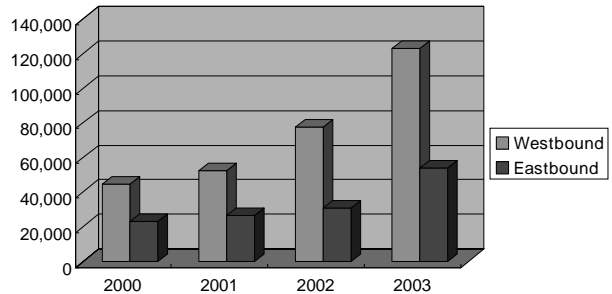
It is not possible to obtain statistics that specify the countries of origin and destination of cargo transported along the TSR. Formerly, as only cargo originating in or destined for the ROK or Japan used the TSR and there was no consolidation of cargo, it was possible to obtain statistics for the volume of cargo originating in or destined for the ROK or Japan based on the cargo carried on each ship. However, in recent years, as Chinese cargo sent to Vostochny Port has been dispatched in transit via Busan where it is consolidated with cargo from the ROK, it has become impossible to distinguish between cargo from the ROK and cargo from China. Given this situation, if we make estimates based on the information provided by those on the ground, we can see that about 60% of cargo is from the ROK, about 40% from China and about 5% from Japan. In addition, as many ROK companies have established bases in China, it is anticipated that there will be a reversal in the shares of ROK and Chinese cargo in the near future.

**An Increase in Cargo to/from Japan**

The effects of the rapid expansion in use of the TSR route have even extended to Japan. Use of the TSR route by cargo originating in or destined for Japan has experienced a long period of decline, but there was an increase, albeit slight, in the volumes of both transit and bilateral cargo in 2003. According to data published by Mitsui O.S.K. Lines (Fig. 6), which handles marine transport between Russia and Japan, the volume of cargo in 2003 totaled 8,869 TEU (an increase of 4.9% on the previous year), with transit accounting for 2,638 TEU (up 3.5% on the previous year) and bilateral accounting for 6,231 TEU (up 5.4% on the previous year).

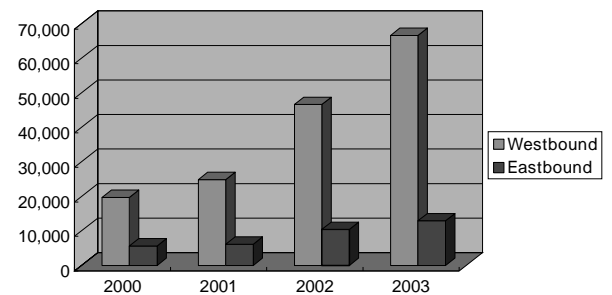
A similar trend is seen in data published by the Trans-Siberian Intermodal Operators Association of Japan (TSIOAJ), which is limited to figures for transit cargo. The data only cover member companies of the association, but these show a 12.9% rise in the combined figure for west-

Figure 2. West-versus East-bound Cargo: Total (TEU)



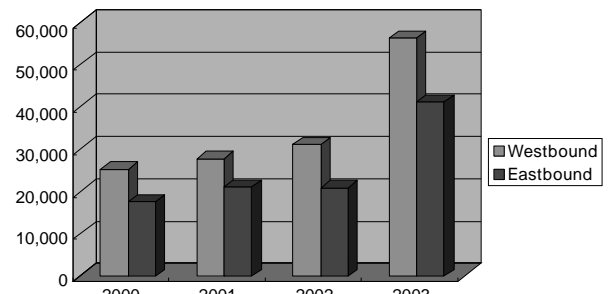
Source: VICS

Figure 3. West-versus East-bound Cargo: Bilateral (TEU)



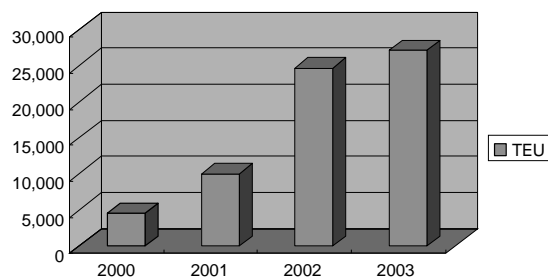
Source: VICS

Figure 4. West-versus East-bound Cargo: Transit (TEU)



Source: VICS

Figure 5. Increase in Empty Containers (TEU)



Source: VICS

and eastbound cargo (Fig. 7).

The predominant characteristic of cargo originating in or destined for Japan is that the volume of bilateral cargo far outstrips that of transit cargo (70:30). The main westbound bilateral cargo is car components destined for Russia, while the main eastbound cargo is metal from Russia. The main eastbound transit cargo is logs (for building log houses) from Finland. However, in contrast to the situation in the ROK, there is hardly any westbound transit cargo bound for Finland. Many Japanese export

Figure 6. TSR Cargo Volume to/from Japan

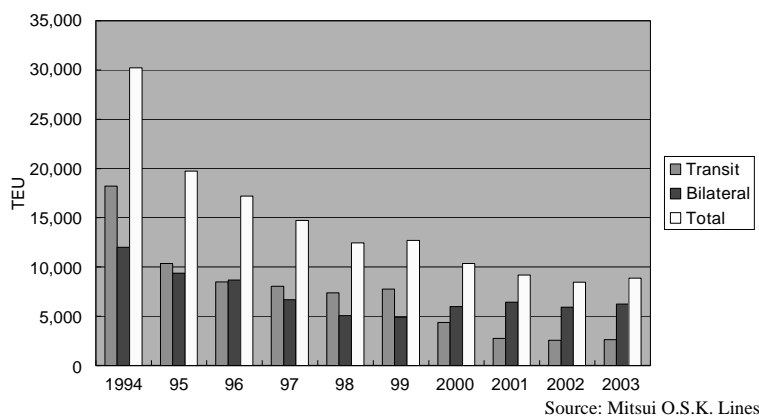
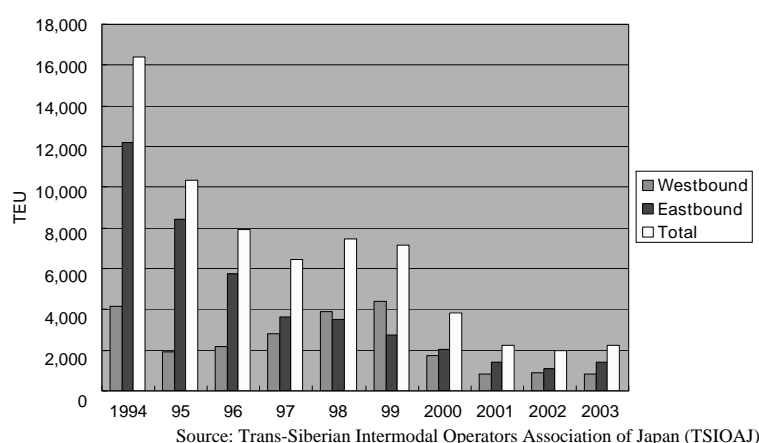


Figure 7. TSR Transit Cargo to/from Japan



companies also use Finnish bonded warehouses, but the All Water route is generally used for transport to Finland. The reason for this situation is that the rates for container transport between Japan and Europe are considerably cheaper than in the case of containers transported between Europe and the ROK and China, with transport via the TSR route comparatively more expensive. Moreover, the route lacks efficiency, as there are only two services each month between Japan and Russia. In contrast, there are more than three sailings each week between the ROK and Russia; fares are said to be cheap due to the fact that several companies compete on this route.

### Factors Contributing to the Boom

Why is the TSR route flourishing? There are several conceivable factors:

#### i) The booming Russian economy

Russia's GDP grew by 7.3% in 2003. The Russian economy has been rejuvenated by the sharp increase in energy prices and consumer demand is also booming. Recently, Russia—known along with China, India and Brazil as one of the BRICs economies—has been the focus of attention as an up-and-coming emerging market. In addition, there is a complementary relationship between the industrial structure of Russia, whose strong suit is energy,

and those of the ROK and China, which excel in the production of consumer goods; the environment needed for expanding mutual trade is therefore already in place. Incidentally, exports from China to Russia in 2003 totaled \$6 billion, an increase of 71.4% on the previous year. Most of the clothing, shoes and miscellaneous goods sold in Moscow markets are made in China, while the markets of Far Eastern Russia are flooded with fruit and vegetables produced in China. Many of the household electrical appliances sold in Russia, such as televisions and white goods, are made in China or the ROK. Japanese-made goods seem comparatively expensive.

#### ii) The steep rise in All Water fares

The keywords in talking about the East Asian economy in the first half of 2004 are “special procurement demand in China”. With China's accession to the WTO in 2001, inflows of foreign direct investment gathered momentum and domestic investment in state mega-projects is now increasing sharply. It is said that investment in such vast projects as the 2008 Beijing Olympics, the 2010 Shanghai Expo, the development of the western region of the country, the construction of the Three Gorges Dam and the development of China's northeastern region totals almost 30 trillion yen.<sup>2</sup> Demand for the resources required for these projects is benefiting economies around the world,

<sup>2</sup> *Economist* (Japanese weekly magazine published by Mainichi Newspapers), 17<sup>th</sup> February 2004 edition.

including Japan, but at the same time, the rapid increase in demand is triggering increases in the prices of raw materials and a steep rise in international marine transport fares. In fact, there are those who say that there are not enough ships and that it is not possible to obtain space on container ships.

Until now, when comparing the various modes of transport between East Asia and Europe, it has been said that although the TSR route is faster than the All Water route, it is comparatively more expensive. However, if charges on the All Water route increase and it becomes difficult to secure space, the perception that the TSR route is comparatively more expensive will lessen and it would be understandable if cargo were to shift onto that.

### iii) Increased speed on the TSR route

The electrification of the small section of railway in Primorsky Territory (175km between Sviyagino–Guberovo) that had yet to be electrified was completed in December 2002, making transport along the TSR smoother. Cargo takes 12 days to travel from Vostochny to Buslovskaya on the Finnish border. In addition, block trains run between Vostochny and Almaty in Central Asia, taking 10 days to complete the journey. A strategy of using speed as a weapon to take the lead over rival routes has been adopted.

## **Prospects for the Future**

Will the TSR continue to flourish in the future? Developments will be determined by a number of factors.

### i) Will the Russian economy continue to be a driving force?

Developments in the Russian economy will be affected by the market price of energy, which is the country's main export. It is said that there are no factors that will cause a fall in energy prices in the short term, so Russia's economy is likely to continue to grow and remain the focus of attention as an emerging market. In particular, imports from China are likely to expand.

### ii) Developments in competing routes (All Water, TCR, Mongolia route, etc.)

The TSR route is already being exposed to competition with rival routes and developments in this area are attracting attention.

At present, the All Water route is booming, but many in the marine transport industry feel that this situation will not continue indefinitely. The history of the marine transport industry has been a cycle in which the number of vessels has been increased when the industry has been experiencing a boom, only to find that there is excess capacity a few years later. In fact, given the current boom, Japan's three major marine transport companies are planning to invest more than one trillion yen over the next 4–5 years.<sup>3</sup> It is possible that there will be excess supply by the time these ships have been built, and that marine freight charges will have dropped. If this happens, there is a

possibility that the TSR will seem more expensive in comparison.

The Trans-China Railway (TCR), which is a competing route to Central Asia, is also aiming to improve facilities and reduce journey times. Of the 4,100km of track between Lianyungang Port and Alashankou, 76.6% is double-track, but only 28.8% is electrified. China Railways is formulating a plan to increase the length of such sections.<sup>4</sup> Japanese cargo bound for Central Asia already mainly uses the TCR and use of the TCR for cargo from the ROK is also on the rise. Competition in the future will center on the issue of which route to use: the TSR or the TCR.

The Mongolian route, which runs via Tianjin, Ulaanbaatar and Ulan-Ude and links up with the TSR, could become an alternative route as well. If the Mongolian route were used, cargo currently transported to Finland or Moscow via the Tianjin–Busan–Vostochny–TSR route could be transported to its destination faster and via a shorter route.

### iii) Transport capacity and price-setting on the TSR

Capacity becomes a problem when the volume of cargo increases. Some are of the opinion that the TSR has a capacity of 200,000–300,000 TEU annually, but there is no concrete evidence to support this theory. However, past experience suggests that the pace of transport via this route will slow if the volume of cargo rises sharply. It is not clear whether this is due to the transport capacity of the railway or the capacity of facilities for transshipping cargo from ships to trains. It is necessary for the Russian side to take action in preparation for a future rise in cargo volumes.

Moves were also made to increase rail charges in late 2002 and early 2003. In the autumn of 2003, Russian Railways was de-nationalized, while fares were increased in the form of the convoy charge, which was introduced to ensure the safety of the cargo. It is feared that charges may be increased further in the future, as the privatization of Russian Railways progresses.

### iv) Will Finland transit continue?

The transport of cargo from East Asia to Russia via Finland has continued for more than a decade, with the aim of avoiding risk. Japanese companies use the All Water route to transport cargo to Finland, but ROK companies combine use of the TSR and the All Water route. The advantage of transit via Finland is said to be that it is more beneficial in terms of the customs aspects than entering Russia directly via ports in the Russian Far East. Piecing together what has been said by those with links to the industry, it seems that customs officers fiddle the invoices and reduce the amount of customs duty to be paid in the case of Russian trucks crossing the border from Finland to Russia. In addition, Finland has easy-to-use bonded warehouses and there is also the effect of rail transit charges that have been set far lower than the charges for bilateral transport. As a result, the neighboring country of

<sup>3</sup> *Nihon Keizai Shimbun*, 24<sup>th</sup> December 2003.

<sup>4</sup> Li Qunren, *The Technical and Operational Condition of the Trans-China Railway*, a presentation at the *Eurasian Land Bridge Railway: Approaches to Efficient Utilization* symposium held in Seoul on 17<sup>th</sup> November 2003.

Finland is reaping great economic benefits. However, one cannot guarantee that transport via this artificially circuitous route will continue indefinitely. Those with links to the industry in Finland are beginning to worry about the future viability of the route. There are those who believe that corrupt customs practices will be abolished if Russia joins the WTO.

v) Is there any possibility that Japanese cargo will return to the TSR in earnest?

Even though Japanese cargo volumes picked up in 2003, is there any hope that this rise will continue in the future? Some with links to the industry are of the opinion that, if the sharp rise in marine freight fares and the lack of freight space continues, Japanese cargo (mainly bilateral cargo) may well increase. However, marine freight fares between Japan and Europe are still cheaper than fares from China and the ROK, and there is a deep-seated sense that the TSR route is comparatively expensive in the field of transit transport. Furthermore, as many Japanese manufacturers of household electrical appliances have moved their production bases overseas, the volume of cargo being transported to Russia from production bases within Japan is limited and it is thought unlikely that the

boom experienced in the 1980s will be repeated.

vi) The effects of the shift of ROK manufacturing industry overseas

At present, the ROK's manufacturers of household electrical appliances are increasingly expanding into China. Direct investment in China on the part of investors from the ROK outstripped that of investment from Japan in the first quarter of 2004. For example, Samsung has built plants in Tianjin, Qingdao and Yantai, LG has built plants in Shenyang, Tianjin, Shanghai, Nanjing and Yantai, and Daewoo has built plants in Tianjin and Yantai. Manufacturers from the ROK entrust exports from their Chinese plants to forwarders from the ROK, with exports destined for Russia being transported via the TSR route, just as in the case of exports from plants within the ROK. Accordingly, it is thought that there will not be much of an effect on TSR business as a whole, as long as ROK businesses continue to shift their production bases to China. However, if companies from the ROK opted to produce goods destined for Russia in Southeast Asia or Europe, the situation would change and the ROK would tread the path previously taken by Japan.