

Japan and the ROK's Involvement in International Container Transportation Using the Trans-Siberian Railway

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1 Introduction

Japanese use of the Trans-Siberian Railway (TSR) for container transportation has been declining for more than 10 years. This downward trend can be seen both in transit use (Siberian Land Bridge: SLB) and bilateral use (to/from Russia and CIS countries). Since 1998, ERINA has been working to investigate the reasons for the decline, in order to assist the expansion of TSR business¹. Our studies suggest that Japanese consignors, forwarders and shipping companies believe that it would be extremely difficult to revive SLB business, as it has lost economic competitiveness over the Deep Sea route due to the dramatic reduction in the cost of using the latter, and also because of a lack of confidence in the SLB, arising from past problems.

However, the total volume of international container cargo using the TSR has been growing, and both the Russian Ministry of Railway and Far Eastern ports have a positive outlook on international usage of the TSR. This is because Korean and Chinese cargoes are making a significant contribution to TSR business. It is difficult to understand why Japanese interested parties have a negative attitude to using the TSR when the Koreans are positive about it. This paper compares the attitudes vis-a-vis the TSR of Japanese consignors, forwarders and shipping companies compared to their Korean counterparts, and presents a proposal for a means of revitalizing Japanese use of the TSR, which is currently stagnating.

Since the historic North-South summit meeting held in 2000, the reconnection and revival of the Trans-Korean Railway (TKR) has been the focus of attention. Furthermore, the idea of connecting the TKR and the TSR to replace the current maritime shipment section between the ROK and the Russian Far East, thereby making rail transport from the ROK to Europe possible, is being promoted. The possibility of connecting the TKR and the TSR and using the link for through transportation will be discussed later.

2 Major TSR routes and their competitive environment

At present, four types of international route that utilize the TSR are in use.

- 1) *European Transit*: Japan/ROK ~ Russian Ports ~ TSR ~ Finland (cargo is temporarily stocked in Finnish bonded warehouses and will mostly be exported to Russia): It takes about 15 days from Vostochny to Finland (about 10,000km) by rail, and 20 days from Busan to Finland. This route is not used for other destinations within Europe, as it lacks competitiveness in terms of both cost

and time.

- 2) *Afghanistan Transit*: Japan/ROK ~ Russian Ports ~ TSR ~ Central Asia ~ Afghanistan
- 3) *Central Asia*: Japan/ROK ~ Russian Ports ~ TSR ~ Kazakhstan ~ Uzbekistan
- 4) *Russian Bilateral*: Japan/ROK ~ Russian Ports ~ Russia

The first two routes are defined as 'transit', since cargo just passes through the former Soviet Union countries; these are often called the 'Siberian Land Bridge' in Japan. The latter two are defined as 'bilateral' transportation. The third route is treated as bilateral under a tradition dating from the Soviet era, although the cargo just passes through Russian territory. Railway tariffs differ between 'transit' and 'bilateral' transportation, and the customs clearance procedures and time required are also different. For instance, customs clearance for 'transit' cargo takes one or two days, while bilateral cargo requires 3 to 4 days at Vostochny Port. Containers owned by Russian Railway can only be used for bilateral cargo.

Transit container transportation using the TSR started in the 1970s and cargo volume has grown quickly since Vostochny Port was constructed in 1975. The volume of transit container shipments from/to Japan exceeded 110,000 TEU in 1983, the peak year. The strength of the SLB at that time was its fares, which were far lower than the Deep Sea route. Additionally, the SLB carried a large volume of cargo to Iran in the 1980s. However, shipments to Iran ended in 1994. In the same year, shipments to Afghanistan started and later became the main cargo among westbound shipments. From the late 1980s, SLB cargo, especially European transit, to/from Japan gradually declined. This downward trend in cargo to/from Japan was particularly significant after 1991, following the dissolution of the Soviet Union.

Initially, Japanese cargo accounted for the better part of SLB cargo; Korean and Taiwanese cargo was just tacked on to the Japanese one for transportation to Far Eastern ports. However, as the ROK grew as an exporter of industrial products and further established a diplomatic relationship with Russia (Soviet Union), the ROK opened an independent shipping route between its own ports and Russian Far Eastern ports in 1992. Thereafter, ROK cargo grew steadily while Japanese cargo, which had been blazing a trail, declined year by year.

Each of the abovementioned four routes has competitors and consignors choose the route depending on cost, shipping time, frequency of service and reliability.

With regard to European transit, the largest competitor is the Deep Sea route between East Asia and Europe. It takes 30 to 35 days by sea, while the TSR route takes only

¹ Hisako Tsuji, *International Cooperation for Revitalizing the Trans-Siberian Railway*, ERINA REPORT Vol. 28, June 1999

20 days between Japan/RDK and Finland. The strength of the Deep Sea route is its low-cost service, which has been achieved through the introduction of huge container ships with more than 6,000 TEU of capacity.

The main competitor of the Afghanistan route is the route via Iran². This involves shipping cargo by sea to Bandar Abbas, then overland to the western part of Afghanistan. The Iran route has been actively used since 2000. Most Japanese cargo has moved to the Iran route since it is more than \$1,500 cheaper than the TSR route. However, some consignors still use the more reliable TSR route, since transport along the Iran route has been interrupted in the past due to the political situation. The major cargoes transported to Afghanistan are tires and used auto parts.

An alternative route to Central Asia via China is called the TCR (Trans-China Railway) in Korea and the CLB (China Land Bridge) in Japan. The CLB connects the Chinese port of Lianyungang with Kazakhstan by means of the Chinese railway. Transshipment has to be conducted at Druzba due to the gauge difference between China and Kazakhstan. However, this route is broadly used for cargo from Japan since there are three journeys a week to Chinese ports, versus two a month on the TSR, and the cost is competitive depending on the destination.

Does the railway have any competitors for the Russian bilateral route? There are, in fact, several alternative routes to Moscow. For instance, Finland transit is often used for shipments from East Asia to Moscow. On this route, export goods, such as electrical appliances from the ROK or Japan, are stored in bonded warehouses located at ports near the Russian border, and are shipped out when orders from Moscow are received. These goods are transported to Russia in Russian TIR-licensed trucks, and are distributed throughout the country, including the Far East, as well as Moscow and St. Petersburg. One of the reasons for choosing the Finland route is that import tariffs for goods imported via Finland are reportedly lower than for goods arriving via Far Eastern ports³. The existence of user-friendly bonded warehouses is another reason. A further advantage is that the railway fare for transit cargo is set much lower than that for bilateral cargo. There are two competing routes to Finnish bonded warehouses: the TSR European transit route, and the Deep Sea route.

3 Trends in Japanese and Korean cargo volumes

1) Comparison of cargo volume in 2001

I will now compare the current volume of containers using the TSR. Since there is no officially published data regarding TSR usage, it is necessary to gather data from forwarders, shipping companies and ports. However, the assembled data are not always consistent, possibly due to the existence of huge empty containers. I will try to follow the broader trend, leaving aside minor inconsistencies.

Both Vostochny and Vladivostok ports handle TSR cargo.

According to the data provided by VICS (Vostochny International Container Services), Vostochny Port handled

72,701 TEU in 2000, and 89,917 TEU in 2001, a 24% increase. Looking at the type of cargo, 54% was transit, 26% was Russian bilateral, 8% was bound for Central Asia, and 11% was empty containers. Cargo from the ROK accounted for the largest share (77%), experiencing an increase of 13% between 2000 and 2001. Chinese cargo was second (12%), outstripping Japan and recording a twelve-fold increase on the previous year. A route between China (Shanghai) and Vostochny opened in October 2000. Additionally, some Chinese cargo is transhipped at Busan and counted as Korean cargo. Therefore, the volume of Chinese cargo is larger than one would assume from the figures published. Most Chinese cargo seems to be shipped to Russia via Finland. It has been pointed out that this shipment is inefficient, since Chinese cargo tends to be a one-way westbound shipment. It is possible to use the railroads of both countries as an export route from China to Russia, so why is the longer route via Shanghai and Vostochny chosen? It may be that China's domestic railway has capacity or speed problems, or that transshipment from standard gauge to wide gauge is a problem. On the other hand, Japanese cargo declined 6% between 2000 and 2001 and the share (11%) is now lower than that of Chinese cargo. In the short term, the growing Russian economy could be one of the reasons for the increase in Korean and Chinese cargo.(Table 1)

7,400 TEU of containers (excluding empty containers) were handled at Vladivostok Port in 2001, all of which contained Korean cargo and the vast majority of which was bilateral cargo.

Combining the data for both ports, we can conclude that the total volume of TSR containers is about 100,000 TEU, including empty containers; 80% of the cargo is Korean, 10% Chinese and 10% Japanese.

2) Business trends in Japanese cargo

On the Japanese side, data for Mitsui O.S.K. Lines, which has monopolized shipping services between Japanese and Russian ports, is available, which show developments in both transit and bilateral transport. Since Korean cargo is included up to 1991, looking at the shipment data from 1992 gives a more accurate picture of the situation. It should be noted that this data still includes some Taiwanese cargo. According to this data, although more than 60,000 TEU of containers were shipped to/from Japan in 1992, the volume declined year by year, and in 2001 the volume was less than 10,000 TEU. The decline in transit cargo is particularly noticeable. (Fig. 1)

As far as transit containers are concerned, the Trans-Siberian Intermodal Operators Association of Japan (TSIOAJ) holds data for a number of years. It should be noted that these data only include shipments by member companies, so they do not present a complete picture. The data are valuable in understanding long-range trends, even if they do not cover all the shipments. According to the TSIOAJ data, transit volume has been declining since reaching the 110,683 TEU mark in 1983; the volume was only 2,238 TEU in 2001, representing only 2% of the peak

² Hisako Tsuji "SLB Shipment Trend in 2000", ERINA Information, March, 2001

³ According to reports from forwarders, a form of smuggling is widely conducted at the Finnish-Russian border.

period. (Fig 2)

With regard to the composition of Japanese cargo, the major westbound transit items are electrical appliances, office machines and tires, while log houses form the main eastbound cargo. Major bilateral import cargo includes chemical goods and aluminum ingots, while auto parts form the main bilateral export cargo.

Following the decline in cargo volumes, the frequency of services between Japanese ports and Vostochny decreased from three times per month to twice monthly, beginning January 2002. TSR has become a much less convenient route for consignors.

The reasons for the decline of Japanese cargo can be

summarized as three points.

Firstly, the TSR route lost its cost competitiveness as a route to Europe, because of the drastic reduction in the marine fares of the Deep Sea route, resulting from the introduction of huge, fast high-tech ships. In recent years, the TSR route has been more expensive than the Deep Sea route, even between Japan/the ROK and Finland. Furthermore, some Japanese forwarders complain that the Russian Railway does not provide containers for transit cargo, thus the fee for leasing the container is added to the total cost.

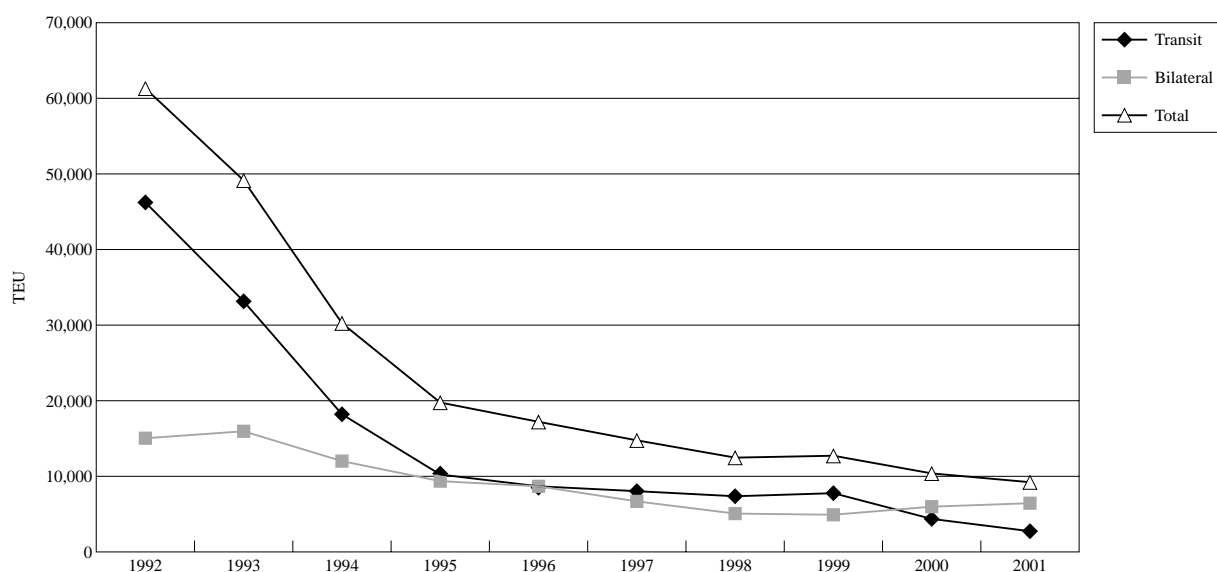
Secondly, following the dissolution of the Soviet Union, the TSR suffered security problems and unstable

Table 1. Volume of Containers Handled at Vostochny Port (TEU)

	ROK	Japan	China	Others	Total
2000	61,282	10,344	928	147	72,701
2001	69,198	9,765	10,864	90	89,917

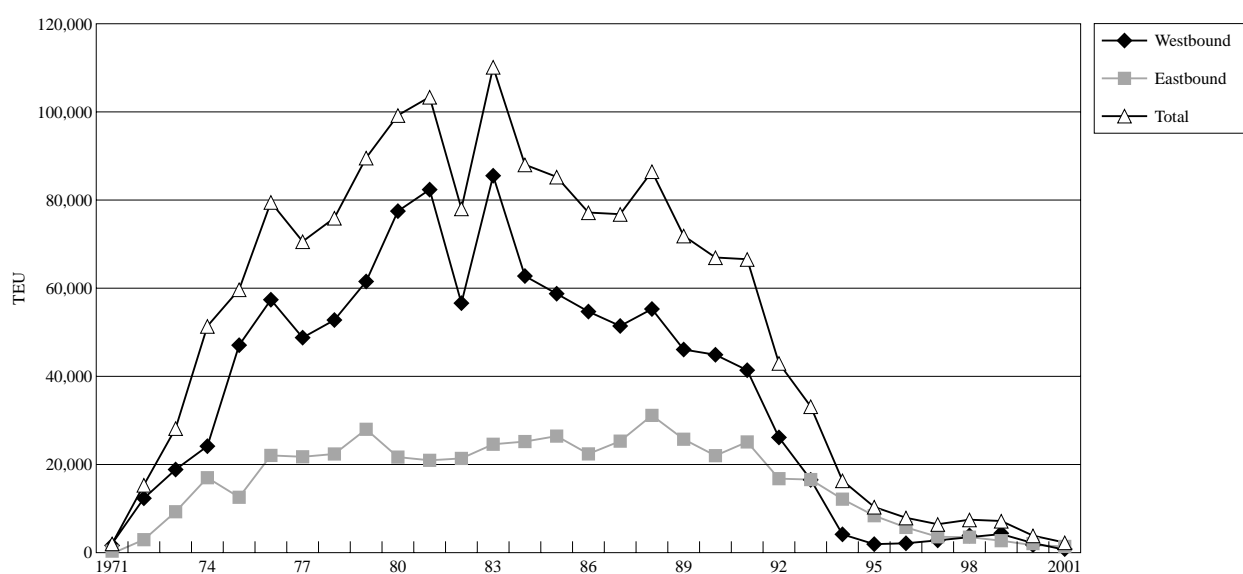
Source: VICS

Fig 1. Trend of TSR cargoes to/from Japan



Source: Mitsui O. S. K. Lines

Fig 2. TSR Transit Containers to/from Japan



Source: TSIOAJ

operating times due to weakened management functions. Cargoes were reported missing or stolen during the early 1990s. However, these operational problems have been solved as the political and economic situation has improved in Russia. Many Japanese consignors, however, still see the TSR as unreliable.

Thirdly, exports from Japan to Russia have decreased due to Japanese manufacturing companies relocating factories to such low-cost sites as China or Southeast Asian countries. In the case of electrical appliances for the Russian market, Korean products are more price-competitive than Japanese products. As a result, Japanese exports have decreased, while Korean and Chinese exports have increased.

3) Business trends in Korean cargo

It is even harder to find systematic data for Korean cargo. According to Hyundai Merchant Marine Co., LTD (HMM), TSR cargo to/from the ROK increased from approximately 25,000 TEU in 1991 to 83,000 TEU (3.3 times) in 2001. They also forecast that the volume would reach 100,000 TEU in 2002 (Table 2). Since the ratio of westbound to eastbound is 7 to 3 in the Korean case, dealing with empty containers is a problem, and many empty containers are returned by rail.

Table 2. **TSR Container volume to/from the ROK (TEU)**

	Westbound	Eastbound	Total
1991	15,000	10,000	25,000
1996	40,000	23,000	63,000
1999	35,000	17,000	52,000
2001	57,000	26,000	83,000
2002 (projection)	72,000	28,000	100,000

Source: HMM

According to a shipping company, 49% of total cargo was transit, and 51% was bilateral in 2001. In addition, 70% was westbound and 30% was eastbound. Interestingly, 16% of transit cargo was from China. This was picked up at such Chinese ports as Tianjin, Dalian and Hong Kong by Korean forwarders and transshipped at Busan. The major consignors are Korean companies who have factories in China.

The main items shipped are various electrical appliances exported to Russia via Finland, chemical ingredients (resin for plastic) bound for Moscow and goods for Korean companies that have invested in Central Asia⁴. Since there is less eastbound than westbound cargo, forwarders are making efforts to book eastbound cargo. For example, pulp from Finland, chemicals from Russia to China, and cotton from Central Asia are shipped as eastbound cargo.

4 Efforts by the ROK transportation industry

I pointed out three reasons for the decline of Japanese

cargo in the previous discussion. Of the three factors, the ones regarding price competitiveness and reliability should be common to both Japan and the ROK. Nevertheless, Korean cargo has grown consistently, while Japanese cargo has declined year by year. How can we explain this difference?

1) Efforts by Korean forwarders

Korean forwarders are actively creating a favorable business environment for consignors where a faster service is available at a reasonable price.

a) Abolishing the monopoly in the marine shipping service

The marine shipping service between Busan and Russian ports was a monopoly held by Transorient Shipping Co, Ltd.⁵ for many years. Similarly in Japan, the marine shipping service is a joint monopoly held by Mitsui O.S.K. Lines and FESCO. Due to the initiative of Korean forwarders, the marine shipping service market was activated by means of the entry of new shipping companies. From the summer of 2001, three or four companies entered the market using Chinese vessels. At present, five companies are competing with each other. As a result, freight tariffs have been halved and the service frequency increased, with vessels leaving on Thursdays as well as Fridays.

b) Obtaining volume discount

Major forwarders have obtained volume discounts for railway fares by means of negotiating with the Russian Railway. The discount rate varies depending on the volume and season. This contributes to reducing costs.

c) Supplying containers

Major forwarders own or lease containers and supply them to consignors at a reasonable rate. For instance, in the case of forwarder A, the company invested 10 billion won and is in possession of 23,000 TEU of containers, including those that are under contract. In Japan, lease containers are used since forwarders do not usually own containers.

d) Collecting Chinese cargo

Korean forwarders pick up Chinese cargo at Chinese ports such as Dalian, Tianjin, and Hong Kong, then transship at Busan for shipment along the TSR route. By adding Chinese cargo, the increased total volume will lead to lower costs.

e) Operating bonded warehouses in Finland

Major forwarders have bonded warehouses in Finland near Russian border, to be used for shipments to Russia. Forwarder B has a bonded warehouse at Hamina and stores Japanese as well as Korean cargo.

f) Confidence in the TSR

All of the Korean forwarders express strong confidence in the TSR. They said that, "the TSR was terrible five years ago, but is reliable now." For instance, forwarder A says about shipment to Central Asia that, "the TSR is reliable, but the TCR has problems, such as the lack of a tracking system, irregular operation, transshipment and inspections in China."

⁴ Daewoo Motors has a motor plant in Tashkent, and LG Electronics has a TV plant in Almaty.

⁵ Transorient Shipping Co., LTD provides the marine shipping service between Busan and Far Eastern ports, as an agent of FESCT and Hyundai Merchant Marine Co., Ltd.

2) Efforts by shipping companies

Although some shipping companies have been enjoying monopolistic profits for years, it does not necessarily mean that their service is poor. Korean shipping companies actively provide containers. According to HMM, although only SOC containers provided by forwarders were used before May 2000, since then it has also been using its own containers. As of March 2002, 15-20% of containers used on the TSR route are now provided by HMM, with the remaining 80% or so estimated to be SOC containers. In the case of Japan, shipping companies do not provide their own containers.

3) Consignors' attitudes: speed appreciated

Korean consignors have confidence in the TSR, unlike Japanese consignors. They did experience security problems in the early 1990s. These problems, however, have been solved in the past five years and the transport time is reported to be stable now. According to Korean forwarders, the main reason why the Finland transit route is widely used is that, although the route is more expensive, it is faster than the Deep Sea route. The TSR route can deliver in 20 days from Busan to Finland, while the Deep Sea route requires 30 to 35 days. Many Korean consignors try to ship faster and make a profit by collecting the proceeds quickly.

According to an electrical appliance maker E, the TSR route charges \$2,900/40f from Busan to Finland, while the Deep Sea route costs \$2,400/40f, which is \$500 cheaper than the TSR route. The company divides its custom 50:50 between the two routes, deciding which to use on the basis of the urgency of each shipment.

Company F, which has a plant in Central Asia, has praised the route, saying that, "although the TCR is less costly, shorter and faster, the TSR is more reliable."

4) TSR issues in the ROK

Korean use of the TSR appears to be very successful. However, there are issues to be tackled and some people are concerned about the future of the route.

- a) The use and distribution of empty containers is a headache for forwarders and shipping companies because there is an imbalance between westbound and eastbound Korean and Chinese cargo and containers tend to accumulate in Europe. If this is not coordinated smoothly, forwarders' profits will be squeezed. According to forwarder B, of the 2,000 FEU handled in 2001, 500 to 600 FEU were empty containers. In fact, a Japanese forwarder, which used to do business extensively using the TSR in the 1980s, eventually went bankrupt due to the poor positioning of a large number of its own containers.
- b) Many of Korean export companies still have manufacturing plants in Korea. However, if Korean exporting companies relocate their major plants to China or Southeast Asia, as Japanese companies have done, the quantity of Korean export goods will decrease.
- c) On the European transit route, severe cost competition with the Deep Sea route will continue. If the fare for the Deep Sea route declines further once the plan to introduce even larger ships is implemented, more cargo

may shift from the TSR to the Deep Sea route. The TSR route may be able to counter the increased competitiveness of the Deep Sea route by means of increased speed as well as further cost reductions. In order to speed up the TSR, technological improvements will be necessary on the Russian side. One Japanese forwarder has said that, "The TSR could be used if it took only 2 weeks from Japan to Finland."

- d) Korean forwarders also have complaints about the Russian side, with regard to such problems as a shortage of wagons, a seasonal shortage of containers supplied by the Russian Railway, and frequent changes of bilateral rail fare. The need for technological investment has been pointed out by an insider from Russian Railway.

5 Towards cooperation between Japan and the ROK

1) Japan could learn from Korea's success

It is encouraging that cost reductions and improved service have been realized in the ROK as a result of efforts by forwarders and shipping companies. Is it possible to make similar efforts and revive business back in Japan? It may take time to get results, but it may be worth trying the following measures:

- a) Strengthen service within the marine shipping element. Possible services provided by shipping companies include reviewing fares, providing their own containers, and increasing the frequency of shipping services. If the shipping frequency is increased from the current twice per month to a weekly service, consignors may feel the TSR route to be more convenient. In order to improve the service as a whole, including the rate charged, it will be desirable to eliminate the monopoly in the marine shipping market and encourage new entrants, in order to create a more competitive environment. The entry of foreign shipping companies from China or the ROK should be permitted.
- b) The cost of leasing containers has been said to be one of the reasons for the high cost in Japan. It may be possible to provide containers owned by shipping companies and forwarders.
- c) In order to boost confidence in the Russian Railway among Japanese cargo owners, it may be useful for forwarders and shipping companies to cooperate with their Russian partners in running a campaign promoting the TSR route. Specifically, this could take the form of undertaking trial shipments and applying special rates for a certain period.

2) Cooperation by Japanese and Korean forwarders

It may be possible for Japanese and Korean forwarders to cooperate with each other in shipping Japanese cargo to Busan and transshipping onto the TSR route. If Korean and Japanese cargo is combined, volume discounts and low marine fares could be applied. It might be possible to use containers owned by Korean forwarders. In fact, some Korean forwarders are interested in the Japanese market. Some of them are looking for opportunities to cooperate with Japanese forwarders, and one is preparing to open a branch in Japan. As mentioned before, the Koreans have already been successful in collecting Chinese cargo and

transshipping it at Busan. They seem to think that a similar operation could be possible for Japanese cargo. The key point will be whether cost-conscious Japanese consignors find the more expensive but faster TSR route to be good value.

6 Future possibilities for connecting the TKR and the TSR

A collaborative effort between South and North Korea to link the railways along the west coast of the Korean Peninsula (Gyeongui Line) is currently underway. Another possible future project is connecting the railways of the North and South along the east coast (Gyeongwon Line). The aim of these ideas is said to be the somewhat fantastic goal of connecting the TKR and the TSR, and linking them to the European railway network. In addition to introducing the TKR concept, I will discuss the possibilities for linking it to the TSR.

1) TKR plan: Gyeongui Line

The idea of connecting the missing section of the TKR was one of the agreements made during the historic North-South summit meeting held at Pyongyang in June 2000. The Gyeongui Line, running along the west coast of the Korean Peninsula, used to be a trunk railway connecting Pyongyang, Seoul and Busan before the Korean War. Unfortunately, the railway was severed due to the division of the country, with 12km of track disconnected on both sides of the DMZ. Construction work began following the agreement to connect the missing parts. Although the ROK side has almost completed its share of the work, the DPRK side has not yet made a start. Furthermore, agreements by the Ministers of Defense of both sides are needed in order to undertake construction in the DMZ (2km+ 2km). Although a basic agreement on the project was concluded, actual construction has been delayed for various political reasons. However, in April 2002, when Mr. Lim Dongwon visited Pyongyang as the President's personal envoy, both parties reconfirmed their intention to promote the advancement of the project. It is hoped that progress will be made in cooperation between the North and South in the future.

A road is due to be constructed along the Gyeongui Line. If the railway and the road were completed, it should become quicker and easier to undertake mutual trade overland, rather than using marine transportation, as at present. In 2001, mutual trade amounted to about 700-900 thousand tons⁶, and the marine shipment cost between Incheon and Nampo was \$800~850/20t. If land transportation were realized, transportation costs could be cut.

In the second stage, the ROK and Northeast China will be linked overland. This means that trade cargo, currently shipped by sea via Dalian, may be transported overland. How much cargo and how many passengers will use the land route will depend on its competitiveness in terms of

time, cost and the complexity of procedures.

Many people engaged in the transportation business are skeptical about the possibility that the Gyeongui Line will be further extended to Russia and Europe. It is widely believed that transshipment at Manzhouli could reduce competitiveness, and passing through many countries could create problems.

2) Gyeongwon Line

Railways along the east coast of the Korean Peninsula are also divided between the North and the South and two possible linkage plans are being discussed. According to the Ministry of Construction and Transportation, the two ideas are 1) reconnecting and revising the Gyeongwon Line, and 2) constructing a new railway along the east coast.

The Gyeongwon Line, which runs from Seoul to the east coast, also used to be a trunk railway connecting Seoul and Wonsan, and has about 30km of track missing on both sides of the DMZ. If this missing part were connected, the railroad would become a link between Seoul and Primorsky via Wonsan, Rajin and the Tumangang. However, transshipment is needed between the DPRK and Russia due to the difference in rail gauge. Additionally, huge renovation is required, as the railway infrastructure of the DPRK is decrepit and the railway is mostly single track. Russia has conducted two feasibility studies, as it has a strong interest in establishing a connection to the ROK by modernizing the DPRK railways and restoring the Gyeongwon Line. However, the results have not yet been published. According to the Korean media, Russia and the DPRK conducted a joint study of the 700km between Tumangang, Wonsan and Pyunggang, which concluded that 130 tunnels and 742 bridges require immediate repair work, and that the total cost for repair work will be \$2.2 billion⁷. No meetings have yet been conducted between the North and the South regarding the Gyeongwon Line, and the ROK has positioned it as a secondary project after the completion of the Gyeongui Line.

On the other hand, a project aimed at constructing a railroad along the east coast, which would link the North and the South, is the focus of attention. This idea was included in the agreements concluded when Mr. Lim visited Pyongyang in April 2002⁸. According to the Korean press, it is planned that the northern part (Gangnung~DMZ, 127km) and the central part (Pohang~ Samcheok, 171km) will be constructed by 2010, completing the entire Donghae Line between Busan and the DMZ (502km). The estimated cost of construction is 1,854.2 billion won for the northern part and 2,441.2 billion won for the central part. This plan must still be agreed by the Inter-Korean Economic Cooperation Meeting⁹. However, there have been no reports regarding plans for construction or repairs in the DPRK yet.

It is not known why the idea of Donghae Line emerged while the idea of the Gyeongwon Line has

⁶ This information is based on hearings at the Ministry of Construction and Transportation of the ROK.

⁷ JoonAng Ilbo, April 8, 2002

⁸ JoonAng Ilbo, April 7, 2002

⁹ JoonAng Ilbo, April 30, 2002

suffered a retrograde step. One possible reason is that the Donghae Line would be easier to construct since it runs on flat land, while the Gyeongwon Line goes through mountain areas. Another point in its favor is that only a short section (18km) needs to be built, as the part between Wonsan and Unjon of the DPRK has already been constructed by a ROK company¹⁰.

3) Possibilities for connecting the TKR and the TSR

If the TKR is constructed, there may be a possibility for the TKR to be used for shipments to Europe, replacing marine shipments that take place at present. Some forwarders expect that the reconnected railway may be used for shipments to Europe or Central Asia.

At the same time, the shipping and port industries feel the idea of the TKR to be a threat to their existing business. If railways are connected between the ROK and Europe, there is a possibility that shipping companies, ports and lifting companies could lose business.

However, major forwarders think that it will not be easy to ensure the economic competitiveness of the TKR-TSR route. The reason is that Korean export industries are located in the southern part of the ROK, near Busan. Export products will have to be shipped more than 500km to the TKR in the ROK before passing through Wonsan, Rajin and Khasan. The domestic railway tariff in the ROK is fairly expensive, and the DPRK may charge a transfer fee. Transshipment is also required. Given the reduction in the marine tariff between Busan and Vostochny, it is a question of whether the TKR is competitive over the current marine route in terms of time and cost. The ultimate advantage will be that accelerated competition between the three alternative routes - the TKR and TSR combination, marine transportation combined with the TSR, and the Deep Sea

route - could end up providing users with faster and cheaper transportation routes.

7 Conclusions

- 1) Japan has many things to learn from the ROK regarding its use of the TSR. In the ROK, thanks to the efforts of active forwarders, faster services are available at a reasonable cost. They have taken such steps aimed at offering a reliable service to consignors as abolishing the monopoly in the marine transportation sector, providing containers, picking up Chinese cargo and obtaining volume discounts for railway fares. Shipping companies also provide containers and offer frequent shipping services. Japanese forwarders and shipping companies can learn from them.
- 2) There is a possibility of shipping Japanese and Korean cargo together by means of cooperation between forwarders from both countries. Some Korean forwarders are investigating the possibilities for collecting Japanese cargo.
- 3) The TSR routes are losing cost competitiveness, and in Japan, most cargo has shifted to more competitive routes. There is a possibility that the TSR will further lose business from the ROK in the near future. The Russian Railway needs to strengthen its competitiveness in terms of cost, speed and service. Superior speed, if attained, could become a strong weapon for the TSR in the future.
- 4) If the TKR is constructed and connected to the TSR, the ROK and Europe will be linked by rail. This means that alternative routes between the ROK and Europe will become available, and the best one, in terms of speed, cost and services, will be chosen by consignors.

¹⁰ The Korean company Taechang constructed a railway for a mineral water project.