Competitive Advantages and Disadvantages of Trans-Siberian Railway Route -Case study of Korea and Japan-

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Summaries

TSR (Trans-Siberian Railway) route is losing price competitiveness versus Deep Sea route in the transportation from East Asia to Europe, including Moscow. To further attracting the containers to the TSR route, it will be necessary (1) to keep competitive through rate, linked to fluctuating Deep Sea rate; (2) to strengthen speed advantage; (3) to enforce seamless transportation system, including simplified customs clearance procedures. In transportation to Central Asia from East Asia (Korea and Japan), TSR is competitive versus TCR (Trans-China Railway), depending on destinations. Korea has been the leader in revitalizing the TSR route since 2000. Key contributors were affluent export containers to Russia and Central Asia, port of Busan, efficient maritime transport network to Far East Russia, and Korean forwarders’ persistent efforts for activating the market. Korea and Japan have a possibility of cooperation in using the TSR route efficiently, such as organizing a joint block train to a same destination.

Keywords : Competitive through rate, Watershed, Seamless transportation system

1. Introduction

An International multimodal container transport system, using the Trans-Siberian railway has over 40 years of history as the shortest and fastest transport corridor, connecting East Asia and Europe. The TSR route is still expanding, though, experienced heaven and hell owing to political and economic changes during the 40 years. This paper analyzes how economic competitiveness has affected the rise and fall of the TSR transportation, with a special focus on Korean and Japanese cargo.

2. Overview of the TSR Transportation

2.1 Route overview and characteristics

TSR transportation is an international multimodal system for transporting containers, by linking the Trans-Siberian railway, other railways and maritime transport. Rail part is operated by rail operators, while shipping companies are in charge of maritime transport part. Forwarders package all the components and sell to consignors. As of 2013, following routes are operated regularly.

① East Asia –Russia Far East port – TSR – Moscow / Europe: Compete against the Deep Sea route.
② East Asia –Russia Far East port – TSR – Central Asia: Compete against TCR.

Additionally, new routes between Western China – Kazakhstan – TSR – Europe are being developed recently. The key strength of the TSR route is shorter distance and reduced transit days to Europe compared to the Deep Sea route. From Korea / Japan to Moscow, TSR route is 1/2 distance of the Deep Sea route, and the actual transit time is 25~35 days by TSR, while 40~55 days by Deep Sea route, nearly 2 weeks shortened.

Advantages of TSR over TCR in transportation to Central Asia is that transshipment is not required since Russia and Central Asian countries adopt the same gauge (1520 mm). TSR also has an advantage in on time delivery compared to the TCR.

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Potential risks of the TSR route are (1) possible unstable transit days due to existing discontinuity, such as transshipment at ports and customs clearance, (2) difficulties in securing economic competitiveness versus Deep Sea route.

2.2 Rail transport

Rail transport section between Vladivostok / Vostochny and Moscow is approximately 9,300 km, taking 11 days by block train. ‘TSR in 7 days’ project, an attempt to shorten the transit time from 11 days to 7 days has started on a trial basis in May, 2013.

Block train is a dedicated container train, composed of 100~150 TEU, running without formation changes until the final destination. Major operators of block trains are TransContainer and FESCO. There are two types of block trains, (1) open type targeting unspecified shippers, and (2) a charter train type, dedicated to a single consignor or a project. Former types of block trains depart from Vladivostok and Vostochny destined for Moscow, Novosibirsk etc. several times a week. The latter types of block trains are operated destined for automobile plants, following the manufacturing program. This type of cargo is called ‘Project Cargo’, and often offers discount rate for rail transport, due to the projected volume.

For example, block trains are operated from Vostochny destined for Tashkent several times a week, transporting auto parts for GM-Uzbekistan plant, originated from Korea. From Europe, BMW auto parts are transported regularly from Leipzig to China’s Shenyang via Zabaikalsk.

Transshipment is necessary when crossing the border between standard gauge (Europe, China: 1435 mm) and broad gauge (Russia/CIS, Mongolia, Finland: 1520 mm). Therefore, transshipment is conducted twice in the above BMW case, from Europe to Belarus and from Russia to China.

2.3 Maritime transport

Maritime transport parts link various East Asian ports of Korea / China / Japan and Vladivostok / Vostochny ports via feeder service. Vostochny and Vladivostok ports are Russian eastern gateway ports. Busan is the de facto hub port of East Asia, attracting containers from China, mainly northeast ports, and Japan. Shipping companies and feeder services between the Busan – Far East Russia ports are increasing, reflecting the growing cargo volume and opening of new Busan port. As of 2013, 14 ships of 9 international shipping companies, including MAERSK, CMA-CGM and APL, operate weekly feeder services between Busan and Far East Russia.

Feeder service between Chinese ports and Russia is also increasing, with the growing volume of Chinese cargo. As of 2013, 7~10 weekly services are operated by 5 shipping lines, including MAERSK and CMA-CGM, between Shanghai, Ningbo, Hong Kong and Russian ports.

On the other hand, direct feeder services between Japanese ports and Russian ports is limited with only 1~2 per week. Therefore, a fairly large volume of Japanese con-

![Fig. 1 TSR route](source: UNICO Logistics)
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Containers go to Russia via transshipment at Busan.

In 2012, container handling volume at Vladivostok port was 699,859 TEU, including 456,146 TEU at Commercial Port of Vladivostok (VMTP) and 144,700 TEU at Vladivostok Sea Fishing Port (VMRP), while 396,668 TEU of containers were handled at Vostochny Port (VSC). These containers are either (1) transported long distance by rail, (2) delivered to Far Eastern destinations by trucks, or (3) reloaded on domestic vessels (cabotage).

3. 40 Years of the TSR Transportation

3.1 ‘Land Bridge’ era (1970s~1980s)

TSR container transportation was founded in 1971 as a transit route between Japan and Western Europe / Middle East, using the Trans-Siberian railway. The route was called ‘Siberian Land Bridge’ (SLB), meaning a bridge across the Eurasian continent. At that time, Soviet Government set about 30% lower transit charges than the Deep Sea route to secure foreign currency. The low tariff was accepted favorably by Japanese shippers and the route was used actively for transporting export goods from Japan to Europe and the Middle East. The major export items were auto parts, chemical products, electric appliances and general machinery, while import items were chemical products, non-ferrous metals, malt, pulp & paper and wood products. Transport volume reached 110,683 TEU in the peak year 1983 (Fig. 2).

At that time TSR route had some weaknesses. For example, unstable transit days, container tracing, unsophisticated container positioning has been pointed out. Furthermore, in late 1980s, TSR’s price competitiveness got weaker.

3.2 Period of chaos (1990~1999)

Environment has changed since the collapse of the Soviet Union in 1991. First of all, a unified transportation system took apart and the system lost control which was necessary for organizing the smooth multimodal transportation service, because each member countries of Soviet Union became independent. In the macroeconomic policy, price liberalization was carried out, market was open, and invited severe inflation. Rail freight rate also soared dramatically. In addition, transportation safety was endangered, under chaotic economy and deteriorated public security. For example, theft, cargo damage and opening of the container during transport were reported frequently.

On the other hand, Deep Sea route, the major competitor of the TSR route, has strengthened economic competitiveness thanks to technological progress, introduction of large-sized ships and intensified competition among carriers. As a result, TSR lost service quality, economic competitiveness compared to the Deep Sea route and finally lost customers.

TSR container volume to/from Japan fell quickly from 86,870 TEU in 1988 to 16,373 TEU in 1994. Container handling volume at Vostochny Port continued to stagnate until 1999 (Fig. 3).

3.3 Revitalized ‘BRICs’ era (2000~2008)

Russian economy entered the stable period since President Putin made his first appearance in 2000. Russia walked on the growth path, receiving following wind of high energy prices. During this period, Russia was widely known as a member of BRICs. Middle class was formed in Russia, and electrical appliances made in Korea and China-made consumer goods were sold broadly.

TSR transportation also regained confidence and competitiveness, and Korea-made appliances and consumer goods were transported to Russia directly by TSR or via Finland transit. Further, as Korean auto manufacturers began local assembly in Russia, huge volume of auto parts
were transported to production sites by container block trains. Project cargo loading auto parts were highlighted by Russian rail industry.

Finland transit using the TSR was a tricky method, making crafty use of preferential fares granted to transit cargo, but was virtually ceased in 2006 due to the abolition of preferential tariff. Thereafter, Korean containers were transported to Russian market directly via rail or the Deep Sea route. China-made consumer goods, appliances and auto parts also headed for Russia using the TSR route, following Korea.

In this period, TSR route offered a comparable or a lower through rate versus the Deep Sea route, in transporting from Korea / China to Moscow region. Additionally, speed advantage of the TSR route was highly appreciated by shippers. Container trace became available, unlike 1980s. However, the TSR route was competitive only to Moscow region. The route was not used for transporting to European countries from Ease Asia due to lack of price competitiveness (Fig. 4).

TSR transportation volume increased significantly from 127,961 TEU in 2000 to 620,831 TEU in 2007 according to CCTT [1] (Fig. 5).

3.4 Lehman shock (2008~2009)

In the fall of 2008, ‘Lehman shock’ hit the world economy, particularly gave a big blow to the Russian economy. Financial sector was paralyzed and car sales, using consumer loans, suddenly slowed down. Car manufacturing was forced to stop, and supply of auto parts using the TSR route was suspended. Block trains disappeared from Vostochny port. Furthermore since the recession expanded to world-wide, Deep Sea rate fell significantly, therefore the TSR route lost price competitiveness versus the Deep Sea route. Customers naturally shifted from the TSR to Deep Sea. Panicked TSR operating companies lowered the TSR through rate from the spring of 2009 to prevent customers from leaving the TSR route. The recession continued until the end of 2009.

The container handling volume in 2009 at Vostochny port fell by 60% versus the previous year (Fig. 4). According to the CCTT, TSR container volume declined by 56%, from 2008 to 2009 (Fig. 5).

3.5 Recovery process (2010~)

With the gradual economic recovery of Russia, containers returned to the TSR route from 2010. The total volume of the TSR transportation in 2012 reached the level before the ‘Lehman shock’. According to the CCTT, the total volume recovered to the pre-crisis level in 2012.

Interestingly, some structural changes were observed before and after the ‘Lehman shock’. Regarding the origin and destination of containers, China became the main origin of TSR cargo. According to the CCTT statistics regarding the bilateral cargo between East Asia and Russia, ratio of Chin: Korea: Japan was 70: 21: 9 in 2012. In addition to those shipped from Shanghai, Ningbo and Hong Kong to Vladivostok / Vostochny, direct railway shipments from Northeast China via Manzhouli / Zabaikalsk to TSR, increased extensively since opening a transshipment sta-
tion at Zabaikalsk in 2008. Furthermore, Korean companies as well as Japanese relocated their manufacturing sites to China. For instance, more and more electrical appliances of Korean and Japanese brands, sold at Moscow supermarkets, are declared as ‘made in China’ (Fig. 6).

Since the second half of 2012 fairly large volume of Korean cargo destined for Moscow shifted from the TSR route to the Deep Sea route, due to decline of Deep Sea charge. On the other hand, large volumes of auto parts are transported from Korea to Central Asia by the TSR. Central Asia is a growing market for the TSR. One of the reasons is that transit time of TSR is more stable than the TCR.

3.6 Lessons from history
Looking back the 40 years of TSR history, it is obvious that competitive through rate versus Deep Sea route is necessary. The more competitive and stable the pricing was, the larger the catchment and delivery area of the TSR route was. In 1970s~1980s, entire Europe was delivery area of the TSR route. However the target area got smaller as economic competitiveness declined. Since 2000, the competitive delivery area is limited to as far as Moscow from Korea.

The TSR route no longer has competitive edge for transportation to St. Petersburg from East Asia. Asian automakers such as Toyota, Nissan and Hyundai have manufacturing facilities at St. Petersburg, but all use the Deep Sea route for transporting auto parts from East Asia. Initially, Russian Railways expected that Asian auto makers may use the TSR route for transporting parts from Korea or Japan, but have given up by realizing that the TSR route is not competitive versus the Deep Sea route.

Shippers are very sensitive to price gap. Thus, competitive through rate is necessary for attracting stable cargo, paying particular attention to fluctuation Deep Sea charge. In other words, TSR is required flexible tariff setting to keep price competitiveness versus the Deep Sea route.

Speed advantage of TSR is attractive but shippers are not willing to pay much money in exchange for faster delivery. At the same time the route is required security, container tracing, seamless transshipments and customs clearance at ports, and on-time delivery.

4. Economic Competitiveness of the TSR Transportation

4.1 Price competitiveness to Moscow (in the first half of 2013)
The main components of the TSR transportation charge are (1) ocean tariff to the Russian Far East port, (2) railway tariff and (3) port charges. Among these, (1) and (3) are fairly stable, while railway tariff is determined in parallel to commodity price index, by Russian price regulatory agency. In fact, railway fare is stable and hikes less than 10% every year.

In the meantime, the main components of the Deep Sea route are (1) ocean tariff to Baltic port, (2) trucking fee from the port to Moscow, (3) port charges. Among these, (2) and (3) are stable, while ocean tariff to Europe fluctuates greatly depending on the market condition.

For example, container spot tariff from Shanghai to major European ports was about $1,900 / TEU in April 2012, but has declined from the second half on the year, and dropped to nearly $500 / TEU in June 2013. However, the tariff is growing again and was about $1,500 / TEU in August (Fig. 7).

Therefore, through rate of the Deep Sea route fluctuate vigorously while TSR rate is relatively stable, generating frequent changes of relative economic competitiveness of both routes. For instance, TSR route was cheaper than the Deep Sea route in the spring of 2012, but a year later, Deep Sea route was much cheaper than the TSR route. As of first half of 2013, standard charge from Korea to Moscow via TSR route was higher than the Deep Sea route for $1,000 / FEU. So many Korean shippers switched to inexpensive Deep Sea route. Korean companies use both routes for transporting to Moscow. The ratio of the Deep Sea route is higher than before.

TSR charge from Japan to Moscow is even higher (about $800 / FEU as of first half of 2013), compared to Korea. Therefore, Japan based containers rarely pass Ural Mountains. In fact all the Japanese auto makers manufacturing in the west of Ural Mountains use Deep Sea route for transporting manufacturing parts from Japan.

Differences of charge of the TSR route from Korea and Japan is caused by maritime transport fare to Far East Russia. Korea has a hub port of Busan and many shipping...
companies compete between Busan and Far East Russia, while Japan – Russia feeder service is inactive. This difference generates a gap in maritime fare.

4.2 Speed advantages

Speed is the biggest weapon for TSR transportation. According to the Russian data, transit days between Korea and Moscow are 48 days by Deep Sea route, while only 21–23 days by the TSR route, indicating that TSR can shorten the transit time to less than half of the Deep Sea (Fig. 9). However, actual transit time via TSR route is about 30 days and guaranteeing 35 days to shippers, according to Korean forwarders. Korean forwarders take a conservative position, assuming additional days often required for customs clearance and transfer procedure at the Far Eastern port, while Russian operators want to stress the speed advantage. On average, the TSR route can save about 2 weeks for transit from Korea to Moscow compared to the Deep Sea route.

In case of transporting from Japan to Moscow, TSR route takes about one more week than from Korea. As a result, Japanese shippers can’t fully enjoy the speed advantage of the TSR route. The reason is that most of the Japanese containers are transshipped at Busan, therefore requiring additional time. Unfortunately, direct feeder service from Japanese ports to Far East Russia has poor frequency, only two services per month.

A manager of a Japanese car manufacturer who has ever used the TSR route to Moscow region said that TSR took longer time than expected and transit time was unstable. Instability of the arrival days is pointed out to be a problem.

4.3 Where is the “Watershed”?

For transportation costs, in theory, the further east the destination the TSR route has the greater advantage, and the further west the Deep Sea route has the greater advantage. Consequently, where the so-called “watershed” [2] lies – where entering from the east and entering from the west compete on an equal footing – is the subject of discussion. For the TSR route, however, which transports goods by rail entering from the east, there is the plus of speed, adding a slight premium.

Factors determining the location of “watershed” are components of tariffs of the subject routes, including railway tariff, maritime tariff, trailer fee, and time-related service elements such as speed, congestion, frequency of feeder service. The “watershed” will be different from Korea and from Japan, and the “watershed” moves over time.

Tracing back through history, in the “Land Bridge” era, the watershed was in Europe, having leapt clear to Russia. Subsequently, in the period of chaos in 1990s, the watershed is estimated to have shifted east to the vicinity of Irkutsk. From 2000 in the revitalized ‘BRICs’ era, the watershed is estimated to have moved to the vicinity of Moscow. Then Lehman shock forced the watershed to move toward east to Siberia. Since 2010 during the recovery process, the watershed is estimated to have moved back to the region between Moscow and Ural Mountains.

Watershed, however, may shift again. If the Deep Sea rate increases or low cost maritime feeder service to Far East Russia is introduced (like LCC in air transportation), there is a possibility that watershed will move to even west of Moscow.

5. Korea’s Success

The TSR route was originated by Japanese companies in 1970, and was revitalized by Korean companies with the opening of the 21st century. What was the reason for the Korea success?

5.1 Development of export cargo to Russia

Korea developed huge volume of export container cargo
to Russian market, including to inland destinations, appropriate for the TSR route. At first, electrical appliances were transported to major market of Moscow region directly or via Finland transit, using the TSR route. Then, Korean car makers, including Hyundai, Kia and SsangYong, started local assembling in Russia in the mid-2000s, and shipped auto parts regularly from Korea. Hyundai used both the TSR and the Deep Sea routes for transporting auto parts to Taganrog plant and let the two routes competes each other. Kia and SsangYong used the TSR route solely for transporting parts to Izhevsk and Naberezhnye Chelny respectively, since both cities are located in Volga region, appropriate for the TSR route. Above mentioned manufacturing plants were closed later and relocated to other cities after the Lehman shock.

Furthermore, auto parts exports to Uzbekistan, for GM-Uzbekistan, increased and TSR as well as TCR was used from Korea.

According to Russian data of 2010, China was the largest exporter of container cargo to Russian ports (31.8%), and Korea was the second (6.3%), while Japan was 14th (1.8%) [3].

5.2 Busan as a regional hub port

Busan is the de facto hub port for sea routes linking East Asia and Far East Russia. This gives a great benefit to Korean companies. Additionally, around the year 2000, Korean government liberalized the Korea – Russia shipping route, which used to be monopolized by FESCO and HMM. As a result, many international shipping companies entered to this route, and active competition as well as increased convenience was created in the market. As of 2013, 14 vessels are operated per week between Busan and Vladivostok / Vostochny, by 10 shipping companies, including FESCO, APL, MAERSK, CMA-CGM, HMM and SINOKOR. As a result, frequent feeder service is provided at reasonable rate, contributing to speed advantage of the TSR transportation.

Recent development of Busan new port will further strengthen hub function of Busan port.

5.3 Choosing the best route among the possible alternative routes

Korean forwarders and shippers use multiple routes flexibly in transporting to a certain destination. They are always prepared to use multiple routes, including Deep Sea, TSR, Black Sea and TCR routes, and choose the best route for each shipping case, taking account of destination, tariff, speed, congestion, etc. When the Deep Sea rate is high, they will use the TSR route more frequently. If the Deep Sea rate is low, they will shift containers from the TSR to the Deep Sea, with an exception of high valued “e-goods” which require fast delivery.

Interestingly, when exporting Korean brand products, manufactured in China, they choose the best route, either Deep Sea or TSR, for each case, considering cost and timing from specific port. For instance, products manufactured near Shanghai will be transported using the TSR, while the Deep Sea will be used from Dalian.

Same principle will be applied to transportation to Central Asia. Either TSR route or the TCR route is used depending on destination, type of commodities and seasonality. To southern Kazakhstan, TCR may be cheaper than the TSR, but to northern Kazakhstan and Uzbekistan, TSR may have advantages. TCR also tends to be congested in the second half of a year.

6. Japan’s Problem

Japan was the mother of the TSR transportation, originated the route in 1971 and cooperated for construction of Vostochny port. Why did Japan lose presence after the year 2000?

6.1 Small volume of container exports to Russia

Japan has larger value of exports and imports with Russia, compared to Korea most of the time. For example, in 2012, Japan’s export share in Russia’s total imports was 4.99%, while Korea’s share was 3.50%. Similarly, Japan’s import share in Russia’s total export was 2.97%, while Korea’s share was 2.65%.

However, as long as container cargo is concerned, Korea has a larger share than Japan. As mentioned before, Korea’s share in Russia’s container imports was 6.3%, while Japan’s share was only 1.8% in 2010. This means that Korea’s container export volume was 3.5 times larger than Japan. This is closely related to the trade structure of Japan and Russia. According to the Japan’s trade statistics of 2012, 62.1% of the total exports to Russia were automobiles, including used cars, busses and trucks. These vehicles are transported to Russia either by PCC or RORO ships. That’s why container volume has been small. But the situation is changing recently. Japanese auto manufacturers are switching to local production from exporting finished cars. Manufacturing parts will be transported in containers.

6.2 A closed maritime transportation market

Japan – Russia maritime shipping route is still closed unlike Korea. Only one Japanese shipping company (MOL) is operating a regular container feeder service
between major Japanese ports and Vladivostok / Vostochny, only twice a month. Since this service is so inconvenient, Japanese shippers use transshipment at Busan for transporting to Far East Russia. According to a research conducted by Japanese government in 2008, 74% was transshipped at Busan and only 26% used the direct service to Far East Russia. Economic factor may be another reason that Busan transshipment is broadly used since Busan transshipment is told being cheaper than the direct service. Inconvenient and expensive maritime service is believed to discourage a use of the TSR route.

Toyo's started SKD production at Sollers' plant in Vladivostok in early 2013. Toyota's car parts are shipped from Mikawa port, near Nagoya, by Korea's SINOKOR vessels every ten days. The SKD parts put in containers are lifted at a wharf adjacent to Sollers' plant.

Why is Japan – Russia shipping route such limited? One of the reasons is that “Japan – Russia maritime agreement”, enacted in 1957 is believed to be still valid in Japanese shipping industry as well as Japanese government. The agreement means that only assigned shipping companies have a right to operate regular shipping services between Japan and Far East Russia. Right now, only FESCO in Russian side and MOL in Japanese side are given rights to operate regular shipping services. This agreement clearly violates international practices guaranteeing freedom of operating international maritime services. However, such a strange regulation is still alive between Japan and Russia. Please note that this agreement regulates shipping companies of Japan and Russia only. Therefore, Korean companies have freedom of operation. In the above case, SINOKOR is enjoying the freedom of operation and Toyota is using.

Many Japanese shippers as well as forwarders feel the existing regulation should be abolished, however, the monopolists want to keep the vested rights and Japanese government seems to be just incompetent.

6.3 Misunderstanding on the TSR transportation in Japan

The TSR route hasn't established a reliable image in Japan. Some shippers still remember TSR's troubles they experienced in the 1990s, and skeptical about safety in TSR transportation. In the meantime, potential shippers are concerned about premium costs of the TSR route. Hence, Japanese forwarders have to make big effort to demonstrate how safe and fast the TSR route is.

We also heard that some shipping companies, who have been eliminated from the TSR transportation due to the regulation of the “Japan – Russia maritime agreement”, made some negative comments on the TSR route. It is quite unfortunate that the potential advantages of the TSR route are not correctly understood in Japanese market.

7. Future Prospects

7.1 Can TSR regain economic competitiveness over the Deep Sea route?

The Deep Sea rate from Asia to Europe is rising from Autumn 2013. This rising trend will be a short term phenomenon reflecting the reduction of shipping capacities by major carriers and increasing demand for Christmas sales in Europe. Therefore, the TSR route may regain economic competitiveness over the Deep Sea route for the time being.

However, in the long term further cost reduction will be materialized in the Deep Sea route by introducing larger vessels. Recently, 18,000TEU container ship was launched between East Asia and Northern Europe and other carriers will follow this trend.

This means that it will be necessary for the TSR route to reduce tariffs in both railway and maritime parts of the route to compete against the Deep Sea route between East Asia and Moscow area.

7.2 TSR network for inland transportation

The TSR network is competitive in transporting goods from East Asia to Central Asia versus TCR. In terms of tariff, TCR is lower to Almaty, but TSR is lower or equal to Astana and Tashkent. In terms of delivery days, TSR has advantages since TCR is often crowded and unstable.

Central Asia is a promising market behind rich resources. The railway transportation doesn't have to compete against Deep Sea. Furthermore, TSR uses wide gauge (1520mm) all the way to the final destination, while transshipment is required for TCR.

In fact, the TSR is actively used for transporting auto parts to Uzbekistan and Kazakhstan from Korea.

7.3 An attempt of Korea-Japan cooperation

A possible cooperation of auto manufacturers of Korea and Japan may be realized in transporting containers from East Asia to Kazakhstan. Korean car maker SsangYong and Japanese maker Toyota are planning to run a block train jointly in transporting manufacturing parts to Kostanay, Kazakhstan via TSR, starting 2014. SsangYong is manufacturing at Saryarka AvtoProm located in Koastanay. Toyota will start manufacturing “Fortuner” at the same plant from the spring of 2014. Both companies agreed on transporting manufacturing parts jointly using a TSR block train for achieving higher efficiency. The joint block train will leave Vostochny port starting the fall of
2013. This could be the first case for the TSR route that a joint block train loading cargo of Korean and Japanese shippers.

7.4 Requests for Russian operators
The TSR route has further opportunities for improvement for satisfying customers. According to Korean and Japanese forwarders and consignors, Russian side is expected to improve the following points.

(1) Take flexible pricing policy of rail transport, and assure the economic competitiveness of the TSR route versus the fluctuating Deep Sea tariff.

(2) Pursue speed advantage of the TSR route by improving customs clearing procedure, frequency of maritime feeder service from Japan as well as pursuing faster run of trains.

(3) Standardize transit time and guarantee arrival day.

(4) Improve technical issues such as vibration of trains and temperature control in winter period.

References
1. CCTT (Coordinating Council on Transsiberian Transportation) is a cooperative organization of Russian Railways.
3. RBC Research, “Transport and logistics market in 20-2011”.