How Expanding Trans-Border Transportation Networks Will Impact South Korean-Mongolian Energy Cooperation: Using the Greater Tumen River Initiative to Realize the Eurasia Initiative

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Abstract

The Greater Tumen Initiative (GTI) is a regional cooperation mechanism among Republic of Korea, People’s Republic of China, Democratic People’s Republic of Korea, Mongolia, and Russian Federation which is supported by the UNDP. GTI member governments established this mechanism with the goal of strengthening economic and technical cooperation to obtain greater growth and sustainable development in Northeast Asia particularly in the Greater Tumen Region. The GTI focuses on the priority areas of transport, trade and investment, tourism, energy, with environment as a cross-cutting sector. For South Korea, the GTI represents an important opportunity to actualize the Eurasia Initiative announced by President Park Geun-hye in October 2013. The Eurasia Initiative is a proposal to link rail and road networks, energy, and logistics infrastructure from Korea’s Busan across the Eurasian continent to Europe in a modern ‘Silk Road Express.’ One potential energy mineral resource partner for the ROK could be Mongolia. The GTI transportation grid design meshes completely with Mongolia’s intention to re-orient its mineral resource customers from China to consumers in Korea, Japan, and Europe. Establishing a new cross-border transportation network should strengthen ROK-Mongolian energy cooperation.

Key words: ROK-Mongolia, railways, transportation networks, Greater Tumen River Initiative, Eurasia Initiative

Introduction

The Greater Tumen Initiative (GTI), originally called the Tumen River Area Development Programme (TRADP), is a regional cooperation mechanism among Republic of Korea, People’s Republic of China, Democratic People’s Republic of Korea, Mongolia, and Russian Federation which is supported by the United Nations Development Programme (UNDP). In 1995, GTI member governments signed agreements to establish this mechanism with the goal of strengthening economic and technical cooperation to obtain greater growth and sustainable development in Northeast Asia (NEA), particularly in the Greater Tumen Region. The GTI focuses on the priority areas of transport, trade and investment, tourism, energy, with environment as a cross-cutting sector. The GTI vision is for a partnership for prosperity among neighbors, with the goal to become an effective platform for regional economic cooperation, expanding policy dialogue, improving business environments, and contributing to NEA peace and stability.

The core decision-making institution is the GTI’s Consultative Commission, composed of vice-ministers from GTI member governments. The Commission’s role is to foster support for regional cooperation and development, and promote mutual understanding. It convenes annually to discuss key policy issues and cooperation projects, and hosts joint sessions with strategic partners and local governments.

In addition, the GTI works closely with international partners to jointly promote the region and hosts both the NEA EXIM...
Banks Association and the Local Cooperation Committee. It has established strong partnerships with regional governments, international organizations, and the private sector to jointly initiate cooperative activities. With both a skilled and low-cost labor pool, the Tumen River basin site is at the crossroads of vital trade, transport and energy routes. Rich in gas, oil and minerals, the region has easy access to affluent markets and hundreds of millions of NEA consumers. Increased regional cooperation is projected to not only lead to economic prosperity and sustainable development, but also to contribute significantly to regional solidarity and stability.¹

For South Korea, the GTI represents an important opportunity to actualize the Eurasia Initiative announced by President Park Geun-hye in October 2013.² The Eurasian Initiative is a proposal to link rail and road networks, energy, and logistics infrastructure from Korea’s Busan across the Eurasian continent to Europe in a modern “Silk Road Express.” One potential energy mineral resource partner for the ROK could be Mongolia. Mongolia, for its part, is a rapidly developing resource economy rich in coal, natural gas, petroleum, copper, gold, and uranium, but overwhelmingly dependent on China as its customer because of poor northeast outbound transportation routes. It is determined to find new mineral customers in Northeast Asia to break the Chinese monopoly over its economy and diversify trade partners. The GTI transportation grid design meshes completely with Mongolia’s intention to re-orient its valuable mineral resource customers from China to consumers in Korea, Japan, and Europe.

Active ROK partnering initiatives for railway development with Mongolia and Russia to improve regional transport infrastructure and ease trans-border transportation passages would have an immediate impact on the existing Jilin, China international cooperative demonstration zone, which includes the participation of 48 South Korean companies and 48 Chinese regional governmental agencies and businesses.³ Furthermore, this new railway development project coupled with Chinese railway construction traveling towards North Korea will connect the Tumen and Yalu Rivers as well as link North Korea’s major cities with China and other regional countries. These efforts, then, have the potential to boost the construction of NEA international transit corridors and promote the cross-border economic and energy cooperation sought in the Eurasia Initiative.

Any new rail development undertaken by South Korean companies also holds specific benefits for each of the GTI countries and should spur competition over Mongolian and Siberia-Russian minerals. While these rich coal, copper, gold, petroleum, natural gas, rare earth, and uranium resources could be moved to willing Korean customers, it is just as probable that they will find new economic partners in Asia and across the Pacific. Thus, GTI members are likely to overcome any present political impasses to realize the goal of greater transportation integration.

**Greater Tumen River Basin**

**GTI Ulaanbaatar meeting of October 30-November 2, 2013**

The 14th meeting of the Consultative Committee of the GTI and Northeast Asia Economic Cooperation Forum was held in Ulaanbaatar, Mongolia from October 30 to November 2, 2013. Vice Ministers of GTI member nations discussed regional cooperation and development strategy in the NEA region, reaffirmed the significance of GTI in building regional partnership for common prosperity, and reviewed transforming its strategic direction into an independent organization by 2016.⁴ The focus of the discussions evolved from GTI’s *Integrated Transport Infrastructure & Cross-border Facilitation Study for the Trans-GTR Transport Corridors* released in February 2013.⁵ As the NEA region has enormous potential for development, especially in port arrangement and infrastructure construction, one of the prime challenges discussed at this year’s Consultative Committee session was how financing institutions can meet demand from the private sector, and what kind of channels and mechanisms can be provided in bringing about regional economic prosperity?

The Northeast Asia Economic Forum, which facilitates dialogue on NEA economic and development cooperation, took place immediately following the Consultative Commission meeting.
This session focused on the legal status of the GTI program and assessed project implementation on consolidating structures of trans-border transportation passages and simplification of border entrances. The Forum brought together more than 100 delegates from GTI member governments, the business sector, and financing associations.6

This round of consultation established the Northeast Asia EXIM (Export-Import) Banks Association, which consists of the EXIM banks of the ROK and China, the Developmental Bank of Mongolia (DBM) and Russia’s State Corporation Bank for Development and Foreign Economic Affairs (Vnesheconombank). The Bank Association’s main function is to collaborate with the GTI and member governments in financing suitable economic projects in the region. The Association of Development Financing Institutions in Asia and the Pacific (ADFIAP) came to the Forum to share its knowledge and insight “into the strategic prospects of economic integration in Northeast Asia, with long-term goals of strengthening trade and investment ties, promoting partnerships and synergizing efforts on Northeast Asia regional development.”7 All parties reached legal agreement to further develop the GTI into an international organization and to increase financial support for it. Korean proposals for organizing an agricultural sector board, regularly holding a GTI International Trade and Investment Expo, and setting up a strong network among policy research institutions were accepted.8 The next GTI Consultative Commission meeting will be held in China in 2014.

**Mongolia’s View of Domestic and Trans-regional Rail Development**

Because Mongolia annually exports about 100 million tons of mostly raw minerals, it seeks to construct a new railroad north to diversify its customers and relieve congestion on the southern rail route to China. Mongolia only has one north-south railroad—Ulaanbaatar Railways—and no east-west rail crossing the country. Freight turnover on Ulaanbaatar Railways is growing annually: in 2012 freight turnover was about 20.4 million tons and in 2013 it increased another 2.7 million tons. As a result, Mongolia wants to build four new accesses to China and another two accesses to Russia—an enormous investment estimated at around $1 billion. In 2010 the Mongolian Parliament approved the governmental policy to develop railway transportation capacity, especially as related to mining and transit freight transportation. Over $400 million will be needed to undertake the first stage of the Ulaanbaatar Railway’s expansion. Innovation and financing has been sought from China and Russia. In October 2013 Mongolia agreed to establish a working group with China to oversee the construction of new road, rail and pipeline infrastructure connecting the two countries with Russia. A Mongolian official explained that landlocked Mongolia aimed to become a “transit corridor” to facilitate trade between its two giant neighbors and reduce the costs of delivering Russian commodities like oil and natural gas BSE 1.16 percent to Chinese markets.9

This topic was discussed with PRC Prime Minister Li Keqiang in Mongolian Prime Minister Norov Altanhayag’s mid-October visit to Beijing, which resulted in plans to organize a working group to allow Chinese firms to invest and build additional transit infrastructure. A domestic rail link to the Russian Far East is now under construction and half of a direct rail line into China has been completed, with the project scheduled to be finished by 2015. The Mongolian Development Bank disbursed an initial funding of $55 million for the design and survey of the 1800 km ‘New Railway’ project, and an additional $200 million for construction work for 243 km of TT-GS rail for the Tavan Tolgoi coal/uranium mine, 540 km south of the Mongolian capital Ulaanbaatar, to the Chinese border.10

Mongolia complains that it has not received fair value for its coal because of the lack of alternative buyers to the Chinese. It hopes the improved transport infrastructure envisioned in the GTI will allow it to generate more revenue from its coal sector by diversifying its mineral energy customers. Since Mongolia was a Soviet satellite and its railway now is Russian-gauge, Mongolian policymakers have chosen to expand this gauge domestically, which would favor mineral products flowing north into Russia and out to Pacific Rim customers. The importance of the China market for Mongolia cannot be underestimated with more than 90 percent of its exports delivered to China. Soaring Chinese demand for commodities like coal has resulted in a Mongolian double digit growth rate since 2010. However, Chinese economic hegemony has fueled strong discontent among the Mongolian people and lawmakers, who forced a change in the foreign investment law in 2012 to limit foreign ownership in “strategic” sectors such as mining. The country began awarding bids for route spur expansion to link large mineral deposits to the main trans-Siberian rail system rather than approve Chinese-gauge rail spurs directly to China. Mongolian construction contractors do not yet have the technical ability to fully handle this new construction on their own, so they must partner with foreign expertise.
Increasingly, South Korea is their partner of choice. This is supported by the fact that the ROK is Mongolia’s 4th largest trade partner. From 1995 to 2005 the export of minerals, particularly gold, dominated Mongolian exports to South Korea, while the ROK sold transportation and machinery/electrical products, as well as textiles and foodstuffs to the Mongols. More recently, South Korean-Mongolian trade has been dominated by investment in the construction industry. Bilateral trade volume amounted to $230 million in 2010, an 85-fold increase from $2.71 million in 1990. As evidence of Mongolia’s desire to have the ROK as its preferred rail construction partner, on May 8, 2013 Samsung C&T was commissioned by the Railway Authority of Mongolia as the sole contractor to implement the $483-million project to build 217 km of TT-GS rail as well as constructing a rolling stock depot.

Mongolia has been actively expanding its inter-regional contacts with other Asian countries to develop the mechanisms for economic partnership. An example is its accession to the Asia-Pacific Trade Agreement (APTA) this past October. The APTA is a preferential trade agreement (PTA) whose membership is open to all developing member states of United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) currently spanning East, South-East, and South Asia. Mongolia joins Bangladesh, China, India, Lao PDR, ROK, and Sri Lanka. Dr. Ravi Ratnayake, Director ESCAP Trade and Investment Division, analyzed Mongolia’s accession: “Business opportunities arising from preferential trade and investment cooperation under APTA could generate higher incomes from exports and create employment in export-led industries for Mongolian people.”

Another example of Mongolia’s new inter-regional approach was the December 18, 2013 consultative meeting in Ulaanbaatar of The Mongolian-Russian-Chinese Northern Railway. The Mongolian Minister of Road and Transportation Amarjargal Gansukh explained that Mongolia sought cooperation with its neighbors in freight transportation between Asia and Europe and would pay more attention to upgrading transportation facilities that would meet all necessary transit requirements for enhancing the trans-northern railway corridor running through Mongolia from Russia’s Ulaan Ude to Jinin province in China.

South Korean Plans for Northeast Asian Rail Expansion

In the last ten years, ROK exports and overall trade have expanded. Exports valued at $556.5 billion in 2012 represented an increase of 19.3 percent over 2011, and imports in the same period increased by 23.3 percent. The land transportation network for South Korea within the context of the NEA is based on two vertical and two horizontal axes. The two vertical axes are Busan (Korea)–Khabarovsk (Russia) and Dalian (China)–Khabarovsk (Russia). The two horizontal axes are Busan (Korea)-Dalian (China) and the Tumen River area–Chita (Russia). The transportation infrastructure throughout this region has many impediments due to different railway gauges, old transition systems, bottlenecks at border points, biased air route allotment for national-flag airlines, and complicated customs clearance system. Nevertheless, if the Korean economy is to continue its expansion and feed its energy needs, these transportation construction challenges must be systematically overcome.

On November 13, 2013 President Park Guen-hye held a summit with Russian President Vladimir Putin in Seoul and signed a Memorandum of Understanding (MOU) that called for steel giant POSCO, Hyundai Merchant Marine Co., and Korea Railroad Corp. to participate in the Rajin-Khasan development project. The project is designed to turn North Korea’s ice-free northeastern port of Rajin into a logistics hub for sending cargo by rail to and from East Asia and Europe via the Russian Trans-Siberian Railway. After five years and $340 million of renovation, a 54-kilometer, double-track rail link reopened in September 2013 between Rajin—North Korea’s first special economic zone (SEZ) in 1991—and the nearby Russian town of Khasan. South Korean firms now can ship exports first to Rajin and transport them elsewhere via Russian railways.

RasonKonTrans, the Russian-North Korean joint venture, will implement the rail and port renovation project. Russian Railways, a state monopoly, has a 70 percent stake in this entity, with the DPRK holding the remaining 30 percent. News reports have said that, after a due diligence study to be conducted in 2014, the South Korean consortium will buy about half the Russian stake in the rail joint venture. This purchase, which is an indirect investment via Russia, seemingly is in conflict with Seoul’s ban
on new investments in North Korea, but, if it goes forward, could pave the way for similar indirect investments in the North. The partnering of the ROK with Russia on other long-term transportation construction projects, including building a natural gas pipeline linking Russia and South Korea via the North and creating Arctic shipping routes to reduce shipping distances and time between Asia and Europe, are indications that South Korea is responding to the challenge of developing new transportation links to mineral and energy resources. The Korean press has reported that the two countries’ sovereign wealth funds agreed to set up a $500 million joint fund aimed at increasing cross-border investments in various companies and projects. But according to Kim Sang-won, a Russian economy specialist and professor at Kookmin University, South Korean firms would need reassurances from Moscow about the political and economic stability of the region before making any commitments, and they struggle with the problem of local bureaucracy and corruption.

The Rajin-Khasan development project fits neatly into President Park’s Eurasian Initiative. During the summit with Putin, she stated that her rail transportation strategy includes Eurasian energy linkage cooperation: “Logistics and energy network in the Eurasian region will not only reduce logistics costs and stimulate global trade, but will also stabilize raw materials costs and contribute to the growth of the world economy... If trade barriers are gradually taken down and Eurasia becomes a free trade zone, Eurasia could be made into a gigantic market like the European Union.”

Such a rail project has been talked about for many years. Called an ‘Iron Silk Road,’ prospects for fruition often were stymied due to strategic concerns. The Korean Railroad Research Institute (KRRI), the ROK’s think tank in the railway sector, has been researching how to connect trans-Korean and intercontinental rail networks to realize a borderless economic bloc. It concluded that construction of a logistics and transportation system is an important issue in the economic relations between the two Koreas. It recommended that, first, logistic bottlenecks needed to be resolved to secure a stable and cost effective transportation route. In the long run, the completion of the trans-Korean Rail would “lead to the development of a strategic international multimodal transport route connecting to Northeast Asia and Europe.” Such railway development has been a major part of plans for development of North Korean SEZs, which have been devised around creating a new rail axis between the North and South and then on to Russia, China, and Mongolia. This concept correlates closely with the transportation ideas embodied in the GTI program.

**The Role of Russia’s Rail Network**

The Russian government has long felt that its Russian Railways (RZD) contributes to the development of the transit potential of Russia. Its key transit route runs east to west. According to the RZD 2012 Annual Report, RZD potential is determined by many factors, but above all by the rapid development of the Chinese economy. China’s export infrastructure is overloaded. The ports of Shanghai and Guangdong are currently working at 20-25 percent above their planned capacity level while the workload of the railway infrastructure in China is 7-8 times higher than the average European level. In response RZD is involved in a project to create the transit east-west corridor through its subsidiary company Russian Railways Logistics. The main RZD objectives for the period 2013–2015 are to increase Russian Railways’ share in the international transport market (primarily Eurasian); strengthen the competitive position of RZD in relation to alternative means of transport and foreign carriers; and attract transit freight traffic to the Russian railway network. RZD seeks strategic cooperation with partners in the Asia-Pacific region in the fields of railway transport, logistics and implementation of joint investment projects and to develop container traffic as a backbone of transit flows in the key international transport corridors, particularly in the transcontinental east-west direction, using the Trans-Siberian trunk railway.

President Putin as early as 2000 aimed to develop the eastern Siberian regions farthest away from Moscow. His goal is to upgrade and extend the Trans-Siberian railway network to the Korean Peninsula and lay new oil-and-gas pipelines across Siberia in order for Russia to become the key carrier for cargo and energy between East Asia and Europe. For the Russian Railway network, the main driver of loading growth has been exports. In the Far East, network loading in 2012 beat the highest figure ever recorded in the entire history of Russian railways by 30 percent. The highest gain in freight turnover has been seen in eastern railways, from Krasnoyarsk to the Far East, which has increased 5.7 percent versus 2011 and 32 percent versus 2007. Freight traffic destinations continue to focus on Russian ports. Since the incorporation of RZD in 2003, transportation to the ports of the Azov and Black Sea basin has increased by 41 percent and to Northwest and Far East ports 2.1 times. Because the load factor of a number of sections has reached its peak, RZD has determined...
that continued regular train service will require large-scale infrastructure investments, which Russia itself cannot afford.

The highest loading increase in 2012 was seen in construction cargo, coal, oil, and oil products. In that year the increase in coal loading was 3.9 percent or 11.4 million tons. Transportation volume in the domestic market decreased by 1.9 percent, but export loading increased by 13.3 percent, destined mainly for Japan, Great Britain, Turkey, Korea and China. Coal export growth rates significantly exceeded production performance. In 2012 the share of exports of the total volume of coal produced in Russia reached 36 percent. The increase in oil cargo loading was 8.2 million tons (+3.3 percent in 2011) for new capacity. Major risks to RZD as an oil cargo carrier are related to a significant deceleration of oil production in Russia and the fast growth of competing means of transport, such as main oil pipelines. In December 2012 two years ahead of the schedule, the second phase of the Eastern Siberia–Pacific (ESP) oil pipeline construction was completed, so oil supplies by rail transport are expected to decrease by some 10-12 million tons a year. However, positive trends that contributed to an increase in the railway transportation of oil cargo in 2012 are expected to provide growth in the medium term.

Loading to ports of the Far East remains historically high; it continues increasing despite expected stabilization. Nonetheless, the number of defective track infrastructure fixed assets is growing with many facilities still in operation after their serviceable life has expired. About 31 percent of all currently operated engineering structures were built before 1913. If current trends continue, by the year 2015 the RZD predicts the serviceable life of 38 percent of the structures will have expired (for supports the serviceable life is 80-100 years, for pipe culverts 100 years, and for metal spans 60 years). Insufficient carrying capacity of railway hauls is often a reason for the limited capacity of the whole track. In 2012 three sections of the Far Eastern Railway and two sections of the East Siberian Railway in the Russian Far East had limited capacity hauls. Russell Pittman’s forthcoming study of the RZD’s restructuring program’s strategy for development until 2030 clearly indicates that “significant expansion of the coverage and capacity of the overall rail infrastructure” is key to the RZD’s future.

An additional financial burden on the RZD has been its agreement to increase its share capital of the joint venture Ulaanbaatar Railway. Both the Russian and Mongolian partners have increased the authorized capital by $250 million to construct new rail infrastructure. Also the RZD has funded the new rail line between Khasan, Russia and Rajin, North Korea. This spur, crossing through the GTI basin, will enable the Russians and Mongols to use the North Korean port as an alternative to overcrowded Vladivostok. Russia is looking for new foreign partners to finance the RZD’s modernization and expansion. Putin’s summit with President Park revolved around seeking South Korea’s participation in various rail projects, including the Rajin port’s modernization. South Korea has shown interest in linking its largest port Busan to the DPRK. Any such investment has been barred since the sinking of a South Korean naval warship in 2010 attributed to a North Korean attack. However, with the November ROK-Russia summit agreement and overall progress in this year’s GTI discussions, it is anticipated that South Korean cooperation with Russia on new rail infrastructure will accelerate.
Conclusion

When looking at energy demands and growth in Northeast Asia, researchers such as Kent Calder of Johns Hopkins have noted that “Northeast Asian countries also face serious and unique developmental challenges that would make a deeper and richer local network of regional organizations mutually advantageous.” He has discussed the “organizational gap” and the rise of pressure for more regional integration and coined the concept of the “new continentalism.” He argues that a new transnational configuration is emerging in Asia driven by economic growth, rising energy demand, and the erosion of longstanding geopolitical divisions. His ‘New Silk Road’ is not far from ROK President Park’s Eurasia Initiative and Silk Road Express.

The GTI framework, long dormant, is now being used by partner countries to springboard new regional cooperation in transportation construction and logistical projects. Research by the Greater Tumen Initiative forecasts that for the DPRK the projects will activate the local economy of Rason by restoring some parts of the old railways and increase cooperation between DPRK and Russia, as well as improving economic ties with northeast China and Mongolia. As for Russia, such projects will resolve the congestion at Far Eastern ports and will modernize and strengthen the Eurasian logistics network of the RZD. Russia’s economic and political influence in the DPRK and the NEA as a railway and energy power should further increase. The ROK can look forward to easing of political tension on the Korean Peninsula with development around Rajin based on a trilateral cooperation among ROK, DPRK, and Russia. The projects also will link South Korea more closely to Mongolian and Siberian mineral-energy resources and stimulate greater economic growth. Regarding China, GTI cooperative actions will promote economic development of the three Northeastern provinces and permit acquisition of energy-related commodities from Russia and the DPRK. For Mongolia, the limitations of a land-locked country will be overcome and economic development will be accelerated as northern and eastern exits are secured. Even for Japan, especially its western region of Niigata, Tottori, and Kanazawa, GTI integration can be another commercial entry into northeast China, Russia, Mongolia, and Europe.

Any Northeast Asian railway cooperation model must create an international transport network through a cooperation consultative group mechanism. The GTI plan through the UNDP uses the existing international railway cooperation bodies and organizations, does not require establishment of additional international organizations, and thus minimizes the financial burden of manpower and equipment. As the 2013 Integrated Report Infrastructure & Cross-border Facilitation Study for the Trans-GTR Transport Corridors emphasizes, the GTI “must be an organization that comprehensively deliberates on the bilateral and multilateral issues of international railway operation from the perspective of joint benefits in the Northeast Asia regions. Therefore, organization of a Northeast Asia railway cooperation consultative group requires step-by-step strategies because stakes of the related countries are different and the standards of railway infrastructures and services in the countries vary significantly.” Its short-term task is to develop multilateral projects and resolve issues in a timely manner, which might best be accomplished in a pilot project. This would build trust among the partner countries and come to practical solutions to interface among the connected routes and customs operations to resolve bottlenecks in each country. Positive results should generate international publicity that will encourage financial partners to participate in the very costly, but necessary, Northeast Asia railway network expansion.

Ultimately, the GTI’s long-range goal is to facilitate a “Northeast Asia peace project” through the Northeast Asia railway cooperation consultative group that would develop into an independent organization of Northeast Asian railway cooperation. The key functions of this organization would be to promote railway operational improvement, set freight and passenger railway rates, and improve railway routes and signal systems. Such efforts are aimed maximizing the integrative role of transport passages of all varieties in a vibrant economic market. If this goal is one day realized, the benefits to the GTI partner nations—China, Russia, Mongolia, DPRK, and ROK—will be substantial. Furthermore, an enhanced South Korean-Mongolian energy mineral trade connection along a new rail network would be in both nations’ best interests.
Endnotes


2 Park Guen-hye asserted that “to combine South Korea’s policy of strengthening Eurasian cooperation and Russia’s policy of highly regarding the Asia-Pacific region to realize our mutual potential at the maximum level and move relations between the two countries forward. . . . South Korea and Russia will join hands to build a new Eurasian era for the future.” Chang Jae-soon, “(3rd LD) S. Korea to participate in Russian-led rail, port development project in N. Korea,” Yonhap (Seoul: November 13, 2013), english.yonhapnews.co.kr.


4 “Tumen development body likely to be upgraded into int’l organization” from Yonhap News (Oct. 30 2013), english.news.mn.


6 Khuder, October 30, 2013.


14 “APTA welcomes Mongolia as its seventh member,” October 29, 2013, www.unescap.org. Between 2001 and 2006, the APTA intra-regional trade share increased by almost 50 percent. The Fourth Round of negotiations launched in October 2007, led to tariff concessions over 10,000 items, compared to 4,270 items under the Third Round. The current Round widens the coverage of preferences of total tariff lines for each Member State and deepens the tariff concessions by at least 20-25 percent of the total intra-regional trade under the APTA.

15 D. Myagmarsuren, “Talks held to develop continental railway,” The Mongol Messenger, No. 51 (Ulaanbaatar: December 20, 2014).

16 Integrated Transport—full report, p. 68.


19 Kwaak, ibid.


21 Russell Pittman and Sunghee Choi, “The Economics of Railway Restructuring in South Korea,” for Korail (December 2013), provided by the author, p. 7. This article has is an in-depth study of the ROK rail system.


27 Ibid, p. 47.

28 Ibid, p. 49.
As of 1 January 2013: 82,837 man-made structures (e.g. bridges, etc.) are used in the railway network of JSC Russian Railways, 9.8% of them are defective; 6.7% of 85,248 km of the registered railway tracks are defective. In the pre-crisis year of 2008 the number of defective engineering structures was lower: 8.3% for man-made structures and 6.1% for the roadbed. The increase in the number of defective engineering structures is largely associated with the aging of the facilities: 28% of bridges have been in service for more than 100 years. Another reason is the lack of funding for repair work. The inability to replace deteriorating engineering structures with like-for-like replacements is also high – on average 76.2%. *Russian Railways Annual Report*, p. 83.


*Integrated Transport—full report*, p. 68.

Ibid., p. 83.

Ibid., p. 84.

Ibid., p. 84.