Present Status of Trans-Korean Railways and plan for connection with Trans-Siberian Railway

Chang-Nam Ko, Acting Vice President of Korea Railway Association
The Trans-Korean Railways Project is a project to connect inter-Korean railways infrastructure, and allow rail freight to travel between ROK, DPRK, Russia and China; it is hoped to halve the time taken to transport freight from eastern Asia to Europe and earn substantial transit fees.

Background of TKR Project

- As the two leaders of the two Koreas in June 15, 2000, announced the historical South-North Joint Declaration, the reconnection of the railways between ROK and DPRK was implemented.

- The purpose of connecting railway in two Koreas is to establish a new transportation network not only on the Korean Peninsula but also all throughout the Northeast Asia with the concept of Eurasia Railway between Asia and Europe.
2. Proposed Roadmap for TKR Connection

Phase 1: Connection of railways between two Koreas: Minimum maintenance of DPRK railways → create/reinvest profits from transport business into railways
2. Proposed Roadmap for TKR Connection

Phase 2: Improve DPRK Railways → expand transport business, organize an international consortium to start the modernization of DPRK’s railways
Phase 3: Modernize DPRK Railways and connect to Eurasian railways networks → complete Eurasia Land Bridge
3. Current Status of TKR Connection

Current status of the railways connection between ROK and DPRK

1) Gyongui Line
   Construction started on Sept. 18, 2000, and completed in April 2006.
   - Munsan to Military Demarcation Line (MDL) 12km, Single track
   - Project cost: 90.3 billion won

On May 17, 2007, the historical opening ceremony for Gyongui Line was held for the first time since January 1951. However, train operation has been suspended since November 28, 2008 when DPRK restricted overland travel.
3. Current Status of TKR Connection

Current status of the railways connection between ROK and DPRK

2) East coast Line
Construction started on Sept. 18, 2002, and completed in April 2006.

- Jejin to Military Demarcation Line, 9km, Single track

- Project cost: 79.5 billion won

On May 17, 2007 the "Iron-Silk Railroad" opened for the first time since Jan. 1951. However, train operation has been suspended since November 28, 2008 when DPRK restricted overland travel.
3. Current Status of TKR Connection

▲ May 17th, 2007, DPRK train crosses the truce line and arrives at Jejin Station in Gosong.
3. Current Status of TKR Connection

3) Gyongwon Line: Feasibility Study started on Feb. 16, 2015

4) Keumgangsan Line: Feasibility Study started on Feb. 16, 2015
Tourists walk along the Geumgangsan Mountain Electric Railroad Bridge

Woljeongri Station
Dorasan Station
A DPRK train master joyfully shaking hands with the station master at Jejin Station.
The RasonKonTrans joint venture was established in April 2008 to reconstruct the railway line from Rajin to Khasan and build a sea port container terminal.
Current Status of Rajin – Khasan Project

Project goal: creating a new competitive route for container cargo transport linked to the Trans-Siberian railway

The project provides for:
• Reconstructing a 54km section of the Rajin – Khasan railway line
• Building a container terminal with a capacity of 100,000 TEUs per year in the Rajin port
• Organising international East – West cargo freight operation based on the new infrastructure
The Rajin-Khasan railway connecting Russia and DPRK was renovated in September 2013.
Cooperation MOU: In November 2013 RZD, in presence of the Russian President Vladimir Putin and ROK President Park Geun-hye, signed a MOU with a ROK consortium composed of POSCO, Korail and Hyundai Merchant Marine. RZD and the consortium established a working group to work out ROK partners’ involvement in the Rajin - Khasan project.

The ROK party is performing due diligence now; as part of it, phase 1 of the technical audit of the Rajin - Khasan line and Rajin station infrastructure was performed. There were consultations on the financial and legal audit of the Rajin - Khasan project and monitoring of the coal transportation from Tumangang to Rajin as well as freight handling work at the port terminal. Consultations with the consortium were recently held in Moscow on potential involvement of the ROK party in the Rajin - Khasan project through establishment of a freight forwarder JV in Russia. At the same time test transportation of coals from the Rajin Port to ROK is being worked on from December 2014.
Current Status of Rajin – Khasan Project

DPRK’s Rajin port
Modernization of DPRK Railways

A ground-breaking ceremony for modernising the railway linking the west coast port of Nampo with Pyongyang, Kangdong and the Jaedong coalfields was held on October 21, 2014 with the presence of DPRK’s Minister of External Economic Relations Ri Ryong Nam and Russia’s Minister for Development of the Russian Far East Alexandr Galushka.

DPRK and Russia signed a US$25 billion deal to modernize a combined 3,500-kilometer stretch of railways in DPRK.
Modernization of DPRK Railways

Railway System of North Korea

- Manpo Line
- Pyongyui Line
- Modernization
- Nampo
- Pyongbu Line
- Kangwon Line
- Hwanghae Chungnyon Line
- Keumgangsan Chungnyon Line
- Pyongra Line
- Hambuk Line
- South Korea
- Russia
- China
DPRK and Russia agreed to modernize Namyang-Onsung-Rajin railway (150km) on Feb. 25, 2015 at a business consultative meeting between DPRK and Russia, with the presence of DPRK Minister of External Economic Relations Ri Ryong Nam and Russia’s Minister for Development of the Russian Far East Alexandr Galushka.
4. Prospect for TKR’s Connection with TSR and TCR, etc.

**International cooperation on railways connection**

- ROK – China railway cooperation agreement (1998)
- ROK – Russia railway cooperation agreement (2001)
- ROK – Russia Transportation Cooperation Committee (2001-02)
- ROK-DPRK-Russia tripartite conference of the supreme representative (2004)
- Eurasia Initiative and ROK – Russia Summit Talk (2013)

DPRK and Russia agreed to jointly proceed with DPRK railways modernization project and held a groundbreaking ceremony on Oct. 21, 2014, at Dongpyongyang station.
4. Prospect for TKR’s Connection with TSR and TCR, etc.

Prospect for TKR’s Connection with TSR and TCR

1) Need for Eurasia Trans-continental railways connection

- Linking the TKR to TSR and TCR will establish a transport network between the Northeast Asia and Europe.

- Converting marine transport of shipment to overland transport route will achieve faster shipment, lower freight rates, more opportunities of development for passing areas, and so on.
4. Prospect for TKR’s Connection with TSR and TCR, etc.

2) Possible connections to Eurasia Trans-continental railway

a. Gyongui Line - Chungnyun Yicheon - Gangwon Line - Pyongla Line - TSR, TCR, TMR
b. Gyongui Line - Pyongwon Line - Pyongla Line - TSR, TCR, TMR
c. Gyongui Line - Pyongwon Line –Pyongla Line - TCR, TMGR
d. East Coast Line - Gangwon Line - Pyongla Line - TSR, TCR, TMR
### 4. Prospect for TKR’s Connection with TSR and TCR, etc.

#### Status of Eurasia Trans-Continental Railway

<table>
<thead>
<tr>
<th>Name of Railways</th>
<th>Description</th>
<th>Distance (km)</th>
<th>Track gauge</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TSR</strong></td>
<td>Vladivostok – Khabarovsk – Chita - Ulan Ude - Irkutsk – Omsk - Novosibirsk - Yekaterinburg - Moscow</td>
<td>9,297</td>
<td>Russia: 1,520㎜</td>
</tr>
<tr>
<td><strong>TCR</strong></td>
<td>LianYunGang – Zhengzhou – Lanzou – Urumqi-Arasankou - *Druzhba - Connected to TSR</td>
<td>8,613</td>
<td>China: 1435㎜, Kazakhstan: 1,520㎜</td>
</tr>
<tr>
<td><strong>TMR</strong></td>
<td>Tumen – Manchuria - Connected to TSR at Karymskaya Station (Russia)</td>
<td>7,721</td>
<td>China: 1435㎜</td>
</tr>
<tr>
<td><strong>TMGR</strong></td>
<td>Tianjin – Beijing – Erenhot - Zamyn Uud – Ulaanbaatar – Suhbaatar - *Nowski – Ulan Ude Connected to TSR (Russia)</td>
<td>7,753</td>
<td>Mongolia: 1,520㎜</td>
</tr>
</tbody>
</table>
4. Prospect for TKR’s Connection with TSR and TCR, etc.

Status of Eurasia Trans-Continental Railway

Track Gauges

- 1,676 mm
- 1,520 mm
- 1,435 mm
- 1,007 mm
- 1,000 mm
- 1,000/1,435 mm
- TAR LINK - PLANNED/UNDER CONSTRUCTION
- POTENTIAL TAR LINK
- POTENTIAL TAR LINK TO BE CONSIDERED
- BREAK-OF-GAUGE
- FERRY CROSSING

UNITED NATIONS
December 2004
5. ROK’s Eurasia Initiative and International Cooperation

In October, 2013, ROK President, Park Geun-hye, proposed the so-called “Eurasia initiative.”

Under the slogan of ‘one continent’, ‘creative continent’, and ‘peaceful continent’, it raises the idea of the creation and development of ROK with the countries of Eurasia by a single and unified system of transport, energy, trade networks, along with the implementation of economic cooperation and exchanges within the spheres of science, technology, culture, including at the level of interpersonal relationships, and thus improving inter-Korean relations based on trust.

Based on this initiative, there is recognition of the fact that, in order for stable economic growth of ROK to occur, it is necessary to develop cooperation with the states of Eurasia, states which are becoming increasingly more important and influential in the world.
The Republic of Korea strongly welcomes international cooperation among related countries, like Russia, China, and Central Asian countries, etc.

**Cooperation with Russia**

One of the most promising areas of economic cooperation between Russia and ROK will be the cooperation in the operation of the railway network from Rajin to Khasan and connection to Trans-Siberian Railway.

The ROK government vowed full support for the Rajin - Khasan project, saying it would help spur the "Eurasia Initiative" proposed by President Park Geun-hye.
Cooperation with Russia (continued)

In the landmark pilot operation of Rajin - Khasan railway and freight transportation, 40,500 tons of Russian coal arrived in ROK’s Pohang on a Chinese-flagged ship in Dec. 2014. The coal was transported from the Russian town of Khasan to Rajin on a 54 km railway that was re-connected in Sept. 2013.

ROK consortium is expected to ink a formal contract with Russia this year for Rajin – Khasan Project.
ROK and China selected Eurasia Initiative and ‘One Belt and One Road (一帶一路)’ as Focus for Bilateral Cooperation in 2015.

At the 13th Korea-China Finance Ministers’ Meeting, both parties agreed to work together on President Park’s Eurasia Initiative, President Xi Jinping’s ‘One Belt and One Road’ project.

China’s ‘One Belt and One Road (一帶一路)’ project is the abbreviation of two programs proposed by President Xi in September and October, 2013, the “Silk Road Economic Belt” (絲綢之路經濟帶) and the “21st Century Maritime Silk Road” (21世紀海上絲綢之路), seeking to develop cross-border traffic services such as highways and high-speed rails, as well as economic support through trade, investment and the Internet.
KORAIL (Korea Railroad Corporation) and OSJD are jointly hosting the OSJD Seoul Railway Summit and 10th International Freight Conference, which will take place in Korea, Seoul, at the Sheraton Seoul D-Cube City Hotel from 27 – 29 May 2015.

The OSJD Seoul Railway Summit and Conference offer a great opportunity for the international community of railways to share a harmonized vision for further development of international rail freight transport in the Eurasian region.

The Conference is dedicated to the development and improvement of international rail freight transport in the Eurasian space.
5. ROK’s Eurasia Initiative and International Cooperation

OSJD Seoul Railway Summit & 10th International Freight Conference (Seoul, 27 – 29 May 2015)

During the Conference, discussions are planned on the following subject clusters:

- Perspectives for development of international rail freight transport, including the connection with the Korean Peninsula. The development of Trans-Siberian transportation.

- Freight consolidation potential of the countries in the Asia-Pacific region for organization of railway transportation in the traffic Asia – Europe.

- Current situation in the freight market (different modes of transport).

- Promising routes of international rail freight traffic. Interaction with other modes of transport. The development of combined traffic and logistics centers.
5. ROK’s Eurasia Initiative and International Cooperation

OSJD Seoul Railway Summit & 10th International Freight Conference (Seoul, 27 – 29 May 2015)

- Tariff policy and marketing.
- The ways for enhancing the attractiveness and competitiveness of railway transport. Development of logistics schemes for cargo owners.
- Perspectives for development of container transport – experience in creating a railway product.
- Technological aspects for organization of freight transport in international traffic – handling of wagon load and container consignments.
- Infrastructure and management of the transportation process; information support for freight traffic.
5. ROK’s Eurasia Initiative and International Cooperation

OSJD Seoul Railway Summit & 10th International Freight Conference
(Seoul, 27 – 29 May 2015)
5. ROK’s Eurasia Initiative and International Cooperation

Cooperation with GTI

The Greater Tumen Initiative (GTI) is a regional cooperation mechanism among ROK, China, Mongolia, and Russia which is supported by UNDP (the United Nations Development Programme).

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.

DPRK was originally a member of GTI but withdrew itself from GTI in November 2009, in part in response to the UN Security Council’s condemnation of its nuclear test.

GTI focuses on the priority areas of transport, trade and investment, tourism, energy, and environment, of which railway is the most important one.
GTI and GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit) estimated that the finance need will be about USD 3 billion for developing and improving major transport infrastructure in the Tumen River Area. The majority of the GTI’s suggested investments concerns railway projects (61%) and to a lesser extent road infrastructure (21%) and port infrastructure (18%).

Recently, DPRK’s ‘Academy of Social Science’ indicated that DPRK lay importance on the development of Tumen River development. Its report says, “The development of the Tumen River and surrounding regions has emerged as a key item for economic cooperation among the countries in NEA over the some 20 years since the 1990s.” The report also reads, “The establishment of an oil and natural gas pipeline and the connection of the TSR (Trans-Siberian Railroad) and the TKR is another cooperative project that is gaining attention.”
Export-import banks from ROK, China, Russia and Mongolia signed an agreement in Yanbian, China, on Sept. 18, 2014, to launch the NEA EXIM Banks Association for financial cooperation in the region's joint development projects.

Major projects include a railway system to connect Russia, China and possibly DPRK and container terminals at ports in Russia and China.

Through cooperation with GTI, there will be opportunities to actualize the Eurasia Initiative announced by ROK President Park Geun-hye in October 2013.

It is recommended that ROK railway authorities need to utilize GTI as channel for international cooperation in NEA to develop TKR and other railway projects in the region.
5. ROK’s Eurasia Initiative and International Cooperation

GTI Transport Corridor

[Map of the GTI Transport Corridor]

- Tumen Transport Corridor
- Tumen Road Corridor
- Tumen Rail Corridor
- Suifenhe Transport Corridor
- Siberian Land Bridge
- Dalian Transport Corridor
- Korean Peninsula West Corridor
- Korean Peninsula East Corridor
- ROK
- Pusan
- Mongolia
- Russia
- China
- DPRK
- Japan
5. ROK’s Eurasia Initiative and International Cooperation

One of GTI’s most important projects is “Trans-Siberian (TSR) and Trans-Korean railways (TKR) Connection” project, which would link Korean peninsula with Europe.
ROK established a Central Asia Cooperation Forum in 2007 as a dialogue mechanism for discussing collaborative projects.

On June 16–18, 2013, ROK President Park Geun-hye visited Uzbekistan, where she met with President Islam Karimov and other Uzbekistani officials. At their summit, Park and Karimov signed a joint statement backing greater collaboration in economic, scientific, educational and cultural domains.

ROK President Park Geun-hye and President Nursultan Nazarbayev of the Republic of Kazakhstan held a summit on June 19, 2013. The two leaders agreed to make endeavors to expand the areas of collaboration into healthcare, forestry and infrastructure, which will contribute to the shared progress and industrial diversification of Kazakhstan.

On June 21-22, 2013, ROK President Park met with Turkmenistan President Gurbanguly Berdimuhamedov and oversaw the signing of new economic agreements.
The 8th Cooperation Forum between the Republic of Korea and Central Asia took place on the ROK’s Jeju Island on April 22, 2014.

The Korea-Central Asia Cooperation Forum is a multilateral dialogue mechanism between the ROK and five countries in Central Asia, -- Kazakhstan, Kyrgyz, Tajikistan, Turkmenistan and Uzbekistan, launched in 2007. The forum, themed “advancing ROK-Central Asia relations for shared prosperity and cooperation: happiness of the people, national development and the creation of the future,” focused on specific ways to work together in the fields of public healthcare, agriculture, environment and forestry.

In the special session of the forum, ROK announced a roadmap for cooperation with Central Asia designed to implement its Eurasia Initiative and strengthen its diplomacy with Central Asia.
Similar initiatives in other countries

Other countries have similar initiatives like Turkey’s “Silk Road Project”, China’s “One Belt and One Road (一帶一路)” Initiative, Russia’s Vision of Eurasian Integration, European New Silk Road Initiatives, USA’s new Silk Road, etc.

Common features among these initiatives focus on transport, trade and cooperation that is re-emerging in Asia and Europe.

There are lots of opportunities for economic cooperation on Eurasia Initiatives.
6. Conclusion

The Importance of TKR Project and connection with TSR and TCR, etc.

TSR and TKR connection project in any case will produce positive impact on Korean Peninsula and the whole Northeast Asia.

Connected railways would increase cargo traffic and make delivery of goods from Asia to Europe more diversified and convenient.

Implementation of this project would allow transporting cargo from Asia to Europe faster and safer than it is currently done by sea. It takes 35-40 days to cover the distance from Asia to Europe by sea while the cargo can be delivered in 17-20 days by railway.

Source: KEEI
The Importance of TKR Project and connection with TSR and TCR, etc.

As for political effect of the project, it cannot be overestimated as its implementation would have great political importance for all participants. TKR is a project which can help overcome political obstacles and settle economic relations between DPRK and ROK. Construction of Trans-Korean Railway can contribute to the establishment of economic cooperation between the countries of Korean Peninsula and prepare the ground for future reunification of two Koreas. The very fact of involving DPRK into international trade and economic links network via such projects as TKR can ensure peace and security in the region.
‘One Continent’, ‘Creative Continent’, ‘Peaceful Continent’

Eurasia Initiative

North Pole Sea Route

Silk Road Express (SRX)

Eurasian Energy Network

European railways

TSR

TMGR

TCR

TKR

Russia

Mongolia

China

Thank you