

The background of the slide is a blurred, high-speed photograph of a train track receding into the distance. The tracks are flanked by overhead power lines and support structures. The sky is a mix of blue and orange, suggesting a sunset or sunrise. A faint world map is overlaid on the background.

ESTABLISHMENT AND OPERATION OF THE EAST ASIA RAILWAY COMMUNITY



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Establishment and Operation of the East Asia
Railway Community(EARC)

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Necessity of the Railway Cooperation





East-Asia Railway Community(EARC) Initiative



Market Integration

Development of a one-day life zone and trading via railways



Mutual Prosperity

Development of the world's largest economic bloc via economic integration



Peace

Building the multi-lateral peace and security regime





- EARC Initiative aims to establish an international cooperation organization that invests in infrastructure and implements economic cooperation projects centered on railways in order to build a foundation for peace and mutual prosperity in Asia
- Relevant Countries: 6 North-east Asian Countries(South Korea, North Korea, China, Russia, Mongolia, Japan)
+ the United States

[Comparison to other International Organizations]

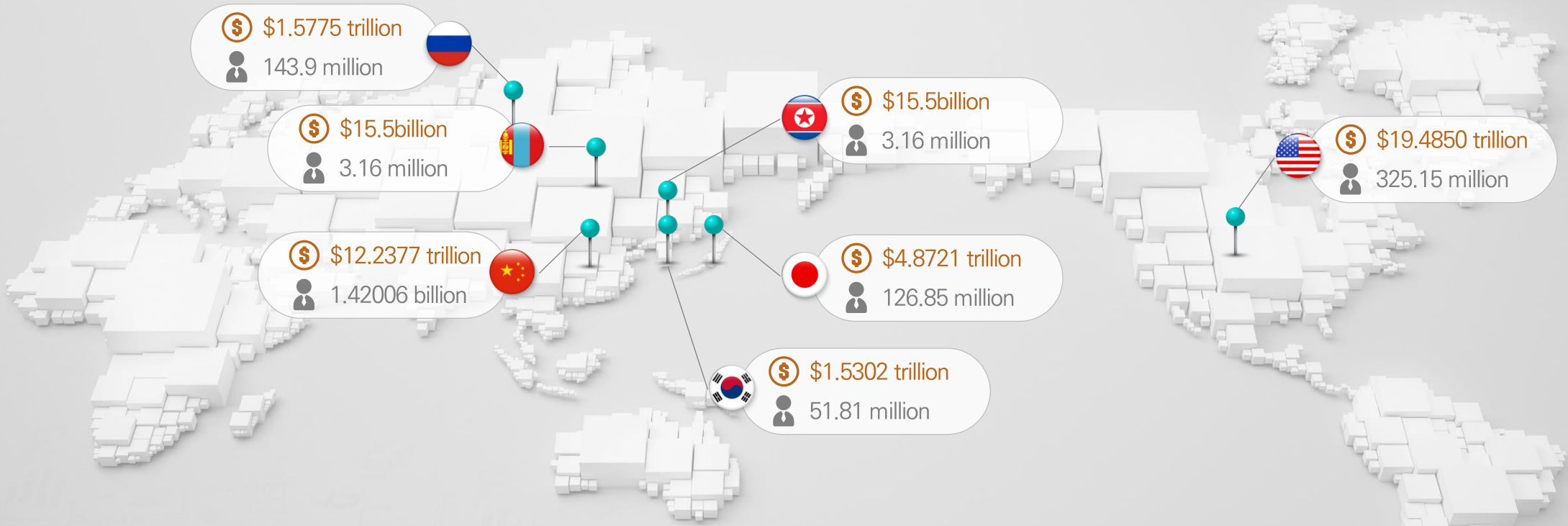
Name	Region	Key Functions	Membership	Date of Foundation
EARC Initiative	Centered on East Asia	Creating economic cooperation projects such as development of neighboring areas of railways and making investment; Collectively carrying out railway projects	7 members	-
Organization for Cooperation of Railways (OSJD)	Centered on China, Russia and Eastern Europe	International passenger and cargo transportation via railways	29 full members	1956
Greater Tumen Initiative (GTI)	South Korea, China, Russia and Mongolia	Strengthening cooperation in the areas including transportation, trade, investment, tourism, environment, energy, and agriculture	4 members	TRADP in the beginning of the 1990s, changed to GTI in 2005
European Coal and Steel Community (ECSC)	Europe	Managing and controlling coal and steel, means for war, through a transnational organization with federal characteristics	6 members	1953



Economic Cooperation and Status of Transportation

The GDP of the relevant countries is \$39.6 trillion (USD) and their population is 2.11 billion

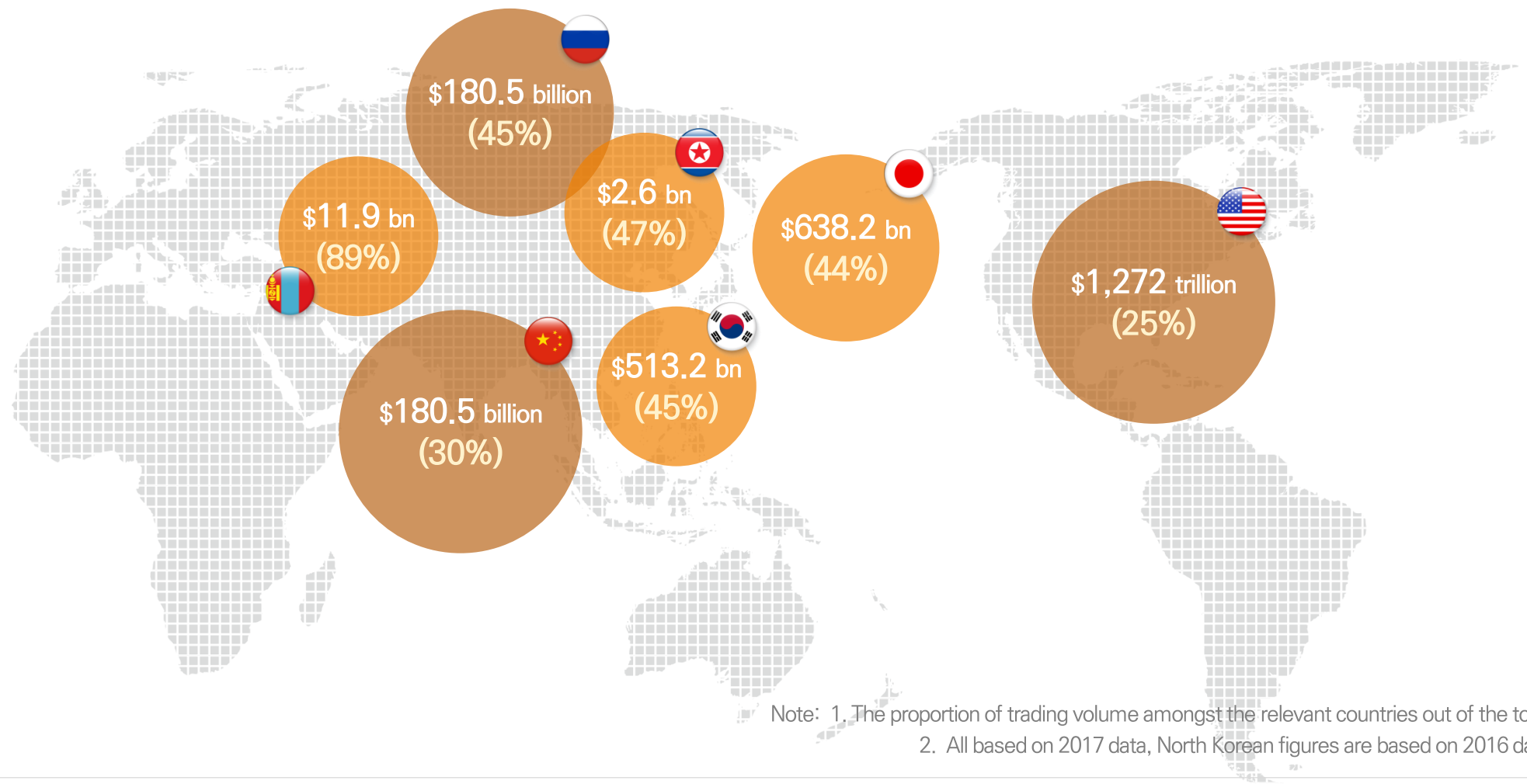
- 49.8% of the global GDP (\$79.5 trillion)
- The population of the relevant countries is 27.4% of the global population (7.71 billion)



Source: Korea Statistical Information Service (2017) North Korea's GDP (2016)

Trading amongst the relevant countries is very vibrant with the proportion ranging from 25~89%

- Based on the sum of imports and exports; the United State's figure is 25%



[The Global Competitiveness Index for Infrastructure (2017–2018)]



Roads



Railroads



Harbors

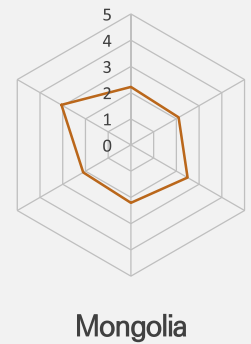
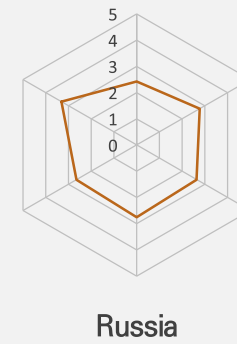
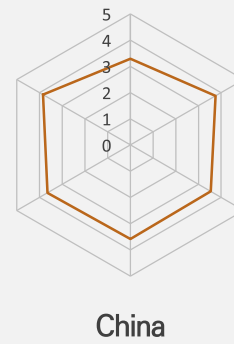
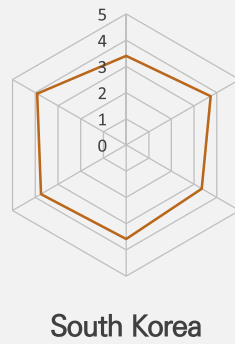
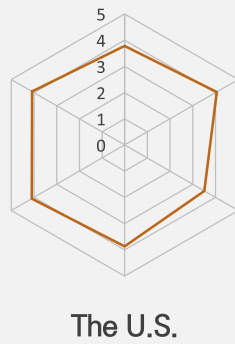
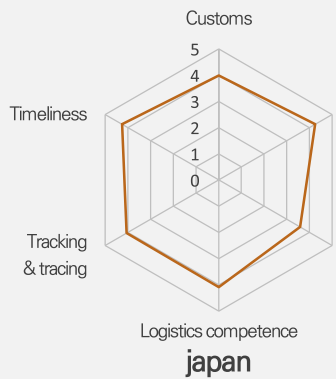
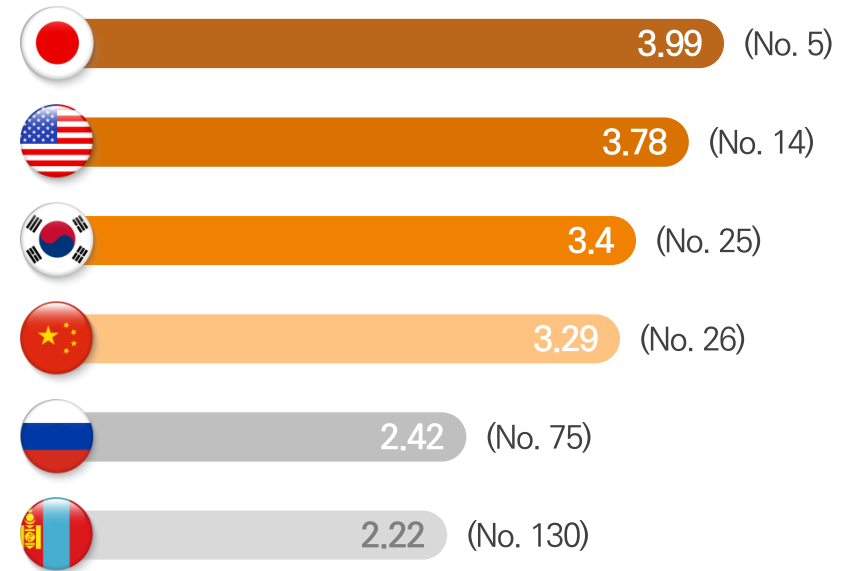


Air
Transportation



Source: The Global Competitiveness Report 2017–2018, World Economic Forum

[Logistics Performance (2018)]





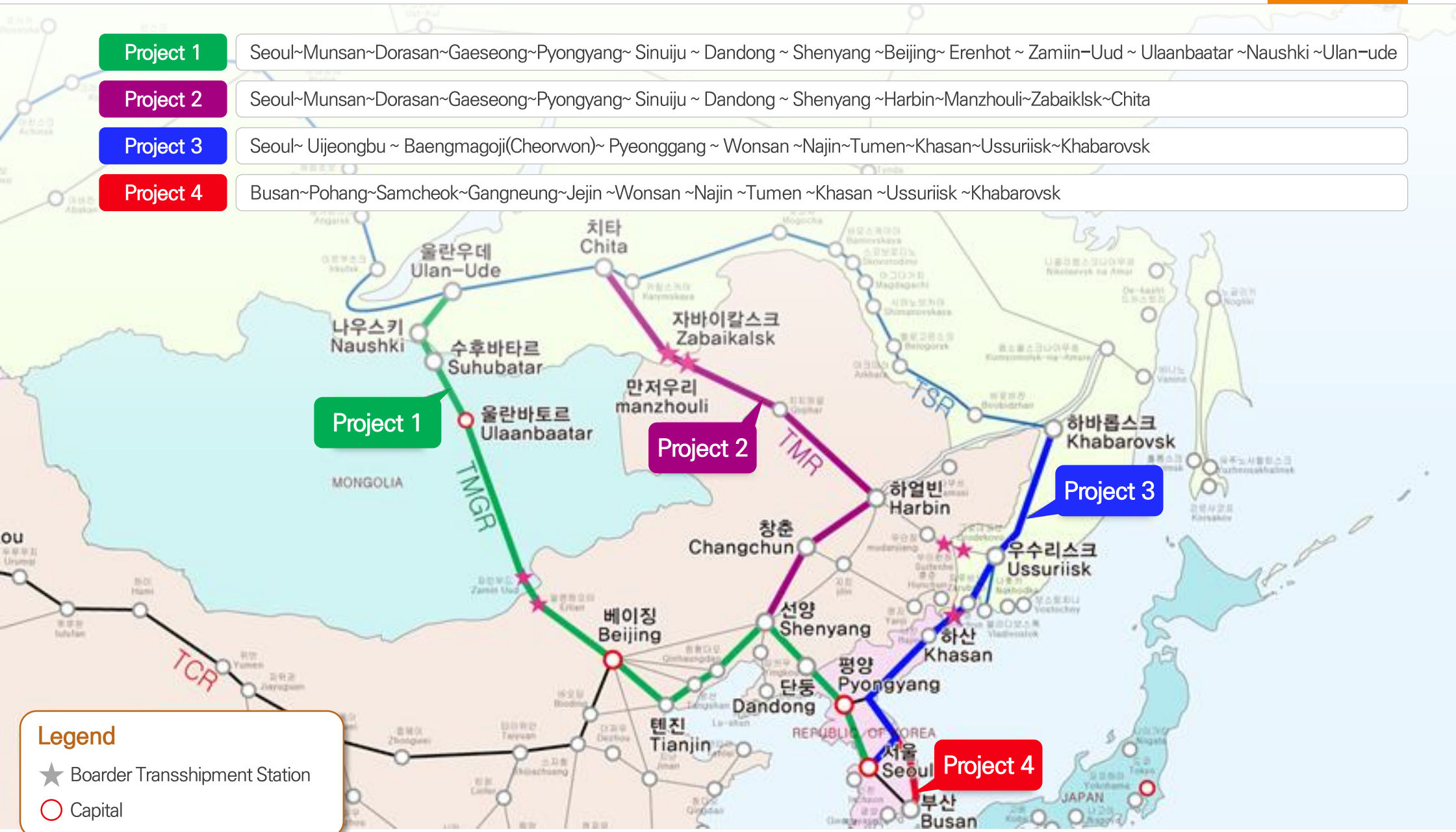
Potential EARC Projects



Goal of Building the Railway Network of East Asia

Building a network that has inter-operability, inter-connectivity and inter-modality

- Project 1** Seoul~Munsan~Dorasan~Gaeseong~Pyongyang~ Sinuiju ~ Dandong ~ Shenyang ~Beijing~ Erenhot ~ Zamiin-Uud ~ Ulaanbaatar ~Naushki ~Ulan-ude
- Project 2** Seoul~Munsan~Dorasan~Gaeseong~Pyongyang~ Sinuiju ~ Dandong ~ Shenyang ~Harbin~Manzhouli~Zabaikalsk~Chita
- Project 3** Seoul~ Uijeongbu ~ Baengmagoji(Cheorwon)~ Pyeonggang ~ Wonsan ~Najin~Tumen~Khasan~Ussuriisk~Khabarovsk
- Project 4** Busan~Pohang~Samcheok~Gangneung~Jejin ~Wonsan ~Najin ~Tumen ~Khasan ~Ussuriisk ~Khabarovsk



Legend

- ★ Boarder Transshipment Station
- Capital

1 China–Mongolia–Russia Economic Corridor

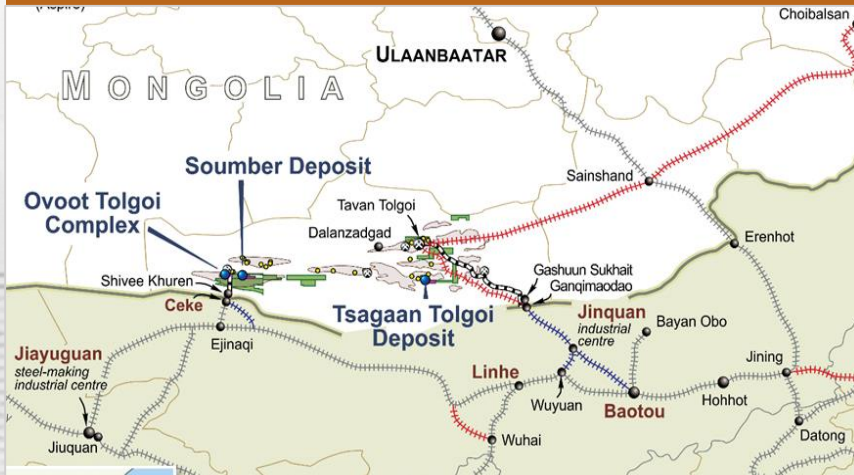


2 Primorye-1,2 International development Projects



East Asia
Rail Network
Projects

3 Tavan Tolgoi Mine-related Rail Development Project

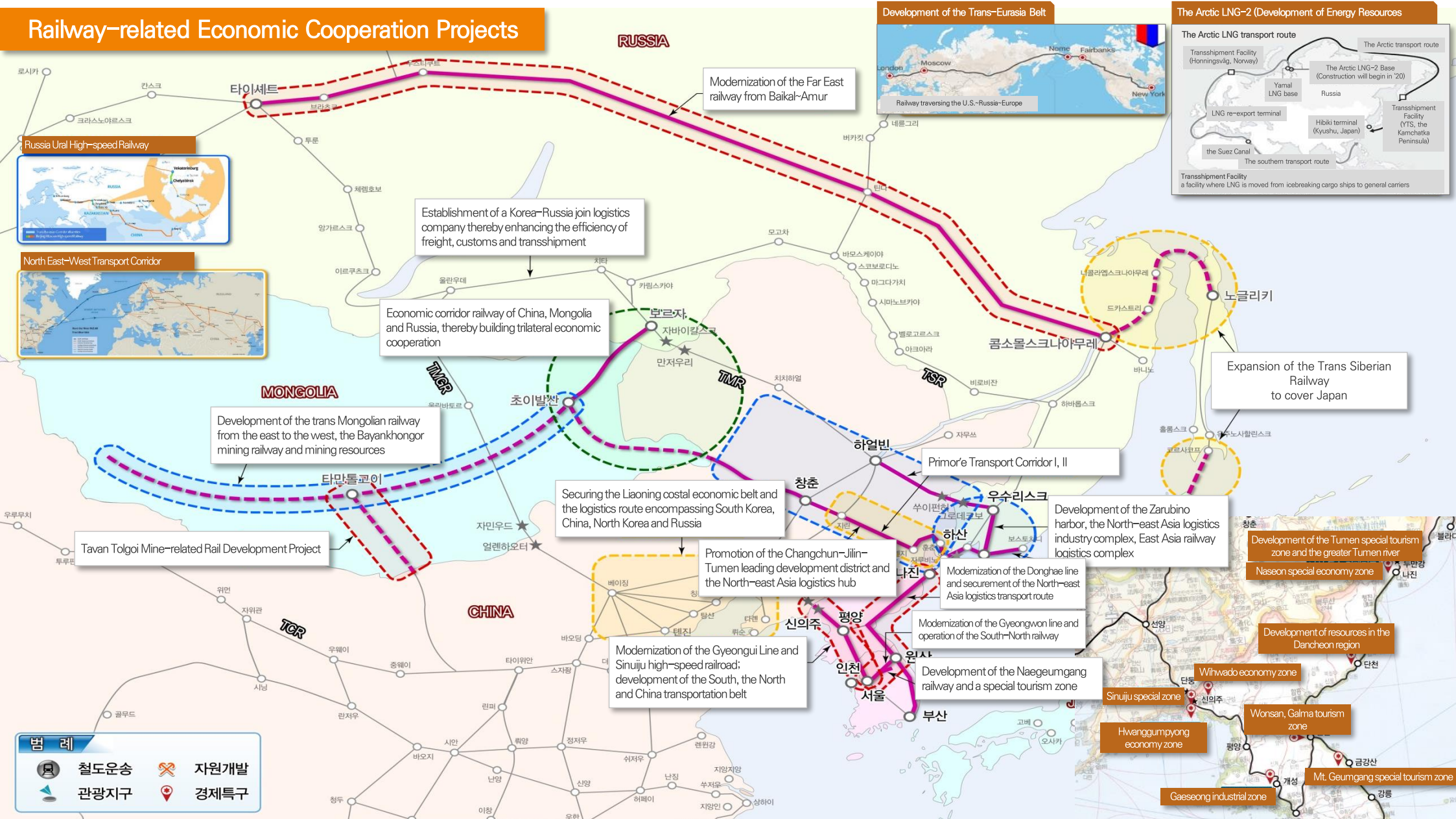


4 The Arctic LNG-2



Railway-related Economic Cooperation Projects: List

Railway-related Economic Cooperation Projects



List of Projects

Classification		Name of the Project	Relevant Country
Rail Projects	International Rails	Modernization of the Far East Railway	Russia
		Russia Ural High-speed Railway	Russia
		Trans-Mongolian East-West Railway	Mongolia
		China·Mongolia·Russia Economic Corridor Railway	China, Mongolia, Russia
		Primor'e-1 International Transport Corridor	China, Russia
		Primor'e-2 International Transport Corridor	China, Russia
		North East-West Transport Corridor	The U.S. , China, Russia and etc
		Development of the Trans-Eurasia Belt	The U.S. , Russia
	The South-North Rails	Sinuiju High-speed Railway	South Korea, North Korea
		Restoration and Modernization of the Gyeongui Line	South Korea, North Korea
Restoration and Modernization of the Donghae Line		South Korea, North Korea	
Restoration of Gyeongwon Line		South Korea, North Korea	
Cooperation Projects	Special Economic Zone	Construction of the Naegyeonggang Railway	South Korea, North Korea
		Sinuiju Special Economy Zone	North Korea
		Development of the Greater Tumen River	South Korea, North Korea, China, Mongolia and etc
		Kaesong Industrial Zone	South Korea, North Korea
		Hwanggumpyong, Wihwado Economy Zone	South Korea, North Korea
		Naseon Special Economy Zone	China, North Korea
		Liaoning Costal Economy Belt	China, North Korea
		The Changchun-Jilin-Tumen Leading Development Zone	China, North Korea, Russia
	Logistics	Establishment of a Korea-Russia joint logistics company	South Korea, Russia
		Development of the Zarubino Harbor	South Korea, China, Russia
		Development of the North-east Asia Logistics Industry Complex	China, Mongolia, Russia
	Tourism	Wonsan·Galma Tourism Zone	South Korea, North Korea
		Mt. Geumgang Special Tourism Zone	South Korea, North Korea
		Tumen River Joint International Tourism Zone	South Korea, North Korea, China, Russia
		Development plan for Russky Island	Russia
	Development of Energy-Resources	Development of Resources in the Dancheon Region	North Korea, China
		Tavan Tolgoi Mine-related Rail Development Project	China, Mongolia
	Undersea Tunnels	The Arctic LNG-2	South Korea, China, Russia, Japan
Russia-Japan Undersea Tunnel		Japan, Russia	

Determination of the Priority





Public–Private Partnership (PPP) promotion



In principle, each country's contribution should be allocated based on the size of its benefits

Restrictions such as the degree of each country's readiness in carrying out private-sector invested projects and the country's financial situation should be taken into consideration



Aside from the relevant countries of the EARC, the Multilateral Development Bank's active participation should be encouraged

➔ Status of Incompatible Gauges

Country	Border Changing Point	Gauge(mm)
North Korea Russia	Tumen River-Hasan (TSR)	1,435(North Korea) 1,520(Russia)
China Russia	Manzhouli-Zabaykalsk (TMR-TSR)	1,435(China) 1,520(Russia)
	Suifenghe-Grodekovo (TMR)	1,435(China) 1,520(Russia)
China Mongolia	Erenhot -Zamiin-Uud (TCR-TMGR)	1,435(China) 1,520(Mongolia)

➔ Transshipment Method for Incompatible Gauges

Method of Freight Transshipment



Transshipping freight from one train to another

Method of Bogie Exchange

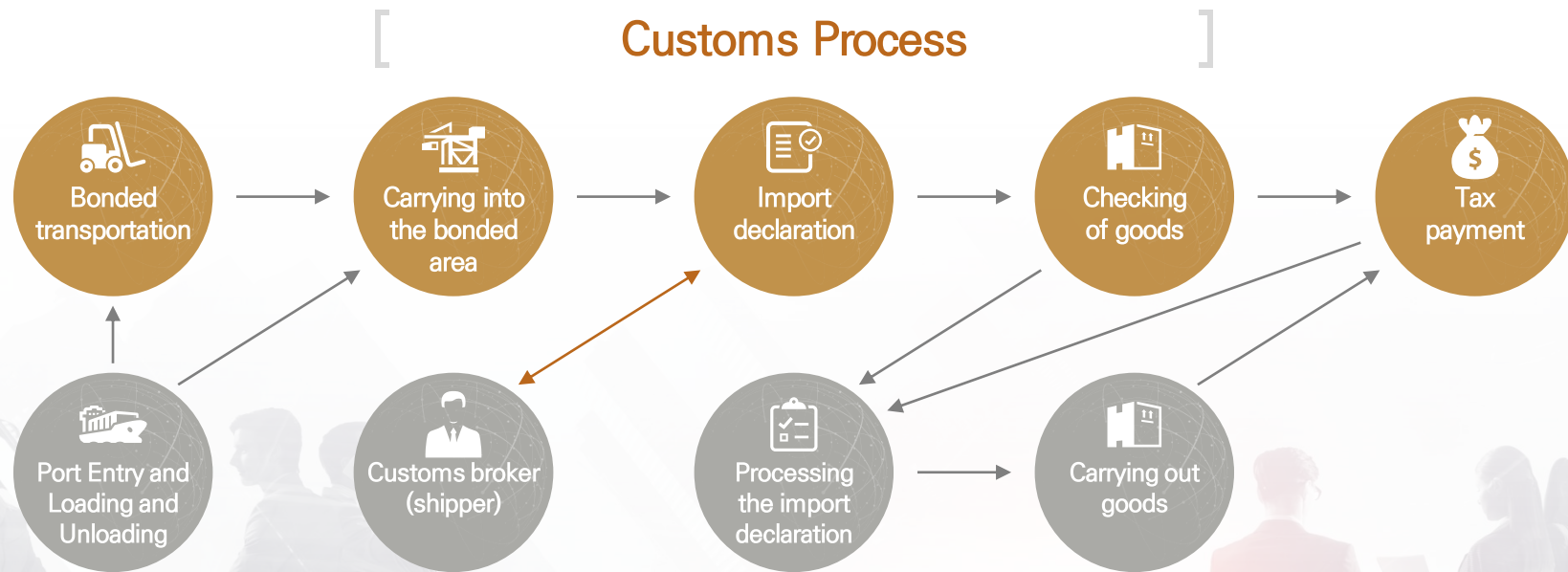


Changing wheels (standard · broad gauge) by lifting the train body

Method of Operating Gauge Changeable Tracks



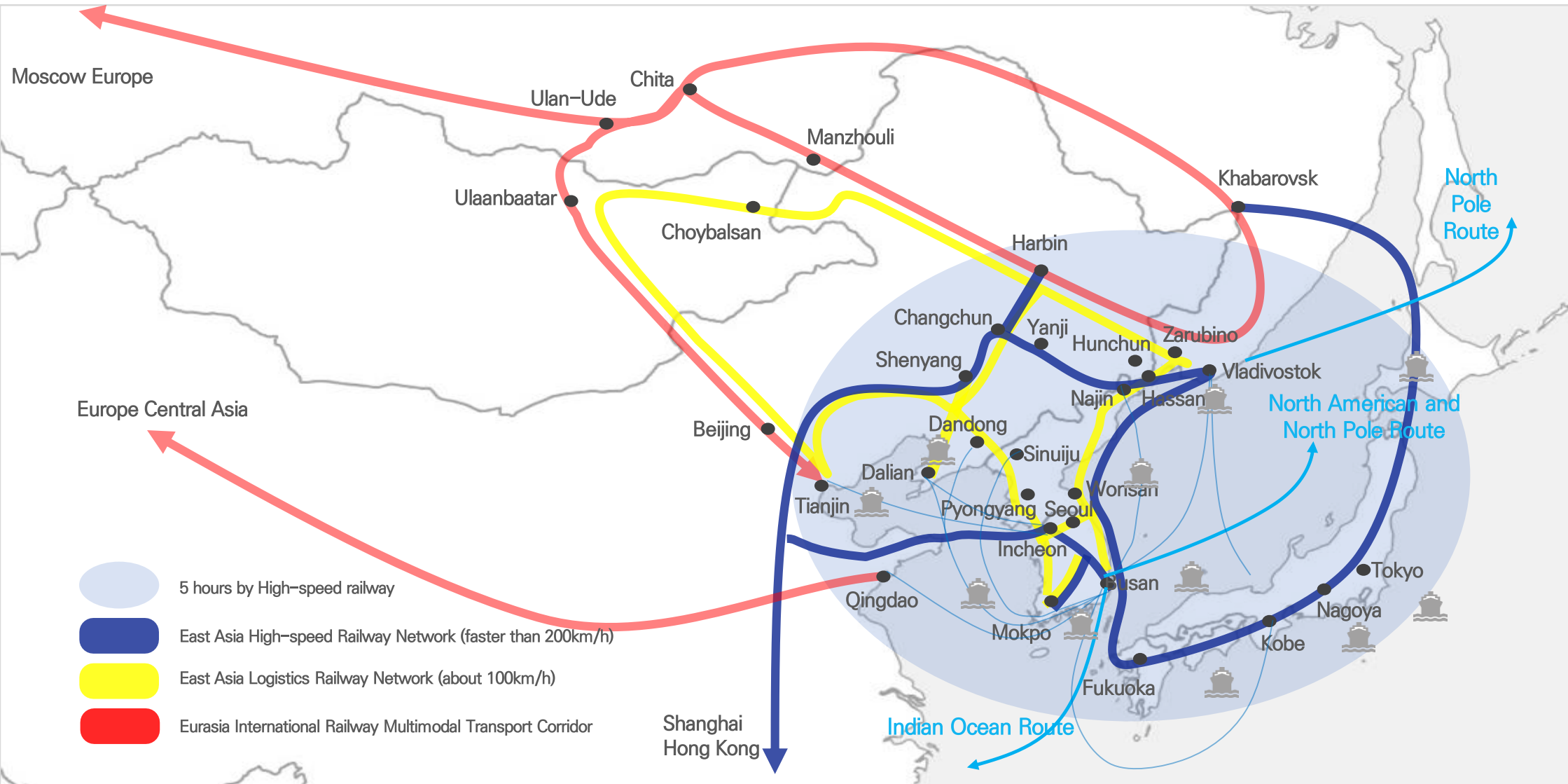
Installing the gauge changing device adjusting the width of the wheels in certain parts of the track → operating gauge changeable trains



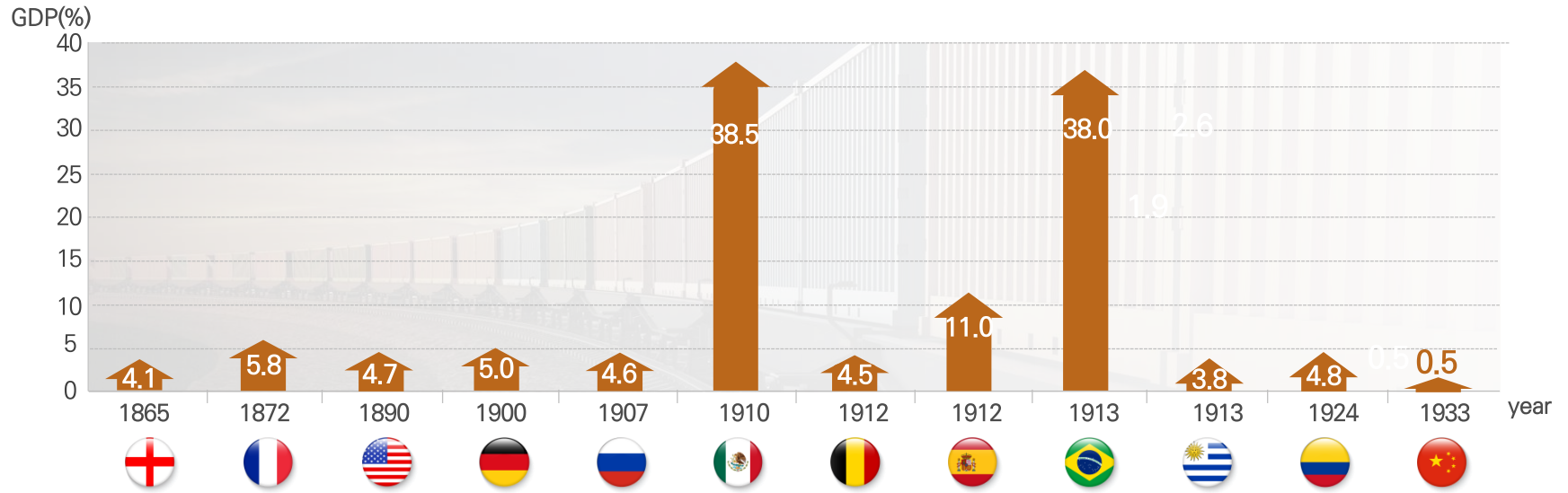


Expected Effect of the Development of the EARC

Creation of a one-day life zone by connecting areas via railway and development of a new land economic · exchange route

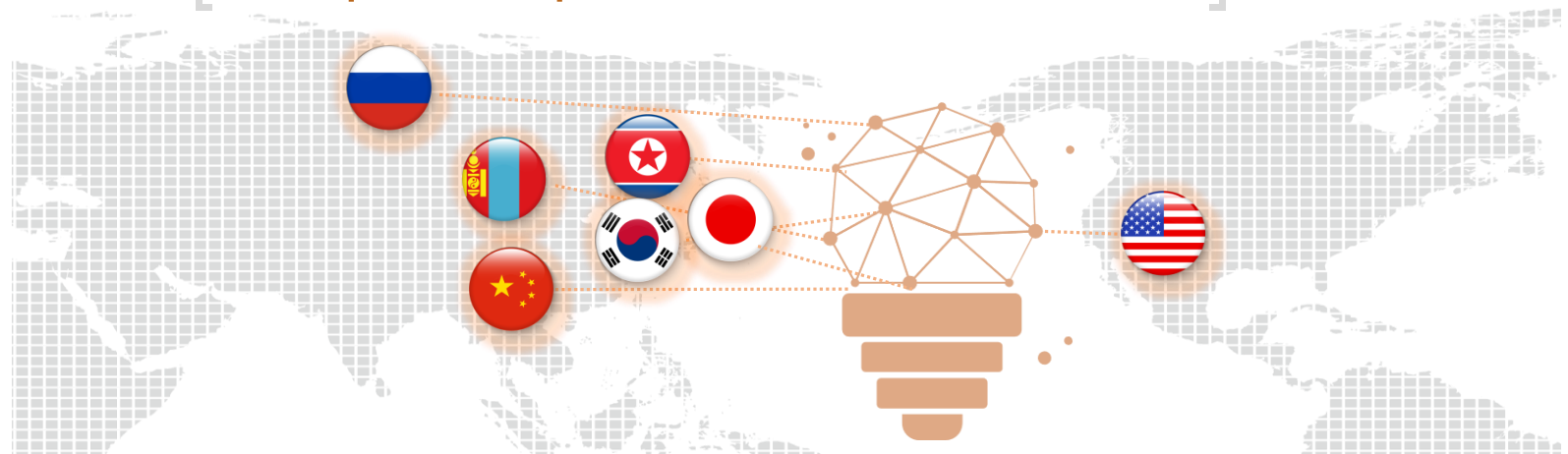


[Difference of GDP Increase rate(Railway vs Other alternatives)]



출처: Fogel(1964), Laffut(1983), Summerhill(2005), Leuning(2006), McGreevey(2008)

[Expected Impact of the Relevant Countries]



Market Expansion and Integration

Investment Expansion and Productivity Enhancement

Economic Development

Stimulating the Development of Relevant Industries

Stimulating the Development of Relevant Industries

01 Strengthening the reliability of the economic cooperation projects and reaffirming the trust the relevant countries have towards one another

02 Contributing to the improvement of relationship amongst the relevant countries

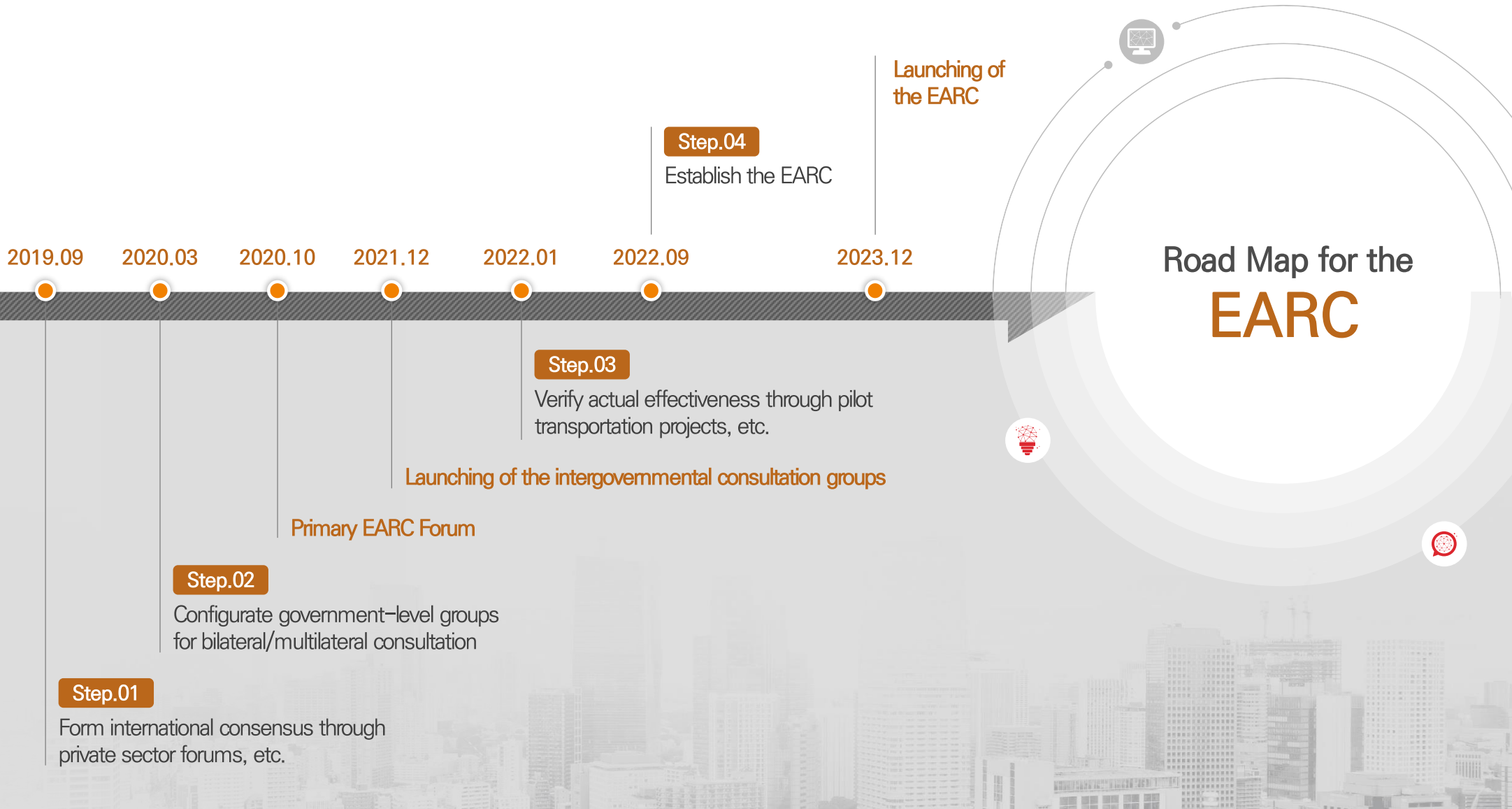
- The East Asia railway network is a key transport network connecting North-east Asia including the Korean peninsular, China and Japan, Central Asia and Europe, creating possibilities for various economic cooperation projects and enhancing manageability to conduct them

03 Building a regional economic community in East Asia and contributing to peace

- Realizing transportation infrastructure-driven national strategies of major countries in North-east Asia including Russia's Eurasia and the Far East development policy, China's One Belt One Road project and Mongolia's Steppe Road Initiative and enhancing the chance of their success
- Carrying out international cooperation projects in East Asia and building an economic community in North-east Asia



Development Plan for the EARC



STEP.01



01

(Tentative name) **Creating the East Asia Railway Cooperation Forum**

- Participation of experts from the 7 participating countries and international organizations (e.g. WB, ADB and etc)
- Discussion on the necessity and impact of railway cooperation and ways to eliminate factors hindering railway cooperation

STEP.02



02

(Tentative name) **Creating the East Asia Railway Consultative Body**

- Creating the ministerial consultative body based on existing, relevant consultative bodies (i.e. ROK–Russia Transportation Ministerial Meeting, ROK–China–Japan Ministerial Conference on Transport and Logistics, and etc)
- Integrating bilateral consultative bodies into a multilateral consultative body while continuing the operation of the bilateral bodies

STEP.03

**Implementing projects that may produce tangible results and are beneficial to the relevant countries**

- Considerations in the selection process: manageability of the project, feasibility, possibility of cross-national cooperation, economic impact, possibility of financing

STEP.04

**(Tentative name) Creating the East Asia Railway Cooperation Organization**

- Expanding and developing the East Asia Railway Consultative Body (tentative name) created in the stage
- Carrying out cooperation amongst the members on the following spheres: policy, operation, investment, finance and human resources





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END OF PRESENTATION

Thanks for your attention

