

Impact of Trans-Asian-Railway Network on Korean Economy

이태식* 란잔**
Lee, Tai Sik Saumya R Swain

ABSTRACT

There is a growing acceptance that rail has an important role to play in the national and international movements of goods and people. By making transportation between countries more efficient, the Trans-Asian-Railway Network is an important infrastructural and logistical component of Asian's goal of achieving closer economic and social integration, This paper discusses about Trans-Asian-Railway Network and its impact on Asia and Korean economy.

1. Introduction

The Trans-Asian Railway (TAR) was initiated in the 1960s with the objective of providing a continuous 14,000-km rail link between Singapore and Istanbul (Turkey), with possible onward connections to Europe and Africa. project to create an integrated freight railway network across Europe and Asia. The TAR is a project of the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP). At the time shipping and air travel were not as well developed, and the project promised to significantly reduce shipping times and costs between Europe and Asia. Progress in developing the TAR was hindered by political and economic obstacles throughout the 1960s, 1970s and early 1980s. By the 1990's, the end of the cold war and normalisation of relations between some countries improved the prospects for creating a rail network across the Asian continent.

The link offered the potential to greatly shorten the distances and reduce transit times between countries and regions, while being a catalyst for the notion of international transport as a tool for trade expansion, economic growth and cultural exchanges.

The international events that punctuated the 1960s, 1970s and early 1980s influenced the momentum of the concept during these three decades. However, with the political and economic changes that took place in the region in the 1980s and early 1990s, the development of the TAR concept was revived.

Given the extent of the territory covered, the differences in standards, and differences in the levels of technical development between railways in the region, ESCAP adopted a step-by-step approach to define the TAR network. The network was initially divided into four major components which were studied separately. The TAR was seen as a way to accommodate the huge increases in international trade between Eurasian nations and facilitate the increased

* 정회원, 한양대학교 건설환경시스템공학과 교수

E-mail : cmtsl@hanyang.ac.kr

TEL : (031)400-4108 FAX : (031)418-2974

** 한양대학교 토목공학과 석사과정

movements of goods between countries. It was also seen as a way to improve the economies and accessibility of landlocked countries like Laos, Afghanistan, Mongolia, and the Central Asian republics. Much of the railway network already exists, although some significant gaps remain. A big challenge is the differences in rail gauge across Eurasia. Four different major rail gauges (which measures the distance between rails) exist across the continent: most of Europe, as well as Turkey, Iran, China, and the Koreas use the 1435 mm gauge, known as Standard gauge; Finland, Russia, and the former Soviet republics use a 1520 mm gauge; most of the railways in India, Pakistan, Bangladesh and Sri Lanka use a 1676 mm gauge, and most of Southeast Asia has metre-gauge. For the most part the TAR would not change national gauges; mechanized facilities would be built to move shipping containers from train to train at the breaks of gauge

By 2001, the four corridors had been studied as part of the plan

- 1) The Northern Corridor will link Europe and the Pacific, via Germany, Poland, Belarus, Russia, Kazakhstan, Mongolia, China, and the Koreas, with breaks of gauge at the Polish-Belarusian border (1435 mm to 1520 mm), the Kazakhstan-Chinese border (1520 mm to 1435 mm), and the Mongolian-Chinese border (1520 mm to 1435 mm). The 9,200km Trans-Siberian Railway covers much of this route and currently carries large amounts of freight from East-Asia to Moscow and on to the rest of Europe. Due to political problems with North Korea, freight from South Korea must currently be shipped by sea to the port of Vladivostok to access the route
- 2) The Southern Corridor will go from Europe to Southeast Asia, connecting Turkey, Iran, Pakistan, India, Bangladesh, Myanmar, and Thailand, with links to China's Yunnan Province and, via Malaysia, to Singapore. Gaps exist in eastern Iran, between India and Myanmar, between Myanmar and Thailand, between Thailand and Cambodia, between Cambodia and Vietnam and between Thailand and Yunnan. Breaks of gauge occur, or will occur, at the Iran-Pakistan border (1435 mm to 1676 mm), the India-Myanmar border (1676 mm to 1000 mm), and at the Thailand-China border (1000 mm to 1435 mm).
- 3) A Southeast Asian network
- 4) The North-South Corridor linking Northern Europe to the Persian Gulf. The main route starts in Helsinki, Finland, and continues through Russia to the Caspian Sea, where it splits into three routes: a western route through Azerbaijan, Armenia, and western Iran; a central route across the Caspian Sea to Iran via ferry; and an eastern route through Kazakhstan, Uzbekistan and Turkmenia to eastern Iran. The routes converge in the Iranian capital of Tehran and continue to the Iranian port of Bandar Abbas



그림 1. Trans-asian railway network

There is a growing acceptance that rail has an important role to play in the national and international movements of goods and people. A number of features speak in favour of a greater utilization of rail transport in Asia. (i) Twelve of the 30 landlocked countries of the world are located on the Asian continent with the nearest ports often several thousands of kilometres away, (ii) the distances linking the main origin and destination, both domestically and internationally, are of a scale on which railways find their full economic justification, (iii) the reliance on ports to connect national economies to the world's markets with the need to clear landside port areas quickly to avoid congestion, especially in the context of growing containerization and the development of intermodal transport, (iv) a number of countries are major exporters of mineral resources in the logistic of which rail transport plays a crucial role, (v) the continuing surge in the volumes of goods being exchanged, and (vi) the recognition of rail as an environmentally friendly and safe mode of transport.

The next challenge is to move towards joint operationalisation of the corridors in a coordinated manner at financial, operational and commercial levels. Institutional and technical bottlenecks have to be identified and specific remedial measures have to be defined and implemented. The development of common information technology systems has to be given proper attention as well as the development of efficient access to ports and inland container depots. In the longer term, corridor-based organizations with the authority to act on behalf of their constitutive railway administrations in areas such as service-definition, tariff-setting and marketing as well as the possibility of bulk-selling trainload-based capacity to private sector need to be considered. The development of joint border stations to implement a "one-stop-shop" concept under which all rail and non-rail operations by the relevant administrations of two neighbouring countries are performed at one single location would also be a step towards greater operational efficiency.

표 1. TAR routes in operation (80,900 km in 26 countries)

South-East Asia:	Cambodia, Indonesia, Malaysia, Myanmar, Singapore, Thailand, Viet Nam	12,600 km
North-East Asia:	China, Democratic People's Republic of Korea, Mongolia, Republic of Korea, Russian Federation	32,500 km
Central Asia and Caucasus:	Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan	13,200 km
South Asia + Islamic Republic of Iran and Turkey:	Bangladesh, India, Islamic Republic of Iran, Pakistan, Sri Lanka, Turkey	22,600 km
Total:		80,900 km

2. Conclusion

Regional cooperation in identifying cross border infrastructure projects, harmonizing cross-border rules and regulations and learning good practice lessons are equally important for infrastructure development. Korea's Economy can be enhanced by developing the current infrastructure which needs to be renovated in the coming years. Trans-Asian-Railway Network was seen as a way to accommodate the huge increases in international trade between Eurasian nations and facilitate the increased movements of goods between countries; this will ease the current trading system for Korea.

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