International Transportation Corridors in Northeast Asia: Multilateral Efforts and the Greater Tumen Initiative's Role¹

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Summary

The corridor-based approach to the development of a region-wide transport network in NEA has gained increased attention since the early 2000s, when the vision of nine regional transportation corridors was unveiled by the Transport Subcommittee of NEA Conference Organizing Committee and ERINA. Since then, the UNESCAP Secretariat has been involved in the transport corridors' formulation and operationalization in NEA by implementing three corridor-focused projects. While the first project promoted a regional integrated transport and logistics system through the identification of six selected transport corridors, two other projects, including that being conducted at present, focus on prioritization and further development of NEA-Europe and NEA-Central Asia inter-regional transport linkages. Consequently, only a few corridors from the original vision have currently been given priority from the multilateral perspective. The other international transport corridors in NEA have not been provided with sufficient support at the regional level, although they are of region-wide significance and conform with national policies and bilateral priorities. At the same time, these corridors pass through the economic core of NEA - the *Greater Tumen Region* (GTR), a territory covered by the mandate of *Greater Tumen Initiative* (GTI), the intergovernmental cooperation mechanism in NEA. Given that the GTI member governments have committed to support transport development and cooperation in the region through the recently established Transport Board, the GTI could be an ideal framework under which these trans-GTR transport corridors could be fostered.

Introduction

Rapid and smooth movement of goods and people within regional blocs is a driving factor of and rationale for promoting regional collaboration and integration. Unlike the EU, the Northeast Asian (NEA) region can not currently harness benefits from formal regional grouping. Nonetheless, in recent years, the political, economic and social environment of the region increasingly demonstrates the need for NEA countries to intensify regional collaboration in order to facilitate intraregional trade, investment and tourist flows and thereby sustain and accelerate economic growth and raise living standards. Under this context, a well-functioning region-wide international transport and logistics network is a key element in the region's move to closer economic ties and increased global competitiveness.

Although NEA is one of the most economically vibrant regions of the world, its regional transport and logistics network is not well developed and properly integrated at the international level, burdened with both physical barriers (missing links, gauge differences,

inadequate facilities of some roads, rails and seaports, etc.) and non-physical barriers (cumbersome border crossing formalities, limitations on the entry of vehicles, restrictive visa requirements, incompatible working hours at border crossings, etc.). As a result of the numerous bottlenecks, the current performance of the transportation system in NEA in terms of costs, speed, safety and quality of service provided is lagging far behind the involved countries' aspirations for strengthening regional economic cooperation. The identification and development of international intermodal transport corridors in NEA could contribute greatly into the broader aim of pursuing integrated regional transport and logistics network and enhancing interregional connectivity.

International transport corridor as a concept

An integrated (intermodal) transport network can be considered "a network where coordinated transport service is provided by multiple operators using one or multiple modes that allow efficient transfer between modes and charge a single tariff (i.e., the network show physical, service, scheduling and tariff integration)". This network is composed of a variety of different routes that should

¹ This article is based on a reference paper prepared for the Inaugural Meeting of the Greater Tumen Initiative Transport Board held in Busan, Republic of Korea, on 25 June 2010. The author gratefully acknowledges the valuable contributions to this paper from by *Nataliya Yacheistova*, Director of the Tumen Secretariat/UNDP, *Mikhail Kholosha*, Director of the Transport Development Department, Far Eastern Marine Research, Design and Technology Institute (Russia), *Hirofumi Arai*, Associate Senior Research Fellow, ERINA (Japan), and *Anne Johnson*, Programme Assistant, Tumen Secretariat/UNDP.

² Toward an Asian Integrated Transport Network. UNESCAP, Asian Institute for Transport Development, New York, 2007. P.21. Available at http://www.unescap.org/ttdw/Publications/TPTS pubs/pub 2399-2/pub 2399-2 fulltext.pdf

be well-integrated and equipped with high-capacity and high-quality transport and logistics facilities. As such, the implementation strategy for developing this type of network should mainly concentrate upon specific paths through networks and thus provide priorities for practical activities and tangible implementation.³ The strategy that involves selecting a number of trunk routes in the region and then channeling political, institutional, financial and human resources to develop them is regarded as a *corridor-based approach*. This approach has proven useful for gradual fostering transport network operationalization in terms of quality, capacity, interconnectivity and interoperability within and between global regions.⁴

In broad sense, a transport corridor can be defined as a tract of land in which at least one main line for transport, road, rail or canal has been built. Corridors may include only one path/route (e.g., when network density is very low) or many alternative paths/routes, sometimes even including small distribution networks. At the same time, the term *international transport corridor* (ITC) currently in use is more specific and refers to a specified, ideally intermodal, route connecting key points in neighboring countries and aiming to expedite the movements of goods and people across international borders. An effective functioning of an ITC is intended to:

- increase cross-border and transit traffic across the counties of the respective region,
- upgrade the connectivity and functionality of the regional transport system,
- facilitate the coordination of transport policies and regulations as well as simplified and standardized cross-border procedures in the neighboring countries.
- stimulate accession to and compliance with relevant legal agreements and conventions, etc.

Three major stages of development of an ITC are defined as follows: (1) identification through studies,

formulation, prioritization and subsequent selection of priority multimodal routs, (2) formalization through official agreements and mutual commitment of the parties involved and (3) operationalization through implementation of policy, investment, management and technology measures to enrich the traffic conditions along the corridor. Institutional bodies such as a steering committee or executive agency which would plan, manage, assess and monitor activities on the ITC operationalization should be established.

The ITC concept is complex and combines *two* major components, infrastructure and services, or "hard" and "soft" infrastructures¹⁰. "Hard" infrastructure encompasses railways, roads, seaports, custom checkpoints, transshipment terminals, warehouses, dry ports/inland container depots, etc. "Soft" issues include a wide range of services provided for shippers during the movement along corridor, such as border crossing procedures (border inspection, customs clearance, quarantine and immigration control), transportation itself, stevedoring, transshipment, storage, distribution and other logistic services.

Principal factors that determine the demand for and a competitiveness of a ITC are total *speed* and *costs* required to deliver cargo from the point of origination to a destination, security of freight, *quality of services* rendered along the corridor, and *stability* of these characteristics. ¹¹ To achieve the high rates of usage of an ITC, it is essential for all the parties involved - freight forwarders, logistics service providers and relevant government agencies - to work closely to improve the aforementioned characteristics of the corridor.

Conceptualization of the NEA transport corridors

From mid-90's, Economic Research Institute for Northeast Asia (ERINA) in Niigata, Japan, had steered one of the most well-known regional expert forums on

³ *Ibid*. P.110.

⁴ The corridor-related activities are pursued through supranational frameworks, international and regional organizations or programmes, such as European Commission/Trans-European Transport Network (TEN-T) Executive Agency, ASEAN, South Asian Association for Regional Cooperation (SAARC), UNESCAP, UNECE, Initiative for the Integration of Regional South American Infrastructure (IIRSA), Transport Corridor Europe-Caucasus-Asia (TRACECA), ADB's Central Asia Regional Economic Cooperation (CAREC), South Asia Subregional Economic Cooperation (SASEC) and Greater Mekong Sub-region (GMS) Programmes, Organization for Railway Cooperation (OSJD), etc. For more information, see Infrastructure for a Seamless Asia. Asian Development Bank Institute, Asian Development Bank. Tokyo. 2009. P. 124-149. Available at http://www.adbi.org/files/2009.08.31.book.infrastructure.seamless.asia.pdf.

⁵ http://en.wikipedia.org/wiki/Transport_corridor

⁶ Toward an Asian Integrated Transport Network. *Op cit.* P. 38.

⁷ UNESCAP Transport Sector Activities and Introduction to the corridor project. Proceedings of the Policy-level Expert Group Meeting on Operationalization of International Intermodal Transport Corridors in North-East and Central Asia. Transport Division, UNESCAP. 4-5 March 2009, Tashkent, Uzbekistan. Available at http://www.unescap.org/ttdw/common/TIS/CorridorStudy/EGM_files/1-ESCAP_Intro.pdf

⁸ Although, there are other interpretations of the international transport corridor term. See, e.g.: Rimmer Peter. *Evolving Logistics Networks in Northeast Asia: Gateways and Corridors*. Paper presented at 2010 PCRD International Conference "Transborder Regional Development and Policy Agenda in NEA". 7-9 July 2010. Jeju, Republic of Korea. Available at http://www.region.go.kr/jeju_conference/SESSION2_2.pdf

⁹ UNESCAP Transport Sector Activities and Introduction to the corridor project. Op cit..

¹⁰ Tsuji Hisako. Key Transportation Corridors in Northeast Asia: Overcoming Physical and Regulatory Impediments. ERINA Report. Vol.41. 2001.
Available at http://www.erina.or.jp/en/Research/db/pdf2001/01030e.pdf

¹¹ Kholosha Mikhail. *Development of the Tumen River transportation corridor*. Paper presented at the GTI Transport Workshop. Hunchun, China. 18 December 2009. Available in Russian at http://www.tumenprogram.org/data/upload/download/Kholosha_rus_Speech&PPT_Wp5EOb.pdf

NEA development and cooperation - the *Northeast Asia Economic Conference*. To facilitate the involvement of all the interested parties into the conference-related activities throughout the year, ERINA established the *Conference Organizing Committee* in 2000.¹² Later, it was supplemented by the Transport Subcommittee composed of experts and officials from NEA countries as well as Tumen Secretariat/UNDP representative. Based on reports at conferences and surveys conducted by ERINA, the Transport Subcommittee put forward a *Vision on Northeast Asian Transportation Corridors* (NATC),¹³ wherein nine such corridors were identified as major transportation routes of international significance in the region, listed below (Fig.1):

- 1. BAM Railway: Vanino Taishet SLB.
- 2. *Siberian Land Bridge (SLB)*: ports in Primorsky Territory, Russia Europe/Central Asia.
- 3. *Suifenhe Transport Corridor*: ports in Primorsky Territory, Russia Grodekovo Suifenhe Harbin Manzhouli Zabaikalsk SLB.
- 4. Tumen River Transport Corridor: Russia's and

- DPRK's ports in the Tumen River Area (Zarubino/Posiet/RaSon) Changchun East Mongolia SLB.
- Dalian Transport Corridor: Dalian Shenyang -Harbin - Heihe - Blagoveschensk - SLB.
- Tianjin Mongolia Transport Corridor: Tianjin -Beijing - Ulaanbaatar - SLB.
- 7. *China Land Bridge (CLB) Corridor*: Lianyunggang Port Kazakhstan Europe.
- 8. *Korean Peninsula West Corridor*: Busan Seoul Pyongyang Sinuiju Shenyang Harbin SLB.
- Korean Peninsula East Corridor: Busan RaSon -Tumangang - Khasan - SLB.

In this vision and related ERINA's papers, the current status of these transport corridors, its significance, key issues to be addressed, including so-called "discontinuous points", as well as major projects for the corridor's development were summarized. The main points of the NATC vision were stated as follows:

— The transport corridors identified form an overall region-wide transport network within which alternative



Fig.1 The vision of the International Transport Corridors in NEA

Source: Vision for the Northeast Asia Transportation Corridors. Op cit. P.4.

¹² http://www.erina.or.jp/en/Ec/ecoc-e.htm

¹³ Vision for the Northeast Asia Transportation Corridors. Northeast Asia Economic Conference Organizing Committee, Transportation Subcommittee. ERINA booklet. 2002. Available at http://www.erina.or.jp/en/Research/db/pdf2001/01010e.pdf

¹⁴ See *ibid*; Tsuji Hisako. *Op. cit*.; Tsuji Hisako. *An international Logistics Network in Northeast Asia*. ERINA Discussion Paper # 0307e. November 2003. Available at http://www.erina.or.jp/en/Research/db/pdf2003/03032e.pdf; Mitsuhashi Ikuo. *Vision for the North-East Asia Transportation Corridors*. Paper presented at the Policy-Level Workshop on the Development of an Integrated Shipping and Ports System in North-East Asia. Tianjin, China. 10-11 October 2002. Available at http://www.unescap.org/ttdw/Publications/TFS_pubs/pub_2354/pub_2354 ann4.pdf .

routes are available and multiple corridors can be used in a single trip.

- This network is ultimately aimed at enabling goods and people to move across the countries of the region as smoothly as within a single country.
- NATC provides the region with effective connections to transportation networks outside NEA and provides inland regions of NEA with an outlet to the Pacific Ocean. Whereas the concept covers only the land sections of the routes, maritime segments were reported to be added to promote the actual development of NATC.
- The corridors support the future development of Heilongjiang and Jilin Provinces, taking into consideration the fact that these provinces are located in the geographical centre of North-East Asia and are home to the greatest concentration of the region's population.
- Three stage of maturity of NATC were identified accordingly the level of development of the corridors:
 - basic formation period: the corridor is at the stage of basic infrastructure development (Suifenhe, Tumen River and both Korean Peninsula corridors):
 - propagation period: the corridor is attracting users requiring transportation services (Vanino -Taishet and Tianjin - Mongolia corridors);
 - active period: the corridor is promoting further utilization and expanding the quantity of freight carried (SLB, Dalian and CLB corridors).

While the original version seems the most broadly cited, there is a revised version involving eight corridors and five "candidate routes": two new lines and three lines related to previously identified corridors:¹⁵

- Russia Northern Route stretching from Heihe along the Russia-China border to Khabarovsk and then to the port of Nikolaevsk-on-Amur,
- East-line of Northeast China, or Dongbiandao
 Railway, running alongside of China-DPRK border
 through Mudanjiang Tumen Tonghua Dandong
 Dalian
- Harbin Amur Route, formerly part of Dalian Transport Corridor connecting China and Russia in the original vision,

- Mongolia Eastern Route, formerly part of Tumen River Transport Corridor linking China and Mongolia in the original vision,
- Korean Peninsula Route, formerly Korean Peninsula East Corridor.

Later, the main focus of the Transport Subcommittee and ERINA was directed towards the promotion of the *Tumen River Transportation Corridor*¹⁶ which was highlighted as unique due to the involvement of all six countries of NEA when the marine route departing from the Tumen area ports is taken into account and thus most meaningful for the development of NEA regional cooperation. To activate this corridor through pursuing bottom-up approach, several possible transport lines were being explored for feasibility since the mid-2000s and, finally, the *NEA Ferry Route project* involving the sealand line through Sokcho (Republic of Korea) - Niigata - Zarubino (Russia) - Hunchun (China) was launched in July 2009.¹⁷

UNESCAP's corridor-related activities

In order to stimulate coordinated actions by governments across the Asia-Pacific region to improve conditions and procedures for international trade and transportation, the Transport Division of the UNESCAP Secretariat, under the framework of the Asian Land Transport Infrastructure Development project, 18 formulated the Asian Highway (AH) and Trans-Asian Railways (TAR) networks over the years 2002-2007 and 2004-2009, respectively. After that, these networks were formalized through the *Intergovernmental Agreement on the Asian Highway Network*¹⁹ and *the Intergovernmental* Agreement on the Trans-Asian Railway Network²⁰. The Agreements have provided the member countries with a platform to discuss technical and institutional issues to improve the quality of the networks. The main obligation of the contracting parties of the Agreements is to adopt the AH and TAR networks as a coordinated plans for the development of highway and railway routes of international importance.

The eight routes of the original nine transportation corridors of the *NATC vision* were adopted into the AH and

¹⁵ Progress on Trade Corridors in Northeast Asia. Background Materials for Hunchun Forum on the Tumen River Transportation Corridor. Organized by ERINA, Tumen Secretariat/ UNDP, JETRO. Hunchun, China. 22 October, 2003.

¹⁶ Forum on the Tumen River Transportation Corridor. Hunchun, China. 22 October, 2003; 2nd Forum on Breathing life into Tumen River Transportation Corridor. Niigata, Japan . February 2004; Working group meeting on Breathing Life into Tumen River Transportation Corridor. Vladivostok-Posiet-Zarubino, Russia. 12-14 July 2004.

¹⁷ Mitsuhashi Ikuo, Kawamura Kazumi. The Northeast Asian International Ferry Project. ERINA Report. Vol.53. 2003. Summary in English available at http://www.erina.or.jp/en/Research/db/pdf2003/03010e.pdf; Special Issue: Northeast Asia International Conference for Economic Development in Niigata. Session A-1: The Tumen River Transport Corridor - The Development of the Yanbian Area and a Northeast Asia Ferry Route (Summary). ERINA Report. Vol.75. May 2007. P. 11-24; Mitsuhashi Ikuo. History and Current Issues regarding Northeast Asia Ferry. Paper presented at the GTI Transport Workshop. Hunchun, China. 18 December 2009. Available at http://www.tumenprogramme.org/data/upload/download/MitsuhashiIkuo speech Eng hoQW3q.pdf

¹⁸ Endorsed by the ESCAP Commission at its 48th session in April 1992.

¹⁹ This Agreement was adopted at the Intergovernmental meeting on Asian Highways in Bangkok on 18 November 2003 and entered into force on 4 July 2005. To date, the Agreement has been signed by 28 member states, including five of six NEA countries (except DPRK).

²⁰ This Agreement was adopted by the 62nd session of UNESCAP in Jakarta, Indonesia, in April 2006 and came into force on 11 June 2009. To date, the Agreement has been signed by 22 member states, including four of six NEA countries (except DPRK and Japan).

TAR networks. The *BAM railway* has not been included. The short-cut versions of the two corridors, *Dalian Transport Corridor* and *Tumen River Transport Corridor*, were adopted in the TAR network where rails already exist. In addition, only the *North Korean route* of the *Tumen River Transport Corridor* was reflected in both networks. The NEA sections of the AH and TAR network's maps, identified routes and their correspondence with the *NATC vision* are provided in Annex 1.

In parallel with network-oriented activities, the UNESCAP Secretariat has taken the lead in assisting member countries with the identification, formalization and operationalization of priority transport corridors within adopted networks. In doing so, the Secretariat has been undertaking the following projects:

- Integrated international transport and logistics system for North-East Asia (2002-2006),
- Developing Euro-Asian Transport Linkages (2002-2007),
- Operationalization of international intermodal transport corridors in North-East and Central Asia (2008 - present).

Integrated international transport and logistics system for North-East Asia (2002-2006)

In 2002, the UNESCAP Secretariat jointly with the Tumen Secretariat/UNDP and in collaboration with the Korea Transport Institute (KOTI) initiated a study project entitled *Integrated International Transport and Logistics System for North-East Asia*. The overarching objective of the project was to assist the member countries in the NEA region to promote the development of an integrated transport and logistics system in the region by selecting a number of priority international transport corridors. As a result of the study, six international transport corridors in NEA were selected. For each corridor, feasible unimodal and intermodal routes were analyzed, infrastructure and institutional bottlenecks were identified and an action plan on the operationalization of the NEA transport and logistics network was developed.²¹

The six priority corridors were formulated precisely in accordance with the AH and TAR networks (subsequently, the *BAM railway* was not included). In addition, the *Korean Peninsula East Corridor* and *Siberian Land Bridge* were combined into a single corridor as well as the *China Land Bridge* was excluded. The map of selected international transport corridors in NEA, their specific routes and correspondence with the *NATC vision* are provided in Annex 2.

Developing Euro-Asian Transport Linkages (2002-2007)

The Euro-Asia Transport Linkages is a joint project of the UNESCAP and United Nations Economic Commission for Europe (UNECE) initiated in 2002. The main objective of this project was to integrate Europe and Asia through transport corridors. Under this project, four main Euro-Asian road and rail routes for priority development and cooperation were identified. In addition, a large number of projects along these routes were evaluated and prioritized, and the preliminary analysis of transit obstacles and recommendations for reducing them were also provided. ²²

Although at the early stage of the project, Korean Peninsula East Corridor and Tianjin - Mongolia Transport Corridor were taken into consideration, only two of previously formulated corridors, Siberian Land Bridge and China Land Bridge, were selected as priority Europe - Asia transport linkages. The maps of selected priority road and railway routes within the NEA region, their itineraries and correspondence with the NATC vision are provided in Annex 3.

Operationalization of international intermodal transport corridors in North-East and Central Asia (2008 - present)

In 2008, as a follow-up to the completed corridorfocused projects, the UNESCAP Secretariat has launched a project entitled *Operationalization of International Intermodal Transport Corridors in North-East and Central Asia*. The main objectives of this project are to assist countries in identifying priority intermodal transport corridors which link countries in NEA and Central Asia as well as to establish cooperative mechanisms for the development and operationalization of the selected corridors. The project is being implemented in two phases.

Under the Phase I of the project, six intermodal transport corridors connecting NEA and Central Asia have been identified based on existing routes of the AH and the TAR networks and potential trade flows. ²³ Only three of them involve the NEA countries and therefore correspond with the following corridors identified by the NATC vision: Tianjin - Mongolia Transport Corridor, China Land Bridge, Korean Peninsula East Corridor and Siberian Land Bridge. These corridors, the countries they traverse and their correspondence with the NATC vision are shown in Annex 4.

As an inception step of Phase II, the status of the six international intermodal transport corridors was reviewed and three of them were prioritized for further in-depth study and operationalization.²⁴ There are only two corridors which involve NEA namely those being coincident with *Tianjin* -

²¹ Integrated International Transport and Logistics System for North-East Asia. UNESCAP, Korea Transport Institute. New-York, 2006. Available at http://www.unescap.org/ttdw/Publications/TIS_pubs/pub_2434/integrated_2434_full.pdf

²² Joint Study on Developing Euro-Asia Transport Linkages. UNESCAP-UNECE, New York and Geneva, 2008. Available at http://www.unece.org/trans/main/eatl/in_house_study.pdf

²³ Most of these corridors (except SLB) are in line with those prioritized under the framework of the CAREC Program, initiated by the Asian Development Bank (ADB), and endorsed by the Ministerial Conference on Central Asia Regional Economic Cooperation (November 2007, Dushanbe, Tajikistan). See the *CAREC Transport and Trade Facilitation Strategy*. Available at http://www.carecinstitute.org/uploads/docs/CAREC-Transport-TradeFacilitation-Strategy.pdf

Mongolia Transport Corridor and China Land Bridge from the NATC vision.

In December 2009, a memorandum of understanding (MoU) was signed by the ten participating countries to cooperate in coordinating the development and operation of the three priority corridors. According to the MoU, the countries have agreed to establish steering committees that will guide, plan, coordinate and implement the work to be performed, with ESCAP acting as the secretariat of the steering committees.²⁵

Role for the Greater Tumen Initiative

To date, the NEA countries driven by UNESCAP's proactive engagement have made a substantial step ahead in the coordination of their transport policies, formalization of the integrated transport networks and promotion of certain intermodal transport corridors. Nevertheless, only the first UNESCAP's corridor project of three aforementioned dealt with the integrated transport and logistics system within NEA. The two others, those carried out jointly with UNECE and one being conducted at present, focus on establishing and further developing inter-regional linkages by promoting the NEA-Europe and NEA-Central Asia transport corridors. Consequently, only some of the corridors running through NEA and reflected in the Vision for NATC, namely the Siberian Land Bridge (Trans-Siberian Railway), Tianjin - Mongolia Transport Corridor and China Land Bridge, are currently being given attention from the multilateral perspective. The operationalization of these corridors is promoted under the framework of not only UNESCAP but also CAREC, Organization for Railway Cooperation (OSJD) and other international public and non-governmental organizations and programs.

Notwithstanding the fact that other international transport corridors in NEA are of region-wide significance and consistent with national policies and bilateral priorities, cooperation on their promotion has not been provided with sufficient support at the regional level. Meanwhile, the infrastructure of these routes is being actively developed by individual countries. Major developments include the following²⁶:

- Tumen River Transport Corridor: In Aug. 2009, the Chang-Ji-Tu Pilot Zone was established. The Changchun Tumen highway has been completed and its further extension to Hunchun is underway, a high-speed railway from Changchun to Tumen is also under construction. The modernization of the Russian section of the Hunchun-Kraskino motor border crossing is about to be initiated. In Aug. 2010, Zarubino port (Trinity Bay port) in Russia launched upgrading of its handling facilities.
- <u>Suifenhe Transport Corridor</u>: In Apr. 2009, the Suifenhe Comprehensive Bonded Area (one of six in China and the only one in Northeast China) was approved. In 2008, an inland container depot/dry port was constructed in Zabaikalsk (500 thousand TEU annually). Reconstruction of the Pogranichny Ussurisk Vladivostok highway with the motor border crossing between at Pogranichny is underway. Ports of Vostochny, Nakhodka and Vladivostok in Russia are currently expanding their handling capacities.
- Korean Peninsula West Corridor: Construction works to build additional bridge linking Dandong (China) and Sinuiju (DPRK) across the Yalu River are scheduled for commencement in Oct. 2010.
- Korean Peninsula East Corridor: The bridge between Hunchun (China) and Quanhe (DPRK) across the Tumen River is now under renovation, works on expanding and paving the road to Rajin Port is scheduled following the completion of the bridge renovation. The Port of Rajin and the Rajin -Tumangang railway are also under reconstruction.

While bilateral endeavors to activate these transport corridors are also on the track between China and Russia²⁷ as well as China and the DPRK, the practical development of the region-wide transport network in NEA, which would greatly enrich transport operations' efficiency and regional connectivity, still requires additional efforts of all the countries involved to strengthen policy coordination and reinforce concerted actions.

As an intergovernmental cooperation mechanism in NEA, the Greater Tumen Initiative - GTI (formerly the

²⁴ Report of the Policy-level Expert Group Meeting on Operationalization of International Intermodal Transport Corridors in North-East and Central Asia, 4-5 March 2009, Tashkent, Uzbekistan. P. 9, 11. Available at http://www.unescap.org/ttdw/common/TIS/CorridorStudy/EGM_files/EGM_Tashkent_FinalReportV2.pdf

²⁵ Review of the Developments in Transport in Asia and the Pacific 2009, UNESCAP. New-York, 2010. P. 245-246. Available at http://www.unescap.org/ttdw/Publications/TPTS_pubs/pub_2392/pub_2392_fulltext.pdf

Information of the Tumen Secretariat/UNDP; Arai Hirofumi. Developments in the Upgrading of the Transportation Corridors Supporting Intraregional Northeast Asia Distribution and Examination concerning the Policy Responses. ERINA Report. Vol. 89. Sept. 2009. P. 63-70. (in Japanese, summary in English); Wu Hao. Plan for Chang-Ji-Tu Pilot Zone and its Interaction with Greater Tumen River Area Cooperation and Development. Paper presented at the 4th NAPA Annual Conference titled "Greater Tumen Initiative and Local Economic Cooperation in Northeast Asia." May 17-18, 2010. Chuncheon, Republic of Korea. Available at http://shandong.chinadaily.com.cn/china/2010-03/08/content_9551067.htm; China gains Sea of Japan trade access. Global Times. 2010. March 10. Available at http://china.globaltimes.cn/diplomacy/2010-03/511351.htm; Kim So-hyun. China to invest in North Korea road. The Korea Herald. 2010. March 22. Available at http://www.asianewsnet.net/news.php?id=10879&sec=1.

²⁷ Issues of transport cooperation and transit are regularly under discussion at the annual meetings of the Subcommittee on Transport Cooperation under the Commission on Preparing Regular Meetings of the Heads of the Russian and Chinese Governments. Measures for tackling infrastructural development and facilitating border crossing have been also highlighted in the Cooperation Program between the Regions of the Far East and Eastern Siberia of Russia and Northeast China over 2009-2018 (adopted in Oct. 2009).

Tumen River Area Development Programme - TRADP)²⁸ is best positioned for acting as a regional platform for coordinating and facilitating the formalization and implementation of these transport corridors.²⁹ The mandate of the GTI geographically covers so-called the Greater Tumen Region (GTR) which includes China's three Northeast provinces and Inner Mongolia, three eastern provinces (aimags) of Mongolia, the eastern ports of the Republic of Korea and the Primorsky Territory of Russia and thus forms the economic heart of NEA.³⁰ Since all these corridors, entirely or partially, pass through this region, it would be beneficial for all involved to cooperate closer under the framework of the GTI, recognizing the regionwide value of these trans-GTR transport corridors and fostering their operationalization on a multilateral basis.

The GTI's legal and institutional background provides an ample foundation for the trans-GTR corridor related activities:

- Basic intergovernmental agreements governing the GTI activities consider the transport sector as one of the primary areas for developing economic cooperation in the region.³¹
- In the GTI Strategic Action Plan for the Period 2006 to 2015, member governments identified the strategic actions in the transport sector as follows:³²
 - infrastructure development to link national road and/or rail networks,
 - development of port facilities,
 - elimination of bottlenecks,
 - shipping development,
 - harmonization of cross-border regulations.
- In 2007, "a number of concrete projects in key sectors were identified as "GTI projects" for further marketing and attracting additional funding". The "GTI Projects" in the transport sector were earmarked as follows: NEA Ferry Route, Modernization of Zarubino Port, China Mongolia Railway Feasibility Study, Resumption of the Hunchun Makhalino Railway, China-DPRK Road and Harbor Project. All of them are related to the Tumen River Transport Corridor.

- In 2009, the GTI Transport Board was established with the aim of supporting transport development and cooperation in NEA. Accordingly, "the participant governments agreed to hold more concrete discussions at the GTI Transport Board meetings regarding the transport issues of common interest... The Board shall be composed of one senior and two other officials from each GTI member country and meet once a year."34 It was stressed that the Transport Board is aimed at creating an extensive transportation system and ensuring stable cargo and passenger flows by connecting the whole NEA with the international transport corridors as well as providing landlocked Mongolia and the Chinese North-East with an access to Pacific ports.³⁵
- On 25 June 2010, in Busan, Republic of Korea, the Inaugural Meeting of the GTI Transport Board was held.³⁶ At the meeting, participants reaffirmed the need to work collectively to promote the NEA transport corridors and enhance regional connectivity. To map out Board's activities in the coming term, the GTI Transport Cooperation Program 2010-2012, with the list of selected transport projects to be undertaken in pursuit of the program, was adopted. Priority was placed on the project entitled Integrated Transport and Facilitating Infrastructures Development Plan for the Trans-GTR Transport Corridors.

Given that the GTI member governments have committed to support transport development and cooperation in the region through the Transport Board, the GTI could be an ideal framework under which the promotion of the trans-GTR transport corridors could be proceeded in the multilateral format. The planned GTI flagship corridor project can be seen as a stepping stone in regional cooperative activities to promote international transport corridors in NEA under the GTI framework. The need for elaboration of the Integrated Development Plan for the transport corridors in the GTR was emphasized at the 11th CC meeting held in Changchun, China.³⁷

²⁸ At the moment, the GTI member countries are China, the Republic of Korea, Mongolia and Russia, the DPRK withdrew from the GTI on 5 November 2009. The member governments are striving to re-engage the DPRK back to the programme.

²⁹ Arai Hirofumi. *Development of International Transportation Corridors in Northeast Asia*. Paper presented at the 3rd Pacific Economic Congress. Vladivostok, Russia. August 19, 2009.

The geographical coverage of the program was expanded at the 8th meeting of the TRADP Consultative Commission (CC) in 2005. In addition, at this landmark meeting, the member governments agreed to revitalize and promote TRADP as GTI, extend the TRADP agreements of 1995 for another successive period and ensure full national ownership of the programme as well as adopted the GTI Strategic Action Plan for the Period 2006 - 2015. See Changchun Agreement of the Member Countries of the Greater Tumen Initiative. 2 September 2005, Changchun, China. Available at http://www.tumenprogram.org/news.php?id=500

³¹ Agreement on the Establishment of the Consultative Commission for the Development of the Tumen River Economic Development Area and Northeast Asia. New York. 6 December 1995. Para 2.4; Annex 3 to the Agreement on the Understanding Concerning the Greater Tumen Initiative (GTI) in the form of exchange of letters (came into force on 5 November 2009 with retroactive effect from 1 May 2006).

³² Endorsed at the 8th CC meeting, Changchun, China, Sept 2005). Available at http://www.tumenprogramme.org/news.php?id=502

³³ Vladivostok Declaration (adopted at the 9th CC meeting. 15 Nov. 2007). Available at http://www.tumenprogram.org/news.php?id=503

 $^{^{34} \}textit{ Ulaanbaatar Declaration} \textit{ (adopted at the 10^{th} CC meeting. 24 March 2009). Available at $\underline{\text{http://www.tumenprogram.org/news.php?id=721}} \\$

³⁵ Terms of References (ToR) for the GTI Transport Board (endorsed at the 10th CC meeting, 24 March 2009. Ulaanbaatar)

³⁶ Presentations and the Minutes of the Inaugural meeting of the GTI Transport Board are available at http://www.tumenprogram.org/news.php?id=833

Thangchun Declaration (adopted at the 11th CC Meeting. 1 Sept. 2010). Available at http://www.tumenprogramme.org/news.php?id=905

Annex 1

The section of the Asian Highway Network (AH) that covers NEA



 $Source: \underline{http://www.unescap.org/ttdw/common/TIS/AH/maps/ah_map_latest.jpg$

No.	Asian Highway routes	Countries of NEA covered	Correspondence with the Vision for NATC
АН3	Ulan-Ude - Kyahta - Altanbulag - Darkhan - Ulaanbaatar - Nalayh - Choir - Saynshand - Zamin-Uud - Erenhot - Beijing - Tanggu	China, Mongolia, Russia	Tianjin - Mongolia Transport Corridor
AH30	Ussuriysk - Khabarovsk - Belogorsk - Chita	Russia	Siberian Land Bridge
AH31	Belogorsk - Blagoveshchensk - Heihe - Harbin - Changchun - Shenyang - Dalian	China, Russia	Dalian Transport Corridor
AH32	Sonbong - Wonjong - Quanhe - Hunchun - Changchun - Arshan - Numrug - Sumber - Choybalsan - Ondorhaan - Nalayh - Ulaanbaatar - Uliastay - Hovd	DPRK, China, Mongolia	Tumen River Transport Corridor (North Korean Route)
AH34	Lianyungang - Zhengzhou - Xi'an		China Land Duidee
AH5	Xi'an - Lanzhou - Tulfan - Urumqi - Kuitun - Jinghe - Horgos - Almaty	China	China Land Bridge Corridor
АН6	Pusan - Kyongju - Kangnung - Kansong - Kosong - Wonsan (- Pyongyang) - Chongjin - Sonbong - Khasan - Hasan - Razdolnoe (- Vladivostok - Nahodka) - Ussuriysk - Pogranichny - Suifenhe - Harbin - Qiqihar - Manzhouli - Zabaykalsk - Chita - Ulan-Ude	Republic of Korea, DPRK, China, Russia	Korean Peninsula East Corridor + Suifenhe Transport Corridor + Siberian Land Bridge
AH1	Pusan - Kyongju - Taegu - Taejon - Seoul - Munsan - Gaesung - Pyongyang - Sinuiju - Dandong - Shenyang - Beijing	Republic of Korea, DPRK, China	Korean Peninsula West Corridor

 $Sources: \ Vision \ for \ the \ Northeast \ Asia \ Transportation \ Corridors. \ \textit{Op cit.}; \ Intergovernmental \ Agreement \ on \ the \ Asian \ Highway \ Network. \\ Available \ at \ \underline{http://www.unescap.org/ttdw/common/tis/AH/AH-Agreement-E.pdf}$

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The section of the Trans-Asian Railway Network (TAR) that covers NEA

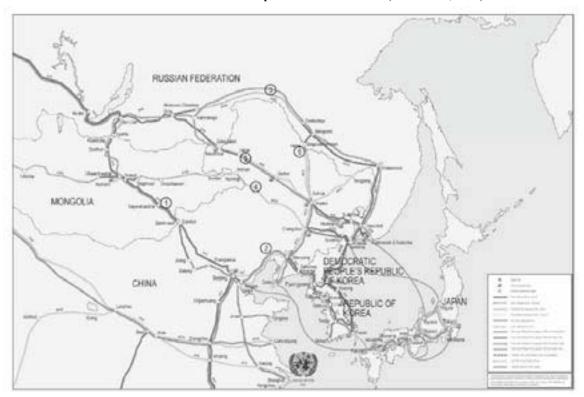
 $Source: \underline{http://www.unescap.org/ttdw/common/TIS/TAR/images/tarmap_latest.jpg}$

Lines of the TAR network across the NEA countries	Correspondence with the Vision for NATC	
DPRK Sinuiju - Kaesong Tumangang - Kumgangsan with a branch to Namyang - (Tumen)	Korean Peninsula West Corridor Korean Peninsula East Corridor + Tumen River Transport Corridor/ North Korean Route (partially)	
China Alashankou - Lianyungang Erenhot - Dandong Manzhouli - Dalian with branches to Suifene - (Grodekovo) and Tumen - (Namyang)	China Land Bridge Corridor Tianjin-Mongolia Transport Corridor Suifenhe Transport Corridor + Dalian Transport Corridor (partially) + Tumen River Transport Corridor (North Korean Route) (partially)	
Mongolia Sukhbaatar - Zamyn Uud	Tianjin - Mongolia Transport Corridor	
Republic of Korea Dorasan - Busan	Korean Peninsula West Corridor	
Russia Krasnoe - Nakhodka with a branch to Grodekovo - (Suefenhe)	Siberian Land Bridge + Suifenhe Transport Corridor	

 $Sources: \ Vision \ for \ the \ Northeast \ Asia \ Transportation \ Corridors. \ \textit{Op cit.}; \ Intergovernmental \ Agreement \ on \ the \ Trans-Asian \ Railway \ Network. \\ Available \ at \ \underline{http://www.unescap.org/ttdw/common/TIS/TAR/text/tar_agreement_e.pdf}$

Annex 2

Selected International Transport Corridors in NEA (UNESCAP, 2006)



Source: Integrated International Transport and Logistics System for North-East Asia. Op. cit. P.20.

No.	Corridor itinerary	Countries covered	Correspondence with the Vision for NATC
1.	Tanggu-Tianjin-Beijing-Eranhot-Zamin Uud- Ulaanbaatar-Sukhabaatar-Ulan Ude	China, Mongolia, Russia	Tianjin - Mongolia Transport Corridor
2.	Beijing-Shenyang-Dandong-Pyongyang-Seoul-Busan	China, DPRK, Republic of Korea	Korean Peninsula West Corridor
3.	Busan-Pohang-Kosong-Wonsan-Kimchaek-Sonbong- Khasan-Ussurisk-Khabarovsk-Chita-Ulan Ude	Republic of Korea, DPRK, Russia	Korean Peninsula East Corridor + Siberian Land Bridge
4.	Rajin/Sonbong-Jilin-Changchun-Ulanhot-Yirshi (Arxan)-Sumber-Ulaanbaatar	DPRK, China, Mongolia	Tumen River Transport Corridor (North Korean Route)
5.	Nakhodka/Vladivostok-Ussurisk-Pogranichny-Harbin- Manzhouli-Chita-Ulan Ude	China, Russia	Suifenhe Transport Corridor
6.	Dalian-Shenyang-Changchun-Harbin-Heihe- Blagoveshchensk-Belogorsk	China, Russia	Dalian Transport Corridor

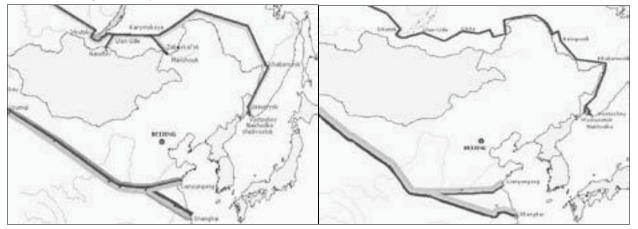
Sources: Vision for the Northeast Asia Transportation Corridors Op cit.; Integrated International Transport and Logistics System for North-East Asia. Op. cit. P.21.

Annex 3

Priority Euro-Asian Linkages (UNECE-UNESCAP, 2007)

Fig 1. Railway Routes in NEA.

Fig 2. Road Routes in NEA.



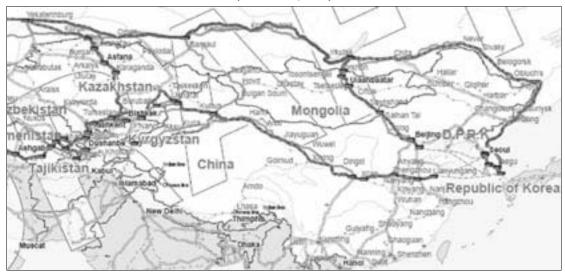
 $Sources: \underline{http://www.unece.org/trans/main/eatl/maps/EATL_rail_A3_schematically_many_colors.pdf \\ \underline{http://www.unece.org/trans/main/eatl/maps/Eatl_road_A3_schematically_many_colors.pdf}$

No.	Corridor title	Corridor itinerary and countries covered	Correspondence with the Vision for NATC
1.	Transsiberian Corridor	Europe - Russia - Japan, with branches to: Kazakhstan - China and the Korean Peninsula; Mongolia - China	Siberian Land Bridge + Korean + China Land Bridge + Korean Peninsula East Corridor + Tianjin - Mongolia Transport Corridor
2.	TRACECA	Eastern Europe - across Black Sea -Caucasus - across Caspian Sea-Central Asia	Not Applicable
3.	Southern	South-eastern Europe - Turkey - Islamic Republic of Iran, with branches from Iran to: Central Asia - China; South Asia - South-East Asia/Southern China	China Land Bridge + Not Applicable
4.	North-South	North Europe - Russia, with branches to: Caucasus - Persian Gulf; Central Asia - Persian Gulf; Across the Caspian Sea - Islamic Republic of Iran (Persian Gulf)	Not Applicable

Sources: Vision for the Northeast Asia Transportation Corridors Op cit.; Final Report of the 1st Expert Group Meeting in Developing Euro-Asian Transport Linkages. UNECE-UNECCAP. 9-11 March 2004, Almaty, Kazakhstan. P. 21-22. Available at http://www.unece.org/trans/main/eatl/docs/Final_report_of-the_1st_EGM_Euro-Asian_Transport_Linkages.pdf

Annex 4

Selected International Transport Corridors in NEA and Central Asia* (UNESCAP, 2008)



 $Source: \underline{http://www.unescap.org/ttdw/common/TIS/CorridorStudy/Corridor_maps/All_corridors.pdf}$

No.	Corridor itinerary	Countries covered	Correspondence with the <i>Vision for NATC</i>
1.	Busan/Incheon-Tianjin-Beijing-Eranhot-Zamin Uud- Ulaanbaatar-Darkhan-Sukhabaatar-Ulan Ude-Irkutsk- Novosibirisk-Petropavlosk-Yekaterinburg	Republic of Korea, China, Mongolia, Kazakhstan, Russian Federation	Tianjin - Mongolia Transport Corridor
2.	Kaesong/Incheon/Busan-Lianyungang-Zhenzhou-Xi'an-Lanzhou-Turpan-Urumqi-Alashankou-Dostyk-Aktogai-Ushtobe-Almaty (-Bishkek)-Tashkent (-Dushanbe)-Samarkhand-Novoi-Bukhara-Turkmenabad-Mary-Ashgabat-Turkmenbashi	DPRK, Republic of Korea, China, Kazakhstan, Kyrgyzstan, Uzbekistan, Tajikistan, Turkmenistan	China Land Bridge Corridor and further to Central Asia
	(Bukhara-Karshi-Sariosiyo-Dushanbe-Yangi Bazar)	Uzbekistan + Tajikistan	Not Applicable
3.	Busan-Rajin/Busan-Pohang-Kosong-Wonsan- Chongjin-Rajin-Khasan-Ussurisk-Khabarovsk-Chita- Ulan Ude-Martsevo	Republic of Korea, DPRK, Russian Federation	Korean Peninsula East Corridor + Siberian Land Bridge
4.	Yekaterinburg-Petropavlovsk-Astana-Karaganda-Chu (-Almaty)-Bishkek-Tashkent-Dushanbe	Kazakhstan, Kyrgyzstan, Uzbekistan, Tajikistan	Not Applicable
5.	Urumqi-Kashi-Irkeshtam-Sary-Tash-Jirgatal- Dushanbe-Sariosiyo-Termez	China, Kyrgyzstan, Tajikistan, Uzbekistan	Not Applicable
6.	Barnaul-Tashanta-Ulaanbaishint-Hovd-Yarant- (Urumqi)	Russia, China, Mongolia	Not Applicable

Sources: Vision for the Northeast Asia Transportation Corridors Op cit.; Report of the Policy-level Expert Group Meeting on Operationalization of International Intermodal Transport Corridors in North-East and Central Asia, 4-5 March 2009, Tashkent, Uzbekistan. Op cit. P. 9, 11.

^{*} Corridors No. 1, 2 and 5 were selected for subsequent activities on corridor operationalization under the Phase II of the Project.