## The Potential for the Development of Logistics in Primorye

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I would like to emphasize the need for transport strategy improvement, pointing out the following factors:

- The first factor. The transport system of the Russian Federation is developing, the cargo turnover of ports and sea routes is increasing, and transport management is improving. This falls within the predetermined framework and scale of projects.
- The second factor. Today, there is a significant restraining factor in geographical economic development in Russia, caused by insufficient development of the transport system, including that in the Far Eastern region.

Therefore, the new long-term "Transportation Strategy of the Russian Federation up to 2030" is oriented toward new tasks and goals. Among them are:

- 1. The establishing of an integrated transport architecture in the country, based on sustainable infrastructure development.
- The providing of the quality, accessibility, volume and competitiveness of transport services and meeting the need for innovation in the development of the economy.
- 3. The providing of accessibility and quality of transport services for the population in line with social standards.
- 4. Integration into the global transport architecture and the realization of the transit potential of the Russian

Federation.

5. Improvement of the safety level of the transport system.

The above goals in the sphere of transport aim at creating innovation in the economy and supporting gross domestic product (GDP) growth by decreasing transport expenses within the cost of the final product.

Today, on a par with the processes of competitiveness in transport, there are the processes of active cooperation and integration of transport systems.

The presence of effective national transport and logistic systems in Northeast Asia forms the basis for the transport integration of the region. We have indicated on the UNESCAP map the region of the adjacent transport architectures of Japan, China, the ROK, Mongolia, the southern part of the Russian Far East and the DPRK (Figure 1). It is obvious that the cooperation of the above countries could result in the creation of a unified transport architecture that would need interacting elements in the Northeast Asian integrated logistical infrastructure.

The integration of Primorye (Primorsky Krai) within the Northeast Asian transport system must be in all areas of transport and in all the kinds of transportation connected with international transportation—that is, exports, imports, and transit. The development of Russian transport infrastructure must be carried out in accordance with the

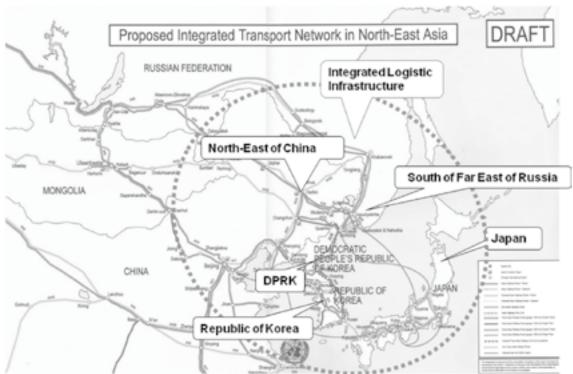


Figure 1: The Integrated Logistical Infrastructure of Northeast Asia

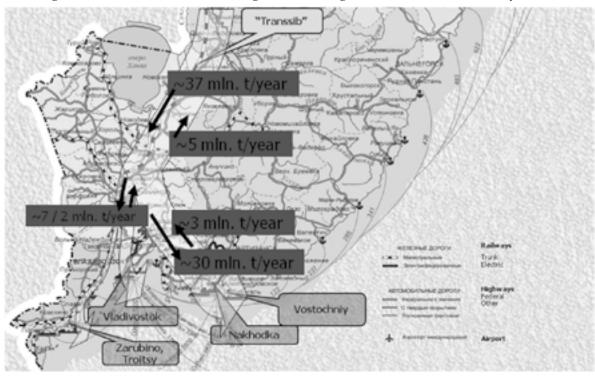


Figure 2: The Current Structure of Freight Traffic through the Ports of Southern Primorye (2007)

requirements and capabilities of our partners.

Today the development of transport in Primorye is taking place in a situation where the export volumes of cargoes of raw materials predominate. Integration within the transport system, however, cannot be limited to development of export potential alone.

There are many tasks to be settled regarding this issue. The main issue is considered to be the development of transit potential for services involving the movement of goods.

### The movement of goods

We touched upon this issue while looking for ways to increase demand for transport services. This resulted in revealing the obvious potential of Primorye (in particular the port of Vostochny and the territory in its vicinity) in solving the following problems:

- Providing the service of final product storage and a trade-servicing system in Asia-Pacific-region countries at the international level,
- Changing the routes of goods movement from Asia-Pacific region countries to the eastern regions of Russia and establishing a wholesale trade in Primorye,
- Realizing the transit potential that Primorye holds for the country.

Although Primorye has potential regarding the above issues, we were previously unable to realize it.

Today the situation is quite different: the investment rating of Primorye is increasing, the government is setting out tasks for development, and major Russian companies are aiming to move into the region.

The above goals may be realized by using the new federal law on Special Economic Zones and in accordance with the new Transportation Strategy of the Russian Federation up to 2030.

Potential transportation routes for transit development and the movement of goods through southern Primorye are:

#### **Overland routes:**

- The traditional overland route via the Trans-Siberian Railway from the ports of southern Primorye to the other Far Eastern regions, Siberia and the central regions of Russia (in both directions),
- The potential overland route via the Trans-Korean Railway Trans-Siberian Railway,

The development of the overland international transport corridors (ITCs) "Primorye-1" and "Primorye-2", and of new international routes, is possible (via Turiy Rog, etc.),

• Other regional overland transportation.

#### Sea routes:

- Traditional shipping routes to North and South America, Japan, China, the ROK, the DPRK, Vietnam, Thailand, the island states of the southern part of the Asia-Pacific region, Australia, and the countries of Oceania, etc., are all possible routes as extensions of overland transportation via the "Trans-Siberian Railway", "Primorye-1" and "Primorye-2" ITCs,
- Shipping by sea via the Northern Sea Route and other prospective routes, including transshipment which is possible in theory.

# The main port nodes and their overland infrastructure

The following nodes are the ones of which most is expected in the development of the regional transport logistic system of southern Primorye:

The ports of the Khasan transport node (KTN). The KTN is connected to the "Primorye-2" ITC and is the location for the potential junction of the Trans-Siberian

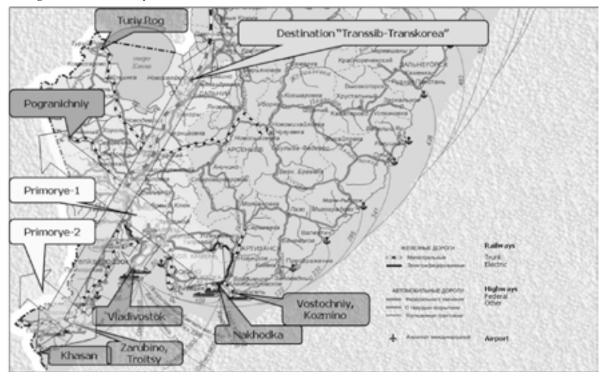


Figure 3: The Potential Directions of Transportation in the Development of Transit and of Movement of Goods through Southern Primorye

Railway and Trans-Korean Railway.

It is a crossroads for different types of transportation, close to the frontiers of the DPRK and China. The port with the most potential is the Troitsy Bay Seaport.

Without doubt the port has the potential of taking a portion of the Northeast Asian cargo drawn in the direction of Jilin, the "Hunchun Border Economic Cooperation Zone", Yanbian Korean Autonomous Prefecture, and other cities and industrial regions situated near the Khasan-area ports.

The principal idea is transit development and port formation on Troitsy Bay as a pilot for the development of modern technologies, international cooperation in the region, and in addition the training of transport specialists, etc.

Developmental work at the node, in particular the Troitsy Bay Seaport, is at hand. It is currently under discussion.

In line with a preliminary scenario, the loading complexes on Troitsy Bay include the following terminals:

- $\bullet$  A container terminal with a capacity of up to 1.5 million TEU per year,
- A grain terminal with a capacity of up to 5 million tons per year,
- A coal terminal with a capacity of up to 10 million tons per year,
- An automobile terminal with a capacity of 500,000 cars per year,
- A passenger terminal with a capacity of up to 350,000 persons per year,
- A terminal for metal-roll reloading with a capacity of up to 1 million tons per year,
  - A lumber terminal with a capacity of up to

350,000m<sup>3</sup> per year.

Vladivostok.

The ports of the Vladivostok transport node (VTN) directly access the Trans-Siberian Railway and are connected with the "Primorye-1" ITC. This is a similar crossroads, situated not far from the frontier, yet is in the center of the most populous area of Primorye. The main disadvantage of the VTN is its location in the center of

For that reason we do not consider here the port container terminals of the VTN alone.

The port development project proposes its technical modernization, the bypassing of the city transport system, the implementation of dry-terminal projects, and the development of logistic and distribution terminals outside the city boundaries.

After the modernization of the Commercial Port of Vladivostok the existing berth capacity will increase to up to 500,000 TEU. Additionally, FESCO Transportation Group has plans to build its own container terminal with a capacity of 250,000 TEU.

Further projects in the VTN development are under preliminary consideration and discussion, an example of which is the dry-cargo-port project "Southern Primorsky Terminal" in the Novy Settlement, with a capacity of approximately 20 million tons per year.

The ports of the Vostochny – Nakhodka transport node (VNTN) also have direct access to the Trans-Siberian Railway and are connected with the "Primorye-1" ITC.

This port transport node is similar to those potential transportation routes. The main advantage of the VNTN is its location outside city boundaries and that it has free land

for its expansion. The main port here is Vostochny Port, together with Nakhodka Port and a new, specialized oil-seaport, Kozmino.

The principal idea is the complex development of all the node's ports (Vostochny, Nakhodka, and Kozmino) including:

- Development for export potential,
- The establishing of a free port zone in Vostochny Port for developing transit potential, the servicing of the wholesale trade and the movement of goods,
  - The development of the "Primorye-1" ITC.

The complex development of the VNTN node—the main Far Eastern port—has been planned by the Ministry of Transport of the Russian Federation within the framework of the federal target programs "Modernization of the Transport System of Russia" for the periods 2002-2010 and 2010-2015.

The "General scheme for the development of the Vostochny – Nakhodka transport node and the 'Primorye-1' ITC up to 2020" will be developed in line with the project. It is necessary to carry out a number of studies, including market research, that will enable the concepts of transport node and transport corridor development to be defined. The development of projects in transport infrastructure, including port and logistics terminals, railway transport,

and roads, etc., lies ahead.

The potential development of the transport system of southern Primorye depends to a great extent on future volumes. A small amount of work cannot provide harmonious development which takes into account a wide range of issues, such as environmental protection and security, concomitant service development, and social problems, etc.

According to preliminary forecasts concerning the container market, the following capacities will be required by 2020:

VNTN: up to 6.0 million-plus TEU per year,

VTN : up to 2.0 - 2.5 million TEU per year,

KTN : up to 4.0 - 4.5 million TEU per year.

An economic evaluation shows that the container capacity of southern Primorye is about 10 million-plus TEU per year and is sufficient for the complex planning of the development of ports, border crossing-points, railways and roads, taking into consideration all of today's demands on its functioning.

This is, of course, only a forecast of the cargo turnover. The realization thereof will be seen in the future. With the global economic crisis, however, we propose considering the regional development of transport architecture as an effective anti-recessionary measure.



Figure 4: The Basic Port Nodes of Southern Primorye and Potential Logistics Terminals