Prospects of the Russian Arctic Transport System Development

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ABSTRACT

The transport system of the Arctic zone of the Russian Federation consists from the different types of transport and transport network. It includes railway, pipeline, road and airline systems which pass through the polar circle to the North. There are over 100 ports and transshipping points on islands and coasts of the Arctic Ocean. The Northern Sea Route (NSR) and nuclear icebreaking fleet are the core elements of the Russian Arctic transport system. The authors provide the description of the prospective directions of Russian Arctic transport system development. The following priorities had been formulated among the major problems of the Russian Arctic transport system: escalating of quantity and types of vessels using for cargo and civil shipping in Arctic regions; strengthening of coastal infrastructure of the NSR and strengthening of security system of marine and river shipping; modernization of cargo transshipment bases and land-water types of transport; reorientation of icebreakers escort fleet for supporting of offshore moorings functioning; shipping in difficult ice conditions, monitoring and rescue services. Research and working out of measures for the serving of mentioned and other problems are directed to strengthen the positions and the sovereignty of the Russian Federation in Arctic regions and for using of the competitive advantages of the NSR, as the largest transport artery connecting continents and countries, located in pools of three oceans – Arctic, Atlantic and Pacific.

KEY WORDS: Transport system; Types of transport; Russian Arctic; Network development; Water transport; The Northern Sea Route; Arctic fleet; Motor and air transport; Pipelines system; Oil and gas resources; Perspectives of transportation.

INTRODUCTION

Sustainable and effective functioning of a transport complex of the Arctic regions is a necessary condition of economy growth and unique natural resources development in the Arctic zone of the Russian Federation. Transport system of Russian Arctic is a base for the integral activity in the region. Efficient development of transport complex ensures improvement of conditions and standards of living in the Arctic and strengthen national safety of Russia inMacro Region.

Development of the Russian Arctic transport system according to the governmental principles of social and economic development regulations should be advancing and should be carried out taking into account difficult environmental conditions and remoteness of many Arctic areas, poor development of a transport network.

DIRECTIONS OF THE RUSSIAN ARCTIC TRANSPORT SYSTEM DEVELOPMENT

The Base of Arctic Transport System

The main transport ways in Russian Arctic are stretching out in the latitude direction. Among them are the Northern Sea Route, railway and air passages. They are making up base for a perspective transport complex of Arctic regions and joining by meridional routes. These routes are presented by railroad lines, river's passages and highways which provide an exit from the areas of Arctic regions to the operating transport network of the country. The strategic task is development of meridional and strengthening latitude railway branches which are connected with the Northern Sea Route. That can allow further support of economical integration of Arctic regions and provide communication of Polar Regions with industrially developed regions of the country.

Transport Network Development

Arctic network will permit to create united chain of transcontinental corridors. Transport connections between the Northern Sea Route and railways from Europe to the Far East have great importance for prospects of the further increase of an economic role of Russian Arctic regions (Russian, 2000). These actions become not only well-timed but also will have strategic character. “Strategy of the development of the railway transport of the Russian Federation till 2030” approved by the Government of the Russian Federation in 2008 provides building in Nenets Autonomous Area two mains from Komi Republic to the coast of the Arctic Ocean: Vorkuta - Ust-Kara (210 km) and Sosnogorsk - Indiga (610 km). With a view of the Barents and Kara seas shelf development it is also necessary to consider potential possibilities of building of railroad lines Korotchaevo-Igarka with perspective exit to the cities Dudinka and Norilsk, and also to the “Sevsib” with an exit to Indiga Bay (Bulletin, 2006).

CORE OF THE RUSSIAN ARCTIC TRANSPORTATION

Marine Shipping

The special attention should be given to maintenance and strengthening of the Northern Sea Rout (Fig.1). The NSR join transport subsystems of the European, Siberian and Northern Far East regions to united transport complex. This artery covers completely the water areas of Russian Arctic seas and, partially, the territory of the Arctic Ocean within an exclusive economic zone of the Russian Federation and includes all suitable for shipping ways from the Barents Sea to the Chukchi Sea and to the Bering Strait (Navigating, 2006). The NSR provides functioning of a transport infrastructure of the country, especially in remote areas of the seas,