ABSTRACT

Russian Arctic fleet plays a key role in the development of the Arctic transport system in the Russian Federation. The authors underline the important role of the Northern Sea Route (NSR) and nuclear ice breakers for maintenance of navigation in Polar areas. The directions of the nuclear Arctic fleet development in Russia and main types of ice-class marine transport in the Russian Federation are discussed. The nuclear ice breakers efficiency in comparison with diesel-electric ice breakers efficiency is presented. The authors state development of the ice-breaking transportation and the prospects of the Russian Arctic fleet development until 2040.

There are many international and national political and legal issues that need to be addressed to push the Arctic marine transportation and particular in the NSR into an operational transportation route. Among legal problems in the Russian Arctic there are international struggle for Arctic territory and internal transformation of Arctic fleet in the Russian Federation. The governmental policy and regulations of existing problems is presented. New management and organizational measures on the governmental level can promote economic efficiency and safety of marine transportation on the ways of the NSR in the polar and sub-polar regions.

KEY WORDS: Arctic fleet; Russian Federation; The Northern Sea Route; Nuclear ice breaker; Polar areas; Efficiency; Perspectives of marine Arctic transportation; Exclusive economic zone.

INTRODUCTION

Challenges of the marine transport activity in the Arctic Ocean, economic growth in the Russian Arctic regions and advancement of the largest oil and gas extracting companies in sub-polar areas cause great demand on the market of ice-class vessels. The Arctic fleet of the Russian Federation which well-known nuclear ice breakers were used for many international projects now passes a stage of rapid development. Russian Arctic Fleet is a base of the polar transport system of the country – the Northern Sea Route. In many areas of Far North it serves to support life of population, economic activity of the Arctic Regions and export of natural resources. The significance of these strategically important polar areas on the national level is very high. It is difficult to overestimate the value of potential hydrocarbon, mineral raw materials and other mineral resources of the Arctic zone of the Russian Federation.

Development of the Russian Arctic transport system according to the governmental principles of social and economic development 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 in the Russian North.

The proposals of Russian Arctic fleet development presented in the paper based on the economic investigations of the Arctic Research Center. The main arguments to develop the NSR and to increase Russian icebreaker fleet are issued from the assessments of the cargo turnover growth on the national and international routes, the economic efficiency of transporting on the lines of the NSR, shortening of the time and ensuring safety of cargo delivery to customers and economy of fuel for carriers.

ARCTIC MARINE TRANSPORTATION

Northwest Passage Development

It is necessary to mention the Northwest Passage (NWP) which consists of meandering channels through Canada’s Arctic. It is the shortest way of transportation between the western and east coast of America compare to the way through Panama Canal. NWP is using mainly for resupply or research purposes and not reliable way for commercial national or international transportation. Even in case of thawing of long-term ice, large amounts of ice get into the Canadian Arctic archipelago from Arctic Ocean, forming a blockage and interfering with navigation. In September 2007 according to the European Space Agency the Canadian Northwest Passage has been free from ice for the first time since record began in 1978 (Kitagawa, 2009).