

# АКТУАЛЬНІ АСПЕКТИ МІЖНАРОДНОГО СПІВРОБІТНИЦТВА

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## Arctic Navigation – a New Era in Shipping or Geopolitics?

The article is devoted to the problem of legal regulation of commercial shipping in Arctic region along the Northern Sea Route. Global warming is bringing vast change to marine North and previous ice-covered areas are becoming more accessible for shipping. The focus of the article is on the need to create the international legal framework in the Arctic.

**Keywords:** Northern Sea Route, ice navigation, legal instruments, Arctic code.

Стаття присвячена актуальній проблемі правового регулювання міжнародного торговельного судноплавства в російській частині Арктики. Глобальне потепління сприяє полегшенню використання Північного морського шляху для транзиту іноземних суден. Основна увага в статті зроблена на необхідності створення ефективного міжнародно-правового регулювання режиму судноплавства в Арктиці.

**Ключові слова:** Північний морський шлях, льодова навігація, Арктичний кодекс.

Статья посвящена актуальной проблеме регулирования международного торгового мореплавания в российской части Арктики. Глобальное потепление способствует расширению использования Северного морского пути для транзитного прохода иностранных судов. Основные акценты в статье сделаны на необходимости создания эффективного международного регулирования режима мореплавания в Арктике.

**Ключевые слова:** Северный морской путь, навигация во льдах, Арктический кодекс.

Global warming is transforming the way the marine industry views on the Arctic. The rapid ongoing climate change is bringing vast change to this remote region, and previous ice-covered areas are becoming more accessible for shipping, raising the prospect that it may soon be possible to sail along the Arctic with ease.

One of the most hotly debated questions nowadays is the use of the Northern Sea Route - a seasonally ice-covered marine shipping lane along the Russian coasts, from Novaya Zemlya in the west to the Bering Strait in the east. The main Russian artery in the Arctic, it passes through the seas of the Arctic Ocean (the Barents, Kara, Laptev, East Siberian, Chukchi, and Bering seas), and is the shortest route, connecting Europe with the East of Asia.

The Arctic navigation is one of the hotly debated question today. Many state and non-state actors are involved in it, including International Maritime Organization, BIMCO, the Nautical Institute, the Arctic Council, brokering and ensuring companies etc. In view of many experts it has great economic potential with transportation time is reduced by nearly 40 per cent because the new route can cut 12 to 15 days from traditional routes. Besides, as distinct from the Gulf of Aden, piracy cases have not been registered in the regions beyond the Polar Circle, which makes the Northern Sea Route very attractive for navigation. Some experts even say that the Northern Sea

Route may become one of the key transport junctions in the world. In other words, like any modern industry, shipping is continuing to push back the polar frontiers.

Statistics reflect positive dynamic on the NSR. The 2014 navigation season set a new record both in relation to the amount of cargo and the number of vessels - 71 ships passed through the Northern Sea Route with some 1,3 million m.t. carried. In 2012, only 46 ships sailed the entire length of the passage from Europe to Asia, while in 2010 only 4 vessels made the voyage. So the interest of foreign ship owners for the Northern Sea Route has significantly grown. According to Chinese long-term scenarios, from 5 to 15 per cent of China's international trade would use the route by 2020 [1, p. 33].

But the route never played a role in international maritime traffic. It has remained sensitive - politically, geographically, climatically and, most of all, legally - until today. Historically the main obstacle for ships in the Arctic was the ice. Anyhow projected reductions in sea-ice extent are likely to improve access along the NSR. For the NSR, the navigation season is expected to increase from the current 20 to 30 days per year to 90 to 100 days per year by 2080 [2, p.12].

Last years Russia intensified its efforts to develop NSR. In July 2012 Russian authorities adopted Northern Sea Route Law, which outlined a set of new regulations. Navigation via the Northern Sea Route, including the Vilkitski Strait, the Shokalski Strait, the Dmitri Laptev Strait, the Sannikov Strait are to be carried out in compliance with the above-mentioned Law, international agreements of the Russian Federation and voyage regulations via the Northern Sea Route. The new NSR administration is settled as a part of Russian effort to strengthen control over the expanding Arctic shipping. Its main functions are to issue the permits for vessels sailing the route, monitor the weather and ice conditions and control the environment situation along the NSR. Icebreakers escorts and ice pilots will be available for vessels and such assistance will always be on duty in specified places along the ice-covered areas of the route. As planned, ten search and rescue centers are planned to establish along the NSR. The Law introduces compulsory insurance of civil liability of shipowners for pollution damage caused by the ship [3].

One of the most important question - if the NSR, abandoned after collapse of the Soviet Union, can become tomorrow one of the main marine transport routes on the planet. Comments from experts fell into two camps – those who expect the shipping boom in the high Arctic and those who believe that the costs and physical constraints would be a barrier to development of the Arctic navigation.

The question has been easy to raise, difficult to answer. Arctic navigation has both positive and negative sides. Distinctive features of the Northern Sea Route are severe climatic and ice conditions on the navigation route. The seas around the North Pole may be losing their summer ice cover, but there is still the ever-present danger of icebergs and drifting slabs of pack ice. For the foreseeable future, the Northern Sea Route will therefore be open for only a few weeks in summer and still require icebreaker escorts. These factors severely limit the route's potential in the short term. Even in the current era of global warming the ice conditions in some sections of the Northern Sea Route have considerable annual and spatial changeability. Traditionally, in the Eastern Arctic ice is the hardest because of perennial ice edge was closest to the shore. The most difficult conditions for navigation occur near such regions as the Taimyr Peninsula and Aion Island, where large accumulations of thick ice never completely break up, even in the warmest months. So many ships still need an icebreaker escort in the summer.

Russia's ambitions in the Arctic are aided by the fleet of two dozens aging icebreakers, including five nuclear-powered – an inherited legacy of the Soviet era. The Kremlin strategy today is to fund the construction of the most powerful nuclear icebreakers in the world, and ensure they dominate future navigation and convoys, notwithstanding that these vessels are very expensive to build and operate. Meanwhile only few days of extra time navigating the icepack could eliminate the cost advantage over the southern (via Suez) route. Those who enlist the services of an icebreaker to use the route can expect to pay a hefty sum, partly because of the NSR Administration's somewhat murky fee structure. There has been already the precedent of dispute between shipowner and Rosatomflot (icebreaker operator company) over the cost of service.

Other issues also affect the attractiveness of sailing in Arctic waters. There are size constraints on the ships, tight beam and draft limits for vessels to navigate shallow waters of the NSR. Some experts are very skeptical over whether a reliable scheduled service will be possible in the Arctic Ocean. A major disadvantage with the NSR is its seasonality. The melting of ice every year starting at different times, and therefore determine the exact schedule of the region will not be easy for the container transport for which the exact date of delivery plays an important role. So the NSR could primarily be explored for bulk rather than the liner shipping.

Analysts are pessimistic about the capacity of shipping in the Arctic. Of course, shipowners are interested to save on fuel and crew, but the most valuable things for them are the ships. Climate warming increases the number of floating ice, which can cause serious damage to the ships in the event of a collision. Despite global warming the Arctic sea ice extent grew 60 percent in August 2013 as compared to August 2012 [2, p.14]. So it is difficult to predict exactly when an ice-free Arctic summer will occur because of cycling nature of Arctic climate. In 1983 I personally was the witness of a very harsh season following several mild winters. More than two dozen Soviet ships have been trapped in Arctic ice by a combination of northerly winds and subfreezing temperatures that mariners say have no precedent at this time of year. One freighter, the Nina Sagaidak, has been crushed and sunk in the grinding floes of the Chukchi Sea off the northeast coast of Siberia, not far from the Bering Strait.

Unpredictability of ice formation creates a problem for investment in costly ice vessels. Not all ships are built to an ice class. Vessels without ice reinforcement and vessels with lower ice class are not allowed to navigate in the NSR in the periods from 16th November to 31st December and from the 1st January to 30th June [3]. The open sea vessels could hardly be transferred to ice operations – for example, the free fall lifeboats cannot be used in ice conditions. Building a ship to an ice class means that the hull must be thicker. Most of the stronger classes require several forms of rudder and propeller protection. More watertight bulkheads, in addition to those required by a ship's normal class, are usually required. In addition, heating arrangements for fuel tanks, ballast tanks, and other tanks vital to the ship's operation may also be required. The true cost of Arctic voyages includes extra cost of equipment the vessel and larger crews, need for extras training and other hidden investments.

Notably, legal instruments are also the target of much of the discussion. The new Law is aimed at making the Northern Shipping Route effective so that it can be used by all countries, says Russia. Anyhow each permit to travel the passage has thus far been preceded by a series of bureaucratic hurdles. For example, one of the icebreak-

ers, operated by Greenpeace, was twice denied a permit to sail along the NSR [4, p.4].

One of the weakest points of the NSR is undeveloped infrastructure. This greatly complicates rescue operations in the event of an accident. Many polar settlements from the Soviet era have turned into ghost towns. If a ship were in distress in the region, it would take many days for rescue teams to arrive at the scene. Ship repair facilities are limited and only minor repairs available at some ports.

The reliance for the safe navigation is placed primarily on the crews of the Russian icebreakers that accompany vessels in ice. From my experience I know that they usually are concentrated on their performance in ice fields and can sometimes lose control about the safety of escorted ships. Icebreaker has a different hull shape and following her it is difficult to avoid strike with pack of ice behind the breakers. Ice is one tonne per cubic meter and is enough to hole the ship. The hull of my ship below the waterline was damaged during escort after hitting pack ice when approaching Vilkitsky strait.

All analysts are united in the view that the Arctic shipping would be not easy work for seafarers. The conditions that crew may face, including extremely low temperatures, chill wind, hard physical work, icing of deck and equipment, vibration, noise and strike with ice, can reduce the quality of work and rest.

Real concerns over training and lack of experience of crew and officers exist. It is well known in shipping community that specialized skills, knowledge and experience are necessary to navigate safely in ice conditions. Navigating vessels in ice requires a particular manner, extensive knowledge of the nature, and can only be performed by those who have a long experience with working a ship in ice conditions. Crews that are inexperienced in cold climate operations can have accidents. There is still no internationally recognized and accepted standards of measuring skills and certification criteria. Non-mandatory Guidelines of IMO simply recommend that 'all ships in Arctic should carry at least one ice navigator'[5]. Is this sufficient to ensure safely navigation? That is hard to answer.

The other problems are no less worrying. Environment campaigners are concerned because even a leak of very small amounts of pollutants, be it oil or residue from a ship's diesel engines, could have dramatic consequences in the polar region. The Russian Arctic coast is one of the dirtiest places on earth. Local ecologists estimate, that the shores of the Arctic Ocean are littered with 4 millions tonnes of industrial and construction waste, part of which is toxic. They call that region The Land of the Rusty Drums because of thousands of 200-liter metal drums strew along the Arctic shore left from Soviet times. There has been already the first tanker accident in the Arctic following the crash of Russia's Nordvik into an ice floe. Taking into account a wide use of nuclear-powered icebreakers, even small nuclear accident can cause catastrophic damage in the Arctic's sensitive ecosystem, it is such a long distance to land that it is almost impossible to mount a rescue mission.

What are the real reasons behind the Russia's revival of this ambitious project? At first sight Russia's steps to rebuild the NSR look as purely economic intention. New shorter trade link between Europe and East Asia can boost trade and therefore accelerate economic growth in depressed Arctic region. Kremlin dreams that one day many ships enter its Arctic waters paying a solid fee. With the help of billions in infrastructure investments, Putin hopes to turn the route into the Suez of the North. In his words, the seaway along the tundra has a golden future as an international trade route. But the only thing international about it will likely be the customers. The biggest

legal problem is that Russia considers the narrowest parts of the NSR to be 'internal waters' and foreign ships have no right to access them without permission from the coastal state [3]. Thus the Russian government can control the entire Northern Sea Route, even though parts of it pass through international waters. That is the real intention – the monopoly on the traffic route, like Russia tries to do in other fields, for instance in natural gas supply to other countries.

The Arctic is becoming the site of the next great frontier campaign waged by the Russian Federation. To protect its geopolitical interests, Russia tries to maintain its active military presence in the region. Russian authorities plan to sail regular naval patrols along shipping lanes in its territory in the Arctic Ocean. For them the Northern Sea Route, as a national transport corridor of Russia, represents an issue of national importance; an issue that plays to the heart of centuries expansionism and the ideology of the motherland. Recent annexation of the Crimea is a clear warning signal to where Russian policy in the Arctic could lead.

Shipping must be aware of the risks in the Arctic. Since this region is a center of geo-political, defense, economic, environmental and scientific interests, it is advisable to allocate the Arctic area as a separate object of public policy. Shipping in the Arctic can be developed with the support of efficient international regulation (Arctic Code), modern technology and best practice. The maritime industry requires clear, legally binding, harmonized requirements for ships operating in challenging ice regimes.

There is no doubt that extended ice-free conditions will enhance the value of NSR but only as an alternative shipping route to Suez and Cape of Good Hope which can contribute to more flexible cargo supply chain. Despite significant numbers of granted permits (370) to sail the route in 2013, in reality only 25 ships under foreign flags used the NSR for transit carrying 400,000 metric tonnes of cargo. For comparence, 740 million m.t. were shipped through the Suez Canal by 17,224 vessels in 2012 [6]. By that standard, the Northern Sea Route has still got a long way to go in transforming world shipping.

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