

**The Russian Federation and the Northern Sea Route:
Challenges – Opportunities – Riskiness.**

At present, the Arctic can be treated as a flagship for Putin-style statehood. The initial strategy for the High North was published in 2001 but hardly implemented, and then in a report completed in 2004 by the Russian State Council Working Group on National Security Interests in the Arctic. Finally in September 2008, a new strategy for the Arctic through 2020 was adopted (Основы государственной политики Российской Федерации в Арктике на период до 2020 года и дальнейшую перспективу, 2008) and Dmitri Medvedev explicitly portrayed the Arctic as a base for Russian natural resources in 21st century. The National Strategy of the Russian Federation until 2020, released in May 2009, underlines the battle for energy resources, also takes place in the Arctic. Key role in Russian plans in terms of the Arctic plays Northern Sea Route (NSR). Due to climate changes and melting of Arctic ice cap these old domestic Soviet and Russian maritime way has started transformation into international sea line of communication. The situation creates new opportunities but also challenges for the Russian Federation. The main objective of Russian policy towards NSR is to open an inflow of financial benefits thanks to internationalization of the NSR, while maintaining full sovereignty of the communication line.

From geographical point of view the Northern Sea Route, is a marine passage that follows the Eurasian coastline between the Atlantic and Pacific oceans and crosses four arctic seas: the Kara, the Laptev, the East Siberian, and the Chukchi. Specifically, it extends from the islands of Novaya Zemlya in the west to the Bering Strait in the east. While the entire route is affected by ice for much of the year, in the summer there is melting due to the combined effects of milder temperatures and the influx of warmer water. The North Cape current, an extension of the Gulf Stream, affects water temperatures as far east as the Kara Sea, and the great Siberian rivers discharge large volumes of warmer water into coastal seas. Between late June and mid-November parts of the route are ice-free, and conditions improve progressively between June and September. The whole system is open for a period in the summer, but all sections are not necessarily open simultaneously. Dates of break-up and freezing can vary widely and local winds are the principal influence on ice conditions in a given area. Sustained northerly winds can bring heavy ice from the polar pack onto the route.

Despite of the aforementioned constraints the route offers distances between north Pacific and European ports that are 35–60% shorter than the traditional routes through the Suez and

Panama canals. Transit speeds since July until October are competitive with those attained on the southerly routes, although slower speeds for the rest of the year offset the savings in distance. Ship speeds in autumn and spring will have to be increased substantially to maintain the route's economic advantage. The eastern portion of the route may in fact need to be open year-round to be economically attractive to the international community.

Table 1.: Alternative Shipping Routes to Ports in the Pacific and Atlantic [nautical miles]

	From Hamburg to:			
Shipping routes via:	Vancouver	Yokohama	Hong Kong	Singapore
NSR	6635	6920	8370	9730
Suez Canal	15377	11073	9360	8377
Cape of Good Hope	18846	14542	13109	11846
Panama Canal	8741	12420	12920	15208

Source: Ragner, C. L. (2000) Northern Sea Route Cargo Flows and Infrastructure – Present State and Future Potential, Lysaker: Fridtjof Nansen Institute, p. 1.

Historically, foreign vessels were prevented from using the NSR because certain key straits and passages were in sovereign waters of the Soviet Union, but in October of 1987 then-General Secretary Mikhail Gorbachev announced a new spirit of cooperation in the arctic regions: the Soviet Union would open the NSR, with certain restrictions, to all foreign vessels for peaceful and commercial purposes. Although navigational difficulties were considerable in these northern waters due to more favourable weather conditions, short daylight season, ice-infested waters, and isolation. At present, as it was mentioned, the situation has changed.

There was a precedent cruise through NSR in August 2009. Two ships, *Beluga Fraternity* and *Beluga Foresight*, sailed from Korean port of Ulsan to Rotterdam. It must be admitted that they were part of a small convoy escorted by the icebreaker *50 Let Pobedy*, but ice breaking was not necessary. The tanker *SCF Baltica* (built in 2005, carrying capacity 117 500 tons, Liberian flag, owner – Russian Sovcomflot) was the first ship of this class which run through NSR, from Murmansk to China, without assistance of icebreaker. She carried gas condensate. It took place in August 2010 and it has been the first example of energy raw material transport directly from Russia to China by using northern shipping route. Also in 2010, but in September, bulk carrier succeeded the first crossing of NSR. Ship *Nordic*

Barents, flying a flag of Hong Kong, belonging to the Danish company Tschudi Shipping Company, carried 40 000 t of ore from Kirkenes, Norway to Lianyungang in China. On the entire route freighter was assisted by nuclear icebreaker *50 Let Pobedy*. At the end of September 2010, the next experimental cruise (without the assistance of the icebreaker) took place. The double action container carrier (see footnote 2) *Monchegorsk*, belonging to the company MMC Norilsk Nickel, sailed from Dudinka to Shanghai. The ship left Russian port September 23, arrived to Pusan, South Korea on October 13 and to harbor of the final destination four days later.

According to reports from 2009 the last ice barrier in the straits between Kara Sea and Laptev Sea (Wilkicki Strait, Szokalski Strait and Red Army Strait) melted. At the same time it appeared that it had been the permanent climatic trend. Thanks to such mild conditions 32 vessels sailed through NSR in 2011 (24 eastbound and 8 to westbound). The largest cargo was Russian gas condensate. The total volume of goods transported through NSR was 820 789 tones. Tables 2 and 3 show the growth of the shipping through the Northern NSR in 2012 and 2013.

Table 2.: Northern Sea Routes Transit 2012

Type of Cargo	Number of vessels	Cargo volume [tons]	Number of vessels Eastbound	Cargo volume eastbound [tons]	Number of vessel Westbound	Cargo volume Westbound [tons]	Number of vessels in ballast Eastbound	Number of vessels Westbound
Liquid	26	894 079	18	661 326	8	232 753		
Bulk	6	354 201	4	262 236	2	96 938		
Fish	1	8 265			1	8 265		
In ballast	6							6
Repositioning	7						3	4
Total	46	1 261 545	22	923 589	11	337 956	3	10
Flags: Russia – 18, Panama – 10, Finland – 6, Norway – 5, Marshall Islands – 3, PRC – 2, Liberia – 1, Cyprus – 1. Total Number of vessels under non-Russian Flag: 28 of 7 states.								

Source: Northern Sea Route Information Office. Transit Statistics, http://www.arctic-lia.com/nsr_transits, (dostęp: 10.02.2014).

Table 3.: Northern Sea Routes Transit 2013

Type of Cargo	Number of vessels	Cargo volume [tons]	Number of vessels Eastbound	Cargo volume eastbound [tons]	Number of vessel Westbound	Cargo volume Westbound [tons]	Number of vessels in ballast Eastbound	Number of vessels Westbound
Liquid	31	911 867	23	588 659	8	323 208		
Bulk	4	276 939	3	203 439	1	73 500		
LNG	1	66 868	1	66 868				
General cargo	13	100 223	9	36 846	4	63 377		
Ballasting	15						1	14
Repositioning	7	1 355 897					4	3
Total	71	1 355 897	36	895 812	13	460 085	5	17
Flags: Russia – 46, Panama – 6, Liberia – 5, Marshall Islands – 2, Greece – 2, Cyprus – 2, Norway – 2, Finland – 2, Malta – 1, Hong Kong - 1, Bermuda – 1, Antigua and Barbuda – 1. Total Number of vessels under non-Russian Flag: 25 of 11 states.								

Source: Northern Sea Route Information Office. Transit Statistics, http://www.arctic-lia.com/nsr_transits, (dostep: 10.02.2014).

The increase in the intensity of vessel traffic in the Far North has prompted the Russian Federation to adopt new administrative arrangements that would govern shipping. The new institution called “Administration of the Northern sea route” was established. It took place on the 15th March 2013. The legal base of the institution is created by:

- Order of the Government of Russian Federation No 355 (Распоряжение Правительства Российской Федерации от 15 марта 2013 г. N 358-р),
- Federal law act № 81 (April. 30. 1999) p.3 art. 5.1 “The merchant shipping code of Russian Federation”, to organize navigation in the water area of the Northern sea route (Кодекс торгового мореплавания Российской Федерации от 30 апреля 1999 г. N 81-ФЗ),
- The Federal Law of July 28, 2012, N 132-FZ, "On Amendments to Certain Legislative Acts of the Russian Federation Concerning State Regulation of Merchant Shipping on the Water Area of the Northern Sea Route" (Федеральный Закон

о внесении изменений в отдельные законодательные акты Российской Федерации в части государственного регулирования торгового мореплавания в акватории Северного Морского Пути).

The main objective of the Institution is to assure safe navigation and protection of marine environment from the pollution in the water area of the Northern sea route.

Despite of establishing the new administrative regulations Russian Federation develops its SAR (Search and Rescue) possibilities at the Far North. At present SAR operations, as well as oil spill response actions on the tracks of the Northern Sea Route are organized by Ministry of Transport of Russia (Министерство Транспорта Российской Федерации). State Marine Emergency Rescue Service of Russia (Государственная морская координационная и аварийно-спасательная служба Российской Федерации, Госморспасслужба России) is directly responsible for SAR tasks which are executed through the Marine Operations Headquarters. There are two such Headquarters: in the Western sector of the Arctic – on the basis of the Federal State Unitary Enterprise "Atomflot" (Федеральное государственное унитарное предприятие “Атомфлот”, in the Eastern sector of the Arctic – on the basis of "Far Eastern Shipping Company" (Дальневосточное морское пароходство). The first company has, among other values, six nuclear icebreakers, the second one has four diesel-electric icebreakers. Usually four nuclear and one diesel-electric icebreaker are in disposition of SAR service. The rescue groups with special diving and oil spill response equipment are carried by ships (one nuclear and one diesel-electric).

The interaction of search and rescue operations and oil spill responses is organized by Marine Rescue Co-ordination Centre (MRCC) Murmansk and MRCC Dikson in their search and rescue areas conducted by State Marine Emergency Rescue Service of Russia. MRCC Dikson operates in two subordinated Marine Rescue Sub-Centers (MRSC) in Tiksi and Pevek. MRCC and MRSC have necessary equipment designed to operate in harsh Arctic conditions and fully comply with the International Convention on Maritime Search and Rescue at Sea, 1979 and the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual. According to Russian administration operation of MRCC Dikson is organized all year round. MRCC Dikson will be responsible for coordination of search and rescue of persons in distress at sea and work on the oil spill elimination in the Arctic zone of the Russian Federation (from the Kara Gate Strait to the Bering Strait). Operation of MRSCs Tiksi and Pevek is organized during the navigation season on a rotational basis. The area of responsibility of MRSC Tiksi includes Laptev Sea and MRSC Pevek East Siberian Sea and the Chukchi Sea.

Due to increased traffic on the Northern Sea Route Russia has declared to allocate about 20,6 million Euro to construct additional ten Search and Rescue Centers from Murmansk in the west to Provideniya in the East. All of them should be fully operational by 2015. The first of the new SAR centers was officially opened in Naryan-Mar (sea and river port town and the administrative center of Nenets Autonomous Okrug, the town is situated on the right bank of the Pechora River, 110 kilometers upstream from the river's mouth, on the Barents Sea) on the 20th of August 2013. Similar rescue centers will be opened in Murmansk, Arkhangelsk, Dudinka, Pevek, Vorkuta, Nadym, Anadyr, Tiksi and Provideniye. All centers will include a fire department, a department for search and rescue operations with vehicles and boats, a berth and training facilities

Russian administration ordered also the new SAR ships which had been dedicated to extremely difficult Arctic conditions: 3 multifunctional rescue vessels of MPSV06 project and 4 multifunctional rescue vessels of MPSV07 project. The first ones called Spasatel Petr Gruzinskiy type are built at in Amurskij shipbuilding yard (Russia, one ship) and Nordic Yards Wismar GmbH (Germany, two ships). Ships of the MPSV07 project (called Spasatel Karev type) were built in Neva shipbuilding and ship-repair yard. They have finished 3 ships and the last one is still under construction.

It must be underlined that Russia signed, in the 12th of May 2011, The Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic. It took place in Nook, the capital of Greenland. The agreement is the first international treaty negotiated under the auspices of the Arctic Council (AC). Its objective is to strengthen Search and

Rescue cooperation and coordination in the Arctic. The Russian new Arctic SAR Centers and new rescue ships can be treated as fulfilling the international agreement, despite the fact that they have also strengthened political position of the state in the Far East.

The Russian Federation is the only country which maintains strong strategic force in the Arctic. The main base of the Northern Fleet is Severomorsk with six more naval bases at Polyarnyy, Olenya Bay, Gadzhiyevo (Yagelnaya/Sayda), Vidyayevo (Ura Bay and Ara Bay), Bolshaya Lopatka (Litsa Guba), and Gremikha. Shipyards are located in Murmansk, Severodvinsk, Roslyakovo, Polyarnyy, Nerpa, and Malaya Lopatka. Spent fuel storage sites include Murmansk, Gremikha, Severodvinsk and Andreyeva Bay. The manpower of the Northern Fleet consists 47 000 officers, non-commissioned officers and conscripts. The Fleet has 84 combatants and 162 auxiliary ships. Among combatants are:

- aircraft carrier.
- 3 cruisers (2 in reserve),
- 7 destroyers,
- 9 nuclear submarines armed with ballistic missiles (SSBN),
- 3 nuclear submarines armed with cruise missiles (SSGN),
- 8 nuclear attack submarines (SSN, 4 in reserve),
- 7 diesel – electric submarines (SS).

Naval aviation of the Northern Fleet consists of about 250 fixed-wing aircrafts and helicopters. In the structure of the fleet also exist: 61st Marine Infantry Brigade, Independent Brigade of Coastal Artillery (missile), Naval Special Operations regiment (Naval Spetsnaz).

Despite of its tremendous military possibilities in the Far North the Russian Federation is going to develop abilities to conduct military operations in the Arctic. In the February 2013 Russian Information Agency Novosti broadcasted the information that Russia would form a new strategic military command by the end of 2014 to protect its interests in the Arctic. According to Russian plans the new command should comprise the Northern Fleet, Arctic warfare brigades, air force and air defense units as well as additional administrative structures. The military structure, dubbed the Northern Fleet-Unified Strategic Command, will be responsible for protecting Russia's Arctic shipping (along the Northern Sea Route) and fishing, oil and gas fields on the Arctic shelf, and the country's national borders in the north. The military has already begun deployment of aerospace defense units in the Arctic and construction of early warning missile radar in Russia's extreme north.

Earlier, in the September 2013, the military base with airfield for An-72 class transport planes (in the future also for heavy Il-76 class planes) and berth for the small and medium ships was re-opened on Kotielnyj Island (New Syberian Islands), where the former Soviet military base had been abandoned in 2003. The base plays the key role to control eastern part of the NSR. Russian Ministry of Defense has also announced plans to reopen airfields and ports on the Franz Josef Land archipelago, as well as at least seven airstrips on the continental part of the Arctic Circle that were mothballed (abandoned) in 1993.

The diminishing Arctic sea ice cover is a fact. The pace of the process is still uncertain but the Arctic Ocean gradually becomes more accessible. The result of the process is an increase of shipping in the region. We can observe more regional and intercontinental traffic, mostly related to the development and export of petroleum resources but also bulk and general cargo. The intercontinental shipping is still limited and takes place when the “summer window of ice opportunity” is open. Under the most radical climate change scenarios, it will probably still take around 20-30 years from now until conditions will have become suitable for such occasional transits. Large-scale, year-round transit operations are hardly possible before the ice cover has disappeared for most of the year, and this does not seem realistic in at least 40-60 years from now.

The Russian Federation anticipates the process and tries to prepare to cope with its consequences. At present we can observe two kinds of activities which were taken with regard to NSR. The first ones are focused on development of administrative and legal regulations and the technical, navigational, meteorological infrastructure along the northern trail. The second ones underlined the military possibilities of the Russian Federation and very strong political will to preserve full sovereignty over NSR and the significant position in the all Arctic. We can expect that the two factors will determine Russian Arctic policy also in the predictable future.