



## ARCTIC URBAN SUSTAINABILITY

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## Russia's Policies for Arctic Cities

By Alexander Pilyasov, Moscow

### Abstract

Although the population of Russia's Arctic has shrunk notably in the past two decades, the region continues to be highly urbanized. The process of developing sustainable, economically self-sufficient, and socially resilient urban centers requires the implementation of informed and directed policy at the federal and local level. In order to assist in informing better policy, this article establishes several categories of northern urban centers based on their economies, political situation, and social networks. The efficacy of policy is analyzed through two case studies, the cities of Muravlenko and Gubkinsky, which have experienced divergent outcomes despite their proximity and organization. Finally, some general policy recommendations are proposed for the different urban categories, based on their varying needs and characteristics.

### Introduction (a short statistical review of Russian Arctic cities)

Russian Arctic cities are known for the large size of their populations relative to the Arctic region in general. By far, the majority of the biggest Arctic cities are located in Russia. Their large size stems from the Soviet era's "triumph of the cities," and continues to be centered on a new knowledge economy oriented predominantly towards modern urban centers.

Archangelsk is the largest of Russia's Arctic and sub-arctic cities, followed by Murmansk and Norilsk. Two more cities, Noyabrsk and Novy Urengoy, have populations of over 100,000. It is typical that cities in the western part of the Russian Arctic are larger by population than cities in the eastern regions.

According to employment indicators, there are two distinct groups of polar cities. In the first category, the number of employed nearly equals the number of shift workers on the local labor market. Prominent examples of this type are the cities of Novy Urengoy, Salekhard, Naryan-Mar, Anadyr, Bilibino, and Pevek. In the second category, the number of employed is less than one third of the general population—in this case, many local residents work in the labor markets of neighboring big cities. Primary examples of this second category are Olenegorsk, Kirovsk, Muravlenko, Monchegorsk, and Apatity.

A special group is comprised of big urban centers like Archangelsk, Murmansk, Norilsk, and Vorkuta, in which the number of employed is a bit larger than the population. Cities in the first group mainly include workers who have migrated there to work in extracting energy and metals from nearby deposits, while the larger cities traditionally host a larger share of retired persons and children in comparison with single-industry cities.

Cities with the highest average salaries are the Yamal oil and gas cities, the single-industry city of Polyarnye Zori (Murmansk Oblast), and the administrative centers of Salekhard, Anadyr, Bilibino, and Naryan-Mar. In the biggest cities of the Arctic, the ratio of the maxi-

imum to minimum salaries is often a factor of three. The most attractive sectors in terms of salary are usually public policy, finance, and mining. In the single-industry cities, differentials between maximum and minimum salaries are usually greater, sometimes by a factor of six, but in extreme cases the difference between the best and worst paid can be as much as 13 times. In the smallest cities, financial service firms can extract monopoly rents (high profits) easily because they are the only players in a small local market.

The cities of Norilsk and Novy Urengoy have the largest municipal budgets, followed by big regional centers like Archangelsk and Murmansk. It is instructive to measure the level of entrepreneurial energy by indicators of small business development. The most neutral indicator here is the level of entrepreneurial taxes in the local budget per resident. The leaders here are the cities of Gubkinsky, Naryan-Mar, Salekhard, Labytnangi, and Anadyr. These cities give the greatest support to their small business communities. The cities that serve as the big administrative centers receive relatively less official budget revenue from small business because these cities have larger shadow economies.

### Typology of Arctic Cities

In addition to contrasting the varying types of employment in cities, we can develop a three-part typology of Arctic cities based on their industrial function. The first category comprises large administrative centers that boast a university, diversified economy, medium-sized industrial firms, a large municipal budget, active commuting by some workers to the nearest resource deposits, and modest levels of salary inequality on the local labor markets.

The second type is the most numerous and is made up of single-industry cities of different sizes. These cities generally employ a considerable number of shift workers, are centered around one large industry, and suffer from high salary inequality on the local labor mar-

ket. The future development of such cities is dependent upon world prices for natural resources and public support measures to diversify the local economy.

Two Arctic single-industry cities make for an interesting case study. The cities of Muravlenko and Gubkinsky are located in the southern part of the Yamal-Nenets Autonomous Okrug, are similar in their age (they were founded in 1984 and 1986, respectively), their industrial specialization (oil production), their population (25,000 and 33,000 inhabitants), the size of their municipal budgets (3.9 billion rubles and 3.3 billion rubles), and the falling oil production volumes over the last decade. However, the trajectories of the diversification of these cities' economies differ radically.

The key factor generating the differences is the *geographic location* of these cities relative to the sub-regional center, the city of Noyabrsk (109,000 inhabitants): Muravlenko is located just 120 km from Noyabrsk (a 1.5 to 2 hour auto journey), while Gubkinsky is about 240 km away (a 3.5 hour journey). This seemingly small geographical difference resulted in a major *institutional* difference: Muravlenko has become an *institutional periphery*, and Gubkinsky has become an independent *subcenter*.

The key oil-producing enterprise of Muravlenko was managed by the Noyabrsk Neftegaz company headquarters in Noyabrsk up to 2008 when a local branch, "Muravlenkovsk-neft," was formed. During the first six years of its existence, the city itself was an administrative part of the city of Noyabrsk, despite the distance of 120 km between them.

Initially, the main oil-producing enterprise of the city of Gubkinsky was also directed from headquarters in Noyabrsk, but due to the inconvenience of managing such geographically remote assets, it was converted in 1986 into an independent company with headquarters in Gubkinsky (Rosneft-Purneftegaz); the settlement almost immediately (in 1988) became an independent administrative unit.

These differing institutional positions resulted in the formation of different *relations of ownership and power*: in Muravlenko a *colonial model* developed (real control over local property and power are located in Noyabrsk), while in Gubkinsky an *embedded model* has developed.

In Muravlenko, in the conditions of the colonial model of ownership, an authoritarian *model of local government* has formed. Its characteristic feature is that it is oriented on interaction with counterparts in Noyabrsk, meaning that it devotes minimal attention to the *local community*. In Gubkinsky, a more democratic *model of local government has developed*. This is reflected, for example, in the number of public councils under the local government and its departments (17 in Murav-

lenko and 54 in Gubkinsky), better funding for the local museum (the museum in Muravlenko has 1 researcher, while the museum in Gubkinsky has 6 researchers which results in 3.6 visitors per 10,000 inhabitants a year in Muravlenko and 9.1 in Gubkinsky, as of 2011). The local authorities of Gubkinsky are accountable to the local community, while the local authorities of Muravlenko are accountable to their counterparts in Noyabrsk.

The most important indicator of whether the local authorities pay greater attention to external (Noyabrsk-based) bosses or to the local community is their attitude to *small business*: in Muravlenko, public support for small business is significantly lower than in Gubkinsky. Thus, in Gubkinsky, budget expenditures on the development of small businesses in 2011 were 25,500 rubles per enterprise and 1,700 rubles per city inhabitant; in Muravlenko the corresponding figures were much lower: 2,200 rubles per enterprise and 100 rubles per inhabitant.

With its colonial model, Muravlenko's local government policy-making narrowed the window of opportunity for the diversification of the economy of the single-industry city. Conversely, in the conditions of an embedded model in Gubkinsky, the local authorities actively contribute to the development of the small business sector, which has become an important tool in diversifying this single-industry city.

Finally, the third type in the typology is port cities along the Northern Sea Route such as Dudinka, Tiksi, Pevek, and some others. According to many indicators, these port cities have the weakest economies among Russia's Arctic cities.

### Policy for Arctic Cities

In the contemporary era, all Russian Arctic cities are attempting to meet the challenge of transforming their economic profile from industrial to service, modernizing old industrial enterprises, and becoming innovation centers for the surrounding area.

The restructuring of the urban economy for each type of Arctic city follows its own path. For the big administrative centers, it is important to become innovative university centers capable of diffusing innovation to neighboring territories. For single-industry cities, it is crucial to overcome the industrial legacy and diversify the local social sphere and economy to create sustainable local development. For port cities, it is necessary to create intelligent logistical complexes, search and rescue centers that ensure maritime safety, and other marine services along the Northern Sea Route.

For cities of the first type and large industrial cities of the second type, a promising prospect can be to create Arctic urban agglomerations. Such a scenario is relevant for Murmansk, Archangelsk, Bilibino, Anadyr,

Salekhard, Norilsk, and Vorkuta. Common world practice is to create mega-cities by integrating neighboring cities within a 60–90 minute car drive. These new agglomerations can create larger integrated markets of labor, housing, and differentiated products.

The question is not only about stimulating inter-municipal cooperation, but doing so in a more powerful way, namely, by forming a common set of institutions (norms) for small businesses, unified rules for housing markets, credit markets, and a coordinated schedule of office hours in the municipal governments of one agglomeration.

Urban agglomerations can decrease the number of duplicative functions and save costs in the provision of

services, for instance, by creating common service centers, specialized medical centers, and logistical centers. Integrative forces towards agglomeration depend upon local conditions, and can be further stimulated by innovative zones, logistical complexes, or common recreation zones.

Another possibility for restructuring the economy of Russian Arctic cities is connected with business services and intellectual services, that is to add elements of the information economy, resource management, and consulting firms to the local economy. Increasingly, the future of the Arctic relies on developing the region's intellectual resources.

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ANALYSIS

## Intercity Networks as a Factor Promoting Arctic City Sustainability

By Nadezhda Zamyatina, Moscow

### Abstract

The migration flows of Russia's northern cities are often blamed for many of the problems associated with urban Arctic centers, yet the development of social networks resulting from these flows, an often-ignored consequence, is a notable factor contributing to their sustainability. Due to Russia's unique geography and political landscape, social networks are particularly essential in building economic and social sustainability. Using data describing youth migration compiled from the social networking site Vkontakte made it possible to establish the patterns of specific migration flows between a number of northern urban centers. Rather than being purely economic, migration flows appear to be strongly influenced by social networks. These networks help furnish northern cities with a number of return migrants, as well as influencing business networks. The typology and initial findings of this research helps to develop a platform from which further research into these trends can be launched.

### Introduction

Northern Russian cities, especially the largest ones, always experience significant migration outflows. However, inflows usually compensate for the outflows. This "flowing migration regime" is typically interpreted as a cause of instability in Arctic cities. In this paper, we will rethink emigration flows out of northern cities. Such flows do not destabilize the cities, but help to include northern cities into wider social networks. Accordingly, this dynamic helps to improve the sustainability of these urban centers.

### Theoretical Approach

Social networks are even more important in shaping economic interactions in Russia than they are in Europe

or the U.S. The vast size of the country, in conjunction with relatively low infrastructural and institutional development, makes connections between the regions much more expensive than in Europe and the United States. Moreover, as is typical for countries with economies in transition, Russia is characterized by the large role for informal communications and contracts. The transitional nature of the economy compels economic actors to use their social capital to reduce their transaction costs. Consequently, the involvement of urban residents in different social networks facilitates economic contacts for the city as a whole. Social networks shape inter-company contacts, innovation, and knowledge flows, and also influence local identity and the adoption of modern living standards.

Youth migrations are both the cause and the effect of the social networks. The institutional order and high transaction costs compel young Russians to use strong social ties to cut transaction costs while they move from one city to another. The data on migrations between cities shows us that the force of strong institutional ties is sometimes greater than the force of distance or of the agglomeration effect: some very distant and small cities are tied closely by migrations flows.

Taking these factors into consideration, social proximity between the cities must be discussed in addition to the more well-known factors of organizational proximity and geographical proximity. This type of proximity is marked by migration flows.

### Data and Methods

The data driving our research is the career information contained in the personal pages of [www.vk.com](http://www.vk.com), the most popular Russian online social network (this network connects over 70% of Russian youth), particularly data on birthplaces, schools, universities, and current residences. The data was extracted by specially designed software (developed by A. Yashunsky). We employed this method because of the lack of city-level migration data in official Russian statistics.

With the help of our colleague A. Yashunsky, we have collected 3,000 to 14,000 personal data files per city for people aged 20 to 29 years old (which is approximately 10–15% of the whole city population) for the following large Arctic cities: Noyabrsk (109,200 inhabitants, 15,050 personal records collected), Norilsk (177,300 and 14,832), Magadan (95,700 and 12,738), and also for two small Arctic cities: the city of Muravlenko (33,500 inhabitants and 5,221 personal records) and Gubkinsky (23,500 and 3,263).

### Results

The majority of youth migrants move from the North to cities where a kind of “Northern diaspora” forms. Primarily, they move to the largest Russian cities (“the group of capitals”): more often to St. Petersburg than to Moscow (Table 1) and also to the nearest macro-regional center, such as Novosibirsk or Ekaterinburg (Table 2), away from the investigated home city.

The leading role of St. Petersburg is not surprising. In the USSR, Leningrad (St. Petersburg) had strong institutional ties with the Russian North; many scientific, construction, and consulting organizations in Leningrad worked on the development of the North. Leningrad State University was the traditional place to get an education for those interested in the North. It appears that young people moving from the North to St. Petersburg follow their parents’ trajectories rather than

today’s economic opportunities. However, the lower cost of St. Petersburg real estate and education may play a role as well.

The choice of regional center is affected by 1: its administrative status (Tyumen’ is an administrative center for Noyabrsk, Muravlenko, and Gubkinsky, while Krasnoyarsk is the same for Norilsk); 2: prestige and economic opportunities; and 3: similar specialization. The second cause could be illustrated with the fact that very few people move to Omsk, which is just as close and well populated (1 million inhabitants) as Novosibirsk, but Novosibirsk develops more rapidly and has a better university, so it attracts more migrants. The third cause is illustrated by the example of Ufa, which has an oil university (Tyumen’ also has similar institutions), so it attracts migrants from the oil-producing Muravlenko and Gubkinsky. There is also a two-way migration here: there are a lot of people in Muravlenko and Gubkinsky who were born in Bashkortostan (Ufa is the capital of the Republic of Bashkortostan). So there are strong diaspora ties playing a role here. Finally, distance also plays a role: people from Magadan move to Vladivostok and Khabarovsk, which are the two nearest big cities to Magadan.

The second group of “recipient” cities include small and medium-sized “professional cities”: cities which are specialized in the same industries as the corresponding northern cities or in which there are opportunities to receive an education in disciplines related to such industries. For oil-producing Noyabrsk, Muravlenko, and Gubkinsky, such cities are those with organizations in the oil industry: Sterlitamak, Surgut, Almetyevsk, Nadym, Novy Urengoy, Salavat, etc.

The third is a group of “grandma towns.” Our research shows that the two-way migration flows between northern cities and some peripheral cities exists; some people were born in the periphery and moved to the North, others were born in the North and moved to specific peripheral cities. Such cities have a consistently negative migration balance and often are depressed regional centers, such as Kirov or Kurgan. We believe that in these cases we are observing young people moving from the North to the birthplace of their parents, utilizing their developed social networks.

The last group is a group of “comfortable cities.” Usually they are located in the southern part of Russia or near Moscow. The comfort factor here must be recognized not only in terms of climate or business conditions, but also through institutional conditions, which are very important, especially the purchase of real estate. They include special programs of resettlement or the presence of realtor firms specializing in real estate for former northerners (often they also have former north-

erners on their staff who are included in northern social networks). This results in the emergence of cities specializing in the provision of housing for former northerners. Across Russia, such specialized centers include Belgorod, Krasnodar, Yeysk, and some others.

Belgorod is a unique city: not less than 1% of all school graduates in Magadan and Norilsk, and not less than 0.5% of all school graduates in Noyabrsk, Muravlenko, and Gubkinsky ultimately settled in Belgorod.

Some “comfortable cities” are comfortable only for their own partners: for example, the small city of Alexandrovsk (Vladimir region) serves this function for former inhabitants of Magadan, but lacks connections to other northern centers.

*About the Author:*

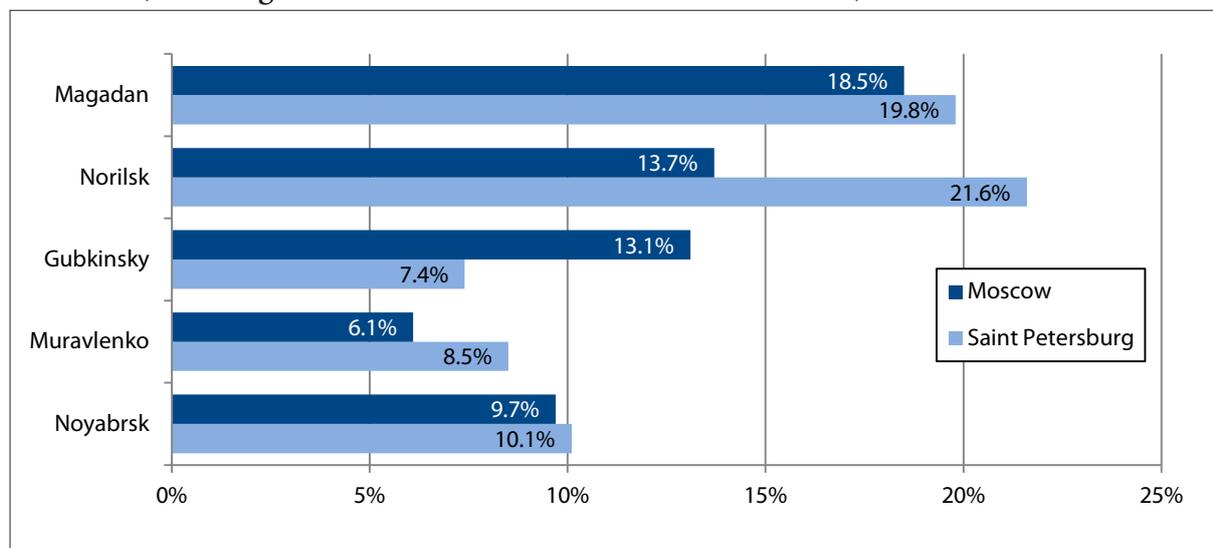
Nadezhda Zamyatina is a Geographer at Moscow State University.

**Conclusion**

A great portion of the entire migration flow from the Russian North is shaped by social ties and family traditions (for example, family members who study in the same university). Such migrations reproduce inter-city social networks.

Beyond the results listed here, we have data showing how the social ties between cities in the North and in the South act on the northern labor market, firm contracting, innovation flows, and city sustainability. This data provides a rich field for further research.

**Figure 1: Youth Northern “Diaspora” in Moscow and St. Petersburg (Percentage Of the Total Number of Youth Who Moved)**



**Table 1: Youth Northern “Diaspora” in Moscow and St. Petersburg**

| Youth migrants moved to: | Moved from the cities of: |       |            |       |           |       |         |       |         |       |
|--------------------------|---------------------------|-------|------------|-------|-----------|-------|---------|-------|---------|-------|
|                          | Noyabrsk                  |       | Muravlenko |       | Gubkinsky |       | Norilsk |       | Magadan |       |
|                          | %*                        | Total | %*         | Total | %*        | Total | %*      | Total | %*      | Total |
| Saint Petersburg         | 10.1                      | 373   | 8.5        | 190   | 7.4       | 98    | 21.6    | 1,155 | 19.8    | 846   |
| Moscow                   | 9.7                       | 359   | 6.1        | 135   | 13.1      | 175   | 13.7    | 735   | 18.5    | 791   |

\*Of the total number of youth who moved

**Table 2: Migration to the regional centers of Siberia and the Urals**  
(Percentage of the total number of youth who moved away from the investigated home city)

| Youth migrants moved to: | Moved from the cities of: |                     |                     |                     |                    |
|--------------------------|---------------------------|---------------------|---------------------|---------------------|--------------------|
|                          | Noyabrsk                  | Muravlenko          | Gubkinsky           | Norilsk             | Magadan            |
| Regional center 1        | Tyumen'<br>18,4           | Tyumen'<br>13,0     | Tyumen'<br>16,9     | Krasnoyarsk<br>10,3 | Novosibirsk<br>3,8 |
| Regional center 2        | Ekaterinburg<br>7,0       | Ekaterinburg<br>6,4 | Ekaterinburg<br>5,7 | Novosibirsk<br>3,5  | Khabarovsk<br>3,6  |
| Regional center 3        | Novosibirsk<br>4,8        | Ufa<br>5,6          | Ufa<br>4,1          | Ekaterinburg<br>1,3 | Vladivostok<br>2,0 |

## ANALYSIS

### Russia's Plans for the Northern Sea Route: Prospects and Obstacles

By Arbakhan Magomedov, Ulyanovsk

#### Abstract

This article examines the benefits and obstacles in the development of the Northern Sea Route in the Arctic. The formation of this trade and shipping corridor from the Kara Sea to the Bering Strait, from Murmansk to Vladivostok, offers Russia great economic and political advantages. However, there are numerous obstacles along the way. Some have nothing to do with Russia, while others derive from the weakness of Russia's system of management in achieving its declared goals.

#### The Northern Sea Route

Moscow's desire to promote the Northern Sea Route (NSR) is completely understandable. Access to the Arctic with its energy and natural resources and its shorter naval route between Europe and Asia could turn Russia into a major sea power. Some Western geostrategists noted the enormous potential of the Arctic for Russia even before World War II.

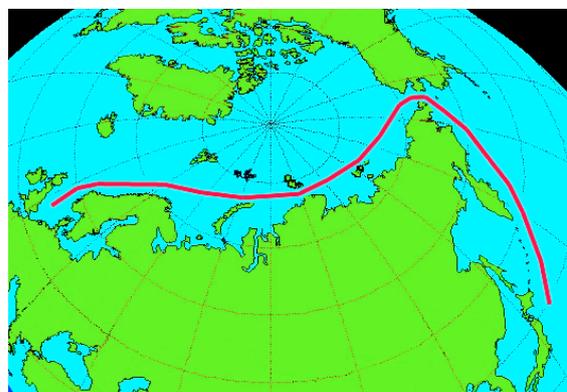
The Northern Sea Route stretches 5,600 km along Russia's Arctic shore, from the Kara Sea to the Bering Strait. The route is almost half the distance of other sea routes connecting Europe and the Far East.

Soviet planners were already preparing for the project. They built an entire transportation system to ensure that the route was open. In 1991, before the collapse of the USSR, the authorities announced that the route was open for shipping. However, in those years, nobody was interested in the northern shipping route. The result was the gradual destruction of the infrastructure built in the Arctic during the Soviet period. Additionally, the systems set up to run the sea route were disbanded. As a

result, overall freight traffic on the NSR dropped from 6.7 million tons in 1989 to 2 million tons today.

Only relatively recently, due to the melting of the Arctic sea ice, did this route start to attract foreign com-

*The Northern Sea Route (NSR)*



Source: <http://en.wikipedia.org/wiki/File:Northernsearoute.PNG>. The image was uploaded by "Monohu" and was released into the public domain.

panies. In 2009, two commercial ships traveled between Europe and Asia through Russia's northern waters. In 2011, the number of ships climbed to 34 and in 2012 it reached 46. For comparison, 18,000 ships transit through the Suez Canal each year. Estimates suggest that the freight shipped through the Arctic could increase ten times by 2019. Looking forward, shipments could reach up to 50 million tons a year.

Today the NSR has become a national priority for Russia. The Ministry of Transportation wants to retrieve the project from 20 years of oblivion and recreate the NSR administration, which will monitor the shipping traffic and the installation of ship guidance and hydrographic information systems along the route. In September 2009, Sovkomflot conducted an experimental trip from Murmansk to ports in South-East Asia. That same year two German ships travelled from the Pacific to the Atlantic oceans along the NSR, travelling through regions that had previously been covered with ice. "We consider that the experiment demonstrated to shippers that there is an economical alternative to the southern route through the Indian Ocean, which for well-known reasons has become insecure," former Transportation Minister Igor Levitin said in 2010.

The cost of transporting one container during the winter across the NSR in light ice conditions is on average 25–27 percent more expensive than through the Suez Canal, according to the Central Research Institute of the Navy. However in the summer, shipping through the Arctic is 33–35 percent less expensive. Thus, shipping containers through the NSR could be competitive with the Suez route since, on average, its annual costs would be smaller.

The Ministry of Transportation provided detailed recommendations for the construction of new icebreakers and sea and river ports in Russia's Transportation Strategy through 2030. Three new nuclear icebreakers will be built to replace obsolete ships, making it possible to secure the year-round functioning of the NSR. New diesel icebreakers are planned to service ports and the new off-shore energy projects and smaller icebreakers will be for coast guard and search and rescue operations. Six nuclear icebreakers—four heavy Arctic class and two smaller Taimyr class ships—ensure the functioning of the NSR. Additionally, companies have begun to acquire their own icebreaking freight ships. In 2009, the Norilsk Nickel fleet moved one million tons of freight from Dudinka through the Kara Sea to the Kola Peninsula. Following Norilsk Nickel's success, it made sense to begin using similar ships to transport oil and natural gas in the Arctic without escorts. Two Finnish tankers traveled the route in 2011 demonstrating the potential for

hastening the delivery of oil to Pacific countries.<sup>1</sup> Currently, freight shipments across the NSR are 1.6 million tons a year and this is mostly Norilsk Nickel output. Russia's plan is to increase annual shipping to 50 million tons by 2020 with the shipment of oil and natural gas from the Prirazlomny and Shtokman deposits.

If the Arctic ice continues to melt with the intensity that is visible now, the Arctic will become an even better zone for shipping. "Due to the warming and the constantly improving technology, shipping along the North West Route, along Canada's shores, and along Siberian shores could become the main shipping route between the Atlantic and Pacific oceans," according to Frederick Lasser of the Quebec Institute for International Research. Thus, for example, the distance between London and Yokohama is 13,841 km along the NSR, 21,200 km through the Suez Canal and 23,300 km through the Panama Canal. Reducing this distance can bring large profits. A shorter shipping time can mean lower expenses on fuel and crew and more passages per year.

These figures produced great hopes in Russia. Therefore in recent years, the country has spent considerable resources to simplify administrative procedures and modernize northern ports. The route Shanghai–Vladivostok–Chukotka–Murmansk–Norwegian and German ports is 5,200 km shorter than routes through the Indian Ocean and the Suez Canal, economizing on fuel, crew salaries and ship pollution. In the north, there are no Somali pirates or lines to pass through the Suez Canal or requirements to pay a fee for doing so. True, it is necessary to pay for the icebreakers and for 8–9 months of the year, most of the route is covered with ice.

### Resources and the NSR: Constructing the Sabetta Port for the Yamal LNG Project

Today the Arctic and sub-Arctic regions are responsible for producing 98 percent of Russia's diamonds and 90 percent of its oil, gas, nickel and platinum output. The NSR is attracting even more attention because new reserves of hydrocarbons are being found in the area. In this sense, the NSR will be most interesting to the owners and operators of the Shtokman gas deposit: transporting LNG with tankers might be cheaper than laying a pipeline in the difficult Arctic landscape. The latest developments in Russia's Arctic policy support such a development. In Yamal, they have begun construction on a new Arctic site—Port Sabetta, which should become one of the largest in the area. Port Sabetta will

1 A. Crawford. "When an Iceberg Melts, Who Owns the Riches Beneath the Ocean?", 1 April 2013 (<http://www.smithsonianmag.com/ideas-innovations/when-an-iceberg-melts-who-owns-the-riches-beneath-the-ocean-199038161.html>).

be a key element in the transportation infrastructure of the Yamal LNG project, which envisions the construction of a plant for liquefying natural gas using supplies from the Southern Tambei gas deposit. Construction of the port, whose annual capacity will be 30 million tons, creates the foundation for developing deposits on the Yamal Peninsula. Analysts note that the port will work all year round, despite the extensive ice in the region.

The first step in the port-building project is to build piers capable of accepting super high clearance ships for the transport of LNG and construction materials. In the second stage, workers will build wharves for shipping LNG and gas condensate. A government decree amending the country's transportation plan for 2010–2015 foresees 47.2 billion rubles in federal funding for the construction of Port Sabetta. Private investors will invest 25.9 billion rubles into the project.

No less interesting than these plans is the port's ownership. The main participants in the port's construction are OAO Yamal SNG, Rosmorrechflot, and Rosmport. Yamal SNG is 80 percent owned by Novatek and 20 percent by the French energy company Total. At the moment, the Indian companies ONGC, Indian Oil Corp. and Petronet LNG have expressed an interest in buying 15 percent of the project.

### **Moscow's Strengthening Control and the Suppression of Regional Interests**

At the end of 2012 Moscow put an end to the on-going argument about where the Northern Sea Route administration would be located. In December 2012 Deputy Transportation Minister Viktor Olersky announced important news: the NSR administration will be located in Moscow. The office began working on January 28, 2013. Olersky also announced that auxiliary offices would be located in Arkhangelsk. Olersky explained that it made sense to base the office in Moscow because Moscow is also the headquarters of the Emergency Situations Ministry, the Rescue Service, and the Federal Service for Hydrometeorology and Environmental Monitoring (RosHydromet), which all have a hand in managing the work of the sea route.

One consequence is that the old competition between Murmansk and Arkhangelsk for the office resulted in both of them losing out to the capital. According to the Transportation Ministry, the choice in favor of Moscow was made as a Solomonic decision in order not to offend either Murmansk or Arkhangelsk. The decision is a heavy blow to the political ambitions of the regional authorities in both cities because they had counted on becoming centers of Arctic policy in Russia.

Several days before the announcement was made, Arkhangelsk Governor Igor Orlov said that in Arkhan-

gelsk, they were ready to open the office which would deal with practical questions related to the sea route. These questions included such important issues as accepting applications to use the NSR, coordinating work with RosHydromet, and the use of polar aviation, among other issues.

Another piece of bad news for the region is a plan to privatize the Arkhangelsk state trawler fleet. Local residents are concerned that if the fleet is privatized, it will be shifted to Murmansk. Such a move would lower fishing costs, but would result in the closure of fish processing plants in Arkhangelsk, leaving more than 300 families without work. Marina Strukova, a commentator for the newspaper *Zavtra*, pointed out that some media had published information for interested parties creating an image of the fleet as being obsolete, so that it would be easier for it to be sold by the state to interested private parties.<sup>2</sup>

### **Obstacles for Realizing the Government's Plans and Perspectives for the NSR**

The enthusiasm of the Russian authorities sharply contrasts with the difficulties inherent in developing the NSR. For example, Norwegian evaluations of the possibilities of the economic exploitation of the Arctic, including shipping, sound extremely critical. According to the former Norwegian Minister of Foreign Affairs Jonas Gahr Store, by 2040 the Arctic likely is 'likely to be free of ice' for a significant part of the year, which will lead to the appearance of new transportation routes. One major problem of the Arctic route is the lack of opportunities to trade along the way. Ships do not typically go straight from Rotterdam to Shanghai. Usually, to optimize their freight and increase the profitability of the shipping, freight ships offload and pick up freight at ports along the route of their trips. In the Arctic, there are no similar opportunities. Moreover, the melting of the ice every year begins at various times making it difficult to establish a specific schedule for traffic in the region. Container traffic depends heavily on precise schedules. Accordingly, there is not likely to be a serious development of shipping in the Arctic in the near future.

At the same time, the warming climate will make it possible for ships to reach Arctic ports to export hydrocarbons and ore produced in the region. There is little doubt that the volume of shipping will gradually grow, according to Lasser. By the middle of the century, they could reach 500–1,000 ships a year. That is a lot more than are currently there. But it is a lot less than the 75,000 ships that transit the Straits of Malacca or the

2 M. Strukova. Regionalizm otchayaniya, in: *Zavtra*. Gazeta gosudarstva rossiyskogo, 9 January 2013.

15,000–20,000 ships in the Panama Canal.<sup>3</sup> It will take a lot before the Arctic route becomes one of the planet's major shipping routes.

There are also several problems internal to Russia that hinder the functioning of the NSR. The main one is the inability of the current Russian authorities to focus on specific state tasks because of the prevalence of corruption and inefficiency. A typical example is the inability to find money for the modernization of the trans-Siberian Railroad or the construction of a second track. The route is already struggling with overuse. At the moment, the Transiberian is more profitable than even the NSR with its complicated climatic conditions. The Japanese and other Asian countries have offered to invest in developing the rail link since they could make large profits from exploiting this transportation artery and it would be great for the Asian countries to guarantee cheap shipping. But the Russian government works very slowly. Another typical example is that several years ago Russia was discussing the enormous benefits of shipping gas to Japan and China. While they spent many years discussing these plans, other countries managed to fill this market. Rather than all the planned projects, Russia's only presence in this perspective market is the already existing Sakhalin-1 and Sakhalin-2 projects. The story is similar with the delivery of oil. All the plans for Europe–Asia transit have ended similarly. Russia has a colossal geographic advantage, but it has not been able

to extract any profit from it. The same holds for NSR: Norway has already carried out test deliveries of LNG along this route to its enterprises in Japan.

A working transportation link from Arkhangelsk to Chukotka and farther to Vladivostok is vitally important. While accepting this fact, according to international law, Russia does not have a monopoly on this route. No country can block the movement of commercial ships through their territorial waters. The status of the NSR as a special Russian zone with a special transit regime means only that the Russian authorities can establish an insurance regime for ships there, provide search and rescue operations, and offer ice breakers to accompany ships. Therefore many Russian politicians and analysts think that it would make sense to find serious partners to complete the NSR. Some propose working with China and signing a special agreement on jointly exploiting the NSR. The main issue is not only that China has money. At China's 18<sup>th</sup> Communist Party Congress, it was announced that China is a great naval power. The country's budget has set aside a large sum to develop its naval programs. According to Aleksandr Panov, Russia's former ambassador to Japan, Norway, and South Korea, the NSR could take approximately one-fifth of China's external trade through a scheme in which China ships its products to Europe and on the way back picks up raw materials in Russia.

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3 Etienne Dubuis. Qui s'aventurera sur les futures routes de l'Arctique?, in: *Le Temps*, 2 April 2013 (<http://www.letemps.ch/page/e807ee8e-9af0-11e2-bec9-d54f263b633a0#UVwVIZPIZgl>).

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