INTERNAL DRAFT PAPER FOR IASCP CONFERENCE

POTENTIAL INTERNATIONAL REGIMES FOR ARCTIC MARINE TRANSPORTATION

By

Matthew Moon (Harvard University)
&
Marat Tukhfatullin (Brigham Young University)

Institute of the North
Alaska Pacific University
Anchorage, Alaska

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I. INTRODUCTION

A. Previous Research

"The Northern Sea Route (NSR) is a national transportation route under full Russian control and jurisdiction, stretching from the archipelago of Novaya Zemlya in the west to the Bering Strait in the east" (Ostreng – Scandianvian Review 2002, 77). Geographically, it differs from other waterways, like the Suez or Panama Canal and St. Lawrence Seaway. Firstly, the NSR's length is around 2,600 nautical miles; secondly, most of the NSR is covered by thick ice during nine months of the year. Substantial reduction of shipping distances between North Asia and Europe, as well as imports from the Russian Arctic, rich in mineral and energy resources, make NSR immediately attractive.

Last year, the Institute of the North (ION) worked on a substantial research endeavor involving the political and economic development trends of the Northern Sea Route. The product of that project was an internal white paper on the subject entitled, "Political and Economic Strategies Northern Regions May Follow to Establish Regular Shipping on the Northern Sea Route."

Mentioned in the concluding remarks of that report was the fact that "next steps require an invitation from Russia to collaborate, an understanding and a willingness of its neighbors to join, and rigorous leadership to reduce the risks that will deter financing of the Northern Sea Route's technical needs." *The goal of this paper is to analyze existing domestic and international regimes that control the regulatory and market bodies of the Northern Sea Route, Northwest Passage, and Arctic marine shipping overall. It will then propose potential regimes for collectively organizing shipping in the Arctic regions.* This proposal is important because many northern regions and nations have a fundamental interest in an international cooperative effort to build a regional infrastructure that will develop the regulations and market for Arctic maritime shipping.

B. International Economic Incentives

The last major international research on the Northern Sea Route was the tri-national research effort *International Northern Sea Route Program* (INSROP), which was completed in 1999. INSROP concluded that "international commercial shipping is economically,

technologically, and environmentally feasible within the Arctic seas." Yet it is important to assess global economic incentives and analyze how to improve them.

Russian economic incentives to develop the NSR include the creation and maintenance of Arctic infrastructure for energy and mineral resource development coupled with sustaining the life of indigenous population of the Russian North. Sergey Frank, the Russian Minister of Transportation, admitted that "the Northern regions hold a vast supply of energy, mineral, and forest resources. Their extraction and processing will fulfill both domestic and international needs" (New East Segodnya, 2000). Development of such infrastructure will also aid the indigenous population in the Russian North providing them with regular fuel shipments, job opportunities, and easier access to industrialized centers of Russia and other parts of the world.

American economic incentives mainly consist of importing energy and mineral resources, exporting grain, and possibilities of further economic development of the Northern Alaskan territories. In June 2003 U.S. Deputy Energy Secretary Kyle McSlarrow was quoted saying that "he hoped Russian could become a new major fuel supplier to the United States" (Moscow News). A few possibilities of fuel transportation have been explored, most of which include Murmansk (Russia's non-freezing deep sea port on the Kola Peninsula) as the key loading point for those resources to sail to American destinations. Grain shipments from the U.S. to Russia may also be a possibility; however, Russia's grain imports may significantly decline in the nearest future according to Russian Prime Minister Mikhail Kasyanov (CDI Russia Weekly # 223, Dec. 2002). Further development of NSR has wide-ranging implications for both importers and exporters of natural resources in Alaska and both coasts of America. This could lead to a paradigm change in the way American companies and shippers think about Arctic commercial transport.

Economic incentives of other countries are mostly linked to energy and mineral imports from all of the Arctic regions. In addition to increased trade possibilities with Russia, Finland may look into becoming one of the key ports along the NSR. The Norwegian government expressed desire to increase trade between Northern Europe, Russia, Alaska, and Northern Asia to offer cooperation possibilities in shipping technologies (Lars Sponheim, Minister of Industry and Trade, Norway, Proceedings of NSR User Conference Nov. 1999, p. 16). Japanese economic interest may include regular shipments of nuclear fuel from Northern Europe and shipments of nuclear waste to Northern Europe (Ragner 2000, 26). Due to

significant vessel size restrictions, irregularity of shipping, and adverse weather conditions presently existing along the Northern Sea Route, many shipping companies currently consider container shipping to be unrealistic. Therefore, some physical and infrastructure improvements regarding the NSR performance will likely increase economic incentives of all countries that practice container shipping in the area.

C. International Political Cooperation

While there is sufficient economic basis for development of NSR, it is international political compromise and negotiation over development and regulation that will stabilize NSR as a competitive, sustainable shipping route. With that analysis, there are six key elements to reducing political risk. First, the cooperation and the interest of Russians must be built at several levels. Second, there is a need for a realistic assessment that outside nations will invest at the start of discussions. Third, an understanding of the strategic interest and values to various nations from more regular commerce via the NSR is important. Fourth, nations need to understand that the NSR is sustainable commercially and environmentally and has the support of local residents, including the indigenous (Native) community. Fifth, larger issues of sovereignty can be resolved or set aside. Sixth, a time table for results is critical to gaining multilateral or bilateral support for opening up the Arctic Ocean.

The last ION report concluded with a list of forums that should promote international cooperation at the commercial, regional, and global level. Commercial bodies include the Murmansk Shipping Company, Far East Shipping Company, Northern Sea Route Administration. On the government level, the Russian Ministry of Transport controls the Route. Regional bodies include the Northern Forum, the Arctic Council, and the U.S. Arctic Research Commission. At the international level, the International Maritime Organization of the United Nations would be the key global body on which the above commercial and regional bodies could testify to in developing the Arctic shipping routes.

While all of these regional and international forums are possibilities of negotiation and cooperation, this paper will propose something more permanent for government-to-government cooperation on both regulation and development of NSR. The Arctic must be seen as owned by all of the Northern regions and countries irrespective of sovereignty claims. The claims of national security and water boundaries detract from further research and economic development of the region. The Arctic Ocean must be recognized as a part of the

common ownership and management of those countries and regions that surround it. A system that develops and regulates for the benefit of all people in the Arctic requires international political cooperation on a more permanent level. The proposed regime that is described in the latter part of this paper will go through two parts: first, government-to-government negotiation over regulation of research, safety, tariffs, etc; second, a development sector that will conduct the commercial business of NSR.

II. CARGO SHIPPING INFRASTRUCTURE

Alternative Shipping Routes to Ports in the Pacific and Atlantic, in nautical miles

(Calculations by Ivanov and Ushakov, 1992, cited in Ragner, 2000)

From Hamburg to, 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

Distance savings would be even greater for traffic between ports in Northern Europe (e.g. Norway and the Russian Kola Peninsula) and in the Northern Pacific area (e.g. Alaska)

A. Costs and Investments: Ice-Breakers

The initial excitement of the Northern Sea Route is the obvious savings in distance. This benefit could offer less shipping time, less man hours and maintenance, less insurance, and a various amount of other time-confounding variables in commercial shipping. The above chart shows these distances comparisons. But the assertions made on the saving of many fiscal variables are incorrect to make because of the special physical and infrastructural difficulties of the NSR.

With very little surprise, the *INSROP Simulation Study* defined capital cost and maintenance as the most important cost component of investing in NSR commercial viability. Because of ice-infestation, characteristics such as ship size, transit speeds, insurance costs, and special crew training all come into effect when assessing the potential for profit to come out for shipping companies. Claes Ragner, in his NSR study of 2000, explains that around 2010 – 2015, "the need for ice-breaker services is bound to surpass the available resources." Furthermore, "if the Russian State is not able to finance the building of larger ice-breaker, the most realistic option will be that the oil and gas industry will construct ice-breakers themselves."

Although there are many Russian-owned ice-breakers in both the public and private sector, such specialized ice-breakers taken over by the private sector might means that those ice-breakers will not be available for other types of cargo. Therefore, an investment mechanism at an international level will be needed to give incentives to both the public and private sector into building all-purpose ice-breakers.

B. Natural Resources and Other Products through NSR

The importance of Russian oil and gas exports is difficult to overestimate, especially in the context of the NSR development. Some analysts suggest that Russian oil and gas will be a significant cargo delivered through the NSR because of the wealth of mineral and energy resources in the Russian Arctic. But there are critics who say that America's east coast energy supplies from Russia may be shipped from Murmansk, the port that Russian government is attempting to connect to the Western Siberian oil fields by means of constructing a new pipeline (Moscow Times). This undertaking is likely to increase the potential amount of oil shipped in the western direction, unfortunately not via NSR. America's west coast is looking at a lucrative opportunity to receive oil shipments from Sakhalin, where US oil companies actively participate in oil field development. Japanese and other North Asian interests also view the Sakhalin project as the most reasonable to consider because of low transportation costs associated with such close proximity, which could also decrease oil and gas shipments via NSR. Therefore, it is possible to conclude that oil shipments might not form a significant part of overall cargo load on the NSR. It is consistent with the concern raised by Norwegian Shipowners' Association, which states that "natural resources alone are not sufficient" to transport through the Northern Sea Route in order to raise enough interest from ship-owners.

Recent estimations have shown that export of non-ferrous metals and ores from Russia seems to be the largest regular shipment opportunity. Norilsk Nickel is considered the main exporter of those resources, namely nickel, copper, cobalt, platinum, and sulphur (Ragner 2000, 16). The direction of those shipments is mainly Western Europe. Nevertheless, by expressing keen interest in developing the NSR, Norilsk Nickel may consider increasing its exports and directing them not only to the west but also to the eastern markets. Therefore, one must take into consideration non-ferrous metals and ores being exported by Russia through NSR as one of the most interesting potential cargo flows.

A special type of cargo that has been researched in detail is nuclear fuel and nuclear waste. Steve Sawhill and Claes Ragner, in a 2002 study published in the Polar Record, have explained that it is "technologically feasible" as well as "economically feasible" for NSR to have transport of nuclear cargoes. Although there is a potential for reducing factors of political risk including safety, environmental security, and national security Sawhill and Ragner caution that "the unpredictability of dealing with Russia and the uncertain future of Russia's ice-breaker fleet offset this."

Other bulk commodities include Russian and other Arctic region timber, intermediate wood products, and dry cargo (i.e. food). Ragner, in his 2000 study, forecasted the cargo flows of the NSR for the next fifteen years. Although he explains that "there are no reasons to expect a dramatic change in NSR cargo flows in either direction from the recent level of between 1.4-2.0 million tons annually", the NSR will see a tremendous amount of change when "it comes to marine export of hydrocarbons … if developments proceed according to announced plans." Ragner has predicted that by 2015, between 8.75 and 62.55 million tons of cargo will be transported, with the realistic mean at about 20.00 million tons.

C. Climate Change Considerations

The Intergovernmental Panel on Climate Change has predicted with a 90% certainty that temperatures will continue to rise between 1.4°C and 5.8°C above 1990 levels by the year 2100. Temperature increases in the Arctic are likely to be even higher, by perhaps a factor of two, due to evidence of an increase in greenhouse gas emissions. (IPCC, 1998) Annual mean temperatures over the last three decades have risen by up to 1°C per decade and winter trends are twice as large. (IPCC, 2001) There have been substantial reductions in both ice extent and thickness in the Arctic in recent decades. Studies using passive microwave data from satellites have shown the extent of Arctic sea ice decreasing by 2.9% (+ or – 0.2%) per decade. For example, the September ice extent in the Beaufort and Chukchi seas was 25% below the prior minimum value over a 45-year record (IPCC, 2001).

The IPCC commissioned a Special Report on Emissions Scenarios (SRES). Four scenarios representing different world storylines are used to estimate emissions and climate change to 2100. Some of the projected increases in precipitation and temperatures are larger than for any other part of the globe. Models predict that land areas in the Arctic will receive substantially increased snowfall in winter and that the climate will be markedly warmer. Summer could be much warmer and wetter than present. The climate over the Arctic Ocean does not change as dramatically, but it will become warmer and wetter by 2080. (IPCC, 2000) When it comes to sea-ice, there are many models that have tried to correlate current trends with simulations. GCM simulations for Arctic sea ice predict that warming will cause a decrease in maximum ice thickness of about 0.06 m per °C and an increase in open water duration of about 7.5 days per °C (Flato and Brown, 1996).

Reduced sea-ice extent and thickness would increase the seasonal duration of polar navigation on rivers and in coastal areas that are presently affected by seasonal ice cover. There is no clear consensus about whether the frequency of iceberg, and their danger to shipping, will change with global warming (IPCC, 1996). Projected reductions in the extent and thickness of the sea-ice cover in the Arctic Ocean and its peripheral seas could substantially benefit shipping, perhaps opening the Arctic Ocean as a major trade route. This projection would include the opening of both the Northwest Passage and the Russian Northern Sea Route for up to 100 days a year.

There are economic impacts of this climate change as well. A survey of potential impacts on Canadian shipping suggested net benefits to Arctic and ocean shipping due to deeper drafts in ports and longer navigational seasons, with mixed results for lake and river shipping due to the opposing effects of a longer shipping season but lower drafts. Currently, ice-breaking efforts are an expensive aspect of navigation in the Arctic. Some ice-breaking programs in some areas may be cut back with moderate warming of the Arctic. In other areas, costs may rise to keep newly available routes open longer. For example, a disappearance of sea ice south of Labrador would eliminate Canadian Coast Guard ice-breaking requirements. This would mean an annual saving of CDN$15–20 million. The effect of annual warming on ice calving (simulated using a simple degree-day model) shows that for every 1°C of warming there would be a 1° latitude retreat of iceberg occurrence in the Atlantic Ocean.

III. POLITICAL ADVANTAGES AND DISADVANTAGES

A. Sovereignty Issues

Overcoming Russian sovereignty over the Northern Sea Route seems to have become a standing topic for some researchers involved with the development of the Route. However, current Russian practices regarding their claims of sovereignty do not impede progress of the NSR, but open the way for responsible use of the Northern Sea Route in particular and the Arctic as a whole.

The issue of the Russian sovereignty claims over the territories closely associated with the Northern Sea Route mainly derives from Article 234 of the Law of the Sea Treaty (LST) adopted by the United Nations in 1982 and ratified by Russia in 1997. Among other things, the Law establishes universal legal regulations for states to observe while drawing and protecting their sea borders. Article 234 states:

> Coastal States have the right to adopt and enforce non-discriminatory laws and regulations for the prevention, reduction and control of marine pollution from vessels in ice-covered areas within the limits of the exclusive economic zone, where particularly severe climatic conditions and the presence of ice covering such areas for most of the year create obstructions or exceptional hazards to navigation, and pollution of the marine environment could cause major harm to or irreversible disturbance of the ecological balance. Such laws and regulations shall have due regard to navigation and the protection and preservation of the marine environment based on the best available scientific evidence.

Thus, the Russian government issued "Regulations for Navigation on the Seaways of the Northern Sea Route" using Article 234 of LST as a foundation for Russian sovereignty claims. By calling the Russian Arctic and the NSR "special" and "extra-sensitive" environmental areas, the Russian authorities declared majority of the straits and sea areas adjacent to the coastal areas of the Russia as internal waters of the Russian Federation with all the protection and supervision that they bear. The aforementioned document entitled "Regulations for Navigation on the Seaways of the Northern Sea Route" establishes strict conditions that all vessels (Russian and foreign) intending to use the NSR must observe due to heightened risks of marine transportation associated with severe climatic conditions of the Arctic Seas. These provisions include "technical and operational requirements" and "financial liability" associated with potential pollution. Similar unilateral moves were taken by Canada and Norway when the countries claimed sovereignty and restricted access for foreign merchant and military vessels in the Northwest Passage and the Indreleia, respectively.

The United States regards some of those claims as unfounded and proposes the status of international passageway for the Routes (Ostreng 1999, 318-323). In defense of the cautious Russian position regarding the strict conditions for all vessels to comply when entering the Northern Sea Route, it might be mentioned that "in most cases… [the] straits [of the Route]… are overlapped by the internal waters of the Russian Federation or its territorial sea. The difficult navigational conditions typical of this region, and in particular in the bottlenecks, create a considerable risk of sea accidents that can entail pollution of the marine environment. This imposes special responsibility on the coastal state, in turn influencing the legal status of the Arctic straits, making it dependent upon the declaration of will of the Russian Federation" (Ostreng 1999, 324).

Most analysts have not yet evaluated the efficiency of the "Regulations for Navigation on the Seaways of the Northern Sea Route" as based on the Russian sovereignty claims. The reason may have been that researchers do not consider the strict conditions of the Northern Sea Route navigation imposed by the Russian government as serious impediments to future commercial development of the Route. It may go without saying that the "Regulations" are most likely inefficient because of excessive bureaucracy they create, which unfortunately comes from many Russian laws and regulations. In other words, the inefficiency of the "Regulations" may not result from the Russian sovereignty claims, but from inherent logistic imperfections. Correctly drafted and applied, the "Regulations" may be a strong force for protection of the Arctic marine environment, which will undoubtedly appeal to the Russian Northern communities and International/Russian environmental groups.

B. International Legal Issues: Existing Agreements

With the Cold War virtually dead and the economic and political relationship of Russia with the United States and Europe warming, international political agreements are on the rise between former nuclear foes. Concerning maritime issues, the administrations of George W. Bush and Vladimir Putin have taken a big step in creating a bilateral agreement.

On June 20, 2001, Norman Mineta (U.S. Secretary of Transportation) and Sergei Frank (Russian Minister of Transport) signed a memorandum entitled "Agreement on Maritime Transport Between the Government of the United States of America and the Government of the Russian Federation." While there exists an International Maritime Organization and many treaties such as the Law of the Sea Treaty, mutual agreements

between nations (especially Arctic Council nations for the Northern Sea Route), should serve as strong international legal foundations for maritime cooperation. Using this U.S.-Russian bilateral agreement, analysis should focus on language that should be put into effect concerning NSR.

First, concerning regulation, Article 4 of the Agreement states that "the Parties shall facilitate the carrying out of administration, customs, and public health formalities in force therein." This language can start negotiations over a regulatory body that handles all non-development matters between nations.

Second, concerning cooperation, Article 7 of the Agreement states that "the Parties shall ensure that carriage of commercial cargo in bilateral trade and between the ports of the country of a Party and ports of third countries is based on commercial considerations. Each Party shall accord the vessels of the other Party fair and non-discriminatory opportunities to compete for carriage of such cargo." Under this provision, legal basis can be made to negotiate economic factors as trade tariffs, non-military research vessels, and eventually cooperation on development of the route.

Third, concerning development, Article 13 of the Agreement states that "the Parties shall continue their efforts to maintain and develop effective business relations and communications between the authorities responsible for maritime transport in their countries. Article 14 outlines that the Maritime Administration of the U.S. and the Ministry of Transport for Russia would be those points of contact for such business. This language could lead to joint development opportunities through a merging of public and private sector investment through international corporations or companies.

IV. EXISTING REGIMES

A. Suez Canal

The Suez Canal links Mediterranean Sea and essentially the Indian Ocean, dramatically reducing shipping distance between Asia and Europe. After the construction of the Suez Canal was completed, the main European powers of the 19th century established a legal structure for use of the Canal by signing the Constantinople Convention of the Suez Canal in 1888. Governments of Great Britain, Germany, Austria-Hungary, Spain, France, Italy, the Netherlands, Russia, and Turkey signed the Convention at that time. After being nationalized in 1956, the Canal still remains the Egyptian government's property. The government established the Suez Canal Authority, a state owned and operated corporation, for management of the Canal. It is important to observe that although the Canal's ownership changed with nationalization, the main legal principles regulating the Canal's usage still remain in force just as they were outlined in the Convention of 1888. The Convention declares the Suez Canal to be an international waterway, indicating free passage of all ships on a "[non]selective or discretionary" basis. Only ships of those countries that are in a state of war with Egypt may be denied the right of passage. The reason for the current Egyptian government to remain true to the old Convention is most likely purely economical: the Canal is one of Egypt's main sources of income. However, "the Suez Canal Authority reserves the right to refuse access to Canal waters, or order the towage or convoying of vessels considered dangerous or troublesome to navigation" (Rules of Transit through the Suez Canal).

B. Panama Canal

The Panama Canal connects the Atlantic and Pacific Oceans through in the area of the Isthmus of Panama. Until 1979, the Canal and its territory were US property and were governed solely by the United States of America. In 1979, the US and Panama formed a joint commission to manage the Canal with the intent to secede the Canal to Panama's government by the 1999. The Panama Government established the Panama Canal Authority in 1999, which signified Panama's complete control over the waterway. However, the treaties signed by Panama and the US provide US military defense assistance of the Canal, as well as establish a permanent neutrality status of the Canal even in case of war. Essentially, the status of the Panama Canal is similar to that of the Suez Canal. The Panama government owns and operates the Canal through its agency, the Panama Canal Authority, which issues regulations

regarding the safety of marine transportation through the Canal based on the US-Panama Treaty of 1977 and International Marine Laws.

In 1978, during the Panama Canal Treaty debates within the United States Senate, Senator Harrison "Jack" Schmitt of New Mexico offered an amendment in the form of a substitute called INTERSEA. The proposed substitute treaty offered a tricameral system of regulations and development of the Panama Canal. The Assembly of Parties, as the principal organ, would enter into agreements with other countries, establish general rules and to consider legal complaints as a regulatory body. The Board of Governors would have the "responsibility of for the operation and maintenance of the canal and for the design, development construction, establishment, operation" of any features of the canal A Board of Users, consisting of representatives of nations whose shipping interests utilize the canal, would be entitled to have a representative sit on the Board of Governors and shall advise the canal's administration on policy and economic development. In his speech, Senator Schmitt explained that "INTERSEA rests on a growing realization that there are truly international resources."

C. St. Lawrence Seaway

In 1909, the governments of the United States and Canada signed an agreement called the Boundary Waters Treaty for the purpose of managing the Great Lakes, St, Lawrence Seaway and other river systems wisely and to protect them for the benefit of both countries' environments and economies. They recognized that each country was affected by the other's actions in lake and river systems along the border, so within the treaty was a provision for the creation of the International Joint Commission (IJC) that has authority and oversight of all waterways between the United States and Canada.

Concerning membership, the 1909 Boundary Waters Treaty created the International Joint Commission as the policy-making and oversight body of the St. Lawrence Seaway bilateral system. It consists of six members, three from each country. The three members from the United States are appointed by the President from the advice of the Secretary of Transportation The three members from Canada are appointed by the Governor in Council on advice from the Prime Minister and Minister for Transportation.

The International Joint Commission of the St. Lawrence Seaway settles disputes and is the official policy-making body of the 1909 treaty. It has three purposes. First, it manages

all bodies of water at the borders of the United States and Canada by having final authorization of all projects (dams, flood control, fishing, etc.) and zoning (which controls which areas are used for recreation, fishing, etc). Second, it investigates situations of water and air pollution. Third, it holds public meetings every two years for the projects that it either authorizes or rejects. The IJC has also drafted treaties for the United States Senate and Canadian Parliament to consider, such as the "Ice-breaking Operations in the Great Lakes and St. Lawrence Seaway System" Agreement in 1980.

While the International Joint Commission handles all legal and regulatory maters, the economic and environmental projects are taken on by separate corporations in both the United States and Canada. Canada has the St. Lawrence Seaway Management Corporation which is a non-profit firm under government auspices that takes care of all Canadian-side projects. Its American counterpart is the St. Lawrence Seaway Development Corporation, which is under the direct control of the United States Department of Transportation.

D. Russian Northern Sea Route

The NSR is governed on two main levels of the Russian government: federal and regional. The Russian Ministry of Transport's official agency, the Northern Sea Route Administration (NSRA), manages the entire stretch of the Route from the west to the east. The federal government's responsibility (through the NSRA) includes "implementation of state supervision over the rational use of the NSR; organisation of Arctic navigation, taking measures to ensure the safety of navigation on the lanes of the NSR and on the lanes of adjacent areas; taking measures to prevent and eliminate consequences of pollution to the marine environment and the northern coast of the Russia and supervision of vessels and offshore installations for this purpose which might be a potential source of pollution" (ARCDEV website). Nuclear and diesel icebreakers are in federal ownership and are leased to Russian shipping companies for the maintenance of the Route. Regional governments are responsible for improving transport and economic infrastructure in their regions for effective support of the commercial feasibility of the Route.

V. AN INTERNATIONAL NSR REGIME: REGULATION AND DEVELOPMENT

A. Regulation

While the political, economic, and physical aspects of the Northern Sea Route are constantly changing in both the short-term and long-term, government-to-government negotiation is still needed for both non-controversial and controversial issues including access to certain parts of the NSR for research and commercial use to safety and international search and rescue procedures. Therefore, regulation on an international level must be negotiated and made permanent by some type of international regime. This proposed regime will discuss what type of roundtable can be formulated, the revival of an assessment and research group, the creation of a uniform safety code, negotiation of fair trade and lowering of tariffs, and the start of a possible international commission overseeing the regulation and environmental status of the Northern Sea Route.

NEGOTIATING ROUNDTABLE: ARCTIC COUNCIL NSR CONVENTION

There have been many working groups and ad hoc workshops on development of political and economic unity on use of the Northern Sea Route. The best overall government-to-government negotiating regime is the existing Arctic Council, now chaired by the federal government of Iceland until the end of the 2004. The Arctic Council consists of each one of the countries that surround the Arctic Ocean (Canada, Denmark through Greenland, Finland, Iceland, Norway, The Russian Federation, Sweden, and the United States through Alaska.)

At the next ministerial meeting of the Arctic Council, which will be at the end of 2004 in Iceland, the general assembly should approve of a Northern Sea Route Convention that would serve as the negotiating table for either one-on-one discussion between certain nations (i.e. U.S.-Russia) or group discussion on creating international legislation and/or treaties to serve as agreements between the nations. While ambassadors and those senior Arctic officials in each country would be handling the general discussion, the main negotiation concerning the details of regulation on all levels would be done by both transportation/maritime administrations in each country as well as environmental ministries and trade/international commerce representatives.

The NSR Convention would last one full year, acting as an international constitutional convention concerning the regulatory aspects of Arctic commercial shipping. As a truly

international, intergovernmental agency roundtable, the product of this convention would be a set of agreements between nations consisting of compromises to make the Arctic Ocean a truly manageable commons area of the Arctic Council nations.

NSR ASSESSMENT AND RESEARCH GROUP

This paper outlines the political risks, economic incentives, and climate change considerations. Yet, the last international effort to study the Northern Sea Route ended in 1999 with the completion of INSROP. The Arctic Council through the NSR Convention or some other means needs to set up a continuation of INSROP to study the recommendations last made in 1999, how to achieve those recommendations, and to have further research done.

The first component of this NSR Assessment Group would focus on long-term economic incentives of the route to both the public and private sector. While in the latter part of this paper we discuss creating a Northern Sea Route Corporation for the short-term, this economic research component would have the job of assessing the commercial viability of NSR, the need for ice-breakers, and the possibilities of sustaining the Northern Sea Route.

The second component of the NSR Assessment Group would focus on all of the existing and pending national and international legislation on the Northern Sea Route and how to combine them into one efficient regulatory body. This research component would also look at each Arctic Council member states' concerns with international policy-making on commercial shipping in the Arctic.

The third component of the NSR Assessment Group would focus on the physical stability and climate change aspects of the Arctic. This would be a group of scientists who can use the work of the Arctic Climate Impact Assessment (ACIA) and other national and international groups who have done similar studies on sea ice extent in the Arctic. These studies could be made available to the first and second components of the group in order to further discuss the need for ice-breakers and the concerns of environmental and safety issues.

NSR CODE OF SAFETY AND SECURITY

Many commercial shipping companies, as well as the nations of the Arctic Council, are worried about the security of the cargo on board of the ships, the stability of the ships themselves in ice-infested waters, the protection of their coastal environmental, and the ability of international cooperation to facilitate search and rescue operations in case of an emergency. There are also special types of cargo that require special rules and regulations

because of the hazardous nature, including nuclear fuel and waste. These are all things that should be negotiated at an NSR Convention, formulated into a unifying NSR Code of Safety and Security.

The first article should deal with the safety of ships and the cargo on board. The International Maritime Organization approved in December of 2002 “Guidelines for Ships Operating in the Arctic Ice-Covered Waters”, or more simply known as the POLAR Code. The POLAR Code deals with three specific articles of safety and security. First, the construction provisions provide for rules on structures, stability, directions control systems, machinery systems, electrical installations, etc. Second, equipment standards provide for rules on the possession on fire safety gear, life-saving appliances and survival arrangements, and navigational equipment. Third, operations guidelines provide for rules concerning crew training and the handling of emergency equipment. Each country within the Arctic Council undoubtedly has its own rules and regulations concerning NSR. An NSR Convention could work on taking the benefits of the IMO Code and benefits of other national regulations and putting them together to make a NSR Code of Safety and Security. If the IMO POLAR Code is deemed sufficient, the Convention can adopt such a code.

The second article would deal with environmental concerns and regulations. The IMO POLAR Code provides for negotiations on environmental standards, but has very little to do with specifying what environmental rules can be put into place. The environmental administrations of each nation can negotiate and combine their knowledge on what they know about the safety of ships and cargo in the first article to define what else needs to be done in this article.

The third article would deal with search and rescue operations in the Northern Sea Route. Agreements need to be made not only on international cooperation between flagged ships; there also needs to be consensus on how to prevent a crisis. Because of ice-infestation, there needs to be the fulfillment of daily observations of weather and ice patterns in the Arctic. The United States National Ice Center in Suitland, Maryland (a joint operation of the Navy, NOAA, and the Coast Guard) maintains safety around glaciers and icebergs through ice reconnaissance studies. This is done through the International Ice Patrol agreement. Such an agreement can be agreed upon or amended to have a truly international safety force around the NSR.

Lastly, it is indispensable to consider the experience the Russian government has had in operating and managing the Northern Sea Route. The Russian NSR experience may have been reflected in the "Regulations for Navigation on the Seaways of the Northern Sea Route," the official federal guideline for NSR users. Many articles of the "Regulations" may become valuable resource for responsible and educated use of the Northern Sea Route as part of the fragile Arctic ecosystem.

NSR TRADE AND TARIFF NEGOTIATIONS

The NSR Convention can also act as or create a separate entity to handle all trade and tariff negotiations concerning commercial ships entering sovereign waters. With the recent trend of bilateral negotiations between countries (including the new agreements between the U.S.-Chile and U.S.-Singapore), bilateral or multilateral agreements can be made between Arctic Council nations at such a convention. If that process is deemed too short, a separate regime under the auspices of the World Trade Organization and/or the Arctic Council can have trade and international commerce ministers from all of the countries work with senior Arctic officials to have fair and balanced tariff agreement on ships and ship investing.

B. Development

Researchers of the Northern Sea Route indicated that one of the largest problems associated with the potential use of the Northern Sea Route is its development program. While many potential users feel that the Route will be a great business enterprise, they reluctantly approach the issue of financing its development, most likely assuming it to be the responsibility of a single entity, such as the Russian government. The Northern Sea Route requires large amounts of investment for its development (the cost of construction and maintenance of icebreakers, infrastructure development). The difficult situation in the Russian economy makes the cost of developing the Route born by the Russian government alone very problematic. Similarly, no other commercial or foreign state would not be able to carry out the NSR development not only due to heavy financial burden, or inevitable conflicts with Russian national security, but also for practical reasons (Russian government already controls a large, though aged, icebreaker fleet, various support and forecasting facilities necessary for proper safety of shipping along the NSR, and ports along with other support infrastructure). Therefore, an idea of creating a joint-stock corporation, which will gradually unite the interests of all potential users of the Northern Sea Route, seems to be the most interesting option for development.

OWNERSHIP

The proposed structure of the Northern Sea Route Corporation (NSRC) should most likely consist of the interests of all potential users of the Northern Sea Route. The structure must include the Russian government as the principal shareholder in the corporation, which will satisfy the Russian national security interests. The move will also utilize the rich resources (icebreakers, support equipment and infrastructure, ports and port facilities) that the Russian government already owns and controls. Russian commercial entities (shipping companies and users) have already expressed some interest in participating in such a joint-stock corporation. LukOil, one of Russia's oil majors, has interest in the Murmansk Shipping Company and owns its own ice-strengthened tanker fleet. Norilsk Nickel, the largest user of the Northern Sea Route, has in fact admitted that it is ready to take part in financing the development of the Route "on the condition that [their] share will be in the general amount of capital of the new NSR stock company" (Rozenberg 1999, 291). Therefore, the structure of the proposed development corporation should include Russian commercial interests, thus bringing significant financial resources to the NSRC's use. Future involvement of international users of the Route must also be considered as the NRSC becomes more organized with Russian participation. This may be accomplished by the Russian government increasing its initial participation in the corporation by 65 percent, with subsequent privatization of less than 15 percent of the shares among foreign users of the Northern Sea Route, to ensure the Russian government's continuing control over the corporation.

REGIONAL PARTICIPATION

Another important structural aspect of such a development corporation would include the interests of Russian, and eventually, foreign regional governments. This matter needs to be correlated between the Russian federal government and the regional governments on the basis of to what degree the regional governments should be participating in financing and later receiving benefits from the use of the Northern Sea Route. The model of such a region as Alaska in the United States may be used in creating regional autonomies, which will regulate the use of the Northern Sea Route in the prescribed for them boundaries, and also participate in distributing NSRC's revenues for their own economic development. The regional governments' responsibilities may include a share in financial support of the Northern Sea Route, construction and maintenance of their local infrastructure (ports, transportation, employment).

The development of the Russian North is closely linked with the development of a regular and reliable transport route such as the Northern Sea Route (Artur Chilingarov, Deputy Speaker of the Russian State Duma, 1999). The Northern Sea Route, functioning as an efficient waterway, will provide the regions along the Route with most likely all necessary supplies for improving the standard of living in those territories. The development of the Route's support infrastructure is very likely to create an influx of outside investments into the territory and increase the number of working places for the local population, as well as spur migration from other parts of Russia in order to fill growing vacancies in the region. Finally, the condition might be achieved, when the regions will become financially self-sufficient, which will turn them into contributors to the Russian budget, instead of being recipients of federal subsidies.

INTERNATIONAL BOARD OF DIRECTORS

The proposed structure of NSRC might include an advisory organ, the Board of International Directors. Such a Board could consist of official government representatives of all countries, users of the Northern Sea Route, on a proportional basis reflecting their use of the Route. The countries' strategic importance (location along the principal Route), financial participation, and cargo traffic could also influence their presence in the Board.. The scope of the Board's responsibilities might initially focus on international cooperation between the involved states on the level of ministries of transportation, consulting the corporation regarding controversial policies, and advising in disagreements between NSR users. Consequently, the Board might develop a more prominent status in the NSRC. If the Russian Federation starts moving toward international governance of the Northern Sea Route, the Board might become a prototype of an International Northern Sea Route Commission, which would regulate the affairs of the Northern Sea Route, a prospective International Waterway, according to international marine rules.

VI. CONCLUSION

From October 20-22, 2003 in Reykjavik, Iceland, there will be a workshop "In Support of the Preparations of the Arctic Marine Strategic Plan". Panels will include subjects on drivers of change in the Arctic marine environment, trends in ocean management, Arctic Council working groups, and the circumpolar response. It is critical that this workshop focus on the international political and economic aspects that this paper has outlined in a very simple fashion.

The ethic of trying to analyze the formulation of international cooperation in the Northern Sea Route is simple: the Arctic is owned by all of us irrespective of sovereignty and national security claims. While many of those claims may be legitimate, efficiency in managing the commons of the Arctic Ocean lies on international regulation, development, and ownership for the common good. Therefore the way to achieve this ethic is through a strong Northern Sea Route Convention for regulation with a Northern Sea Route Corporation to handle the development decisions for both countries and their regions to be economically sustainable.