



Norwegian University
of Life Sciences

Master's Thesis 2017 30 ECTS
Faculty of Social Sciences
Department of International Environment and Development Studies,
Noragric

The Viability of Developing the Northern Sea Route for International Shipping: Understanding Russian Arctic Policies in Arctic Security and Resource Management

Huijeong Son
International Relations

Shipping along the Northern Sea Route



Source: Gazprom.com

The Department of International Environment and Development Studies, Noragric, is the international gateway for the Norwegian University of Life Sciences (NMBU). Eight departments, associated research institutions and the Norwegian College of Veterinary Medicine in Oslo. Established in 1986, Noragric's contribution to international development lies in the interface between research, education (Bachelor, Master and PhD programs) and assignments.

The Noragric Master theses are the final theses submitted by students in order to fulfil the requirements under the Noragric Master program "International Environmental Studies", "International Development Studies" and "International Relations".

The findings in this thesis do not necessarily reflect the views of Noragric. Extracts from this publication may only be reproduced after prior consultation with the author and on condition that the source is indicated. For rights of reproduction or translation contact Noragric.

© Huijeong Son, May 2017

e-mail: huijeong.son@nmbu.no, colleenson@naver.com

Noragric

Department of International Environment and Development Studies

P.O. Box 5003

N-1432 Ås

Norway

Tel.: +47 67 23 00 00

Internet: <https://www.nmbu.no/om/fakulteter/samvit/institutter/noragric>

Declaration

I, Huijeong Son, declare that this thesis is a result of my research investigations and findings. Sources of information other than my own have been acknowledged and a reference list has been appended. This work has not been previously submitted to any other university for award of any type of academic degree.

Signature.....

Date.....

Acknowledgements

It has been a long journey working on my master's thesis. Conducting research was a hard and challenging process, but definitely a worthwhile experience which brought me both frustration and accomplishment.

All this journey would not have been possible without support and assistance from my supervisors: Stig Jarle Hansen and Thor Larsen from International Environment and Development Studies, Noragric at NMBU. I would like to express my gratitude to Stig for giving me constructive feedback and guidance through the process, and to Thor for assisting me with useful comments and valuable sources that I could refer to. I also would like to thank to my peer students who have been supportive to each other and shared useful information during this two year of master program in International Relations.

Special thanks go to my husband and son who have been unconditionally and incredibly supportive and caring during my study in Norway. We all are glad to have survived the long dark Norwegian winters, as I am enjoying myself in completing this Master's program.

Moss Norway, 9 May 2017

Huijeong Son

Abstract

Challenges and opportunities are continuing to emerge in the Arctic Region. As the Arctic sea ice is decreasing due to climate change, exploration and development in the region has become more accessible. This phenomenon has also opened up the Arctic shipping lanes. Russia, a member state of the Arctic Council (AC), has the longest of the Arctic coastlines. Historically, Russia has exclusively controlled the Northern Sea Route (NSR). In utilizing the NSR for shipping and developing the Arctic region, Russian Arctic policies have been politically and strategically changed during the past years, mainly concerning the Arctic security and resource management. This thesis aims to analyze and discuss how to understand Russian Arctic policies to evaluate whether the NSR could become an international transit shipping lane. Researching the recent historical background and current conditions of the NSR, this study argues the importance of three parts: Russian political ambitions in the Arctic since the 2000s in changing Arctic security, territorial disputes of Russian jurisdictional claim over Arctic resources and control of the NSR, and developing Arctic shipping mainly for internal transportation. This thesis has found that Russia faces political, economic and environmental challenges to developing the NSR for international use. The military and economic strategies of Russian Arctic policy in the context of Arctic security and resource management are deeply grounded in the national security. Through prioritizing its national security in developing the Arctic region, Russia strategically plans a long project to develop the NSR mainly for domestic use. Thus, developing the NSR for international shipping does not seem to be feasible, neither politically nor economically.

Table of Contents

List of figures	IX
List of abbreviations	X
1. Introduction	1
1.2. Definition of the Northern Sea Route	2
1.3. Research questions	3
1.4. Previous research	4
2. Methodology	6
2.2. Qualitative research	6
2.3. Data collection and analysis	7
2.4. Validity and reliability	9
2.5. Ethics and limitations of the study	9
3. Theoretical approach	10
3.2. Neo-liberalism perspective: Complex interdependence and institutionalism	11
3.3. Neo-realism perspective: Waltz's realism connecting to defensive realism	14
4. Background of the Northern Sea Route	17
4.2. Brief historical background of the NSR	17
4.3. Natural and technical conditions of the NSR: Short distance but several obstacles	19
4.4. Cargo flows of the NSR since the Cold War era	21
5. Discussion: Viability of developing the NSR for international shipping by understanding Russian Arctic policies in Arctic security and resource management	22
5.1. Changing Arctic security: Russia's political ambitions in the Arctic since 2000s	22
5.2. Territorial disputes: Russia's jurisdictional claim over Arctic resources and control of the NSR	31
5.3. Developing Arctic shipping: Multiple bilateral cooperation for developing Arctic resources and utilizing the NSR for internal transportation	38
6. Conclusion: Long-term plans of developing the NSR mainly for domestic use	45
6.2. Further recommendations	46
7. References	48

List of figures

Figure 1: The Northern Sea Route (NSR)	2
Figure 2: Sailing distance between Asia and Europe	19
Figure 3: NSR transit traffic	22
Figure 4: Distribution of the undiscovered hydrocarbon resources among the Arctic coastal states	26
Figure 5: Limits of Continental Shelf (CLCS)	33
Figure 6: Area of the Russian continental shelf in the Arctic Ocean beyond the 200 mile zone	34

List of abbreviations

AC	Arctic Council
AGF	Arctic Group of Forces
AZRF	Arctic Zone of the Russian Federation
BEAC	Barents Euro-Arctic Council
CHNL	Centre for High North Logistics
CLCS	Commission on the Limits of the Continental Shelf
CNPC	Chinese National Petroleum Company
EEZ	Exclusive Economic Zone
EU	European Union
FNI	Fridtjof Nansen Institute
FSB	Federal Security Service
FSS	Federal Security Service
ICS	International Chamber of Shipping
IMO	International Maritime Organization
INSROP	International Northern Sea Route Programme
NATO	North Atlantic Treaty Organization
NEP	Northeast Passage
NSR	Northern Sea Route
NSRA	Northern Sea Route Administration
SAR	Search and Rescue
UN	United Nations
UNCLOS	United Nations Convention on the Law of the Seas
US	United States

1. Introduction

Challenges and opportunities are continuing to emerge in the Arctic Region. As the Arctic sea ice is decreasing due to climate change, exploration and development in the region has become more accessible. This phenomenon has also opened up the Arctic shipping lanes. Shipping companies have expressed interest in the Arctic routes, and are wondering whether the lanes connecting the West and East could be commercially feasible (Buixadé Farré et al., 2014). With high levels of concern and interest in developing the High North among the Arctic and non-Arctic states, the Northern Sea Route (NSR, also known as the Northeast Passage)¹ is expected to be the most heavily utilized route navigating in the region in the foreseeable future (Solski, 2013, p. 91).

Østreng et al. (2013) also indicate the NSR is the most attractive passage when it comes to offering spaces of manoeuvrable ice among the several Arctic routes². This lane is regarded to be the most anticipated route as a corridor for transporting resources out of the Arctic region both eastward and westward (Hill et al., 2015). A benefit of using this route is to shorten the distance by about 20% up to 40% compared to the traditional way of the Suez Canal route between ports in the Northeast Asia and Europe (Buixadé Farré et al., 2014), significantly reducing shipping time. If successful, the NSR will bring economic benefits for both Russia and the other concerned countries.

In 1987 Mikhail Gorbachev made an announcement known as the 'Murmansk Initiative'³ - declaring the intention of Russia to open the NSR for international use. The speech is often regarded as an indicator of Russia starting to change to openness and cooperation in the Arctic. Gorbachev called the region an 'Arctic Peace Zone' (Purver, 1989, p. 182). Along with continuous Arctic sea-ice reduction, Russia's political openness to the NSR brought much attention from neighbouring countries. Russia also expected the route to attract more customers once opened. However, even with Russia's open policy to the NSR

¹ The Northern Sea Route (NSR) is a term used by Russia, and the Northeast Passage (NEP) is a historical term for the transit route of Russia linking the Northern Atlantic and Northern Pacific Oceans. It referred to Moe (2016), chapter 13 'Voyage through the North: Domestic and International Challenges to Arctic Shipping'.

² The Arctic routes are the Northeast Passage, Northwest Passage and Trans Polar Passage

³ Mikhail Gorbachev's speech in Murmansk, October 1, 1987,

https://www.barentsinfo.fi/docs/Gorbachev_speech.pdf (accessed November 11, 2016)

and the advantage of short navigating distance, the route has not emerged to be a comparable shipping lane to the traditional ones yet. The NSR is where political, economic, legal and environmental issues are all entangled. Overall, commercial potential of the NSR is highly dependent on Russian political and economic abilities to provide the requirements for international shipping (Ragner, 2000a).

Russia has the largest Arctic coastal territories including the NSR, and is a key player interacting with other countries in developing the region. The Arctic has been a militarily strategic region to Russia, and now developing the abundant Arctic natural resources seems to be a good opportunity to bring many economic benefits to the Russian economy. As developing the NSR is one of the main Arctic strategies of Russia, understanding Russian Arctic policies is important to see whether the NSR can be a comparable international shipping lane, and whether this will occur in the coming years. Thus, this thesis aims to discuss Russian Arctic policies to find out its political and economic intention of utilizing the NSR for international shipping.

1.2. Definition of the Northern Sea Route

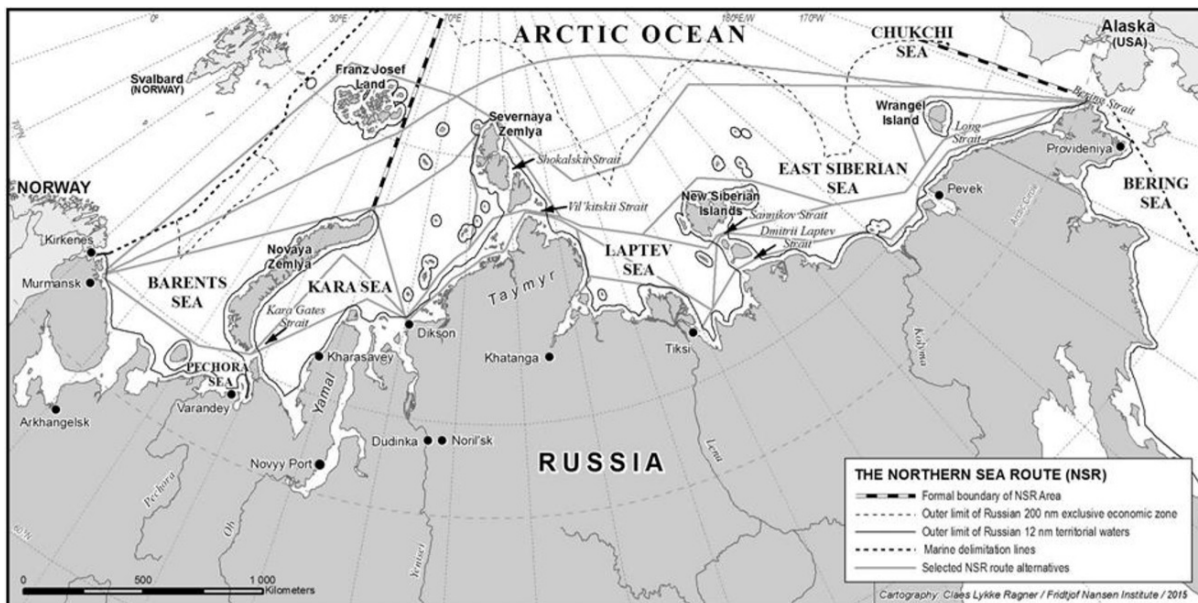


Figure 1: The Northern Sea Route (NSR)

Source: Moe, 2016 / Fridtjof Nansen Institute

The Northern Sea Route is an Arctic shipping lane officially defined in Russian regulations. In the early 1930's the Russian government politically established the concept of

the NSR, which comprises the main part of the Northeast Passage (NEP) including the Barents Sea. The lane connects the Atlantic and Pacific Oceans along the entire length of the northern coast of Eurasia (Østreng et al., 2013, p. 13). According to Østreng, the NSR is often defined by two different approaches- an official definition and an unofficial Russian functional definition. The former definition is regulated by the Russian laws connecting with geographically fixed endpoints for a shipping lane from the Bering Strait in the east to the Kara Gate Strait of Novaya Zemlya in the west. The latter definition is based on organizational, operational and geopolitical aspects including international water in the Atlantic and Pacific Oceans (Østreng, 1999, p.2-7).

With the functional definition of shipping lanes, a sea route traditionally connects ports in between towns and cities, which facilitates trade of loading, service and reception facilities, transport networks and sizeable populations (Østreng, 1999). In this regard, Russia has claimed that the NSR should also meet the functional conditions by connecting sizable ports on the Pacific side in the East, and the European part of Russia in the West. Russia maps out the four principal transit routes of the NSR from Murmansk in the West through the Bering Strait in the North Pacific⁴ (ibid). According to Russian claims of the functional definition of the NSR as a practical shipping lane, this route is the same as the NEP, which places the White Sea in the west of Novaya Zemlja to the Bering Strait (Østreng et al., 2013, pp. 13-18). This thesis is using the term NSR interchangeably with the term NEP.

1.3. Research questions

As Russia is interested in developing the Arctic resources, the NSR plays an important role in transporting those resources in and out of the region. Russia has also emphasized how important it is to establish international cooperation in the Arctic region. Connecting the two continents of the Northeast Asia and Europe, the NSR is open for foreign trade, albeit with some natural and technical challenges. Developing the Arctic shipping lane for international use could bring economic growth to Russia, and commercial benefits to neighbouring countries. Thus, this thesis presents the following research question to study.

- Is developing the NSR for international shipping politically and economically viable?

⁴ The four principal transit routes of the NSR are the coastal, marine, high-litudinal and near pole routes.

As developing and utilizing the NSR is one of the main Russian strategic priorities in the Arctic region, I find that the following related sub-questions would be beneficial to support the answers to the main research question.

- *What challenges does Russia face in opening the NSR?*
- *How can we understand the military and economic strategies of Russian Arctic policy in the context of Arctic security and resource management, and how are they affecting on the NSR?*

Academic research on the Russian Arctic policies and strategies with some historical background of the NSR, and current conditions and data will contribute to the findings of the research questions.

1.4. Previous research

Developing transportation lanes in the Arctic is considered to be important by both sides of Russia and neighbouring countries. This is because of potential economic benefits from opening the region as a big commercial market for both public and private sectors. However, politicians, scholars and experts raise concerns that developing the region may cause irreversible damage to the environment, destroying the Arctic ecosystem⁵.

In the early 1990's, right after the Soviet Union collapsed, multinational research on the NSR was initiated. The research aimed to study viability and profitability of opening the Arctic route. The International Northern Sea Route Programme (INSROP) was the most well-known research program from 1993 to 1999 regarding NSR development. It was funded and projected jointly by Japan, Norway and Russia academically and economically. More than 450 scholars from 100 institutions in 14 countries participated in producing massive data on this Arctic route. As they presented the major obstacles to viable shipping through the NSR, the outcome was relatively negative. Some obstacles are the harsh weather conditions with ice throughout the year, and outdated infrastructure along the route including the Russian ice breaker fleet (Østreng, 1999). INSROP pointed out that Russia was going through both economic decline and political instability, suggesting Russia would need to solve political

⁵ Environmental issues are highly important in developing the Arctic, however, this thesis does not focus on the Arctic environmental issues.

problems before they were ready to utilize the NSR.

In comparison, Brubaker and Ragner (2010) leave room for opportunity in opening the NSR in a review of the International Northern Sea Route Program. They suggest commercial shipping through the NSR can be technically feasible due to icebreaker support, although the main outcome of the research was rather discouraging for traffic of international commercial shipping. They point out the research program may have been prematurely initiated, and outcome of the research may be more relevant now with a higher potential of utilizing the route in the coming years with less sea ice because of climate change. It is also noticeable that they indicate the research program led the way to cooperation between Russia and the West in the Arctic. During the research, the scientists learned to deal with each other by sharing information along with corresponding development of personnel (pp. 33-34). Brubaker and Ragner also suggest that more research should be carried on all aspects of the NSR to be a viable commercial lane.

Gunnarsson, managing director of the Centre for High North Logistics (CHNL) holds a relatively positive view of the Russian Arctic development plan (Gunnarsson, 2013). He highlights the key factors for global shipping operations are predictability, punctuality and economy of scale (2013, p. 44). Unfortunately none of these conditions are currently met for Arctic shipping. He agrees the NSR will not be a serious competitor to the Suez route, but points out Russia is actively working to capitalize in the Arctic planning to transform the NSR to a commercial shipping lane. Russia plans to utilize the route to compete with traditional routes in price, safety and quality as a positive aspect of the NSR for international route (Gunnarsson, 2013). According to him, China which is 'the world biggest exporter of 90 % of its trade carried by sea' has been cooperating with Russia in the Arctic (2013, p. 58).

Hill et al (2015) assert the NSR will be used in the future. They indicate that even with significant obstacles prevailing along the route, the NSR certainly facilitates an international shipping and trade route as well as enables local Arctic economies. Regardless of the cause of diminishing sea ice, the Arctic route is opening fast and marine navigation season will increase along the route (2015, pp. 71-77). They assert it is not a matter of whether the vessels could use the NSR, but is a matter of *when* to use it in large volume (ibid).

Asian countries are expected to consume the largest energy resources in the coming years (Østreng et al., 2013). Østreng believes this will have the affect of increased energy resource extraction in the Arctic and transporting of resources to Asian countries, which can

be new attractive markets in the future (2013, p. 72). Many expect the navigation season of the NSR will considerably increase during the twenty-first century with less ice presence and this will eventually reduce the costs of transit. Khon et al (2010, pp. 765-766) estimate the NSR transit could be an effective route only under the proper conditions, with profit up to 15 % more compared to the Suez canal possibly by the end of this century. However, uncertainty remains such that no one can precisely predict when the profitable time will be.

2. Methodology

Methodology is an useful tool to explain the choices researches make in designing their studies from selecting topics to finding results. Research designs are plans and procedures for research, which take steps from broad assumptions to a specific method of data collection, analysis and interpretation (Creswell, 2009). Indicating all the process that this thesis has gone through helps to justify this research work. Thus, this chapter outlines how the research is designed from selecting a method of qualitative research, collecting and analyzing data, validity and reliability of the study, and lastly ethical issues and limitations of the study.

2.2. Qualitative research

Selecting a research design is based on the nature of the research problems or issues being addressed (Creswell, 2009, p. 3). When conducting research in social science field, normally a qualitative or quantitative research method is used, or a mixture of the two. Berg differentiates a qualitative approach as being essential to the nature of things from a quantitative which measures elementally an amount of something (Berg, 2009, p. 3). According to him, qualitative research is sometimes criticized for being non-scientific, and thus is sometimes regarded as invalid. However, the critics can be replaced with an assumption of certainty because qualitative research refers to meanings, concepts, definitions, characteristics and descriptions of things (ibid).

A qualitative research method is an effective approach to explore and interpret the meaning individuals or groups attribute to a social or human context and phenomenon (Creswell, 2009, p. 4). It helps us to better understand the complex reality of a given situation. The Arctic situation, which this thesis studies, is very much compounded with many factors

of political, economic, legal, environmental and human security issues among states. Indeed, this thesis discusses and examines whether opening the NSR for international shipping is feasible by understanding Russian policies in the context of Arctic security and resource management. Thus, a method of qualitative research is adopted to this thesis as a tool providing more realistic views of the Russian Arctic politics in opening the NSR for international shipping.

2.3. Data collection and analysis

Collecting data represents a key point of the research. The purpose of data collection in this thesis is to gather information to be able to answer the research questions. The data collected in this thesis are divided into two types, which are collected from primary and secondary sources. Qualitative researchers normally collect multiple forms of data through interviews, observations and documents instead of depending on a single data source (Creswell, 2009, p. 175). Using both types of data, the sources of this thesis are collected from academic books, journals, articles, visual materials from internet, media publications, online newspaper and websites. The library of Norwegian University of Life Sciences was a good place to collect related academic books and literature even from other universities in Norway. Online sources were useful and easy to collect current data as well. However, I tried to restrict access to only reliable websites to reduce reliability problems, of which online data can be accused. This thesis also referred to the published speeches of government officials, international documents and a personal interview with an Arctic expert in the discussion chapter.

Berg and Lune (2012, pp. 5-8) indicate every method has a different line of sight in observing and interpreting particular aspects of social reality. Triangulation is a method combining several lines of sight, which helps researchers have a better picture of reality (ibid). Adapting text analysis and triangulation methods, this thesis utilizes various primary and secondary data collected from multiple levels of sources to approach the research questions from different perspectives (ibid). At the beginning stage of research for this thesis in June 2016, I consulted senior researchers in the Arctic field and a former Norwegian ambassador to Russia to take their opinions about the topic on the NSR opening for international shipping. Receiving academic feedbacks from several sources reflecting the current situations of the NSR from the informants, I was able to narrow down the topic focusing on Russian Arctic

policies to evaluate the viability of developing the NSR for international transit shipping. Two of these conversations were in-person consultations and the third was done through email due to a long distance. Later on, I tried to contact three of them for further interviews, but only one succeeded due to time constraints.

A single lengthy interview may provide sufficient information to answer the research questions (Berg, 2009, p. 322). A personal interview with Mr. Arild Moe, a senior researcher of the Fridtjof Nansen Institute (FNI) was conducted at the FNI in March 2017 for one and a half hours. As a well known Arctic researcher who has been studying in the Russian Arctic politics and Arctic shipping fields, involved in several research projects related to the NSR, Mr. Moe has broad knowledge in the Arctic field especially in Russian Arctic politics and NSR shipping. Before conducting the interview, I thoroughly prepared for the interview by grasping general knowledge on the topic from reading many written sources including his own writings. Considering interview manners, I asked for his consent on recording the conversation in the beginning stage, which he welcomed. A semi-structured interview was conducted, which allows the interviewer to investigate beyond the answers to the prepared questions (Berg & Lune, 2012, pp. 107-109). According to Berg & Lune, semi-structured interviews are flexible for interviewers to ask structured questions, allowing comparisons across the interviews, and to spontaneously pursue places where interesting comments are made by the interviewees.

Text analysis was employed as the thesis is based on many different kinds of written sources. Written sources have been used in various research topics as they can provide enormous amount of information. However, researchers have to be careful when using written sources because they may give the researchers wrong source of data (Berg, 2009, p. 286). Misinterpretations can lead to a biased result of research. As an effort to reduce misinterpretation of the sources, I have compared the sources to each other, and tried to use scholarly written sources or journals. Using the university library was useful to access a wide range of academic sources, which are considered to be reliable references for academic work like theses. As this thesis refers to the data from written sources, reducing misinterpretation was important. Adopting triangulation method was able to reduce possible sources of error such as missing data and so on as Berg suggests (2009, p. 286). I have worked back and forth many times in between each stage of this thesis to comprehend the theme of the thesis.

2.4. Reliability and validity

Trustworthiness of findings in scientific research is highly important. According to Golafshani (2003, p. 601), validity and reliability are two factors qualitative researchers should think of when designing a study, analyzing results and judging the quality of the study (cited in Patton, 2001). Creswell (2009, pp. 190-201) defines validity as checking for accuracy of the data and findings through certain procedures, while reliability as the consistent approach across different researchers and different projects (cited in Gibbs, 2007). Triangulation is a process of combining different kinds of data, which relate the multiple data to each other to hinder the threats to validity (Berg, 2009, p. 6). Reliability and validity are conceptualized as trustworthiness, rigor and quality in a qualitative research paradigm, which eliminate bias and increase trustworthiness of the researcher's proposition in certain social phenomenon by using a triangulation method (Golafshani, 2003).

This thesis applies the triangulation process to contribute to data validity and reliability. This research involves different ways of collecting the data, such as an interview, documents, visual materials and written sources. Such various sources were gathered to compare them to each other and to verify them in finding the relevant data and the results. The process of crossing checking the various data was time consuming, but certainly contributed to obtaining the valid and reliable findings of the study. Use of references throughout the thesis demonstrates transparency in data collection. Applying the triangulation process was also beneficial to minimize biased interpretations of the data from various sources, and helped to increase building probability of the findings of this study, the NSR opening for international shipping.

2.5. Ethics and limitations of the study

Social scientists have ethical obligations to their colleagues, study population and the larger society (Berg, 2009). As this thesis is largely based on the secondary data representing of someone else's, properly citing the original sources is an important ethical steps. All the sources in this thesis referred to others are properly cited, so the readers are able to access them.

Researchers have to protect the informants in the process of their studies. Berg (2009) indicates researchers have to ensure the rights and privacy of people involved in their studies. To meet the ethical practices of research, I have reported to the Norwegian Social Science

Data Service. Concerning the interview, I provided the informants with description of my thesis with some questions related to my thesis topic and research questions via email before the interview. I have also noted the purpose of the personal interview and acquired the informant's consent in recording the conversation before proceeding the interview. In the matter of *do no harm* and being sensitive ethical issues, the informants are in well-known professional positions and it was more likely the interviewer was taking their professional knowledge and opinions on the topic. Thus, physical or emotional harm during the interview or indicating their personal information is not relevant to my research.

Lastly, to briefly address limitations of this study, some of the written sources are written only in Russian, while some are translated into English from the original Russian. I understand that translated articles or documents may miss out the true meaning of Russian original written sources. It would have been better if I was able to understand the original text. However, I have tried to primarily use and analyze the English written sources to the best of my ability during the time allotted to this research work.

3. Theoretical approach

When we look at the world, we see it through "a specific set of lenses", and how to understand the theories of international relations can be considered as tools of those lenses (Jackson & Sørensen, 2013, pp. 57-58). According to Jackson & Sørensen, theories are based on certain values and visions of how we want the world to be, so they guide us to better understand the world politics, and structure our view on the world. Developing the NSR for international shipping is expected to bring lots of economic benefits to both Russia and neighbouring countries. However, international transit shipping on the NSR has not quite materialised as expected.

To develop the NSR for international shipping, multi or bilateral cooperation needs to be involved, both in and between public and private sectors. This thesis aims to find out how Russian Arctic policies have influenced on realizing the potential of the NSR for international shipping and Russian political and economic intention on the Arctic shipping lane. Russian Arctic strategies have been changing over the past two decades. As utilizing the NSR is a key part of Russian Arctic policy, it is important to understand Russian political and economic aspects of the NSR, which are related to developing the High North in general.

The main rational theories of international relations, neo-realism and neo-liberalism are applicable to explaining the complex Arctic circumstances and changing Arctic security. The difference between neo-realists and neo-liberals may be caused by concentrating on a different field of international studies. While neo-liberals study international political economy and environment fields, neo-realists study international security area (Jervis, 1999). Developing the NSR for international shipping includes multiple relations on the state level as well as relations between non-state actors in the region. Taking cooperation and institutions as the core instruments of international relations in world politics, the theory of neo-liberals explains Russian political rhetoric towards international cooperation with soft foreign policy. In comparison, emphasizing the importance of statism, survival and self-help by considering states as rational actors, the theory of neo-realists explains Russian political actions of accumulating military power and showing ambitions to play a leading role in Arctic affairs.

This chapter presents theoretical perspectives of neo-realism and neo-liberalism to discuss Russian political behaviours in relation with other countries in the High North. Applying theoretical perspectives of neo-liberals' complex interdependence and institutionalism and Waltz's realism connecting to defensive realism on the security dilemma issues in the High North will help to understand Russian Arctic policies in general. This will lead to analysis of the main research question: political and economic viability of developing the NSR for international shipping.

3.2. Neo-liberalism perspective: Complex interdependence and institutionalism

Neo-liberals place more value on how to promote and support cooperation in international politics, especially in the economy and environmental concerns (Jackson & Sørensen, 2013). Emphasizing interdependence between societies and political relations of governments in the 1970's, Robert O. Keohane and Joseph N. Nye developed the ideas that there could be other actors besides sovereign states in international relations (ibid). They stress that states tend to build international institutions to deal with common problems and to promote cooperation by providing information and reducing cost for each other (2013, pp. 46-48). In doing so, states are also involved in joining less formal agreements to handle common activities or issues on shipping or environment (ibid). Despite Russia conflicting with the other Arctic member states, Moscow is a determined actor both in the Arctic Council

(AC) and in the Barents Euro-Arctic Council (BEAC). Russia plays a very constructive role in discussing joint research and rescue systems (SAR) at sea and in developing scientific cooperation (Laruelle, 2014, p. 14).

Neo-liberals take a stance of states cooperating with each other if the gains are evenly shared, and wars are also avoidable when security institutions, such as alliances or treaties, are created (Lamy, 2011). Keohane (2011) stresses that international institutions can influence on states achieving collective gains by encouraging them to build cooperation for mutual benefits. Institutions help to reduce the costs of making and enforcing agreements among the members. He points out institutions can strengthen the practices of reciprocity, which motivate the participating actors to keep their promises to make sure the others do the same. According to Keohane, states are not sure of their partners and rivals' intentions or future behaviours in an anarchic international system. In this uncertain system of international politics, international institutions can reduce uncertainty by promoting transparent negotiations, such as dealing with many different issues under the similar regulations for a long period and checking the actors' behaviours (Keohane, 2011, pp. 152-153).

As a strand of neo-liberalism, complex interdependence theory provides a better reflection of reality (Keohane & Nye, 2001). This theory contains the ideas of many forms of connections between societies including political relations of governments and transnational links between business corporations present (Jackson & Sørensen, 2013, p. 47). Keohane and Nye introduce three main characteristics of complex interdependence, questioning realists' view of the world politics. First, they indicate societies are connected by *multiple channels*, meaning societies are comprised of formal and informal ways of interstate, transgovernmental and transnational relations (2001, pp. 19-21). These multiple channels challenge the realists' assumption of considering states as the only actors. Instead, they stress transgovernmental and transnational channels such as multinational firms, banks, corporations and organizations which are not entirely controlled by government and can also influence on interstate relations (ibid). Russia is a member of the AC, International Maritime Organization (IMO) and the United Nations Convention on the Law of the Seas (UNCLOS), and these channels contribute to establishing Russian Arctic policies.

Concerning *absence of hierarchy among issues*, Keohane and Nye indicate that military security does not always dominate different kinds of issues of world politics (2001,

pp. 22-30). Complex interdependence asserts that military force is not a relevant tool to resolve economic issues among member states, but international organizations play a key role (ibid). According to Keohane and Nye, international institutions can play a great role in bargaining political issues in a world where multiple issues are imperfectly related to each other, and where transnational and transgovernmental coalitions are formed. They assert complex interdependence approach is to approve an alternative to the realists' way of explaining the world politics by looking at and distinguishing the world politics from different dimensions and areas.

Applying the complex interdependence theory to the oceans issue area, Keohane and Nye agree that the ocean issues are somewhere in between complex interdependence and realism (Keohane & Nye, 2001, pp. 85-109). They indicate that force is useful occasionally, but not a major factor influencing the outcomes. The security concern was dominant during the Cold War, but the role of force has changed, and is less central in the oceans issue area because of the 'technological change and international regime change' (p. 90). Technological change in a system of different international regimes has brought new issues to the world. New technology has made it possible for states to develop resources from the seabed, so the oceans remain strategically important. According to Keohane and Nye, including non-governmental channels like shipping firms and oil companies, interaction between states in the ocean arena has developed at different levels bilaterally and multilaterally since 1920 (pp. 93-94). Russian public companies have jointly engaged in developing the Arctic region with Chinese companies (details in the discussion chapter).

To conclude, the core assumption of neo-liberals is that states are seeking out cooperation to maximize their absolute gains. This theory seems to explain Russian economic strategy in seeking mutual cooperation for developing the region. Russia plays an active role in the international organizations and regimes which cover common issues of the Arctic, however, it seeks bilateral cooperation rather than multilateral in the Arctic exploitation as it relates to economic development. Russia has controlled the NSR under the preconditioned claims on its sovereignty. Abundant natural resources in the High North brought the Arctic states, including Russia, to lay claim to the borders, and to seek to expand their territories relative to others. While ensuring the national security, the Russian government has weighed which way is more profitable to the economy, and then strategically changed a plan of developing the NSR, whether for international or internal purpose of use. As Russia holds

the exclusive rights of controlling the NSR, neo-liberals' perspective of cooperation seems to have some limitations in explaining potential mutual gains in developing the lane for international use. To better understand Russian Arctic policy, I would like examine the political strategy for ensuring the national security as it is dominantly related to the Arctic policy. To compare with the neo-liberals' perspective, the theory of Waltz's realism connecting to defensive realism will be applied to illustrate the Arctic security issues hindering the possibility of developing the NSR for international shipping.

3.3. Neo-realism perspective: Waltz's realism connecting to defensive realism

Kenneth N. Waltz, the most leading scholar of neo-realism defines the system as anarchy. Neo-realists believe the structure of the anarchic international system shapes all foreign policy choices (Lamy, 2011, p. 117). A core assumption of neo-realism is that states with great power have more influence in an anarchic system when states interact to each other. Waltz (2010) states the international politics are similar to the structures of domestic politics in terms of the following three elements: 'ordering principles', 'the character of the units' and 'the distribution of capabilities' (pp. 88-101). First, he claims the principles of international and domestic politics are on a different level. The structure of international system is decentralized and anarchic, while the domestic political system is centralized and hierarchic (ibid). He stresses that states are preoccupied with obtaining power and security under the anarchic international system.

Waltz (2010) compares the international political system to the economic markets operated by actors' calculations, behaviours and interactions for their own profits. In this regard, he argues the international political system is maintained on a self-help principle just like the principle of markets (pp. 93-97). Considering the principle, states should seek for their own security in international relations to survive. Sovereign states, as the units of international system, form the structure of international political systems (ibid). In this structure, distribution of capabilities is the most important to understand international politics as it emphasizes the relative power distribution in the international system (Waltz, 2010, pp. 97-99). For a perspective of neo-realists, what matters with a state is to make sure one's state gains more than others because the structure of international politics limits states' cooperation (ibid). When faced with the possibility of cooperation for mutual gains, insecure states will wonder how the gain is to be divided by asking "Who will gain more?" instead of "Will both

of us gain?" (Waltz, 2010, p. 105).

The more power a state has the greater influence it has in a competitive anarchic system of international politics (Waltz, 2001). The assumption of obtaining more power to survive and to secure national security reflects a perception of international politics as a zero-sum game: 'my winnings plus your winnings are exactly equal to the losses of our opponent or opponents. In a zero-sum game, the problem is entirely one of distribution...' (2001, p. 202). The challenge of power distribution in the Arctic region is how to divide the Arctic region for taking more natural resources. Russia's jurisdictional dispute over the Arctic and its exclusive control over the NSR under the national regulations have been viewed as Russia fighting to take over a larger portion of the Arctic. The same view has been revealed by the West when Russia planted a flag under the seabed and declared it belonged to Russia.

In the Arctic affairs in general, scholars, experts and policy makers view the Arctic as either a zone of conflict or cooperation among states (Young, 2011). In a view of the Arctic of a new possible Cold War zone, Waltz takes the states' behaviours as being defensive. Waltz's Theory of International Politics influences the defensive realism thought, which focuses on security dilemma and balance of power logic. Defensive realists admit sometimes states realize common goals and interests through cooperation under an anarchy structure (Oye, 2015). According to Oye, governments often bind themselves to mutual cooperation, formal bilateral and multilateral negotiation, and international regime creation (2015, p. 67). However, defensive realists believe the structure of international politics limits cooperation of states in two ways: one is division of possible gains (relative gains) and the other is becoming too dependent on others through cooperation (cheating of other actors) (Waltz, 2010, pp. 105-106). Thus, states must choose when to form alliances and when to abandon them by calculating who gains more when cooperating. Defensive realists argue a state will withdraw from cooperation regardless of having a common goals or interests with others if the state expects to gain a smaller portion than others (ibid). In doing so, states have to act by scheming which way suits the best strategy to survive in the anarchic international system.

Defensive realists have a different view from neo-liberals concerning the role of institutions. According to Jervis (1999), neo-liberals stress states are able to work together to mitigate the effect of anarchy, to produce mutual gains and to avoid shared harm by establishing institutions as they believe regimes and institutions are good instruments to achieve mutual gains and to secure national interest (p. 45). Lamy (2011) distinguishes

defensive realists' institutions from a neo-liberals' perspective. He states that institutions are only established when states believe the institutions will help them to achieve their goals in the areas where national security interests are not at stake (p. 124). Thus, international institutions are tools of statecraft, but mainly 'a reflection of state interest' (Jervis, 1999, p. 63), which affects cooperation only marginally (Grieco, 1988, p. 488). As the institutions are useful tools to use to promote international cooperation in the Arctic region, Russia has actively engaged in organizations and regimes such as the UN, the AC and the BEAC.

However, although Russia has aimed to promote international cooperation in the Arctic region, developing the NSR for international shipping does not seem to be a shared issue among the member states because Russia keeps the dominant power by controlling the shipping lane. By playing a leading role in developing the Arctic region for its economic benefits, Russia also seeks bilateral cooperation to bring economic benefits in developing the region. As long as Russia holds the exclusive rights of controlling the NSR under the national regulations, developing the NSR for international use does not seem to be a politically feasible plan yet.

As states are considered to be rational actors, defensive realists are concerned with the security dilemma (Glaser, 2010). Glaser stresses that states should adopt their policies accordingly for their own national security in this complex international environment (2010, pp. 57-63). Following Waltz's thought of the security issue, the security dilemma is created by misconception of other actors, uncertainty about other actors' intentions and security through self-help. Under the security dilemma, states have a lot of pressure on cooperation and competition (Glaser, 2010, p. 63). He asserts conflict is sometimes avoidable in certain situations, while cooperation can reduce national insecurity as a means of decreasing military threats. Cooperation can increase a state's security as a self-help tool, and defensive realists perceive states are the security maximizers (ibid). Thus, a state's leaders do not accumulate too much power relative to others because the greater power may jeopardize its own security, which explains how one state's security depends on the other states' behaviour.

Uncertainty and insecurity caused by Russian military build-up in the High North causes the West to take the same position to defend themselves. To understand military strategy of Russian Arctic policies in Arctic security and resource management, this uncertainty and insecurity will only raise tension between Russia and the West in the region. However, a war between Russian and the West is not likely to happen in the Arctic Circle.

With a positive stance, the Arctic states have solved some territorial disputes in a peaceful way, and Russia is following the international rules on the jurisdictional claims (Roberts, 2015). As Glaser (2010) indicates, risk of cooperation and competition depends on under what conditions a state should seek to cooperate and to compete.

Consequently, a perspective of defensive realism seems to be suitable to understanding the complex Arctic situation. The ongoing Arctic security and changing Russian Arctic policies reflect the security dilemma issues. The Arctic region has significant energy resources, and utilizing the NSR is a main part of the Russian Arctic policy, considered highly significant to resource management. Russian concerns over the Arctic region are important both in terms of national security and as a means of developing the economy. While exploiting the Arctic region, Russia has strengthened the military forces at the border of the region. Considering the Arctic geopolitical importance and understanding Russian political and economic strategies in the High North, Moscow has continuously secured the rights controlling the shipping lane, and it will continue. Thus, developing the NSR for international shipping looks even less likely to occur from a perspective of neo-realism.

4. Background of the Northern Sea Route

To better understand the Russian perception of the NSR, this chapter will present some empirical findings of historical background, natural and technical conditions, and cargo flows of the NSR since the Cold War era.

4.2. Brief historical background of the NSR

People started to explore the NSR early in the 16th century. As European empires expanded their powers and trading routes to East Asia in the 16th century, European traders began exploring the Northeast Passage to see the possibility of a marine shortcut to East Asian countries by sailing through the Russian Arctic waters (Ragner, 2000c, pp. 1-2). After Adolf Erik Nordenskiöld⁶ explored a transit through the whole passage in 1878-1879, the route was considered too extreme to be a regular transit route, and it disappeared from

⁶ Adolf Erik Nordenskiöld is the Finnish-Swedish explorer who reached the Bering Strait from Europe through the Russian Arctic waters in 1878-1879. Referred to Ragner, 2000b, p. 2

European awareness after the Russian closed the passage to foreign shipping in the early 1930s (Ragner, 2000b, p. 541). In 1932 the former Soviet Union established a bureaucracy called 'the Glavsevmorput' in order to administer the NSR and all economic activities in the Russian Arctic (Ragner, 2000c, p. 2). Since then, the NSR was steadily developed for internal use as a Russian waterway in supporting the industrial development of Arctic resources (ibid).

The NSR was an important and integrated Russian Arctic infrastructure used for indigenous, industrial, military and scientific purposes, as well as a means to export timber, ores and other products in the Arctic region (Ragner, 2000c, p. 2). During the Cold War, Russia forbade all routes to foreign ships for military security and only used the route as an internal waterway for exporting and transporting natural resources in the region (Ho, 2010). Russia has heavily used the NSR for supplying industrial development of oil and gas in Northwest Siberia since the 1970s. The first year round route was initiated in 1978 between Dudinka on the Yenisey River and Murmansk, transporting metals and ore from Norilsk, but transit shipping was rare and mostly for domestic purposes (Moe, 2016, p. 258, Rangner, 2000, pp. 545-548).

Current Russian laws are based on the laws inherited from the former Soviet Union or established by the Russian government itself (Yoon, 2009). According to Yoon, Russia enacted the regulations of the northern bureau of shipping administrations of the Soviet Maritime Bureau in 1971, followed by the regulations of the boundaries of Arctic waters by the straight line in 1983 (p. 62). In 1984 Moscow announced its intention to impose the Soviet Economic Zone Protection Act and to establish the initiative including Arctic waters, and declared the straits along the NSR to be internal water under the Russian coastal jurisdiction (ibid). Russia exclusively controlled over the NSR limiting foreign shipping through the route.

In 1987, Gorbachev's Murmansk speech suggested the reform and opening policy with future possibility of the NSR for international use. Russia then established *the Regulations for Navigating on the Seaways of the Northern Sea Route*⁷ in 1991 for those ships using the NSR (Sergunin, 2015). A committee of the Arctic sea route has also established as a new process for foreign ships to obtain permission to use the NRS (Yoon,

⁷ Available at http://www.arctic-liaison.com/docs/nsr/legislation/Rules_of_navigation_on_the_seaways_of_the_Northern_Sea_Route.pdf.

2009). Other regulations, such as the *Guide for Navigation through the NSR*⁸, and the *Regulations for the Design, Equipment, and Supply of Vessels Navigation in the NSR*⁹ were established in 1995 (Sergunin, 2015). Soon after the Soviet Union collapsed applying the national regulations on the NSR, Russia has officially and increasingly shown interest in developing the route for foreign use of transportation (Moe, 2017).

4.3. Natural and technical conditions of the NSR; Short distance but several obstacles

The most competitive advantage of the NSR is clearly the short distance between Northwest Europe and Northeast Asia compared to the traditional lanes. An ice free Arctic could reduce transportation time and costs by cutting the distance in between Rotterdam and Shanghai/Yokohama by approximately 20% to 40% respectively as indicated in figure 2. As the Northeast Asian countries located in north of Hong Kong could reach Europe faster through the Arctic, the potential benefits of opening the NSR brought much interest to Japan, Korea and China (Sergunin, 2015, p. 83). Sailing from Ho Chi Minh to Rotterdam via the NSR is the one route where the Suez Canal is still shorter.

From	To Rotterdam, Netherlands via (in nautical miles)			
	Cape of Good Hope	Suez Canal	NSR ¹⁰	Difference between Suez and NSR (%)
Yokohama, Japan	14,448	11,133	7,010	37
Busan, S. Korea	14,084	10,744	7,667	29
Shanghai, China	13,796	10,557	8,046	24
Hong Kong	13,014	9,701	8,594	11
Ho Chi Minh, Vietnam	12,258	8,887	9,428	-6

Figure 2: Sailing distances between Asia and Europe

Source: Composed by author referring to Buixadé Farré et al.(2014)

⁸ Available at http://ww2.eagle.org/content/dam/eagle/publications/2014/NSR_Advisory.pdf.

⁹ Available at <http://www.arctis-search.com/Requirements+to+the+Design,+Equipment+and+Supplies+of+Vessels+Navigating+the+NSR>

¹⁰ Buixadé Farré et al.(2014) note NEP in the table, but it is revised to NSR by author as NEP and NSR are considered to be the same terms in this thesis.

However, when it comes to shipping, it is not the distance itself which is most important to the economic estimate, but how much a journey costs to a shipping company. Short distance does not mean it always consumes less time and cost (fuel consumption). The NSR is not a clearly fixed single lane, but has several possible routes within the sea area. Since the coastal route has restraints in depth and width¹¹, vessels may have to take a different route to avoid the restraints and present ice, which may shorten or increase the distance (Ragner, 2000b, p. 552). Compared to the advantage of physically short distance, sailing along the NSR poses several challenges as below (Sergunin, 2015, pp. 83-84).

- **Ice presence:** Sea ice disappearance during the summer season does not mean the Arctic ocean is free of ice. Indeed icebergs are still present, and ice can form anywhere causing a possible danger of collision, and reducing the predictability of traveling.
- **Extreme weather:** Extremely cold weather and darkness create technical challenges of using ice class vessels or ice breakers for assistance.
- **Technical barriers:** Foreign ships face numerous administrative technical barriers, such as Russia requiring use of icebreakers, access to weather and ice reports, and hire pilotage in the straits, which are expensive.
- **Expensive insurance:** International insurance companies have to consider the unpredictability of shipping times and conditions.
- **Lack of operational rescue system:** Russian government plans to build ten search and rescue centers along the Arctic coastline, but it remains an open question whether it is a feasible plan and whether these centers will be sufficient to the international safety standards.

It is clear that the Arctic sea ice has reduced noticeably for the past years due to climate change. However, less ice presence this year does not mean the Arctic route will experience the same conditions or less sea ice in the following year. Russia's lack of investment in developing the NSR for shipping may well explain the cargo flows, particularly

¹¹ Depth constraints are maximum draft 12.5 m due to the shallow 13 m Sannikov Strait¹⁰, and width constraints are maximum beam 30 m due to the largest Russian icebreakers (data from INSROP research in the 1990s) (Ragner, 2000b)

its downturn in recent years in the following sector.

4.4. Cargo flows via the NSR since the Cold War era

Volume of cargo transportation through the NSR has widely fluctuated for the past decades. The former Soviet Union developed the NSR into a transport corridor for importing and exporting industrial supplies and natural resources during the Cold War. After the Second World War, the transport volume was slow, but steadily grew to reach a peak at 6.6 million tons in 1987 (Ragner, 2000b, p. 544). The cargo volume since then significantly decreased, balancing around 1.5 to 2.0 million tons every year since 1996 (ibid).

With continued economic recession, Russia faced a significant challenge financing the NSR infrastructure, and allowed it to deteriorate. Even with Russia's encouragement of international use of the NSR since the route officially opened to international shipping in 1991, the traffic continued to decline in the 1990s (Moe, 2014, pp. 785-786). The transit traffic stopped altogether in 1998, followed by the NSR administration closing down in the following year. According to the result of a joint research study carried out by Japan, Norway and Russia- INSROP- in 1999, the NSR was considered to be not viable for commercial shipping due to economic and climate conditions back then.

According to Moe, even though Russia officially opened the NSR for international shipping in 1991, encouraging international use of the sea route, it was unsuccessful in the 1990s. It has started to flourish more since 2009 (Moe, 2014, pp. 786-787). The transit traffic started to pick up in 2009 with near record low level of sea ice in the Arctic when the two German merchant ships successfully sailed through the NSR from East to West (Engineers, 2013). After four years of increased use of the NSR in cargo transit between Europe and Asia, the volume has steeply downturned in 2014; it dropped by 77 percent compared to the previous year (Pettersen, 2014b). In the following year, 2015, Russia saw a downturn again at the lowest level in years by 75 percent decrease (Staalesen, 2016). The traffic volume has slightly bounced back up in 2016 (NSRIO, 2017), however, transit shipping has remained on a low level. Below is the number of transit shipping along the NSR in the 2010s.

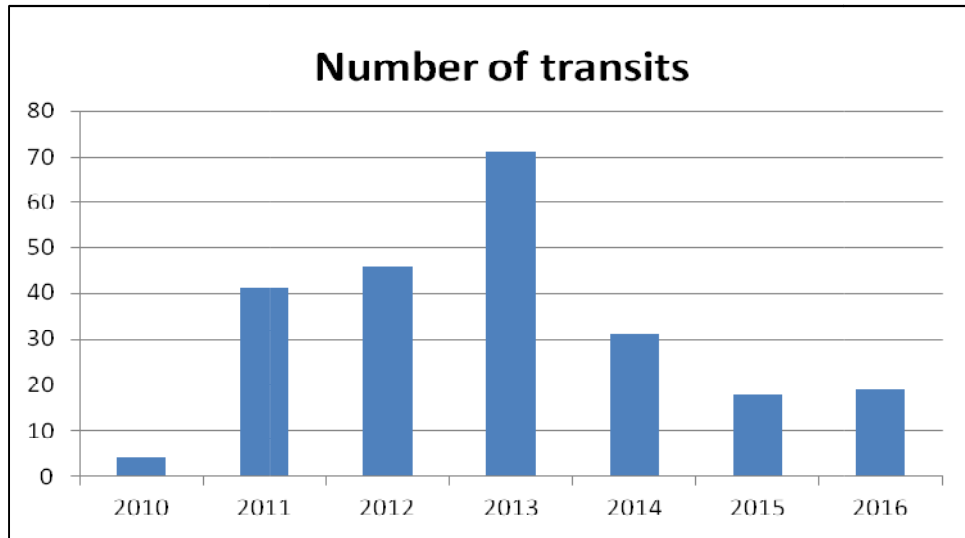


Figure 3: NSR transit traffic

Source: Northern Sea Route Information Office / Moe, 2014

The data provided in this chapter shows how unstable the current condition of the NSR is to be used for international shipping. Russia needs to invest more to provide better infrastructure to have and encourage commercial foreign trade of shipping. Developing the NSR is a key part of Russian Arctic policies and as Russia initiated a new developing project of Yamal LNG, the NSR is expected to be more actively used.

5. Discussion: Viability of developing the NSR for international shipping by understanding Russian Arctic policies in Arctic security and resource management

5.1. Changing Arctic security: Russia's political ambitions in the Arctic since 2000s

To be able to find out whether opening the NSR for international transit shipping is feasible or not, it is necessary to understand the Russian Arctic policies in general as the NSR is a main part of the region (Klimenko, 2016). Russia has changed its Arctic strategies for cooperation and competition over the past years. Russia's general perception of the High North applies to the NSR development strategy. In discussing how to understand the military and economic strategy of Russian Arctic policies in Arctic security and resource management, this chapter will attempt to answer the main research question of whether it is viable,

politically and economically to develop the NSR for international shipping. This chapter starts by analyzing the changing Arctic security, with a focus on Russian political ambitions in the Arctic since 2000s. Then, I will discuss Russian jurisdictional claims over Arctic resources and controlling the NSR. Lastly, through bilateral cooperation in developing resources and utilizing the NSR, I will discuss political and economic constraints to developing the NSR for international shipping.

Russia has sent mixed messages on the Arctic and their general policies to the international community (Laruelle, 2014). According to Laruelle, Russia had demonstrated its absolute role as a great power in the Arctic by asserting the Arctic belongs to Russia up until 2008. However, it has started to change political rhetoric towards international cooperation in the Arctic since then. She indicates Moscow has created a highly cooperative idea of "Arctic brand" by positioning itself as a co-leading actor for international cooperation in the region (ibid; pp. 12-13). As the Arctic presents itself as an opportunity to Russia, it aims to use the Arctic as a tool of building international cooperation. Russia's positive attitude towards the Arctic region as a space for international cooperation was clearly shown by the statement of Prime Minister Putin at the Arctic Forum held in 2010 as below:

"While we are taking care of a steady and balanced development of the Russian North, we are working to strengthen our ties with our neighbors in our common Arctic home. And we think that preserving the Arctic as a zone of peace and cooperation is of the utmost importance. It is our conviction that the Arctic area should serve as a platform for uniting forces for genuine partnership in the economy, security, science, education and the preservation of the North's cultural heritage"¹².

Tracing back to the 1990s, Russia had not paid much attention to the High North since the former Soviet Union collapsed (Sergunin, 2015). Russia's attention to the Arctic has started to change in the early 2000s when the general socio-economic situation in Russia improved, and Putin's administration came to power with ambitions of Russia's revival as a great power (Sergunin, 2015, p. 41). As Putin's interest in the High North, including utilizing

¹² Prime Minister Vladimir Putin addresses the international forum "The Arctic: Territory of Dialogue", September 23 2010 at <http://archive.government.ru/eng/docs/12304/> (accessed: 11 January 2017)

the NSR for international shipping increased, Russia has become the foremost Arctic state to formulate its strategy in the region. The Russian government started to heavily engage in developing resources and shipping in the Arctic region through building partnerships with foreign companies and creating investment (Klimenko, 2016). As an indicator of this shift, Russia made a draft of a federal document outlining Russian national interests and main strategies of the Arctic region, which included developing the NSR early in 2001.

7 years after the draft of that federal document, the Russian government officially adopted it in 2008. The title of the document was: the Foundations of the States Policy of the Russian Federation in the Arctic to 2020 and Beyond (hereafter referred to as Russian Arctic Strategy 2008) (Federation, 2008). The document states Russia's main interests in the region as follows:

- Use of the Arctic zone of the Russian Federation as a strategic resource base
- Maintenance of the Arctic as a zone of peace and cooperation
- Preservation of unique ecological system of the Arctic
- Use of the Northern Sea Route as a national single transport communication

According to the document, developing the energy resources is to be Russia's priority in the Arctic strategy, which explains why Russia has focused on international cooperation in developing the region. However, in the document the NSR was clearly intended to be used under Russian control, which has been controversial between the US and Russia. The US and Russia have shown different opinions over the NSR, and whether the lane lays in the Russian internal waters or high seas.

Following the above document of Russian Arctic Strategy 2008, Putin has newly approved a document in 2013. It is titled: the Strategy for the Development of the Arctic Zone of the Russian Federation (hereafter referred to as Russian Arctic Strategy 2013) (Federation, 2013) strengthening the previous Russian Arctic Strategy 2008. The document covers international dimensions including geological protection of the Russian continental shelf in the Arctic, exploitation of the natural resources, and upgrading the infrastructure for resource development and transportation. Moreover, the Russian Arctic Strategy 2013 acknowledges that Russia lacks the technologies for exploiting the natural resources and needs foreign investment with high technology (Sergunin, 2015, pp. 43-44). It envisions a

great role of regional and local governments, and public and private sector involvement in developing the region. This reflects complex interdependence theory, indicating states are not the only actors, but societies are comprised of multiple channels like multinational firms or corporations which can influence interstates relations (Keohane & Nye, 2001). Promoting international cooperation in developing the region is a political and economic strategy of Russian Arctic policy including the NSR development. As developing Arctic shipping can contribute economic benefits, Russian authorities looked for a possibility of developing the NSR for international shipping with an open policy of promoting foreign investors (Ragner, 2000a).

In the process of making the above Russian Arctic policies, the Presidential Administration plays a prominent role (Klimenko, 2016). The other state agencies are also involved at different levels in their respective fields according to Klimenko (ibid). The document underlines how important the energy resources are for Russia to use as potential tool for remaining as a great power. As Russia holds the world's largest reserves of natural gas and oil, the Arctic implies more than commercial interests to Russia. According to Giusti (2013), energy has been an extraordinary political tool for Russia to return to being a great power and has significantly supplied its power projection in the post-Soviet era. In this vein, Russia will not give up its current power holding and exclusive control over the NSR, which is a main sea route for transporting the Arctic energy resources in the region. Developing the Arctic energy resources and utilizing a shipping lane as a part of the Arctic development plan are the main concerns of Russia to continue the economic growth .

Among the Arctic coastal states, Russia holds the largest amount of natural resources, as illustrated in figure 4. Utilizing those energy resources made it possible for Russia to recover its economy in the early 2000s. During Putin's presidential terms from 2000 to 2008, the Russian economy had grown significantly due to high oil and gas prices (Åtland, 2011, p. 267). The Arctic region is considered to be the most productive area in Russia, providing 95% of gas and about 70% of oil of the country (Sergunin, 2015, p. 27).

Country	Oil	Natural gas
Russia	41	70
U.S.	28	14
Denmark (Greenland)	18	8
Canada	9	4
Norway	4	4

Figure 4. Distribution of the undiscovered hydrocarbon resources among the Arctic coastal states (%)

Source: Sergunin 2015, Naumov and Nikulkina 2012

Concerning the Arctic security, Russia has accumulated military forces in the High North (Klimenko, 2016). A perspective of neo-realists' 'what matters with a state is to make sure the state gains more than the others' seems to reflect the Russian activities and exploration in the High North. As Waltz (2001) indicating the great influence of powerful states in a competitive anarchic system, assumption of 'the more power a state has the greater influences it has' explains the motivation of why Russia wants to build economic power and to return to the superpower. As starting to modernize its nuclear arsenal and the power station located in the northwest along with economic growth from the energy resources, Russia allowed nuclear submarines to recommence patrols under the Arctic ice cover and in surrounding waters (Åtland, 2011). Since 2004, missile tests have been conducted on a regular basis in the White Sea, the Barents Sea, and the Arctic Ocean, and in 2007 Russia resumed long range bomber patrols in the international air space over the Barents, Norwegian and Greenland Seas (Åtland, 2011, p. 267). Putin has certainly increased military activities in the Arctic with the aim of asserting Russia's position as a key player in international affairs. Moreover, the Russian flag planting on the seabed under the North Pole in 2007 as a declaration that the Arctic belongs to Russia astonished the other coastal states (Blomfield, 2007). Such activity has raised high concern about the danger of a 'resource race' in the Arctic among states (Åtland, 2011, p. 267).

However, during the second half of the 2000s, Russia became more actively involved in searching for new partners to engage in developing energy projects in the Arctic (Klimenko, 2016, p. 6). Keohane and Nye (2001) apply the complex interdependence theory

to the ocean issue area. New technology has made states possible to cooperate in developing resources and made the oceans stay strategically significant (Keohane & Nye, 2001). As emphasizing the importance of different levels of cooperation, the complex interdependence theory highlights non-governmental channels such as shipping and oil companies as well as states interaction in the ocean area. Lack of technology for exploring the resources on the seabed and high costs of investment in the region forced Russian public companies, Gazprom and Rosneft to look for foreign involvement (Klimenko, 2016, p. 6). They negotiated with many foreign companies for joint projects in developing the gas and oil in the High North, which required a stable and peaceful environment in the region during development of the project. Companies from Norway, France and the US signed an agreement for developing the energy resources back then (Klimenko, 2016, p. 6). However, after the US-led sanction against Russia following the Ukraine crisis, all investment from the West stopped. In substitution, Moscow started to cooperate with China for funding development of the gas project, Yamal LNG in 2014 (Times, 2014).

Arguing the purpose of Russian Arctic Strategy 2008, Sergunin (2015) asserts it was not designed for international purposes, but for Russian domestic ones. He sees Russia is particularly aiming at setting priorities for developing the Arctic Zone of the Russian Federation (AZRF) (Sergunin, 2015, p. 42). In accordance with the document, the basic objective in the military security, defense and protection of the state border in the Arctic zone is "maintenance of a favorable operative regime in the Arctic zone of the Russian Federation, including maintenance of a necessary fighting potential of groupings of general purpose armies (forces) of the Armed Forces of the Russian Federation, other armies, military formations and organs in this region" (Federation, 2008). Sergunin explains this involves strengthening the Coastal Defense Service of the Federal Security Service (FSS) and border controls in the AZRF, and establishing technical control at straits and river estuaries along the entire NSR (2015, p. 42).

Furthermore, the Russian Arctic Strategy 2013 has more a detailed description of the military aspect. Even with a changed Russian Arctic policy towards cooperation since 2008 and roles of regional actors in public and private sector now more open to mutual collaboration, Russia's ongoing military building-up statute puzzles the other Arctic states' perception of Russia's real intentions in the Arctic region. The military description in the Strategy 2013 indicates as below:

- Ensuring a favorable operative regime for the Russian troops deployed in the AZRF to adequately meet military dangers and threats to Russia's national security.
- Providing the AGF with military training and combat readiness to protect Russian interests in its EEZ and deter potential threats to and aggression against the country.
- improving the AGF's structure and composition, providing these forces with modern armaments and infrastructure.
- Improving air and maritime space monitoring systems.
- Applying dual-use technologies to ensure both AZRF's military security and sustainable socio-economic development.
- Competing hydrographic works to define more precisely the external boundaries of Russia's territorial waters, EEZ and continental shelf (Putin 2013) (Sergunin, 2015, p. 45).

The Russian political strategy of strengthening the military forces in the region has caused deteriorated relations with the West. The deteriorated situation has affected the Russian ability to develop plans for the Arctic region, which connect to the NSR utilization (Klimenko, 2016). The policy highlights Russian sovereignty over the AZRF and NSR, and the strategy demands for defense of the country's national interest in the region (Sergunin, 2015, pp. 44-45). To protect the sovereignty issue, Russia has certainly improved its military capacities. Strengthening the military capabilities in the High North has certainly brought a concern to the West about Russia's real intentions in the region. The same applies for the other Arctic coastal states, which are members of the North Atlantic Treaty Organization (NATO). Russia also watches over growing military activities of NATO in the Arctic region. Russia's military modernization in the High North is often reflected as its ambition to be seen again as a great power by the West (Roi, 2010).

Waltz (2010) stresses that states are preoccupied with gaining power and security in the anarchic system, and states should seek for their own help and security to survive in the competitive world of anarchy. As reflecting Waltz's thought of realism, the security dilemma is brought by misconception and uncertainty of other actors and self-help security. The security dilemma issue fits to explain the current Arctic security between the West and Russia. Sergunin opposes the Westerners' interpretation to the Russian Arctic Strategy 2008 as

evidence of Russia's revisionist aspirations and expansionism in the region (2015, p. 42). However, Russia is a determined actor in developing the region for economic increase, and therefore, it intends to secure the border and control the NSR to protect the resources (Roi, 2010).

As discussed above, goals of the Russian Arctic Strategy 2008 and 2013 have two controversial aspects: one to defend Russian territory and the other to protect Russia's economic interests in the region. Russia certainly has nuances in their Arctic policy as Laruelle indicates (2014). She compares Russia to Janus with a double face: One side has a domestic public consumption relying on old ideology inspired by the Soviet legacy and the Cold War era, and the other side has a political willingness to cooperate with the other Arctic states by taking the Arctic as a brand and positioning itself to renegotiate bilateral relations based on soft power (2014, p. 3). Russia's two main Arctic strategies are 1) security first and 2) cooperation first (p. 7). Laruelle indicates the 'Security- first' strategy focusing on asserting Russia as a great power in the region can allow Russia to forcefully as revive its great power status. In the mean time, the 'Cooperation first' strategy, motivated by economic aspects of the Arctic, can promote Russia's collaborative willingness to open to foreign influence, both in public and private investment and sharing of expertise. While Russia has played double strategies, its deteriorating relations with the West since the 2014 crisis in Ukraine have raised uncertainty about future Arctic cooperation (Buixadé Farré et al., 2014) and changed Russia's rhetoric in the Arctic (Klimenko, 2016). Incidentally, the transit shipping volume of the NSR has decreased since 2014.

Klimenko (2016) argues the growing tensions of two sides has changed Russian rhetoric with regards to the Arctic, pointing to increasing threats to its national security and interests in the region. Russia has shifted into cooperative mode by focusing on developing resources and shipping in the Arctic region for the past years. Klimenko indicates the Ukraine crisis has reinforced Russia's voice in the Arctic security during 2014 and 2015. The goals of Russian Arctic security policy remained the same as before the year 2014: to ensure sovereign rights, to protect its borders and sea areas, and to provide strategic deterrence against NATO. She also states that Russia is more concerned with developing economic activities in the Arctic region through international cooperation, and the main reason for strengthening the military power is to modernize and reshape its armed forces to balance to NATO and the US (ibid). However, Russia's military build-up and activities in the region

have triggered a new level of concern between Russia and the West. Security dilemma is created in the Arctic by states seeing other actors as potential enemies and threats (Lamy, 2011). States are rational actors, therefore they seek for the best strategies to maximize their benefits and to minimize the losses (ibid). The same applies to the Arctic situation. Klimenko (2016) asserts that due to misperceptions stemming from strengthening of the military power, tensions between Russia and the other Arctic states seems only likely to grow. Considering maximizing the national security is a core assumption, states leaders understand wars and conflicts are irrational and unnecessary in certain situations where economic relations are involved (Lamy, 2011). In that sense, from a perspective of defensive neo-realists, a war fighting over the resources, is not likely to happen in the High North.

Thinking of the Arctic, where the line between conflict and cooperation is blurred, Young (2011) raised a question on the Arctic issue. He asked whether we are at a historical turning point as to whether thoughts of the Arctic future will remain as a peaceful and multilateral arena for cooperation or a place of conflict of rapacious resource extraction (Young, 2011, p. 191). Russian authorities declare the military facilities are to protect shipping routes linking Europe and Pacific region across the Arctic Ocean (guardian, 2015). However, Åtland (2011) indicates that industrial and commercial increases in the littoral zone appear to be a chance for strengthening the military power in the region, which is and will be a factor in the Arctic frontier. Developing the oil and gas in the Arctic is likely to impose new responsibilities on the Russian Navy and Federal Security Service (FSB) in charge of the Russian Border Guard Service (Åtland, 2011, pp. 272-282).

Although the High North is considered to be a low tension region, "the Arctic is by no means immune to the logic of the security dilemma" (Åtland, 2014, p. 145). Recognizing the Arctic region as the economic opportunities, the Arctic and non-Arctic states including Russia have developed their own strategies in the region. Russia and the other Arctic coastal states have taken various measures to protect their economic and national security interests in the region at the same time. As Åtland points out, most of the measures are based on or motivated by states' uncertainty about their neighbours or outside actors' intentions in the region. The problem is that the measures sometime have the unintended and unforeseen effect of making other feel less secure, and compelled to reciprocate (ibid; p. 161). Misconceptions of other actors and uncertainty about others' intention create a security dilemma (Glaser, 2010), which applies in the current Arctic situation. NATO and Russia's military build up in

the Arctic can be explained by that fear and uncertainty of others, which can have potential harmful effects on the regional security dynamics (Åtland, 2014, p. 162). Under the security dilemma, Russia may experience much pressure for cooperation and competition as Glaser indicates.

To conclude, Russia's Arctic policy has changed over the past years and this has influenced on planning for Arctic shipping . The first half of the 2000s with Putin administration, its Arctic policy was followed by the ideas of revival of Russia as a great power and restoration of military power, and of maintaining Russia's status as an energy superpower (Klimenko, 2016, p. 5). The Arctic is the region where Russia could best demonstrate its power along with a long history of its strong stance, by accessing the valuable energy resources and deploying its military force. Even though Moscow has certainly provided a positive view of the Arctic region as a zone of cooperation since 2008, Russia has continued its military modernization plan in the region, which has led to security concerns. The tension has deteriorated relations of Russia with the West and seemed to cause a shipping decrease in the NSR. In discussing the Russian political ambitions in the Arctic region in the context of Arctic security, a perspective of neo-realists' relative gains and security maximizers seems to reflect the current situation better.

To understand military and economic strategies in Arctic security and resource management, Russia has clearly shown its plans of building up the military capabilities as a part of its Arctic policies (Sergunin, 2015). Whether or not Russia is willing to create cooperative environment in the Arctic, it clearly aims to ensure its sovereign rights over energy resource management in the region and exclusive control of the NSR under Russian jurisdiction. Russia's plan for developing Arctic resources will only increase their ability to control the territories and water areas in the region as Klimenko indicates (2016, p. 34). By accumulating more military and economic power, and with the exclusive rights of controlling the NSR, developing the NSR as an international shipping lane does not seem to be realizable considering the current Arctic security situation.

5.2. Territorial disputes: Russia's jurisdictional claims over Arctic resources and control of the NSR

To understand military and economic strategies of Russian Arctic policy in the context of Arctic security and resource management, this thesis finds that it is important to

discuss Russian jurisdictional claims over Arctic resources and control of the NSR. A political challenge to Arctic shipping has stemmed from jurisdictional disputes over Arctic waters (Buixadé Farré et al., 2014, pp. 309-311). Territorial disputes among the Arctic littoral states¹³ have remained unsolved for decades. In the Arctic case, national interests are at the core (Roi, 2010). Neo-liberals do not discuss how states do or should behave when *vital interests clash* (Jervis, 1999, p. 51). Neo-liberals' perspective on cooperation being relatively easy to achieve when states have common interests does not explain the ongoing Arctic territorial disputes. In this regard, a zero-sum game theory of realism- 'someone gains means someone else's loss'- seems to be applied better in the Arctic circumstances. The ongoing territorial disputes certainly reflect the relative gain theory of neo-realism.

Waltz (2010) compares the international political system to the economic markets which are operated by actors' calculations and for their own profits. The Arctic can be seen as a global economic market where the Arctic coastal states interact to have more resources, including those which are yet undiscovered. Emphasizing the relative power distribution, neo-realists perceive states are rational actors who want to gain more than others. Indicating importance of distribution of capabilities in the international political system, Waltz (2010) states that the more power a state has the greater influence it has in a competitive anarchy system, and should have more power to survive and to ensure national security. Applying Waltz's realism theory, this part of the discussion chapter will delve into analyzing territorial disputes of Russian jurisdictional claims over Arctic resources and control of the NSR under Russian authority.

Under the UNCLOS each state has the rights to protect their coastal state for up to 12 nautical miles of territorial sea, 24 nautical miles of contiguous zone and 200 nautical miles of exclusive economic zone (EEZ) (UNCLOS, 1982). UNCLOS indicates within the 200 nautical miles of the EEZ each state has its sovereign right to protect both living resources and non-living resources in the water, seabed and subsoil, but all foreign ships have the right to freely pass the zone. Beyond the limits of the EEZ are high seas, which are open to all states. Thus, all states have rights to conduct marine scientific research and free navigation.

However, a coastal state can claim its jurisdiction to the continental shelf abutting its shores only if UNCLOS recognizes a territorial contiguity up to 350 nautical miles or 100 nautical miles from the 2,500 meter isobath (Laruelle, 2014, p. 94). Most of the territorial

¹³ The Arctic littoral states are Canada, Denmark, Norway, Russia and the United States

disputes between the Arctic coastal states are related to delimiting the EEZs. Laruelle recognizes that since the UN Commission on the Limits of the Continental Shelf (CLCS) was established, from the very beginning of the 21st century, the continental shelf has raised high international attention encouraging the coastal states to claim sovereignty over Arctic resources. Russia is involved in legal disputes of the continental shelf delimitation, EEZ boundaries and vessel transit in the straits (Laruelle, 2014, p. 95). Below are marine zones of the continental shelf, which the Arctic states' jurisdictional claims are based on (Fig 5).

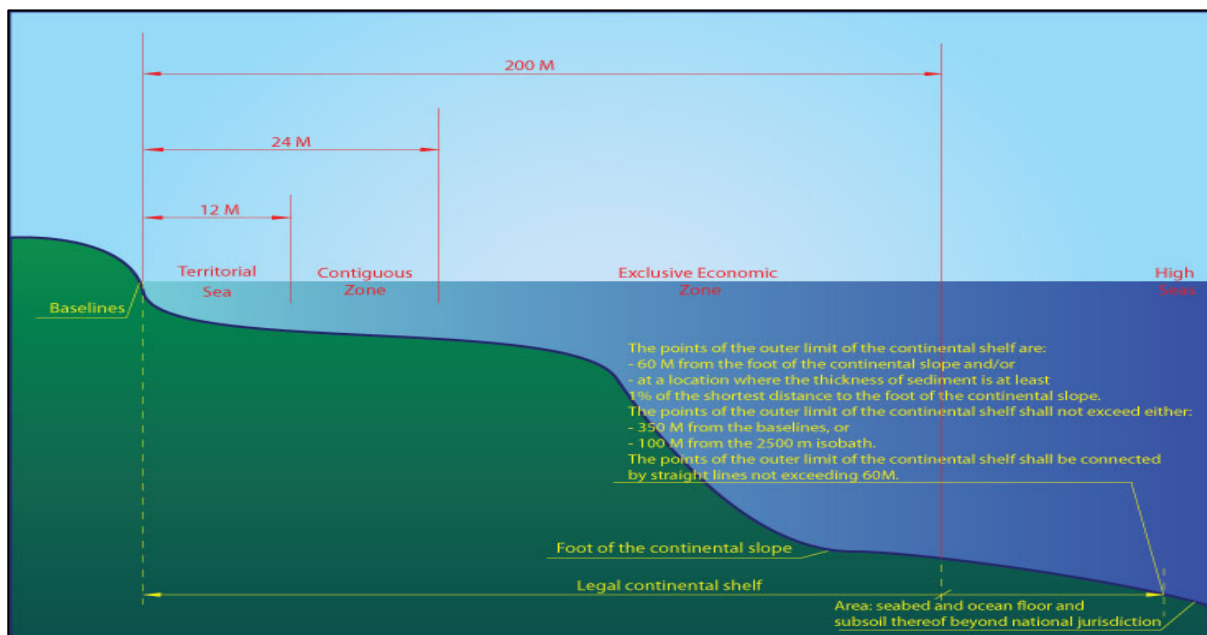


Figure 5. Limits of Continental Shelf (CLCS)

Source: UN. org (www.un.org/depts/los/clcs_new/marinezones.jpg)

According to the United States Geological Survey, the Arctic is believed to contain about 30% of the world's undiscovered gas and 13% of undiscovered oil largely concentrated in Russia (Donald L. Gautier et al., 2009). UNCLOS makes it so that a coastal state can exercise its sovereign rights to explore or exploit the natural resources from the continental shelf within its EEZ. Beyond the EEZ limits, the state has to provide some scientific evidence to exercise the same rights over the continental shelf. According to Laruelle (2014), Russia has carried out marine research in the Arctic since the 1960s and it became the first country to create a review body of scientists, setting a legal precedent under UNCLOS. Russia has claimed that the Lomonosov Ridge and the Alpha Mendeleev Ridge are geological extensions of its continental Siberian shelf, so parts of the Central Arctic Ocean, the Barents Sea, the

Bering Sea and the Sea of Okhotsk all fall under Russian jurisdiction (Laruelle, 2014, p. 99). Other states refuse to acknowledge the Russian claim. According to data collected by the Geology and Mineral resources in 2004, the estimated total recoverable resources of East Siberian and Chukchi Seas are equivalent to more than 8 billion tons of oil (V.Verzhbitsky, 2008).

In 2002 Russia had submitted an application to the UN defining the Arctic territory to the seabed beyond the 200 mile zone along the entire Russian polar sector including the zone under the North Pole, but it was rejected on technical grounds (Kramer, 2016). Russia again submitted a bid to the UN claiming vast territories (1.2 m sq km of sea shelf extending more than 350 nautical miles from the shore) in the Arctic in 2015 (guardian, 2015). In the following year, 2016, Russia has formally presented a revised claim of Arctic territory to the UN (Kramer, 2016). Baev and Boersma (2016) assert Russia's desire for expanding its control over the Arctic shelf is entirely legitimate. Below is the Russia jurisdictional claim on the Arctic territory (Fig. 6).

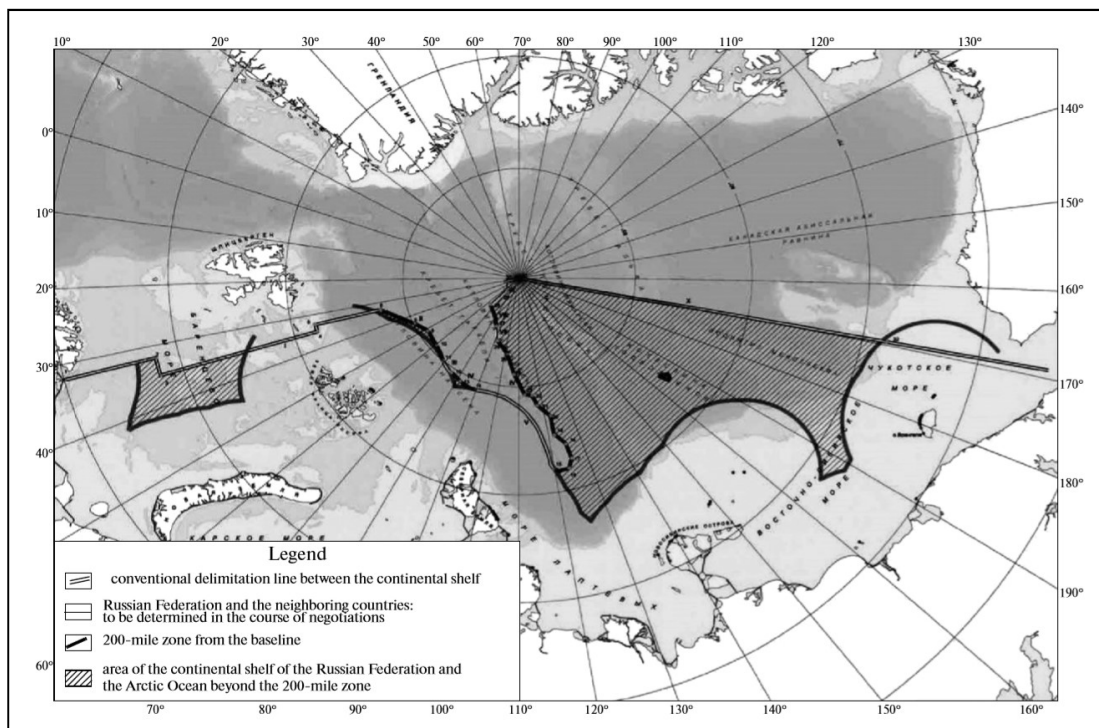


Figure 6. Area of the Russian continental shelf in the Arctic Ocean beyond the 200 mile zone

Source: Herald of the Russian Academy of Sciences, 2015, Vol. 85, No. 3, p. 200

In regard to the NSR, Russia asserts the route is a historically national unified transport route of the Russian Federation in the Arctic. Thus, Russia considers the NSR to be under its exclusive jurisdiction (Laruelle, 2014). The dispute over the legal status of the NSR began in 1965 when a US icebreaker tried to navigate through the Vilkitsky strait between the Kara and Laptev seas (Byers, 2012). The Soviet Union refused to permit the US icebreaker to traverse the NSR by applying strong diplomatic pressure on Washington. Thus, the US vessel failed to sail along the route, and since then no foreign vessels have navigated through the NSR without permission from Russia.

Differing from the other traditional commercial transit lanes, the vessels navigating through the NSR are heavily dependent on the ice extent through multiple lanes (Buixadé Farré et al., 2014). There is no one fixed single lane for shipping. Depending on navigating close to the coastlines or further out to the north, vessels crossing the route have to go through internal, territorial and adjacent waters, the EEZ of Russia, and international waters of the open seas (Sergunin, 2015). Russia, however, has developed the route over decades and considers it to be controlled under the Russian authority.

With the former Russian signing of the UNCLOS, Russia has applied its national regulations over the foreign ships to control the NSR under Russian jurisdiction. In the *Regulations for Navigation on the Sea ways of the Northern Sea Route*¹⁴, article 1.2. defines the NSR to be "situated within the inland waters, territorial sea (territorial waters), or exclusive economic zone adjoining the USSR northern coast, and includes seaways suitable for guiding ships in ice" (Marine, 1990). Under the Law of the Sea Convention, Russian territorial waters are subject to innocent passage rights for all ships. However, foreign vessels using the NSR are fully under the control of Russia and may be required to pay NSR fees and to use compulsory icebreaker assistance through the main straits, which is regulated by the NSR administration.

Russia declares this regime is based on Article 234 of the UNCLOS, endowing coastal states with the right under the title '*Ice-covered areas*'. Feasibility of using the NSR has caused disputes between the US and Russian authorities around the route passage (Åtland, 2010). In general, all ships have free transit within the 200nm exclusive economic zone under

¹⁴ Available at http://www.arctic-lio.com/docs/nsr/legislation/Rules_of_navigation_on_the_seaways_of_the_Northern_Sea_Route.pdf.

the UNCLOS, except for the *'ice-covered areas'*, Article 234 as below:

"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" (UNCLOS, 1982).

This clause is important to Russia's ability to regulate and control the traffic along the NSR. Russia claims the ice covered straits of its Arctic archipelagos as internal waters (Østreng, 2010). Thus, the NSR is in its internal waters and surrounded by Russian ships. The US takes a different stance that the NSR, the Russian Arctic straits, are international straits where all states have a right to free transit passage (Åtland, 2010, pp. 21-22, 39). Such a territorial dispute between the two countries was caused by understanding the international law of the Arctic in a different way. Russia defines the NSR as a coastal route within the internal and territorial waters and/or high latitudinal route located within 200 nautical miles of Russian EEZ (Østreng, 2010). However, in accordance with international law, the waters between Russian territorial seas and the North Pole are international waters, and some parts of the NSR may extend beyond the EEZ (ibid).

Moe (2014, p. 786) finds some ambiguity in the Russian declaration in the 'Law on the Northern Sea Route ' adopted in 2012 saying:

"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".

He points out although Russia clearly refers to the UNCLOS and Article 234, the clause keeps a reference to the Russian historical circumstances, holding some instability in Russia over the prospects of diminishing ice, which makes Article 234 *less relevant*.

According to Laruelle (2014, pp. 172, 183), only foreign ships are paying for the services of Marine Operation Headquarters¹⁵ and the NSR administration when using the port infrastructure, but Russian ships are exempt or pay lower fees than foreign companies. This is regarded as a discriminatory measure. The International Chamber of Shipping (ICS)¹⁶ has expressed its position on the Arctic shipping that the rights of Arctic coastal states must be exercised in a manner consistent with UNCLOS and IMO Conventions. It is indicated that the coastal states should not impose discriminatory treatment or other measures on ships. The UNCLOS regime for transit passage on straits used for international navigation should take precedence over the coastal states' rights under Article 234 (ICS, 2014).

Russia, however, to facilitate the increasing traffic in the NSR waters, has launched the NSR administration in 2013 (Staalesen, 2013). This provides relevant information to customers on applications, icebreaking assistance, ice pilotage, navigation, weather information, and search and rescue centres available through its own website¹⁷. In addition, the Russian Arctic Strategy 2008 clearly regulates the Arctic Zone of Russia in terms of ocean space, which comprises the internal waters, land and islands, territorial sea, the EEZ and the continental shelf of Russia, stating "Russia possess sovereign rights and jurisdiction in accordance with international law" (Østreng, 2010). Losing its power to influence neighbouring countries after the Soviet Union collapsed, Russia has considered gaining the vast swathes of Arctic territory for compensation (Kefferpütz, 2010, p. 6).

Young (2011) states although the Arctic states have had jurisdictional issues for many years, their willingness to deal with the disputes in a peaceful way gives some room for interstate cooperation space in the Arctic. Indeed, some of the disputes have been already solved in between Norway and Russia in the Barents Sea, and between Canada and the

¹⁵ Marine Operation Headquarters are two private companies supporting shipping services, which are the Murmansk Shipping Company at Dikson in charge of the western part and the Far East Shipping Company at Pevek in charge of the eastern part of the route.

¹⁶ ICS is the principal international trade association for ship owners, representing all sectors, trades and more than 80% of the world merchant fleet.

¹⁷ Federal State Institution The Northern Sea Route Administration (NSRA) at http://www.nsra.ru/en/celi_funktsii/ (accessed February 16, 2017)

United States in the Beaufort Sea (ibid). While questioning what the Arctic situation is, Young suggests those concerned states should prioritize strategies that ensure a cooperative future of the Arctic by citing Michael Byers words: "[i]f humanity cannot cooperate in the Arctic, it cannot cooperate anywhere (p. 128)" (2011, p. 192)".

Among the Arctic littoral states having territorial disputes in sharing the region under international law, Roberts (2015) says Russia has been viewed as 'the wild card' by the West. Trenin states that judging Russia's actions in the Arctic as being aggressive is not correct, and Russian foreign policy has been mistaken by the west (Trenin & Baev, 2010). This misconception of the West towards Russia is due to mistrust of a Russian leadership promoting its sovereignty and appearing to find military solutions to political problems, and concerns about a return to 'a new Cold War' (Roberts, 2015, pp. 112-115).

Overall, Russia has strengthened military forces and activities in the High North while filing a jurisdictional claim on territorial disputes to the UN. As the natural resources in the High North are highly important to increasing the Russian economy (Roi, 2010), Moscow continues to dispute and claims jurisdictional right to enlarge the Arctic territory. Gaining more economic power directly connects to strengthening the military power. The West has a perception of Putin and his ambitions to be a superpower again by playing a leading role in the Arctic (Roi, 2010). Uncertainty and misperceptions of others' intention under the security dilemma reflected the Westerners' perception on "once the Russian government has more money, it will surely wish to assert once again the country's power in Arctic waters" (North, 2000, p. 203), and it still remains in the complex Arctic situation. As it is playing a leading role against the West in the High North, Russia will continue to claim jurisdictional rights over Arctic resources and control of the NSR. In doing so, Russia will adhere to their plans to develop the economy by utilizing the NSR for domestic use and regional development rather than promoting international use.

5.3. Developing Arctic shipping: Multiple Bilateral cooperation for developing the Arctic resources and utilizing the NSR for internal transportation

As discussed in the previous chapters, Russia's political and economic ambitions in the Arctic have changed over the past years influencing their intentions for use of the NSR. With easing of international tensions in the late 1980s, the former Soviet Union shifted its Arctic policy to open for international cooperation and trade (Moe, 2014). After Russia

officially opened the NSR for foreign ships in 1991, the Russian government encouraged international use of the shipping lane with high expectations of increasing commercial traffic along the route (Moe, 2017). From the early 1990s up to 2009, the idea of the NSR continuously used as national transport was dominated in Russia, as they looked for ways to finance operating the route. The Russian authorities assumed that the fees from international shipping on the NSR could be secondary income as a possible revenue earner to support the icebreaker fleet and to invest in infrastructure (Moe, 2017).

Russian ambition regarding the NSR was officially expressed at the former Russian president Medvedev's speech in 2008. At the meeting of the Russian Security Council, he stressed the NSR was a key component of protecting Russian national interests in the Arctic, stating:

"The transcontinental Arctic Sea Route is another of the Arctic region's assets. This route can connect European, Far-Eastern and river transport routes, thereby making it possible to reduce transport costs and substantially increase business ties between Russian businesses and their foreign partners. [...] We must ensure reliable protection in the long term for Russia's national interests in the Arctic. [...] the Arctic Sea Route is one of the main links in the Arctic transport system...We need to expand the network of ports, use ships sailing under the Russian flag and work in general on developing this route as one of the country's strategic national main transport routes" (Medvedev, 2008).

Even though Russia officially announced plans to open the NSR for international use, its predominant ambition for using the route primarily for national interests under its control was very clear.

The infrastructure along the NSR, however, has deteriorated since the Soviet Union era due to lack of investment and maintenance following Russia's economic downturn. In return, the international shipping community did not show much interest in the sea route contrary to Russia's high expectation. According to Moe (2017), the international shipping community thought the NSR shipping conditions were not so good and it would not be getting better in the future. Back then, Russian authorities applied fixed fees to the transit ships and almost none were willing to pay, which drove Russian authorities to be in a worse

financial situation. It was a pipe dream for Russians that they had an idea of income from the NSR, but it did not attract much interest from foreigners in reality (Moe, 2017) .

North (2000) indicates "the NSR is technically unique and commercially risky" (p. 199). Private investors normally expect monetary returns when they invest. He states that although transit along the NSR is feasible for certain kinds of traffic according to the INSROP papers, foreign shipping companies would be more likely to invest in infrastructure when they see all year-round reliability and regularity for shipping. According to him, back in the 1990s Russia's volatile political and financial situation had influenced foreign investment, and the strong nationalism of Russian leaders and general public refused the idea of foreigners benefiting from exploiting the Russian resources. All the conditions for investment in natural and man-made forbade international interests in the NSR development. However, North suggested expanding exploitation of natural resources might increase traffic on the NSR (2000, p. 203). Russian regional politicians also underlined the NSR would play a key role in exporting natural resources like timber, metals and minerals, and also further development of oil and gas in the Russian Arctic region would contribute to increased transport traffic on the NSR (Jørgensen, 2000). Moe (2016) points out although Russia clearly signalled opening the NSR for international use, there is no indication that any type of international governance has been considered.

Holding a pessimistic view of the NSR for international shipping, Moe (2014) indicates there are some technical and administrative problems of using the NSR. There exists uncertainty over how much traffic is to be developed in the coming years, even with considerable international interest in the NSR. According to him, general conditions of the route have considerably improved, but uncertainty of the Arctic route and the unpredictable future situation are hindering the NSR development. For example, Russia's obscure administrative procedures, escort fees, and unclear capacity of the ice breaker fleet to meet the proper conditions for a large volume of shipping through the route. He explains the economic allure of short shipping distance and time savings by using the Arctic route.

The shipping volume through the NSR had increased only up until the year 2013 as presented in the previous chapter. However, it has continuously decreased since then. Noticeably most of the shipping volume during the peak years was most likely domestic transit, not international (Moe, 2016). Moe recognizes that potential users of the sea routes keep updating their assessment of shipping conditions before deciding which route they are

going to use. If the conditions are not stable, companies will not invest in ships and equipment for the NSR. Thus, he predicts the road ahead to developing the NSR is not going to be smooth sailing (Moe, 2014).

Since the early 2010s, developing the Arctic transport infrastructure has become important to Russian policies for its economic growth. Trenin (2010) stresses the Arctic has become Russia's foremost international agenda as Russia pushes for strong economic growth and geopolitical advantages. Reflecting the view, at the 2nd International Arctic Forum in Arkhangelsk in 2011, Putin expressed political willingness to open the NSR- highlighting its bright future as an international transport artery and the High North for an international cooperation arena: "Transport is what connects the Arctic states" (Pettersen, 2011). As Putin outlined a plan to transform the NSR to be a commercially viable route between Europe and Asia, Moscow announced its plan to improve shipping safety and communication along the route. Russia has also strengthened the Arctic policies including investment in the region in order to extract the resources and to utilize the Arctic route for transportation (Trenin & Baev, 2010).

In the Russian Arctic Strategy 2008 and 2013, we see a common goal of utilizing the NSR for both international and domestic shipping lanes under the Russian jurisdiction. According to Klimenko (2016), the Russian Transport Strategy 2030 also stresses how important the NSR is for commercial shipping activity, developing resources on the Arctic shelf and the territories of the Arctic zone. It also provides transportation services for remote areas of the northern part of Russia. She indicates the Transport Strategy 2030 aims at strengthening the coastal infrastructure along the NSR including improvement of search and rescue systems and ice breaking capabilities. Due to their outdated and insufficient ice breaker fleet, the Russian government has encouraged not only the state owned ice breakers, but also the public and private companies operating in the Arctic to modernize and to improve their own ice breaker fleets (Klimenko, 2016).

Concerning the likelihood of the NSR emerging as a potential commercial shipping lane, Laruelle (2014) indicates developing a new shipping lane is highly complex in practical and technical conditions. It has to be profitable and predictable to compete with the other shipping lanes. In fact, as mentioned in the previous chapter, the NSR has many barriers to be taken into account for shipping companies. According to Moe (2017), the shipping volume of the NSR was too low to meet the minimum budget for ensuring profitability of using the

icebreakers up until the early 2000s. Since 2008, the main oil terminals in Arkhangelsk, Kolguev, Mokhnatkina Pakhta, Murmansk, Ob' Bay, Varandey, Vitino have started to increase oil shipping (Laruelle, 2014, p. 182). The NSR administration was accordingly established in 2013, projecting continuous increases in the shipping volume, mainly due to domestic transport needs and oil related activities (ibid).

Neo-liberals' perspective is more reflective in the area where states have mutual interests (Lamy, 2011). Neo-liberals believe states are to cooperate when there are absolute gains to achieve. As a stakeholder of the Arctic resources, Russia looks for partners who can assist them to maximize the gains from developing the region. Russia has established multi-level international cooperation in developing Arctic resources to increase the shipping volume of the NSR. A major transnational integrated project for natural gas production, the Yamal LNG project on the Yamal peninsula in West Siberia is expected to contribute to increases in shipping up to an estimated 20 million tons per year on the NSR (Staalesen, 2012). The project, which is owned by multinational companies, including the Russian gas company Novatek, French Total, the Chinese National Petroleum Company (CNPC) and the Chinese Silk Road Fund, is situated onshore and involves building a liquefaction plant, port and 15 purpose built ice strengthened LNG carriers (Moe, 2016). The Yamal LNG project includes developing the Sabetta port¹⁸ which is expected to carry outshipments of 16.5 million tons of LNG per year through the NSR (Staalesen, 2014c). This project led the two major gas companies, Gazprom and Novatek to cooperate with each other by establishing a joint venture of developing the rich gas fields in the Yamal Peninsula (Staalesen, 2014b). Apart from Yamal LNG, the Novy Port¹⁹ oil project located further south on the Yamal Peninsula will also provide significant amounts of cargo no less than 5.5 million tons via the NSR all year round (Gazprom-Neft, 2015).

To accommodate the shipping volume, icebreakers are key components. Russia has the largest and most powerful icebreaker fleet in the world. The Russian icebreakers however are getting aged and all the nuclear powered icebreakers built in the 1970s to 80s are to be decommissioned by the year 2020 (Laruelle, 2014). To ensure year round shipping along the NSR, Russia needs more powerful third generation icebreakers in order to meet the

¹⁸ It is located on the eastern shore of the Yamal Peninsular.

¹⁹ Novy Port (Novoportovskoye) is one of the largest oil and gas condensate fields being developed on the Yamal Peninsula.

expectations of large energy companies (ibid). Dagfinn Lunde, managing director of INTERTANKO emphasized that working closely with private sector is extremely important to promote international shipping on the NSR (Lunde, 2000). A Russian authority from the Ministry of Transport stated that Russia was working to develop new generation of nuclear powered icebreakers and port icebreakers in cooperation with experts from Finland and Germany (Matushenko, 2000). Atomflot, the State Atomic Energy Corporation (also called by Rosatom) is actively engaged in managing the Russian nuclear fleet. In 2012, Novatek and Atomflot signed a 15 year mutually beneficial agreement providing icebreaker support to transporting construction cargoes and products of the Yamal LNG plants via the NSR (NOVATEK, 2012).

As indicated above, from the late 2000s to the early 2010s Russia was actively engaged in looking for foreign partners to develop energy projects in the Arctic region (Klimenko, 2016). This is because Russian domestic capabilities of shipbuilding sharply decreased when many specialized engineers went abroad to work in the 1990s (Laruelle, 2014, pp. 184-185). As a result, only 5 per cent of Russian merchant ships are built domestically and the rest depends on foreign technology (ibid). In 2008 Gazprom, and Norwegian company Statoil and the French multinational Total signed an agreement to develop the Shtokman field in the Barents Sea, followed by Rosneft which signed an agreement with the US multinational ExxonMobile to explore the licences in the Kara Sea in 2011 (Klimenko, 2016, p. 7). Many other bilateral agreements for establishing joint ventures for developing the continental shelf between Russian and the West have been signed.

However, the US's Russian sanction regime paused all western investment and drove Putin to look for other cooperative partners from China. While Putin visited Shanghai in 2014, he and Xi Jinping signed a joint statement strengthening cooperation in major projects in Arctic development (Pettersen, 2014a). Novatek signed major agreements with China's biggest oil company CNPC and China Development Bank on the Yamal LNG project in 2014 (Staalesen, 2014a). Laruelle also indicates multinational corporations such as Norilsk Nickel (metallurgical company), Rosneft and Lukoil (oil enterprises), and the Murmansk and the Far East Shipping Companies also play significant roles in the Russian merchant shipping industry. Recently Norilsk Nickel opened a new Murmansk terminal expected to double shipments on the NSR between Dudinka and Murmansk (Staalesen, 2017). Overall, the absence of technology for exploring the natural resources and high costs of investment in the

region drove Russia to look for bilateral cooperation with foreign involvement in developing the Arctic shelf resources (Klimenko, 2016).

The NSR has been a key component of Russian strategies for its economic development in the Far North (Laruelle, 2014). The lane is to be used mostly related to hydrocarbon resource development in the Russian Arctic territory and on the Arctic shelf (Klimenko, 2016). Klimenko indicates internal transportation between the ports in the Russian Arctic will be up to 80 per-cent of shipping along the NSR, mostly from developing the large oil and gas resources in the Yamal LNG project. Russia has seen the transit shipping volume plummet since 2013. Now the Ministry of Transport expects cargo traffic is to increase up to 83 million tons by 2030 mainly within the Russian ports (BarentsObserver, 2015). Yamal LNG and oil projects need the NSR to transport materials and resources. Atomflot, which operates an ice breaker fleet along the NSR meets the demands for the projects, and it now has an anchor customer bringing permanent income and also satisfies the Russian government (Moe, 2017). Accordingly, Russia is no longer interested in looking for international customers, which can be potential security issues for Russia (ibid). Deputy Minister of Transport, Viktor Olersky previously stated in an interview that the NSR will never be an alternative to the Suez Canal, but will play a crucial role in the Arctic offshore projects (Pettersen, 2013). The Russian government also started to realize how much it will cost to invest in the NSR infrastructure to be in a proper condition as a transit route, and has gradually reshaped the NSR for non-commercial enterprises (Inozemtsev, 2016).

To conclude, the NSR is expected to be utilized for domestic shipping purposes politically and economically. Moscow has recognized great potential for economic growth by utilizing the NSR in transporting the resources from the region, mainly for domestic use. The Russian government has promoted transnational investment in developing the region. China, as a newly emerging power in Asia, has the economic power with high technology, which Russia has needed. As states are rational actors who see value in cooperative behaviour in a competitive system of international politics (Lamy, 2011), Russia and China have recognized their mutual interests in developing the region for economic growth. Thus, they have built bilateral agreements of investing and developing Arctic resources. Russia has also sought for multilateral cooperation by actively playing in the AC and the BEAC while promoting bilateral cooperation with foreign partners. Russia once had high hope of the NSR was potential for international shipping. However, as starting to realize the challenges of

developing the NSR as an international shipping lane, the Russian government is satisfied with the current Arctic development project and utilizing the Arctic shipping lane for the resource transportation (Moe, 2017).

6. Conclusion: Long-term plans of developing the NSR mainly for domestic use

The thesis has aimed to analyze whether developing the NSR for international shipping is politically and economically viable by understanding Russian Arctic policies. To address the main research question, this thesis has tried to find answers to two sub-research questions: 1) what challenges does Russia face in opening the NSR, and 2) how can we understand the military and economic strategies of Russian Arctic policy in the context of Arctic security and resource management, and how are they affecting the NSR. In order to demonstrate the Russian Arctic strategies in the complex Arctic situation, this thesis has approached perspectives using two different theories, neo-liberalism and neo-realism-focusing on the security dilemma.

First, analyzing the military and economic strategies of Russian Arctic policy in the context of Arctic security and resource management, this thesis has found that they are deeply based on national security and ensuring integrity of territorial borders of the region to own the Arctic resources. The economic downturn drove Russia to view the Arctic resources as a good opportunity to recover the economy. In the process, Russia has played a double role of revealing ambitions to revive their position as a great power and military might, and at the same time to build a cooperative environment in developing the region by utilizing the Arctic shipping lane for energy transportation. Thus, as long as Russia ensures its national security and economic development from exploiting the Arctic region, Moscow strategically is not going to plan to develop the NSR for international shipping for extra profits.

Second, Russia faces political, economic and environmental challenges to developing the NSR for international use. Moscow once had ambitions to develop the NSR for foreign trade to make extra income by promoting international cooperation, but this has strategically changed. Developing the Arctic region drove Russia to expand its ability to secure the territories including the NSR control. Russia's jurisdictional claims in the High North have created political uncertainties by being viewed as a way to secure its Arctic resources and

exclusive right controlling over the NSR, so nobody else can claim on taking the resources in the region. For Russia the Arctic is a new opportunity to recover economic development, and the Russian government finds utilizing the NSR for resource transportation is more profitable. Thus, Moscow plans to use the lane for domestic purposes by continuously controlling under the Russian jurisdiction.

Overall, to answer to the main research question, developing the NSR for international shipping does not seem to be realisable neither in political nor in economic terms. Russia now has growing income from developing the region. Based on protecting its jurisdictional border to own the resources and control the NSR, the Russian government is satisfied with the current stable situation as it has both the security and destination shipping for permanent income to Russian budget. As the infrastructure along the NSR improves, and environmental conditions move- to be in a better condition in the coming years with less ice, the NSR may see some increase of international shipping around the year. However, the NSR is not going to be a comparative commercial shipping lane to the traditional ones. Strategically Moscow now plans a long project to utilize the NSR mainly on domestic purposes for regional development.

6.2. Further recommendations

Reflecting on the limitations of this thesis and having a second thought of the Arctic issues for further studies, emphasizing importance of international cooperation among states in the Arctic development should be more considered. I have also noticed that environmental concerns are a big part of the common issues involved in all the Arctic and non-Arctic states, which is not discussed in this thesis. As a means of preventing a possible accident at the polar seas, the IMO has made the Polar Code, an international code of safety for ships operating in polar waters. It came into force as of 1 January 2017²⁰. All the IMO member states including Russia have to strictly adopt this code. Considering environmental issues, it would be worthwhile to study further on this matter. Even though this thesis finds the Arctic situation still faces tensions between Russia and the West, in an uncertain environment like the Arctic

²⁰ International Maritime Organization (IMO), Media Centre 'Shipping in polar waters: Adoption of an international code of safety for ships operations in polar waters (Polar Code)' at <http://www.imo.org/en/MediaCentre/HotTopics/polar/Pages/default.aspx> (accessed February 16, 2017)

region it would be more useful to explore with the potential for cooperative manners among states for a better future (Brosnan et al., 2011). Emphasizing the importance of cooperation between the Western Arctic states and Russia on the Arctic issues, 'excluding Russia would have terrible consequences' as the US Special Representative to the Arctic and a former US Coast Guard, Robert Papp indicated (Rosen, 2015).

7. References

- Åtland, K. (2010). Security implications of climate change in the Arctic. *FFI-rapport 2010*, 1097 (18): 15.
- Åtland, K. (2011). Russia's armed forces and the Arctic: All quiet on the northern front? *Contemporary Security Policy*, 32 (2): 267-285.
- Åtland, K. (2014). Interstate relations in the Arctic: an emerging security dilemma? *Comparative Strategy*, 33 (2): 145-166.
- Baev, P. K. & Boersma, T. (2016). *With Russia overextended elsewhere, Arctic cooperation gets a new chance*. Available at: <https://www.brookings.edu/blog/order-from-chaos/2016/02/18/with-russia-overextended-elsewhere-arctic-cooperation-gets-a-new-chance/#>.
- BarentsObserver, T. (2015, October 17). Northern Sea Route – focus on domestic projects. *Barents Observer*.
- Berg, B. & Lune, H. (2012). Qualitative research methods for the social sciences.
- Berg, B. L. (2009). *Qualitative research methods for the social sciences*, vol. 7: Pearson Boston, MA.
- Blomfield, A. (2007, August 1). Russia claims North Pole with Arctic flag stunt. *The Telegraph*.
- Brosnan, I. G., Leschine, T. M. & Miles, E. L. (2011). Cooperation or conflict in a changing Arctic? *Ocean Development & International Law*, 42 (1-2): 173-210.
- Brubaker, R. D. & Ragner, C. L. (2010). A review of the International Northern Sea Route Program (INSROP)—10 years on. *Polar Geography*, 33 (1-2): 15-38.
- Buixadé Farré, A., Stephenson, S. R., Chen, L., Czub, M., Dai, Y., Demchev, D., Efimov, Y., Graczyk, P., Grythe, H. & Keil, K. (2014). Commercial Arctic shipping through the Northeast Passage: routes, resources, governance, technology, and infrastructure. *Polar Geography*, 37 (4): 298-324.
- Byers, M. (2012, June 8). Canada Can Help Russia With Northern Sea Route *The Moscow Times*.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*: Sage publications.
- Donald L. Gautier, Kenneth J. Bird, Ronald R. Charpentier, Arthur Grantz, David W.

- Houseknecht, T. R. K., Thomas E. Moore, Janet K. Pitman, Christopher J. Schenk, John H. Schuenemeyer, Kai Sørensen, et al. (2009). *Assessment of Undiscovered Oil and Gas in the Arctic*. Available at: <http://science.sciencemag.org/content/324/5931/1175>
- Engineers, R. B. I. o. M. (2013). Arctic transit: Northern Sea Route. *Gallois magazine*.
- Federation, R. (2008). *Russian Federation's Policy for the Arctic to 2020*. Available at: http://www.arctis-search.com/Russian+Federation+Policy+for+the+Arctic+to+2020#I._General_Provisions.
- Federation, R. (2013). *The development strategy of the Arctic zone of the Russian Federation*. Available at: <http://www.iecca.ru/en/legislation/strategies/item/99-the-development-strategy-of-the-arctic-zone-of-the-russian-federation>.
- Gazprom-Neft. (2015). *Gazprom Neft makes first winter shipment of oil from Yamal*.
- Giusti, S. (2013). *Russia's Foreign Policy for the country's stability*. Available at: <http://www.ispionline.it/it/pubblicazione/russias-foreign-policy-countrys-stability>.
- Glaser, C. L. (2010). *Rational theory of international politics: the logic of competition and cooperation*: Princeton University Press.
- Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The qualitative report*, 8 (4): 597-606.
- Grieco, J. M. (1988). Anarchy and the limits of cooperation: a realist critique of the newest liberal institutionalism. *International organization*, 42 (03): 485-507.
- guardian, t. (2015). *Russia lays claim to vast areas of Arctic*. Available at: <https://www.theguardian.com/world/2015/aug/04/russia-lays-claim-to-vast-areas-of-arctic-seabed>.
- Gunnarsson, B. (2013). The future of Arctic marine operations and shipping logistics. *The Arctic in World Affairs: A North Pacific Dialogue on the Future of the Arctic*: 37-61.
- Hill, E., LaNore, M. & Véronneau, S. (2015). Northern sea route: an overview of transportation risks, safety, and security. *Journal of Transportation Security*, 8 (3-4): 69-78.
- Ho, J. (2010). The implications of Arctic sea ice decline on shipping. *Marine Policy*, 34 (3): 713-715.
- ICS. (2014). *POSITION PAPER ON ARCTIC SHIPPING* Available at:

- <http://icsclass.org/news/ics-issues-its-position-paper-on-arctic-shipping/>,
<http://www.ics-shipping.org/docs/default-source/resources/policy-tools/ics-position-paper-on-arctic-shipping.pdf?sfvrsn=20> (accessed: March 22).
- Inozemtsev, V. (2016). Russia's Northern Sea Route Ambitions. *Eurasia Daily Monitor* 13 (84).
- Jackson, R. & Sørensen, G. (2013). *Introduction to international relations: theories and approaches*: Oxford University Press.
- Jervis, R. (1999). Realism, neoliberalism, and cooperation: understanding the debate. *International Security*, 24 (1): 42-63.
- Jørgensen, A.-K. (2000). Special Session: The Northern Sea Route's Importance for the Development of the Northern Russian Regions. In Ragner, C. L. (ed.) *The 21st Century-Turning Point for the Northern Sea Route?*, pp. 247-248. Dordrecht: Kluwer Academic Publishers
- Kefferpütz, R. (2010). On thin ice?(Mis) interpreting Russian policy in the high north.
- Keohane, R. O. & Nye, J. S. (2001). *Power and interdependence*: Longman Publishing Group.
- Keohane, R. O. (2011). International institutions: Can interdependence work? In Art., R. J. J., R. (ed.) vol. 10 *International politics: enduring concepts and contemporary issues*, pp. 150-157. Boston: Longman.
- Khon, V., Mokhov, I., Latif, M., Semenov, V. & Park, W. (2010). Perspectives of Northern Sea Route and Northwest Passage in the twenty-first century. *Climatic Change*, 100 (3-4): 757-768.
- Klimenko, E. (2016). *Russia's Arctic security policy; Still quiet in the High North?* Policy Paper No. 45, vol. No. 45: Stockholm International Peace Research Institute (SIPRI) Available at: <https://www.sipri.org/publications/2016/sipri-policy-papers/russias-arctic-security-policy-still-quiet-high-north>
- Kramer, A. E. (2016). *Russia Presents Revised Claim of Arctic Territory to the United Nations*. Available at: https://www.nytimes.com/2016/02/10/world/europe/russia-to-present-revised-claim-of-arctic-territory-to-the-united-nations.html?_r=0
- Lamy, S. L. (2011). Contemporary mainstream approaches: neo-realism and neo-liberalism. In Baylis, J., S. S. O. P. (ed.) vol. 5 *The globalization of world politics: An introduction to international relations*, pp. 114-129. Oxford: Oxford University Press.

- Laruelle, M. (2014). *Russia's Arctic strategies and the future of the Far North*: ME Sharpe.
- Lunde, D. (2000). Summing Up the Northern Sea Route User Conference - The Shipping Industry's Perspective. In Ragner, C. L. (ed.) *The 21st Century - Turning Point for the Northern Sea Route?*, pp. 235-237. Dordrecht: Kluwer Academic Publishers.
- Marine, U. M. o. M. (1990). *RULES OF NAVIGATION: REGULATIONS FOR NAVIGATION ON THE SEAWAYS OF THE NORTHERN SEA ROUTE*. Available at: http://www.arctic-lio.com/docs/nsr/legislation/Rules_of_navigation_on_the_seaways_of_the_Northern_Sea_Route.pdf.
- Matushenko, N. I. (2000). Summing Up the Northern Sea Route User Conference - The Russian Perspective. In Ragner, C. L. (ed.) *The 21st Century - Turning Point for the Northern Sea Route?*, pp. 239-240. Dordrecht: Kluwer Academic Publishers.
- Medvedev, D. (2008). *Speech at Meeting of the Russian Security Council on Protecting Russia's National Interest in the Arctic*. Available at: <http://en.kremlin.ru/events/president/transcripts/48304#sel=8:16:Zvn,8:31:D3r;6:1:Rk3,6:17:l33;4:1:W3D,4:42:yo3;12:90:Zw3,12:122:13v> (accessed: March 26, 2017).
- Moe, A. (2014). The Northern Sea Route: Smooth Sailing Ahead? *strategic analysis*, 38 (6): 784-802.
- Moe, A. (2016). Voyage through the North: Domestic and International Challenges to Arctic Shipping. In Kathrin Keil, S. K. (ed.) *Governing Arctic change; global perspectives*, pp. 257-274: Springer.
- Moe, A. (2017). *Interview conducted by the author*.
- North, R. N. (2000). Financing of the Northern Sea Route Infrastructure: Russian Resolve and Possible International Contributions. In Ragner, C. L. (ed.) *The 21st Century-Turning Point for the Northern Sea Route?*, pp. 197-203. Dordrecht: Kluwer Academic Publishers.
- NOVATEK. (2012). *NOVATEK and ROSATOM enter into cooperation agreement*.
- NSRIO. (2017). *Traffic volume on the NSR increased in 2016*. Available at: <http://www.arctic-lio.com/node/264> (accessed: February 14, 2017).
- Østreng, W. (1999). *The natural and societal challenges of the Northern Sea Route: a reference work*: Springer Science & Business Media.
- Østreng, W. (2010). *The Northern Sea Route and Jurisdictional Controversy*. Available at:

<http://www.arctis-search.com/tiki-index.php?page=Northern+Sea+Route+and+Jurisdictional+Controversy#534>
(accessed: March 20, 2017).

- Østreng, W., Eger, K. M., Fløistad, B., Jørgensen-Dahl, A., Lothe, L., Mejlænder-Larsen, M. & Wergeland, T. (2013). *Shipping in Arctic waters: a comparison of the Northeast, Northwest and trans polar passages*: Springer Science & Business Media.
- Oye, K. A. (2015). The mitigation of Anarchy: The conditions for cooperation in world politics. In Jervis, R. A., R. J. (ed.) vol. 12 *International politics: enduring concepts and contemporary issues*, pp. 67-79. New Jersey: Pearson Higher Ed.
- Pettersen, T. (2011). Putin sees bright future for Arctic transport. *Barents Observer*.
- Pettersen, T. (2013, December 19). Northern Sea Route no alternative to Suez – Deputy Minister *Barents Observer*.
- Pettersen, T. (2014a, May 21). China to get better terms on Northern Sea Route. *Barents Observer*.
- Pettersen, T. (2014b). Northern Sea Route traffic plummeted. *Barents Observer*.
- Purver, R. G. (1989). Arctic security: the Murmansk Initiative and its impact. In *Soviet Foreign Policy*, pp. 182-203: Springer.
- Ragner, C. L. (ed.) (2000a). *The 21st Century-Turning Point for the Northern Sea Route?* Dordrecht: Kluwer Academic Publishers. 307 pp.
- Ragner, C. L. (2000b). The Northern Sea Route—Commercial Potential, Economic Significance, and Infrastructure Requirements. *Post-Soviet Geography and Economics*, 41 (8): 541-580.
- Ragner, C. L. (2000c). Northern Sea Route cargo flows and infrastructure—present state and future potential. *FNI report*, 13: 2000.
- Roberts, K. (2015). Why Russia will play by the rules in the Arctic. *Canadian Foreign Policy Journal*, 21 (2): 112-128.
- Roi, M. L. (2010). Russia: The Greatest Arctic Power? *Journal of Slavic Military Studies*, 23 (4): 551-573.
- Rosen, Y. (2015, May 26). Top Arctic official says cooperation key for Arctic Council under US leadership *Alaska Dispatch News*.
- Sergunin, A. (2015). *Russia in the Arctic: Hard Or Soft Power?*, vol. 149: Columbia University Press.

- Solski, J. J. (2013). New developments in Russian regulation of navigation on the Northern sea route. *Arctic Review*, 4 (1).
- Staalesen, A. (2012, December 03). Yamal LNG ahead of schedule. *Barents Observer*.
- Staalesen, A. (2013). *Opening the Northern Sea Route administration*. Available at: <http://barentsobserver.com/en/arctic/2013/03/opening-northern-sea-route-administration-21-03>.
- Staalesen, A. (2014a, May 22). China's biggest Arctic project. *Barents Observer*.
- Staalesen, A. (2014b, March 27). Gas giants with Yamal deal. *Barents Observer*.
- Staalesen, A. (2014c, November 11). To Yamal with world's most powerful LNG carriers. *Barents Observer*
- Staalesen, A. (2016, February 16). Russia's Northern Sea Route saw downturn in cargo transits in 2015 *adn.com*.
- Staalesen, A. (2017, March 29). Norilsk Nickel opens new Murmansk terminal, says it will boost Arctic shipments. *Barents Observer*.
- Times, T. M. (2014, 7 November). Chinese Banks Ready to Invest \$10 Billion in Yamal LNG. *The Moscow Times*.
- Trenin, D. & Baev, P. (2010). *The Arctic: A View from Moscow*. Washington, DC: Carnegie Endowment for International Peace.
- UNCLOS. (1982). *United Nations Convention on the Law of the Sea* Available at: www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf.
- V.Verzhbitsky, T. S., E.Frantzen, A.Little, S.D.Sokolov and M.I.Tuchkova. (2008). *Russian Chukchi Sea*. Available at: <http://www.geoexpro.com/articles/2008/03/russian-chukchi-sea>.
- Waltz, K. N. (2001). *Man, the State, and War: A Theoretical Analysis*: Columbia University Press.
- Waltz, K. N. (2010). *Theory of international politics*: Waveland Press.
- Yoon, Y. (2009). Leosiaui buggeugjiyeog-e daehan haeyang-anbo jeonlyag: Buggeughae gaebalgwa han-leo haeyanghyeoblyeog-eul jungsim-eulo [Maritime Security Strategy for the Arctic Region of Russia: Focusing on Arctic Sea Development and Korea - Russia Maritime Cooperation]. *Yonsei University East-West Research Institute, 東西研究*, 21 (2).

Young, O. R. (2011). The future of the Arctic: cauldron of conflict or zone of peace?
International Affairs, 87 (1): 185-193.



Norges miljø- og biovitenskapelig universitet
Noregs miljø- og biovitenskapelige universitet
Norwegian University of Life Sciences

Postboks 5003
NO-1432 Ås
Norway