

Global Warming and Security: The Security Implications for NATO and the EU of a Melting Polar Ice Cap in the High North

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Introduction

Environmental changes will have an impact on global and regional security communities. This article will examine the security challenges posed by the melting of the polar ice cap in the High North. Many NATO and EU members have manifest interests in this region, and parts of the Arctic belong to the NATO treaty area. Official documents, political statements, and actions already taken show that the most of the Nordic countries address the effects of climate change on their region's security in specific policies and national security concepts. Moscow has sparked concerns in the West with displays of its will and capabilities—for example, flying strategic bomber patrols over the Arctic, or the hoisting the Russian flag on the sea bed below the North Pole. Despite a high degree of media awareness and intensive public discussions about spheres of influence and a possible return to classical geopolitics, both NATO and the EU try to avoid sending signals that would indicate that they regard regional security questions in the Arctic as a matter of deep concern or urgency. The motivation behind this article is to investigate this disconnect, to explain it, and to draw conclusions that argue for or against changes in the present posture. If their affected members states do not securitize the threats and vulnerabilities related to the melting polar ice cap in the High North within the organizations, NATO and the EU will lack the incentive and legitimacy to adapt their security policies and strategies in order to address the evolving situation.¹ Having said this, the question of the research

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¹ Barry Buzan and Ole Wæver, *Regions and Powers: The Structure of International Security*, Cambridge Studies in International Relations 91 (Cambridge: Cambridge University Press, 2003), 491.

undertaken here is whether NATO and/or the EU are required to change their current security policies and concepts in order to address the challenges and risks imposed by the melting of the Arctic ice cap.

This essay is intended to foster an ongoing academic and public discussion on the security risks posed by global warming as well as to provide input to the strategic policy-shaping and decision-making process. Isolated aspects of Arctic geopolitics are frequently addressed within political circles, the media, and in scientific publications. Hundreds of documents and articles are publicly available that allow one to investigate the subject in all its details. Despite this tremendous amount of information, the research community admits that the picture remains incomplete. The gap in understanding Arctic security issues has been acknowledged by various academic institutions and individuals. For example, in 2008 the Norwegian Institute for Defense Studies (*Institutt for forsvarsstudier*, or IFS) assumed a lead role in a five-year research program that addresses security conflicts and cooperation in the High North from various perspectives.² The Stockholm International Peace Research Institute (SIPRI) launched a three-year project entitled “Managing Competition and Promoting Cooperation in the Arctic” that aims to identify and analyze the key political and security issues, political dynamics, main security challenges, and the future of existing security frameworks.³

No doubt, this essay cannot compete with the research currently being conducted by various security institutes. Nevertheless, it seeks to contribute to the overall discussion while focusing on short-term policy implications for NATO and the EU instead of advising long-term policies for the Arctic community. The facts and information presented are derived from a study of the relevant literature. The article does not constitute an attempt to chart a course for future studies. It makes the assumption that the environment in the High North will continue to alter dramatically, and that this will accompany a rise of new challenges and threats. Neither the exact extent of global warming nor the precise timeline for its environmental effects are of fundamental relevance in order to answer the research question at hand here. The fact that other actors responded to the Arctic melting process by implementing strategies for the promotion of their own interests in the High North provides enough incentive to ask, “*Quo vadis, NATO? Quo vadis, EU?*” In order to answer the research question, the article’s first section offers a closer look towards the High North, examining the expected changes in the region and their possible impact on security issues. The second chapter addresses the level of individual actor—national governments and

² “Geopolitics in the High North: Multiple Actors, Norwegian Interests,” The Fridtjof Nansen Institute (FNI); available at http://fni.no/doc&pdf/Geonor_digital.pdf.

³ “Managing Competition and Promoting Cooperation in the Arctic,” Stockholm International Peace Research Institute (SIPRI) (Stockholm, 2011); available at <http://www.sipri.org/research/security/arctic>.

consortia—and investigates their ideational presets, spheres of influence, expected gains and other interests, positions, security strategies, actions, areas and level of cooperation, as well as their degree of dependency. Current disputes over territorial claims and demands for access to natural resources have raised tensions and trigger fears that the West and Russia might fall back into rivalry and struggle for supremacy in the region. The next section brings the single actors together and investigates how cooperation, multi-lateralism, and dispute resolution work. It points out in which areas and to what extent policy coordination and collaboration among those actors take place and how the international legal system provides tools for solving territorial disputes. Having shown what the other actors do or intend to do, the essay turns toward NATO and the EU. The next section identifies the organizations' positions and roles, their current strategy, and the significance of Arctic security as proclaimed and as practically embedded. Overlaying NATO and the EU's security policies and strategies with the analysis offered in previous sections of the article, the last part of this paper culminates in the answer to the research questions. It points out the degree of pressure for NATO and the EU to alter decisions at the strategic level in order to address the challenges and risks imposed by a melting polar ice cap in the High North.

The term “security” is widely referred to in political statements, in public discussions, and in academic work. Security can be regarded as a “degree of protection” or as a “form of protection” against non-desirable influences or events.⁴ Security has two dimensions: “real” security and perceived security. Each analysis and categorization of security depends on ideas about the objects that are to be protected. To give some examples, the term “security” can be applied to individual human beings as well as to states, organizations, systems, companies, etc. With reference to the subject at hand, this essay predominantly addresses the level of states and international organizations, not that of individuals. The research concentrates on stabilities and instabilities in the world of international relations. Taking the concept of security with its two predominant views into account, this work selects a path between the narrow and the wide approach.⁵ It addresses the military, political, and economic security sectors, including energy security. For the sake of concision, and to avoid a fundamental discussion of where security starts and where it ends, the sectors of environmental and human security must remain outside the scope of this analysis. Therefore, challenges like the loss of biodiversity or food security will not be addressed. By doing so, this

⁴ “Security,” en.wikipedia.org; available at <http://en.wikipedia.org/w/index.php?oldid=415830112>.

⁵ Graeme P. Herd and Pål Dunay, “International Security, Great Powers and World Order,” in *Great Powers and Strategic Stability in the 21st Century: Competing Visions of the World Order*, ed. Graeme P. Herd (New York: Routledge, 2010), 10–11.

work acknowledges the argument as expressed by Stephen E. Sachs, that “there is a significant danger in defining security as including everything that’s good in life—or everything that’s considered ‘necessary’,” and that there “are many values that policymakers might pursue, but security is only one of them, and cannot encompass the whole.”⁶

A New Arctic in a Changing World

Environmental Changes in the High North

For more than a century, the Arctic and the Antarctic have attracted the attention of scientists and travelers from around the world. 2007–08 marked the third International Polar Year. Despite intensive research and a fundamental agreement between academics about the significance of the polar regions for the global climate system, scholars were not able to develop persuasive forecast models for the Arctic climate. Intensified survey activity has taken place in order to fill the gap. Under the auspices of the World Meteorological Organization (WMO), several programs aim to generate the required datasets, in order to improve our knowledge of causes and effects and to raise the quality of predictions.⁷

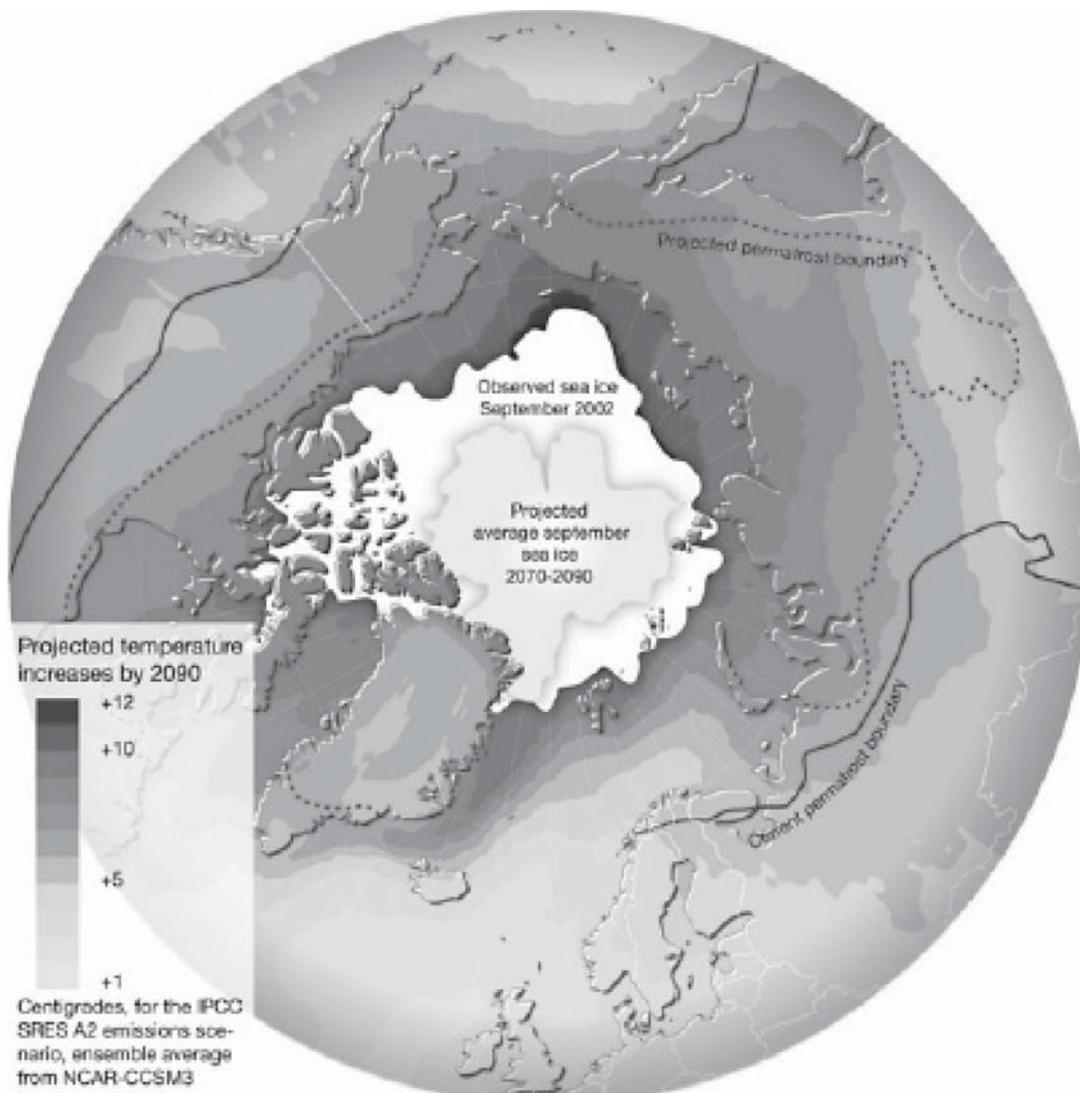
The polar regions are linked to the rest of the Earth’s climate system through atmospheric exchange and ocean circulation. The annual surface temperature across the globe is rising. Arctic temperature change is a complex phenomenon. In addition to the general increase in temperature, scientists have identified local hot spots. Areas with permafrost or seasonally frozen ground shrink, with immense outcomes for flora and fauna, land erosion, release of stored carbon dioxide and methane into the atmosphere, as well as implications for human activities, e.g. pipeline construction and maintenance. While Greenland’s ice sheet thins below an altitude of 1200 meters, it thickens above this level. In total, this leads to an increase of the country’s land ice mass. The maritime environment shows a different picture: “over the period 1978–1996, Arctic sea ice decreased by 2.8 percent per decade, or 34,300 km² per year. These reductions took place in all seasons and over the year as a whole, but the losses were greatest in the spring and smallest in the autumn. ... Since the mid-1990s, there have been several years with record low summer-ice extents.”⁸

⁶ Stephen E. Sachs, “The Changing Definition of Security,” paper presented at Oxford University, Merton College, Department of International Relations, 2003; available at http://www.stevesachs.com/papers/paper_security.html.

⁷ World Meteorological Organization (WMO), *Polar meteorology. Understanding global impacts*, WMO-No. 1013 (Geneva: WMO, 2007).

⁸ Ibid.

Figure 1: Projected Temperature Increases in the Arctic Due to Climate Change, 2090⁹



⁹ UNEP/GRID-Arendal, Projected temperature increases in the Arctic due to climate change, 2090 (NCAR-CCM3, SRES A2 experiment), *UNEP/GRID-Arendal Maps and Graphics Library*; available at <http://maps.grida.no/go/graphic/projected-temperature-increases-in-the-arctic-due-to-climate-change-2090-ncar-ccm3-sres-a2-experiment>.

Frequently, the scientific community and the media inform the public about new forecasts of the rise of the global average temperature within the coming decades.¹⁰ The World Climate Research Program (WCRP) commented in a 2010 white paper on various models and studies. While admitting a certain degree of concern about the validity of today's predictions, the document underlines the fact that all simulations indicate a decrease of the Arctic sea ice cap, and that a number of studies even suggest that a total loss may occur in the early to mid-twenty-first century.¹¹ The Potsdam Institute for Climate Impact predicted in an article in 2010 "a predominantly ice-free Arctic Ocean in summer ... before the end of this century."¹² Many sources indicate that the Arctic sea ice melts down even faster than had been previously predicted,¹³ while few authors report contradictory results.¹⁴

"Climate change is a long-term process that will trigger a range of multi-dimensional demographic, economic, geopolitical, and national security issues with many unknowns and significant uncertainties."¹⁵ If the effects of climate change are regar-

¹⁰ Ola M. Johannessen and Martin W. Miles, "Critical Vulnerabilities of Marine and Sea Ice-based Ecosystems in the High Arctic," *Regional Environmental Change* 11, Supplement 1 (2011); available at <http://dx.doi.org/10.1007/s10113-010-0186-5>. World Meteorological Organization (WMO), *WMO Statement on the Status of the Global Climate in 2009*, WMO-No. 1055 (Geneva: WMO, 2010). David Shukman, "Four degrees of warming 'likely'," *BBC News* (28 September 2009); available at <http://news.bbc.co.uk/go/pr/fr/-/2/hi/science/nature/8279654.stm>.

¹¹ World Meteorological Organization (WMO), *Rapid Loss of Sea Ice in the Arctic*. Document JSC-31/Doc. 4.2/1 (1.2.2010), ed. Vladimir Kattsov et al., WMO/ICSU/IOC/World Climate Research Programme /Joint Scientific Committee (15–19 February 2010); available at http://www.wcrp-climate.org/jsc31/documents/jsc-31clic_artic_4.2.pdf.

¹² Johannessen and Miles, "Critical Vulnerabilities," 1.

¹³ Jonathan Amos, "Arctic summers ice-free 'by 2013'," *BBC News* (12 December 2007); available at <http://news.bbc.co.uk/2/hi/science/nature/7139797.stm>. WMO, *WMO Statement on the Status*, 20. Scott G Borgerson, *The National Interest and the Law of the Sea*, Council on Foreign Relations Special Report 46 (New York: CFR, 2009), 32; available at http://www.ciaonet.org/pbei/cfr/0016458/f_0016458_14229.pdf. Richard Black, "Arctic sea ice melt 'even faster'," *BBC News* (18 June 2008); available at <http://news.bbc.co.uk/2/hi/science/nature/7461707.stm>. A. D. Romig, Jr., George A. Backus, and Arnold B. Baker, *A Deeper Look at Climate Change and National Security*, Sandia Report, SAND 2011-0039, (Albuquerque/Livermore: Sandia National Laboratories, March 2010), 8; available at https://cfwebprod.sandia.gov/cfdocs/CCIM/docs/Climate_Change_and_National_Security.pdf.

¹⁴ Richard Black, "Pause in Arctic's melting trend," *BBC News* (17 September 2009); available at <http://news.bbc.co.uk/go/pr/fr/-/2/hi/science/nature/8261953.stm>. "Competing Claims on the Arctic Circle," STRATFOR (24 September 2010); available at http://www.stratfor.com/graphic_of_the_day/20100924_competing_claims_arctic_circle.

¹⁵ Romig Jr., Backus, and Baker, *A Deeper Look at Climate Change*, 3.

ded as threats, the extent and the speed of the change determines the vulnerability of states and their populations as well, and the degree of negative impacts on them. In other words, climate change *per se* is neither purely good nor totally bad. Global warming in the High North offers certain chances for economic development, but it is also correlated with real and perceived risks.

Scientists conclude that the Copenhagen Accord is insufficient to prevent harm or loss in cases of disruption or damage to ecosystems, food production, economic development, and human cultures.¹⁶ The discussion about an acceptable level of human induced climate change goes beyond the scope of this work, as it addresses the problem of climate change on a global scale and not in the Arctic as a region in particular.

As previously stated, this article will not focus on the consequences of the predicted loss of Arctic sea-ice on ecosystems, maritime environment, food security, human rights, or human cultures. In order to address the central security concerns related to NATO and the EU, it concentrates on the issues of political and economic relations between key actors in the High North. The purpose of this essay is not to challenge the various scientific models that predict climate change in the Arctic region. In order to find an answer to the given research question, it seems to be sufficient to make the assumption that the observed melt-down tendency will continue, and that major parts of the Arctic Ocean will allow increased economic activities like enhanced fishery activities, exploration and exploitation of oil and gas deposits, as well as maritime transportation emerging along new sea lanes of communication (SLOC) that link the Atlantic and Pacific.¹⁷ The global economy depends on reliable transport routes. The oceans are the backbone for the long-range transport of mass goods. Vessels navigating along the Northwest Passage (north of Alaska and the Canadian mainland) might shorten their journey significantly in terms of distance and time compared to traditional seaways.¹⁸ Even the Northeast Passage appears to promise an advantage.

¹⁶ William L. Hare, Wolfgang Cramer, Michiel Schaeffer, Antonella Battaglini and Carlo C. Jaeger, "Climate Hotspots: Key Vulnerable Regions, Climate Change and Limits to Warming," *Regional Environmental Change* 11, Supplement 1 (2011); available at <http://dx.doi.org/10.1007/s10113-010-0195-4>.

¹⁷ Scott G. Borgerson. *The National Interest and the Law of the Sea*, 4. Romig Jr., Backus, and Baker, *A Deeper Look at Climate Change*, 15–18.

¹⁸ "For example, the distance from London to Tokyo via Panama is approximately 23,000 km. Through the Suez Canal it is approximately 21,000 km. Through northern Canada, it is approximately 16,000 km." Cleo Paskal, "How climate change is pushing the boundaries of security and foreign policy," Chatham House Briefing Paper, (London: Royal Institute of International Affairs, 2007), 6; available at http://consiglio.regione.emilia-romagna.it/biblioteca/pubblicazioni/MonitorEuropa/2007/Monitor_10/Dibattito/Clima_Politica_Estera.pdf.

This route tracks along the north of Russia, linking the North Atlantic Ocean with the Pacific Ocean. It is commonly referred to as the shortest seaway between Europe and the Pacific Ocean.¹⁹

Figure 2: Transport Routes in the High North²⁰



¹⁹ Johannesen and Miles, “Critical Vulnerabilities,” 8.

²⁰ “New Building Blocks in the North. The Next Step in the Government’s High North Strategy,” Norwegian Ministry of Foreign Affairs (Oslo/Tromsø: 12 March 2009), 52; available at http://www.regjeringen.no/upload/UD/Vedlegg/Nordområdene/new_building_blocks_in_the_north.pdf.

News headlines feed the perception that new sea routes through the Arctic are considerably cheaper, shorter, and faster than the traditional ones, and that these waters will be open for shipping soon. In consequence, many believe that a dramatic change in global trade patterns is on the horizon, with dramatic implications for other regions and other actors, such as merchant hubs like Singapore. Contemporary academic work takes the latest climate change forecasts into account and considers global economic trends. This draws a picture that deviates from widespread starry-eyed perceptions about near-future Arctic trade routes (see Figure 3 below). The major new findings are:

- Northern sea routes are not always the shortest ones between Europe and the Pacific
- Shipping in the High North will continue to struggle with sea ice, and therefore requires ice-strengthened ships
- Intra-Arctic shipping activities will expand continuously
- Northern transit routes will not become attractive for commercial shipping between the North Atlantic Ocean and the Pacific Ocean, especially not in the near future
- Most predictions indicate that the Northeast Passage will open sooner than the Northwest Passage.²¹

²¹ Svend Aage Christensen, "Are the northern sea routes really the shortest? Maybe a too rose-coloured picture of the blue Arctic Ocean," Danish Institute for International Studies (DIIS) Brief (March 2009), 2, 5; available at http://www.ciaonet.org/pbei/diis/0015955/f_0015955_13834.pdf.

Figure 3: Port Distances Along Alternative Sea Routes²²

Are the northern sea routes really the shortest?
Distance in km between harbours using various southern and northern routes

Route	Panama Canal	Northwest Passage	Northeast Passage	Suez and Malacca
London - Yokohama	23.300	15.930	13.841	21.200
Marseilles - Yokohama	24.030	16.720	17.954	17.800
Marseilles - Singapore	29.484	21.600	23.672	12.420
Marseilles - Shanghai	26.038	19.160	19.718	16.460
Rotterdam - Singapore	28.994	19.900	19.641	15.750
Rotterdam - Shanghai	25.588	17.570	15.793	19.550
Hamburg - Seattle	17.110	15.270	13.459	29.780
Rotterdam - Vancouver	16.350	14.330	13.445	28.400
Rotterdam - Los Angeles	14.490	15.790	15.252	29.750
Gioia Tauro (Italy) - Hongkong	25.934	24.071	21.556	14.093
Barcelona - Hongkong	25.044	23.179	20.686	14.693
New York - Shanghai	20.880	17.030	19.893	22.930
New York - Hongkong	21.260	18.140	20.982	21.570
New York - Singapore	23.580	20.310	23.121	18.770

Marginally longer route Shortest route

All numbers calculated by Frédéric Lasserre in SIG Mapinfo, except the numbers for the Northeast Passage through the Kara Strait south of Novaya Zemlya which have been calculated in Google Earth by Svend Aage Christensen.

Emerging Energy Demands

Following the notion that power “is the ability to attain the outcomes one wants, and the resources that produce it vary in the different contexts,”²³ it seems to be likely that further shortages and changes in allocations of scarce natural resources—e.g. fossil fuels—will spark enhanced competition between relevant actors, and that this might go along with the possibility of changes in the distribution of power on the regional and global scale.²⁴ The World Energy Outlook 2010 (WEO-2010) provides medium- to long-term energy projections. Using the latest version of the World Ener-

²² Ibid.

²³ Joseph S. Nye, Jr., “The Future of American Power: Dominance and Decline in Perspective,” *Foreign Affairs* 89:6 (November/December 2010): 2–13; available at <http://www.proquest.umi.com.ezproxy.by.edu>.

²⁴ Tomas Ries, “Global Warming,” in *Potential Global Strategic Catastrophes. Balancing Transnational Responsibilities and Burden-sharing with Sovereignty and Human Dignity*, ed. Nayef R.F. Al-Rodhan (Zürich/Berlin: LIT Verlag, 2009), 125.

gy Model (WEM), the International Energy Agency (IEA) differentiates between three scenarios in order to forecast corridors for energy-related trends²⁵ like future oil prices, the world's primary energy demand, the world oil production, coal-fired electricity generation, or renewable primary energy demand.²⁶ Keeping the probable location of unexplored hydrocarbon deposits in the Arctic in mind, the following key findings of the WEO-2010 should be noticed: "In the New Policies Scenario—the central scenario this year—world primary energy demand increases by 36% between 2008 and 2035, or 1.2% per year on average. ... Oil remains the dominant fuel in the primary energy mix to 2035. ... Natural gas is set to play a central role in meeting the world's energy needs for at least the next two and a half decades. ... Oil demand (excluding biofuels) continues to grow steadily in the New Policies Scenario, reaching about 99 million barrels per day by 2035—15 mb/d up on 2009."²⁷ With respect to the international community's attempt to limit the global average temperature rise, the WEO-2010 predicts, "The costs of getting on track to meet the climate goal for 2030 has risen by about \$1 trillion compared with the estimated costs in last year's Outlook. ... The timidity of current commitments has undoubtedly made it less likely that the 2°C goal will be achieved."²⁸ While predictions indicate a rising demand for energy due to the recovery of Western economies and the needs of emerging economic powers like China, India, or Brazil, the sustainable supply of fossil fuels might be threatened by political instability within producing regions and along transport routes. The Arctic offers an alternative to other energy regions. While the expected resources are of a significant scale, the volume of future oil and gas extraction in the High North remains a function of multiple variables and leaves us with a high level of uncertainty.

²⁵ International Energy Agency (IEA), "World Energy Model – Methodology And Assumptions," OECD/IEA (2010); available at http://www.worldenergyoutlook.org/docs/weo2010/World_Energy_Model.pdf. International Energy Agency (IEA). "World Energy Model," OECD/IEA, 2011), 3; available at <http://www.worldenergyoutlook.org/model.asp>.

²⁶ International Energy Agency (IEA), "World Energy Outlook 2010, Key Graphs," available at http://www.worldenergyoutlook.org/docs/weo2010/key_graphs.pdf. And IEA, "World Energy Outlook 2010, Presentation to the press" (9 November 2010); available at http://www.worldenergyoutlook.org/docs/weo2010/weo2010_london_nov9.pdf.

²⁷ International Energy Agency (IEA), "World Energy Outlook 2010 Factsheet, What does the global energy outlook to 2035 look like?" (2010); available at <http://www.worldenergyoutlook.org/docs/weo2010/factsheets.pdf>.

²⁸ International Energy Agency (IEA), "World Energy Outlook 2010 Factsheet," 6.

Figure 4: Probable Location of Unexplored Hydrocarbon Deposits in the Arctic²⁹



Arctic Actors

Russian Federation

Russia has faced rapid demographic and economic changes since the dissolution of the Soviet Union. Under Putin and Medvedev's presidencies, Russia redesigned its political, military, and economic systems. In foreign relations, Moscow established a pragmatic strategy towards the West that combines confrontation in some cases and collaboration in others, while in parallel strengthening its ties with Asia. Currently the country has regained its self-assertiveness as a major power. From time to time this leads Moscow to emphasize its position by flexing its muscles in the High North.

²⁹ USGS Circum-Arctic Resource Appraisal, available at <http://energy.usgs.gov/arctic/>.

The country's economic health is less robust. Russia's unproductive and inefficient energy sector faced serious structural problems that had consistently been masked by high global demand. While large volumes of oil and gas were exported, the country has failed to reinvest in its required infrastructure and technology resources, as well as to create an efficient energy market.³⁰ Russia's economy remains highly dependent on oil and gas, while the nation's developed natural gas fields face exhaustion. Russia lacks flexibility to alter the direction of its energy exports (e.g., to the Far East). New pipeline systems and especially the application of liquefied natural gas (LNG) technology can provide an answer, but gas pipelines mean large investments, and Russian companies lack the capabilities for deepwater LNG production in extreme latitudes.³¹ This being said, there is good reason to challenge Russia's self-proclaimed status as an energy superpower. President Dmitry Medvedev analyzed the nation's deficits and concluded in his 2009 "Go Russia!" article: "In the next few decades Russia should become a country, the prosperity of which will depend not so much on raw materials but its intellectual resources..." Medvedev continued with the proclamation of strategic priorities, the first of which addresses the efficiency of production, transportation, and energy use as well as the development of new types of fuel.³² In order to streamline the energy sector and to improve its competitive position on the global markets, Russia requires access to capital and technology. So far, the Putin/Medvedev axis has rejected liberal-oriented political and economic solutions. Academics and policy makers try to forecast in which direction Russia's political system and its economy will develop over the coming years. In 2010, New York University published a "Russia 2020" scenario paper that described the following three options: Working Authoritarianism, Bottom-Up Liberalization and Modernization, and Degeneration.³³ The dividing lines between the scenarios are drawn by their predicted outcomes in terms of economic strength and political reform. Access to natural resources and commodity price levels have played a significant role in the past, and might con-

³⁰ J. Robinson West, "Talking Business Facts about Europe's Gas Problems," *European Affairs* 10:1 (2009). Adnan Vatansever, *Russia's Oil Exports. Economic Rationale Versus Strategic Gains*, Carnegie Papers, Energy and Climate Program 116, Carnegie Endowment for International Peace (December 2010); available at http://www.carnegieendowment.org/files/russia_oil_exports.pdf; Vatansever, "A Russian Solution to Europe's Energy Problem," Carnegie Endowment for International Peace (10 January 2011); available at <http://www.carnegieendowment.org/publications/index.cfm?fa=view&id=42258>.

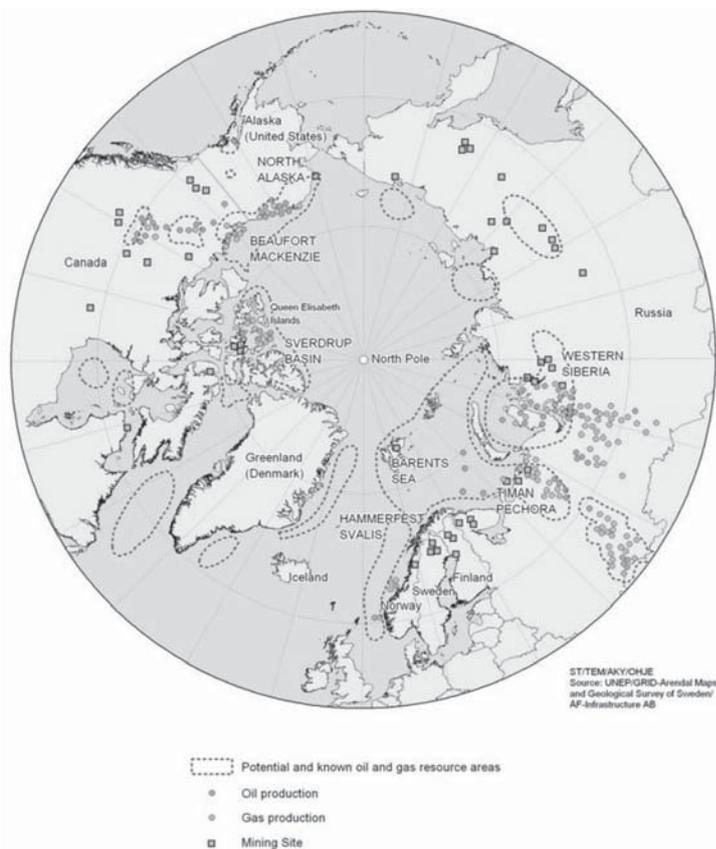
³¹ "Norway: A New LNG Player," STRATFOR (31 July 2008); available at http://www.stratfor.com/analysis/norway_new_lng_player.

³² Dmitry Medvedev, "Go Russia!" RT.com (11 September 2009); available at <http://rt.com/politics/official-word/dmitry-medvedev-program-document/print/>.

³³ New York University, *Russia 2020* (New York: New York University / School of Continuing and Professional Studies / Center for Global Affairs, Spring 2010); available at <http://www.scps.nyu.edu/export/sites/scps/pdf/global-affairs/russia-2020-scenarios.pdf>.

tinue to do so in the future. The present authoritarian Putin/Medvedev regime relies heavily on an omnipresent security apparatus and on the promise to care for the basic needs of the population. Both depend on revenues from oil and gas. In this context, the assumption can be made that Russia's ongoing exploration and exploitation of its natural resources in the Arctic holds high importance for the government as a means to access foreign capital and technology in order to ensure continued economic growth while avoiding internal pressure for political liberalization (see Figure 5). In other words, an early utilization of Arctic resources on a large scale would help the Kremlin to decouple economic and social challenges from liberal-oriented political reforms. And circumstances continue to maneuver the country in a favorable direction: "Russia would seem to be the likely hub of global economic expansion as the Arctic becomes economically accessible. With a border that spans over 160 degrees of the Arctic region, its side of the Arctic is opening to exploration faster than the North American/European side."³⁴

³⁴ Romig Jr., Backus, and Baker, *A Deeper Look at Climate Change*, 17.

Figure 5: Potential and Known Arctic Oil and Gas Deposits and Mines³⁵

During recent years, Moscow's main priorities for the Arctic were the accelerated exploration and exploitation of oil and gas deposits, expansion of the Exclusive Economic Zone, increased international cooperation in environmental protection, and a demonstration of military power.³⁶ As Pavel Baev writes, "By 2010, serious problems had emerged in all four of these areas, which can only partly be blamed on the global economic crisis."

What does this mean for the way the Russian Federation pursues its interests in the Arctic? Some years before, Moscow sparked concerns about a return of the Cold War pattern of relations when it emphasized its will to defend Russian citizens and business interests abroad and proclaimed its renewed sphere of influence. Following Russia's 2008 conflict with Georgia, Medvedev highlighted regions where Russia

³⁵ Finnish Prime Minister's Office, "Finland's Strategy for the Arctic Region," Prime Minister's Office Publications 8/2010 (Helsinki: Prime Minister's Office, 5 July 2010), 73; available at <http://www.geopoliticsnorth.org/images/stories/attachments/Finland.pdf>.

³⁶ Dmitri Trenin and Pavel K. Baev, *The Arctic: A View From Moscow*, (Washington, D.C.: Carnegie Endowment for International Peace, 2010), 27; available at http://carnegieendowment.org/files/arctic_cooperation.pdf.

has “privileged interests.”³⁷ Although he made no direct reference to the Arctic at that time, it should be understood that the High North—inside and outside its territorial borders—plays such a role.

Nevertheless, the Russian government was forced to acknowledge political, economic and military realities. Moscow altered its posture towards the West, as expressed by Foreign Minister Lavrov: “Finally, we all should step over ourselves and stop the unnecessary talk about ‘veto power outside the UN Security Council, about ‘spheres of influence’ and the like. We can very well do without all that, as there are more important things where we undoubtedly have common interests.”³⁸ Russia’s 2010 Military Doctrine avoids any reference to threats arising from the Arctic. Baev draws the following conclusion in his analysis of Moscow’s Arctic Policy: “Russia has reevaluated the risks of geopolitical competition in the Far North and now prefers a pattern of balanced cooperative behavior, as exemplified by the maritime border agreement with Norway.”³⁹ Despite this, it should be noted that Russia will continue to assert a visible military presence in the High North⁴⁰ and to use Arctic waters as a relative safe area to deploy its seaborne nuclear deterrence capabilities.⁴¹

This being said, the overall conclusion is that Russia’s interests in the Arctic are predominantly of an economic nature, and that the country applies an approach of pragmatic cooperation with foreign governments and non-governmental partners in order to gain its desired goals. This offers great potential for foreign companies to benefit from broader cooperation with Russia, even though Moscow’s authoritarian regime and previous setbacks leave investors with some uncertainty.⁴²

³⁷ Andrew E. Kramer, “Russia Claims its Sphere of Influence in the World,” *New York Times* (1 September 2008); available at http://www.nytimes.com/2008/09/01/world/europe/01russia.html?_r=1&pagewanted.

³⁸ Sergei Lavrov, “Russia and the World in the 21st Century,” *Russia in Global Affairs* 6:3 (2008): 17; available at http://kms1.isn.ethz.ch/serviceengine/Files/ISN/96338/ichapter-section_singledocument/C2DAF5EF-6CA0-4A57-8ABA-D1A2E73E1334/en/1.pdf.

³⁹ Pavel K. Baev, “Russia’s Arctic Policy: Geopolitics, Merchantilism and Identity-Building,” *Finnish Institute of International Affairs Briefing Paper No. 73* (2010); available at <http://www.upi-fiia.fi/fi/publication/162/>.

⁴⁰ “Russia: Aviation Brigade To Be Stationed In Alakurtti,” *STRATFOR* (1 October 2010); available at http://www.stratfor.com/sitrep/20101001_russia_aviation_brigade_be_stationed_alakurtti.

⁴¹ “Russia: Navy To Continue Arctic Nuclear Submarine Patrols,” *STRATFOR* (1 October 2010); available at http://www.stratfor.com/sitrep/20101001_russia_navy_continue_arctic_nuclear_submarine_patrols.

⁴² “Russia, U.K.: Lavrov and Miliband Play the ‘Great Game’,” *STRATFOR* (2 November 2009); available at http://www.stratfor.com/memberships/148198/analysis/20091102_russia_uk_lavrov_and_miliband_play_great_game.

Medvedev's "Go Russia!" slogan has already produced some outcomes: in January 2011, the international oil company BP and the national Russian oil company Rosneft announced the formation of a strategic global alliance. Their collaboration had started in 1998. Now, both companies had agreed to exchange share packages, to develop licensed oil field blocks in the South Kara Sea, to establish an Arctic technology center in Russia, and to continue their joint technical studies.⁴³

The United States

Until the end of the Cold War, the Arctic played an important role within U.S. politics. Since then, Washington's administrations lost much of their interest in the region. Forecasted environmental changes, the re-consolidation of the Russian Federation as a major power, and the rise of China and other emerging powers combined with a new approach to foreign and security policy followed by President Obama's administration bear high potential that the U.S. will reexamine its attitudes towards the High North. Indeed, "The U.S. National Security Council is now preparing a review of the U.S. policy in the Arctic, and that might lead to a reappraisal of U.S. interests in the region."⁴⁴

The Arctic region serves an important role for the U.S. in pursuing its national interests, namely security, wealth, economic growth, and power.⁴⁵ Therefore, it is in the country's interest to limit the maritime influence and the claims of other coastal states while at the same time enlarging its own legal and economic position.⁴⁶ Having said this, it appears perfectly logical to argue that the U.S. harms and marginalizes itself through its ongoing resistance to become a party of UNCLOS.⁴⁷ Limiting the argument to the matter of secured access to natural resources, one can also argue directly in the opposite direction. Despite its enormous demand for energy, the U.S. is far from facing any threatening shortage in fossil fuel supply. The country possesses more coal than any other state in the world, and coal presently covers more than half of the

⁴³ BP plc Press Release, "Rosneft and BP Form Global and Arctic Strategic Alliance," 14 January 2011; available at <http://www.bp.com/genericarticle.do?categoryId=2012968&contentId=7066710>. Tony Hayward, "Russia and the Energy World – Challenges of a new decade," speech at the Academy of National Economy, Moscow, 21 January 2010; available at <http://www.bp.com/genericarticle.do?categoryId=98&contentId=7059344>.

⁴⁴ "Geopolitics in the High North. Multiple Actors. Norwegian Interests," Work Package 3 Description.

⁴⁵ Scott G. Borgerson, "Arctic Meltdown: The Economic and Security Implications of Global Warming." *Foreign Affairs* 87:2 (2008): 63–77; available at <http://www.ciaonet.org/journals/fa/v87i2/0000814.pdf>.

⁴⁶ Borgerson. *The National Interest and the Law of the Sea*, 9–10.

⁴⁷ Scott G. Borgerson. "Arctic Meltdown"; Borgerson, *The National Interest and the Law of the Sea*, 22 and 33–35.

nation's electric power generation. In addition, the U.S. has considerable amounts of natural gas at its disposal. Crude oil is imported into the U.S. to a larger extent than necessary. The U.S. is blessed with the world's largest known oil shale deposits. The RAND Corporation estimates this reservoir at "between 500 billion and 1.1 trillion barrels of useful fuels. The mid-point of this range is 800 million barrels, which is more than triple the oil reserves of Saudi Arabia."⁴⁸ Until now, oil shale resources play a minor role in the U.S. energy sector, but private business shows interest and willingness to move toward utilizing this energy source.⁴⁹ On top of this, the U.S. is (according to some estimates) believed to possess methane hydrate resources on a tremendous scale, meaning that the country could run for "thousands of years" on these supplies.⁵⁰ In this respect, the Arctic Ocean and possible U.S. claims on its continental shelf attracts attention. But so far neither the exact potential of these deposits has been determined, nor has the technology to utilize them been developed, nor has their economic viability been assessed. To shorten a long story, unless the U.S. does not commit itself to a significant reduction of greenhouse gas emission levels, there is no pressure to alter its given energy mix and to increase its use of less problematic forms of fossil fuels and/or forms of renewable energy. The U.S. will secure its claims against others in the Arctic, but so far they are not being challenged, and from the perspective of energy security there is no need for Washington to rush to the High North.

Canada

As Canada's 2009 Northern Strategy emphasizes, the Arctic plays a central role for the nation: "The North is a fundamental part of our heritage and our national identity, and it is vital to our future."⁵¹ Despite this claim, Canadian security planners lost their focus on the region after the Cold War. Over the last decade, the topic of Arctic security has regained a high place on the political agenda in the media. Huebert identifies four driving factors for this: post-9/11 perceptions of terrorist threats; improved accessibility of the region caused by climate change; increased exploration and exploitation of the Arctic's natural resources; and a revived public interest in

⁴⁸ James T. Bartis. "Research Priorities for Fossil Fuels," testimony presented before the Senate Energy and Natural Resources Committee on 5 March 2009 (Santa Monica, CA: RAND Corporation, Publication CT-319, March 2003), 5; available at http://www.rand.org/content/dam/rand/pubs/testimonies/2009/RAND_CT319.pdf.

⁴⁹ *Ibid.*, 6.

⁵⁰ *Ibid.*, 4.

⁵¹ Government of Canada, *Canada's Northern Strategy Abroad*, 2010; available at http://www.international.gc.ca/polar-polaire/assets/pdfs/CAFP_booklet-PECA_livret-eng.pdf.

Arctic sovereignty and security issues.⁵² Canada's Northern Strategy determines four priority areas in order to address the region: sovereignty, social and economic development, environmental protection, and governance. In terms of military and law enforcement issues, Canada has to reinvent and reinforce its Arctic capacities: "There has been significant discussion and study of the twin issues of Arctic sovereignty and security. The emerging consensus is that there is a need to improve both surveillance and enforcement capabilities for northern operations. There is also agreement that the Canadian Forces in general and the navy specifically need to relearn how to have a greater significance in the Arctic."⁵³

Canadians have a tradition of cooperation in the High North, especially with its Allied partners in terms of security. In 2010, Denmark and Canada signed a "Memorandum of Understanding on Arctic Defense, Security, and Operational Cooperation" in order to promote enhanced collaboration.⁵⁴ Several weeks later, the government released a statement on its Arctic Foreign Policy, which is the international dimension of the northern strategy. Ottawa named the U.S. as its "premier partner in the Arctic" and committed itself to closer international cooperation, especially with Russia, Norway, Denmark, Sweden, Finland, and Iceland.⁵⁵ Progress on outstanding boundary issues has been given the highest priority.⁵⁶

Norway

In general, Norway prosecutes the following interests in the Arctic: Protection of national sovereignty, jurisdiction and exclusive rights; stability and low tension; economic growth; sustainable resource management; energy security; environmental concerns and climate change; managing the relationship with Russia; and involving Western countries.⁵⁷

⁵² Rob Huebert, "Renaissance in Canadian Arctic Security?" *Canadian Military Journal* (Winter 2005–2006): 27.

⁵³ Rob Huebert, "Canadian Arctic Maritime Security: the Return to Canada's Third Ocean," *Canadian Military Journal* (Summer 2007): 9–16.

⁵⁴ Government of Canada, "Canada And Denmark Sign Arctic Cooperation Arrangement," Press Release (14 May 2010), NR-10.042; available at <http://www.forces.gc.ca/site/news-nouvelles/news-nouvelles-eng.asp?cat=00&id=3376>.

⁵⁵ Government of Canada, Statement on Canada's Arctic Foreign Policy. Exercising Sovereignty and Promoting Canada's Northern Strategy Abroad (Ottawa, 2010), 25; available at http://www.international.gc.ca/polar-polaire/assets/pdfs/CAFP_booklet-PECA_livret-eng.pdf.

⁵⁶ Government of Canada, "Address by Minister Cannon at Launch of Statement on Canada's Arctic Foreign Policy," Press Release (20 August 2010), No. 2010/57; available at <http://www.international.gc.ca/media/aff/speeches-discours/2010/2010-057.aspx?lang=eng>.

⁵⁷ "Geopolitics in the High North: Multiple Actors, Norwegian Interests," Work Package 8 Description.

With its 2006 High North Strategy, the Norwegian Government addressed the region as “the most important strategic priority area in the years ahead” and initiated a whole-government approach for developing the region.⁵⁸ Seven priority areas were formulated, and twenty-two specific action items set in place. The 2009 strategy update reviewed the process and confirmed the increased activity and presence as well as sustainable economic and social development in the High North.⁵⁹ The underlying assumption for the Norwegian government’s policy is that the country should avoid isolation, and should instead pursue far-reaching partnerships: “Strengthened international cooperation in the north—both circumpolar cooperation and cooperation with Russia in particular—will in turn be beneficial for development in Northern Norway.”⁶⁰ In terms of foreign policy, this means that the relationship between Moscow and Oslo is the key to success. Norway has particular interests in solving the issues involving the maritime delimitation line with Russia, in overcoming both countries’ controversies concerning the Svalbard Treaty, and in achieving a positive decision in view of the outer limits of the Norwegian continental shelf.⁶¹ Besides bi- and multilateral relations, the High North Strategy highlights the areas of knowledge development, surveillance, emergency response, maritime safety, offshore and onshore business development, infrastructure, sovereignty, and safeguards for the indigenous people.

While Norway seeks close international cooperation, the country still resists joining the EU. In the wake of the Greek economic crisis, domestic support for EU membership dropped significantly, to 30.6 percent of the population in March 2010.⁶² For the foreseeable future, the EU seems to be a welcome partner for the Norwegians, but does not represent a comfortable home. Therefore, it is less likely that the EU area of responsibility will enlarge in a way that would allow it to directly border Arctic waters. In conclusion, the Norwegian absence from the EU will—at least *per forma*—restrict the Union’s ability to exercise significant influence in the region.

Good political relations and advanced technology make Norwegian companies a

⁵⁸ The Norwegian Government’s High North Strategy (Oslo/Tromsø: Norwegian Ministry of Foreign Affairs, 1 December 2006), 7; available at <http://www.regjeringen.no/upload/UD/Vedlegg/strategien.pdf>.

⁵⁹ New Building Blocks in the North. The next Step in the Government’s High North Strategy, (Oslo/Tromsø: Norwegian Ministry of Foreign Affairs, 12 March 2009), 3; available at http://www.regjeringen.no/upload/UD/Vedlegg/Nordområdene/new_building_blocks_in_the_north.pdf.

⁶⁰ *Ibid.*, 7.

⁶¹ “Geopolitics in the High North: Multiple Actors, Norwegian Interests,” Work Package 1 Description.

⁶² “Brief: Most Norwegians Against EU Membership,” STRATFOR (23 March 2010); available at http://www.stratfor.com/sitrep/20100323_brief_most_norwegians_against_eu_membership.

strong player when it comes to the exploitation of natural resources in the High North. For example, Norway's Statoil company currently operates in thirty-four countries.⁶³ Its first trade ties to Russia were established in the 1950s, and its presence in Russia proper reaches back to 1988. In the last couple of years, StatoilHydro developed a technology for LNG production in deep waters and extreme latitudes.⁶⁴ This "almost unparalleled know-how" makes the enterprise a welcomed partner, especially for Russia.⁶⁵ The LNG technology provides flexibility in energy transport and bears the potential to divert gas flows from given pipeline routes. Therefore, a boom in LNG can affect regional and global patterns of energy distribution. Consequently, Russian Gazprom awarded StatoilHydro the final stake in the Shtokman far-north deepwater natural gas field project that is located in the Russian sector of the Barents Sea. In addition to the Shtokman project, Statoil is also engaged in the Kharyaga field exploitation. Statoil states, "Russia is regarded as an important core area for Statoil's international investments," but cooperation is not restricted to Russia itself. Statoil cooperates for example with Russia's Lukoil in Iraq.⁶⁶

Denmark and Greenland

Denmark is involved in changing geopolitics in the High North via Greenland, which is a Danish territory. When the Scandinavian state joined the European Community in 1973, Greenland was included, but the territory left in 1985. Today Denmark is a member of the European Union, while the Danish territories of Greenland and the Faeroe Islands are not. In 2006 the Danish government and Greenland's representatives decided to develop a coherent strategy for the Arctic. The core idea behind this step was to support and strengthen the development of Greenland towards increased autonomy, and to maintain the Greenlandic-Danish position as a major player in the Arctic. While the major focus seemed to be placed on environmental issues and on preparation for the Danish Presidency of the Arctic Council (2009–11), the original tasking also pointed to some issues of primary concern: the Northwest

⁶³ "Statoil in brief," Statoil, published 28 October 2009, updated 18 January 2011; available at <http://www.statoil.com/en/about/inbrief/pages/default.aspx>.

⁶⁴ "Snøhvit—Unlocking resources in the frozen North," Statoil (12 October 2009, updated 23 November 2009); available at <http://www.statoil.com/en/OurOperations/ExplorationProd/ncs/Pages/SnohvitNewEnergyHistoryInTheNorth.aspx>. "Snøhvit," Statoil (2 September 2007, updated 22 November 2009); available at <http://www.statoil.com/en/ouoperations/explorationprod/ncs/snoehvit/pages/default.aspx>.

⁶⁵ "Norway: A New LNG Player," STRATFOR (31 July 2008); available at http://www.stratfor.com/analysis/norway_new_lng_player.

⁶⁶ "International exploration and production," Statoil, 2010; available at <http://www.statoil.com/en/ouoperations/explorationprod/internationalfields/pages/default.aspx>.

Passage, globalization and trade, and the continental shelf.⁶⁷ (The question about the legal status of the passage will be highlighted elsewhere in this article.) The question of whether or not the Northwest Passage constitutes an “international strait” is important for Greenland because its Western coasts form a part of it.

After the Danish state had granted home rule to Greenland in 1979, the Siumut Party ruled the territory for thirty years. The 2009 elections resulted in a power shift. For the first time, the left-wing opposition achieved a majority. In the same year Greenland achieved expanded autonomy from Denmark. Analysts conclude that the changing situation in Greenland “opens the possibility of competition for influence over the world’s largest island by other Arctic powers.”⁶⁸ Greenland depends on cooperation with external partners in order to access its natural resources. The territory’s main political parties aim for full independence from Denmark, at least in the long term. So far, the island’s foreign policy continues to be determined by Copenhagen. Nevertheless, by going into practical details, one can also argue in the opposite direction, namely that “Greenland has taken over element after element of its foreign politics.”⁶⁹ Two factors should be kept in mind when looking at the security impacts of global warming. First, enhanced economic cooperation bears potential for Greenland to increase its sustainability and therefore to promote its independence from Denmark. Second, the island continues to play a significant role in military strategic planning, especially for the North American Defense Perimeter.

Iceland, Finland, and Sweden

Iceland, Sweden, and Finland do not border the Arctic Ocean, but they are member states of the Arctic Council. All three states have significant interests in what happens in the Arctic seas because of its geographic proximity to their territory. In the wake of the global financial crisis and the collapse of its banking system, Iceland raised much attention by its search for “new friends.”⁷⁰ First, Prime Minister Geir Haarde confirmed the country’s application for a USD 5.43 billion loan from the

⁶⁷ Naalakkersuisut Allattoqarfiat, Landsstyrets Sekretariat (Greenland Cabinet Secreteriat), “Fælles arktisk strategi mellem Hjemmestyret og Rigsmyndighederne,” File No. 09.16-03, 15 May 2008; available at www.nanoq.gl.

⁶⁸ “Greenland: An Opposition Victory and the Competition for the Arctic,” STRATFOR (3 June 2009); available at http://www.stratfor.com/analysis/20090603_greenland_opposition_victory_and_competition_arctic.

⁶⁹ Jans Kaalhaug Nielsen, “Greenland’s geopolitical reality and its political-economic consequences,” DUPI Working Paper No. 2001/6, 4; available at <http://www.ciaonet.org/wps/nij01/nij01.pdf>.

⁷⁰ “Iceland: Financial Crisis and a Russian Loan,” STRATFOR (7 October 2008); available at http://www.stratfor.com/analysis/20081007_iceland_financial_crisis_and_russian_loan. “Iceland: Strategic Air Base for Sale?” STRATFOR (12 November 2008); available at http://www.stratfor.com/analysis/20081112_iceland_strategic_air_base_sale.

Russian government.⁷¹ Then, Icelandic President Olafur Ragnar Grimsson shocked Iceland's allies with the idea to offer Russia the former U.S. air base at Keflavik.⁷² To complete the surprise, the President decided also to approach the Chinese government and seek help. Beijing took the occasion, and strengthened its ties with Reykjavik.⁷³ Until 2008 Iceland presented itself as a perfect EU candidate with a small population, political stability, a member of the European Free Trade Association, and party to the Schengen Agreement.⁷⁴ After being elected in 2009, the new Prime Minister Jahan-na Sigurdardottir continued the push for EU membership.⁷⁵ Nevertheless, since that time the island's population has fallen into skepticism regarding the EU, mainly over the issues of protected fishing grounds, whale hunting, and losing political influence within a larger body. In parallel, critical voices from some EU member states arose that rejected the idea of a fast track accession for Iceland. To make a long story short, currently it seems less likely that Iceland will enter the EU within the coming years. Iceland does not have any territorial claims on the Arctic Ocean, but it follows the developments there very closely.

Finland's cultural identity is fundamentally influenced by its geographic location. The territory extends far across the Arctic Circle, but it does not border the Arctic Ocean. The country acquired unique know-how and gathered great expertise in coping with extreme conditions in the High North. The constitution guarantees protection for the country's Arctic indigenous people, the Sámi. "Out of the eight Arctic countries, Finland was seventh to draft an Arctic strategy,"⁷⁶ which was released in mid-2010.⁷⁷ The core message of the document is that Helsinki strongly

⁷¹ "Iceland: Financial Crisis and a Russian Loan." "Geopolitical Diary: A Russian Financial Power Play in Iceland," STRATFOR (8 October 2008); available at http://www.stratfor.com/geopolitical_diary/20081007_geopolitical_diary_russian_financial_power_play_iceland.

⁷² "Iceland: Strategic Air Base for Sale?"

⁷³ Natalia Makarova, "China Seeks Piece of Arctic Pie," *RT.com* (8 October 2010); available at <http://rt.com/politics/arctic-region-china-vysotsky/>.

⁷⁴ "Iceland: The Road to EU Accession Gets Rocky," STRATFOR (15 October 2008); available at http://www.stratfor.com/analysis/20090801_iceland_road_eu_accession_gets_rocky.

⁷⁵ "Iceland: The Push for EU Membership," STRATFOR (27 April 2009); available at http://www.stratfor.com/analysis/20090427_iceland_push_eu_membership.

⁷⁶ Hannu Halinen, "Finland's Arctic Strategy," presentation given at the conference "Finland's Arctic Strategy and the EU" at the Finnish Institute of International Affairs, Helsinki, 25 August 2010; available at http://www.upi-fia.fi/assets/events/Halinen_Finlands_Arctic_Strategy.pdf.

⁷⁷ Finnish Prime Minister's Office, "Finland's Strategy for the Arctic Region," Prime Minister's Office Publications 8/2010 (Helsinki: Prime Minister's Office, 5 July 2010); available at <http://www.geopoliticsnorth.org/images/stories/attachments/Finland.pdf>.

advocates the protection of the Arctic environment, and that it seeks to benefit from emerging economic opportunities in the region. The strategy emphasizes external relations, and is intended to promote Finland's interests within the EU. While Finland has no territorial claims regarding the continental shelf in the Arctic Ocean, it regards itself as being indirectly affected by the respective disputes between other states.

Sweden is another Scandinavian country that does not border the Arctic Ocean. It is an Arctic country, but only a small fraction of its population lives in the High North.⁷⁸ As demonstrated during its last EU Presidency, Sweden is an active member of the European Union, and consequently uses its bodies to pursue its ideas and interests. However, Sweden does not have an articulated policy regarding the Arctic.

Emerging Asia

China is far from being an Arctic country, but within recent years it has demonstrated significant interest in the polar regions. In 2008, representatives of Canada's aboriginal communities visited Beijing at the invitation of the Chinese Communist Party. On this occasion, the delegation expressed its ambition to establish broad business ties with China around the future exploitation of the natural resources controlled by their people.⁷⁹ Recently, a Chinese Rear Admiral as quoted as follows: "The Arctic belongs to all the people around the world, as no nation has sovereignty over it."⁸⁰ Both events underline concerns about China's future influence in the Arctic, at least in Washington and Ottawa. In practice, the Chinese outreach to the High North is characterized by the pursuit of economic interests. In preparation for this, China has undertaken academic research on the Arctic, including some studies in cooperation with Norway. China opened its first Arctic research station in 2004. In 2010, the icebreaker *Zuelong* deployed for China's longest Arctic expedition in history. The vessel had already conducted twenty-four research expeditions to the Antarctic, but only three to the Arctic. This relation is most likely to change: "China now recognizes the commercial and strategic opportunities that will arise from an ice-free Arctic."⁸¹

⁷⁸ "The Geopolitics of Sweden: A Baltic Power Reborn," STRATFOR (30 June 2009); available at http://www.stratfor.com/analysis/20090629_geopolitics_sweden_baltic_power_reborn.

⁷⁹ Cleo Paskal, "Redrawing The Map," *The Journal of International Security Affairs* 18 (2010): 93; available at http://www.ciaonet.org/journals/jisa/v0i18/f_0018657_15979.pdf.

⁸⁰ Gordon G. Chang, "China's Arctic Play," *The Diplomat* (9 March 2010); available at <http://the-diplomat.com/2010/03/09/china%e2%80%99s-arctic-play/>.

⁸¹ Trude Pettersen, "China to Boost Arctic Research," *The Barents Observer* (6 May 2010); available at <http://www.barentsobserver.com/china-to-boost-arctic-research.4781463.html>.

Consequently, the Norwegian Foreign Minister Jonas Gahr Støre proposed China as an observer to the Arctic Council.

The Russian government and Russian companies are the preferred partners for the Chinese. Beijing is strongly interested in the development of the Northern Sea Route and in joint LNG projects.⁸² Recently, Sovcomflot—a Russian firm that is the leading shipping operator along the Northern Sea Route—signed a cooperation agreement with a Chinese company in order to increase the volume of Chinese goods it would transport. In early 2011, the Chinese National Offshore Oil Company (CNOOC) won the tender for the Pechora LNG plant project, and was chosen by the Russian company Allteck to join the project with a larger stake.⁸³ While CNOOC aims for gas, another large player, the China National Petroleum Corp (CNPC), is seeking a substantial share in the exploitation of Russian oil reserves.⁸⁴

China is not the only Asian country that longs for increased economic influence in the High North, but at first glance it appears to be Russia's preferred partner. Nevertheless, Jean-Marie Holtzinger has identified some arguments against the rapid development of a Russo-Chinese strategic energy partnership, namely Russia's own energy needs, Europe's attractiveness as high-price market, China's interest in independence from Russia, Sino-Russian competition in other areas, Russian concerns about China's ambitions as an emerging power, and Russian advances toward Japan and South Korea.⁸⁵ Further competition for Chinese and Western companies comes for example from India (with its state-run oil and gas company ONGC),⁸⁶ and from Vietnam (with PetroVietnam).⁸⁷

⁸² Trude Pettersen, "Chinese Interest Towards Northern Sea Route," *The Barents Observer* (6 April 2011); available at <http://barentsobserver.custompublish.com/chinese-interest-towards-northern-sea-route.4907565-16149.html>.

⁸³ Atle Staalesen, "Pechora LNG from Year 2015," *The Barents Observer* (24 August 2010); available at <http://barentsobserver.custompublish.com/index.php?id=4811601>. Trude Pettersen, "China to Invest in Pechora LNG," *The Barents Observer* (29 March 2011); available at <http://barentsobserver.custompublish.com/china-to-invest-in-pechora-lng.4903454-16149.html>.

⁸⁴ Katya Golubkova and Jessica Bachman, "India in the Tuning for Russia's Arctic Oil," *Fox Business* (21 September 2010); available at <http://www.foxbusiness.com/markets/2010/09/21/india-running-russias-arctic-oil/>. Richard Weitz, "Chinese Pipe Dreams," *The Diplomat* (3 January 2011); available at <http://the-diplomat.com/2011/01/03/chinese-pipe-dreams/>.

⁸⁵ Jean-Marie Holtzinger, "The Russo-Chinese Strategic Partnership: Oil and Gas Dimensions," *Connections—The Quarterly Journal* 9:4 (2010): 69–82; available at <https://www.pfpconsortium.org/file/3920/view>

⁸⁶ Golubkova and Bachman, "India in the Tuning for Russia's Arctic Oil."

⁸⁷ Atle Staalesen, "Pechora LNG from year 2015"; Trude Pettersen, "China to invest in Pechora LNG."

Conflicts, Competition, and Cooperation

The Law of the Sea

The 1982 United Nations Convention on the Law of the Sea (UNCLOS) is the product of a long-lasting process that culminated in three United Nations Conferences on the Law of the Sea (1958, 1960, and 1973–82). The agreement aims to establish “a legal order for the seas and oceans which will facilitate international communication, and will promote the peaceful uses of the seas and oceans, the equitable and efficient utilization of their resources, the conservation of their living resources, and the study, protection, and preservation of the marine environment.”⁸⁸ All Arctic states (except for the U.S.), all EU member states, and the EU itself are parties to the convention. As of today, 156 states and the European Union have signed and ratified the treaty.

UNCLOS represents the centerpiece of international governance of the seas. Therefore, the convention organizes the space of the sea—including its bed, its subsoil, and the airspace above—by precise distinctions between certain types of zones, universal definitions of their outer limits, comprehensive determinations of their legal status, as well as detailed specifications of the freedom, rights, and obligations of all parties. The convention serves two major purposes. First, it stipulates a legal framework for the parties (states) to define their mutual relations within the given zones in view of the use the sea and the utilization of it. Second, it provides legitimacy as well as instruments and procedures for the settlement of claims and disputes.

UNCLOS acknowledges the freedom of the seas, and transfers international customary law into international treaty law. Movement of vessels is guaranteed through a variety of mechanisms, including the right of innocent passage in the territorial sea, the right of transit passage through straits used for international navigation between one part of the high seas or an exclusive economic zone and another part of the high seas or an exclusive economic zone, and the right of archipelagic sea lanes passage. The convention guarantees the immunity of warships and ships used only in non-commercial government service. It establishes rules for various kinds of human activities related to the sea, such as research and surveys; enforcement of laws and regulations (e.g. countering piracy); interception of transport of slaves; fighting against the illicit traffic in narcotic drugs or psychotropic substances; construction of artificial islands; installations; tunneling; utilization of living resources, including execution of traditional fishing rights; offshore drilling; exploitation of non-living resources; laying of submarine cables and pipelines on the continental shelf; and

⁸⁸ United Nations Convention on the Law of the Sea (UNCLOS), 25 (Preamble); available at http://www.un.org/Depts/los/convention_agreements/texts/unclos/unclos_e.pdf.

protection of human life and of the environment. The convention sets general provisions for the settlement of disputes by imposing the obligation to settle disputes by peaceful means. Melting ice constitutes a prerequisite for improved access to the High North, which is the key to the realization of economic opportunities in the area such as the utilization of living resources, the exploitation of non-living resources, or the establishment of new shipping lanes.

The Northwest Passage

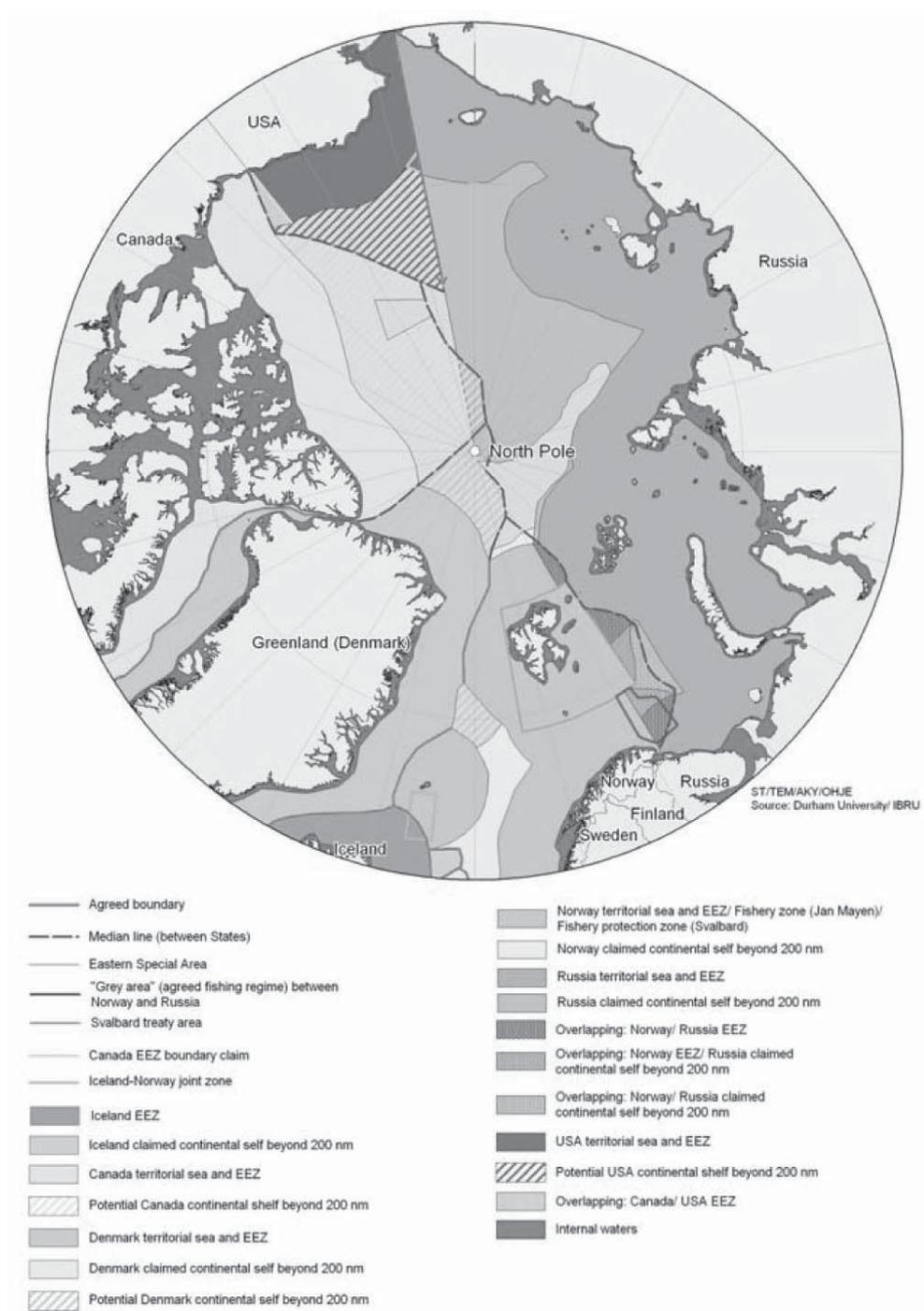
During the Cold War, the Arctic took on the highest strategic importance from its function as a safe loitering area for Soviet ballistic missile nuclear submarines and, consequently, as the hunting ground for their adversaries, the Alliance's nuclear-powered attack submarines. The U.S. and Canada established far-reaching cooperation in response to the Soviet air threat, but both partners were not able to address the surface and subsurface naval threat in the same manner. While the U.S. approached the High North with an emphasis on military security, Canada felt its sovereignty over its Arctic waters to be challenged by the American position that claimed the Northwest Passage to be an international waterway and, as such, allowing unrestricted transit. A 2010 EU report entitled "Legal aspects of Arctic shipping" comments: "Controversially, Canada has drawn straight baselines around its Arctic islands—or Arctic archipelago.... The international legal validity of enclosing the Canadian Arctic Archipelago with straight baselines remains contentious. The United States and EU member states lodged formal protests against the baselines, regarding them as inconsistent with international law. Whether Canada can justify the status of internal waters for the enclosed waters by the argument that they are historic waters is in doubt."⁸⁹ The current situation is a legal stalemate. Both sides can refer to principles of international law, and both sides are supported by cases from the International Court of Justice (ICJ). In the end, "the complexities of the legal status of the Passage" opens the door to competing interpretations and, therefore, to different solutions.⁹⁰ Once commercial and military shipping increases within the Northwest Passage, Canada will have to decide whether to focus first and foremost on sovereignty issues or on the solution

⁸⁹ European Union, *Legal aspects of Arctic shipping*. Summary report, Study commissioned by the European Commission, Directorate-General for Maritime Affairs and Fisheries MARE.C.1, Project no. ZF0924 - S03, issue ref. 2 (Brussels: European Union, 23 February 2010); available at http://ec.europa.eu/maritimeaffairs/pdf/legal_aspects_arctic_shipping_summary_en.pdf.

⁹⁰ Andrea Charron, "The Northwest Passage Shipping Channel. Sovereignty First and Roremost and Sovereignty to the Side," *Journal of Military and Strategic Studies* 7:4 (2005): 3, 7; available at http://www.ciaonet.org/olj/jmss/jmss_2005/v7n4/jms. Cleo Paskal, "How climate change is pushing the boundaries..." 7.

of pressing, practical matters in the management of these waters. While the U.S. and Canada continue to agree to disagree, the prevailing uncertainty might become an invitation for others to test Canadian sensitivity and U.S. safeguards in the High North. Further increases in Chinese activity in the High North correspond with a potential to break the stalemate, meaning to encourage U.S. acceptance of the Canadian legal position for the sake of securing the North American defense perimeter. The U.S.-Canadian border issue is not the only territorial dispute in the Arctic. A graphic illustration of the situation in the High North can be found in Figure 6.

Figure 6: Agreed Borders and Territorial Claims in the Arctic⁹¹



⁹¹ Finnish Prime Minister's Office, "Finland's Strategy for the Arctic Region," Prime Minister's Office Publications 8/2010 (Helsinki: Prime Minister's Office, 5 July 2010), 70; available at <http://www.geopoliticsnorth.org/images/stories/attachments/Finland.pdf>.

Dispute Settlement and Cooperation in the High North

In the past, various disputes in the Arctic were addressed through peaceful methods that were either treaty-based, by tacit acceptance, or through a decision by the International Court of Justice. Examples of settled territorial questions are the Svalbard Archipelago (Norway), the Franz Josef Land Archipelago (Soviet Union, now Russian Federation), the island of Jan Mayen (Norway), the Sverdrup Islands (Canada), Eastern Greenland (Denmark), and the maritime delimitation in the Vangerfjord area (Russia/Norway).⁹² Examples of economic agreements are bilateral fishery agreements like that between Norway and Russia about fishery management in the Berents Sea. Some conflicts have persisted over the years without finding a proper solution, like the Norwegian Fishery Protection Zone around Svalbard that is challenged by other states, such as Spain and Iceland.⁹³

Norway and the Soviet Union (and later the Russian Federation) successfully avoided any escalation over the issue of petroleum resources in the Barents Sea and the Arctic Ocean. Since the 1980s, both countries have followed a bilateral moratorium that suspends any exploration and exploitation of oil and gas in disputed territories. Now, following a breakthrough in their negotiations, Norway and Russia signed a treaty concerning the maritime delimitation and cooperation in the Barents Sea and the Arctic Ocean. The signing ceremony marked the end of a four-decade-long process. Once approved by the two states' parliaments, this treaty will create legal clarity and improve political predictability in the region.⁹⁴ Apart from its contribution to good relations between Russia and Norway, this treaty will grant immediate access to natural resources that are located only on one side of the agreed delimitation line. In addition to this, the 2010 Treaty contains detailed provisions for the exploitation of trans-boundary deposits.⁹⁵

⁹² Norwegian Royal Ministry of Foreign Affairs, Legal Affairs Department, "Svalbard and the Surrounding Maritime Areas. Background and legal issues - Frequently asked questions," edited by Rolf Einar Fife; available at <http://www.regjeringen.no/en/dep/ud/selected-topics/civil--rights/spesiell-folkerett/folkerettslige-sporsmal-i-tilknytning-ti.html?id=537481#>.

⁹³ Norwegian Government, *The Norwegian Government's High North Strategy*, 17.

⁹⁴ *Treaty between the Kingdom of Norway and the Russian Federation Concerning Maritime Delimitation and Cooperation in the Barents Sea and the Arctic Ocean*, Document signed in Murmansk, 15 March 2010 (English translation published by the Norwegian Government); available at http://www.regjeringen.no/upload/UD/Vedlegg/Folkerett/avtale_engelsk.pdf. Norwegian Royal Ministry of Foreign Affairs, "The Treaty on Maritime Delimitation between Norway and Russia," available at <http://www.regjeringen.no/en/dep/ud/campaign/delimitation.html?id=614002>.

⁹⁵ Treaty between the Kingdom of Norway and the Russian Federation. Norwegian Royal Ministry of Foreign Affairs, "Petroleum Resources," available at http://www.regjeringen.no/en/dep/ud/campaign/delimitation/petr_resources.html?id=614009.

In 2010, Russia and Canada announced that they will seek a UN decision over their territorial claims related to the Lomonosov Ridge, a huge Arctic underwater mountain range where rich resources are expected to be found.⁹⁶ Both Canada and Denmark claim Hans Island as their territory. In 2005, they agreed upon a joint statement. Since that time, the solution to the conflict is on the diplomatic track. The maritime boundary in the Lincoln Sea is regarded as being managed. As has been discussed above, the U.S. and Canada disagree about the legal status of the various waterways known as the Northwest Passage, while they have managed their dispute over the maritime boundary in the Beaufort Sea.⁹⁷ Climate change makes the polar ice cap in the North disappear and increases the accessibility of the region, but it has not sparked any outbreak of hostilities between states bordering the region. In fact, not a single territorial disagreement in the Arctic is perceived by the respective governments to provide sufficient reason for military confrontation.

Applied Multilateralism

Since the collapse of the Soviet Union, major efforts have been made to enhance consultation and cooperation in the High North. The Barents Euro-Atlantic Council (BEAC), and the Barents Regional Council (BRC) were established in 1993, and both of them work closely together. The BEAC provides a forum for Finland, Norway, Sweden, Denmark, Iceland, Russia, and the European Commission. The BRC is composed of representatives from regional administration units of Finland, Norway, Sweden, and Russia. The Arctic Council, established in 1996, provides a high-level intergovernmental forum “for promoting cooperation, coordination and interaction among the Arctic States, with the involvement of the Arctic indigenous communities and other Arctic inhabitants on common Arctic issues.”⁹⁸ The Arctic Council’s documents state explicitly that “the Arctic Council should not deal with matters related to military security.”⁹⁹ The active arm of the Arctic Council is represented by its six working groups that deal with contaminants, monitoring and assessment, flora and fauna conservation, emergency matters, marine environmental protection, and sustainable development. Member states of the Arctic Council are the eight Arctic states: Canada, Denmark, Finland, Iceland, Norway, Russian Federation, Sweden, and the

⁹⁶ “Russia and Canada seek UN ruling on Lomonosov Ridge,” BBC News Europe (16 September 2010); available at <http://www.bbc.co.uk/news/world-europe-11331904>.

⁹⁷ Canada’s Northern Strategy Abroad, 13.

⁹⁸ Arctic Council, *Declaration on the Establishment of the Arctic Council. Joint Communique of the Governments of the Arctic Countries on the Establishment of the Arctic Council* (Ottawa: Arctic Council, 19 September 1996), Paragraph 1; available at http://arctic-council.org/filearchive/ottawa_decl_1996-3.pdf.

⁹⁹ *Ibid.*, Footnote 1.

United States. Additionally, the council offers non-Arctic nations the opportunity to gain observer status. Multilateral organizations have proved to be important platforms for consultation, cooperation, and joint policy formulation.¹⁰⁰ In terms of security, these bodies address issues of human security in all its variations and depth.

NATO and the EU as Security Actors in the High North

NATO

Four out of the five countries that border the Arctic Ocean are NATO members. Over the past five decades, NATO and its member states have acquired enormous experience in planning and exercising Arctic security. After the dissolution of the Soviet Union, the Alliance's focus shifted towards other regions and other missions. Its collective presence in the High North—e.g., through large-scale exercises or the deployment of high-readiness forces—dropped significantly. The perceived absence of any further threat in the High North had consequences for NATO's equipment, doctrine, and training.

One outcome of the 2009 NATO Summit in Strasbourg/Kehl was the foundation of a group of experts (chaired by Madeleine Albright) that was tasked to prepare the ground for a new NATO Strategic Concept. In May 2010, the experts released their final report, where they conclude: "Conventional military aggression against the Alliance or its members is unlikely, but the possibility cannot be ignored."¹⁰¹ The document avoids the word "Arctic" entirely, and it uses the term "High North" only once: "A new level of secure maritime situational awareness is called for by changing risks around the periphery of NATO and in the High North, Gulf, Indian Ocean and other areas."¹⁰² When the issue of climate change is addressed, the expert group recommends: "NATO could, however, be called upon to help cope with security challenges stemming from such consequences of climate change as a melting polar ice cap or an increase in catastrophic storms and other natural disasters. The Alliance should keep this possibility in mind when preparing for future contingencies."¹⁰³ Neither NATO's

¹⁰⁰ "Geopolitics in the High North: Multiple Actors, Norwegian Interests," Work Package 1 Description.

¹⁰¹ North Atlantic Treaty Organization (NATO), *NATO 2020: Assured Security; Dynamic Engagement - Analysis and Recommendations of the Group of Experts on a New Strategic Concept for NATO*, Report dated May 17, 2010 (Brussels: NATO Public Diplomacy Division, 2010), 17; available at http://www.nato.int/nato_static/assets/pdf/pdf_2010_05/20100517_100517_expertsreport.pdf.

¹⁰² *Ibid.*, 41.

¹⁰³ *Ibid.*, 46.

New Strategic Concept¹⁰⁴ nor the Lisbon Summit Declaration of 2010¹⁰⁵ provided guidance, stated requirements, or called for action that specifically addressed the Arctic. The same picture can be taken away from the NATO-Russia Council: neither the opening statement by the Secretary-General¹⁰⁶ nor the joint resolution include any statement that would highlight security issues in the High North.¹⁰⁷ NATO's New Strategic Concept determines the Alliance's future contribution in the field of energy security as follows: "Therefore, we will ... develop the capacity to contribute to energy security, including protection of critical energy infrastructure and transit areas and lines, cooperation with partners, and consultations among Allies on the basis of strategic assessments and contingency planning."¹⁰⁸ Looking at NATO's energy security website, the Mediterranean and the Caucasus region receive mention, but the Arctic does not.¹⁰⁹

Within NATO's strategic framework, the Arctic receives no special attention, neither in terms of deterrence and defense nor in terms of actions related to energy security. NATO avoided overreacting to Moscow's proclamation of "spheres of influence" and the Russian Army's show of force in the High North. It stayed calm and did not securitize a threat that merely existed. Bringing all the environmental, political, and economic facts and trends together, this analysis concludes that NATO is not required to change its current policies and concepts in order to address the security challenges and risks in the High North. In other words, the research question is answered that there are no implications for NATO in terms of security imposed by the melting polar ice cap in the High North. Dmitri Trenin argues, "The Arctic countries have taken several practical steps over the past two years that testify to their goodwill," concluding, "the need for an increased military presence in the Arctic no longer seems

¹⁰⁴ NATO, *Active Engagement, Modern Defence—Strategic Concept for the Defence and Security of the Members of the North Atlantic Treaty Organisation*, adopted by Heads of State and Government in Lisbon, 19 November 2010; available at <http://www.nato.int/lisbon2010/strategic-concept-2010-eng.pdf>.

¹⁰⁵ NATO, *Lisbon Summit Declaration Issued by the Heads of State and Government participating in the meeting of the North Atlantic Council in Lisbon on 20 November 2010*, NATO Public Diplomacy Division, Press Release PR/CP(2010)0155 (20 November 2010); available at http://www.nato.int/nato_static/assets/pdf/pdf_2010_11/2010_11_11DE1DB9B73C4F9BBFB52B2C94722EAC_PR_CP_2010_0155_ENG-Summit_LISBON.pdf.

¹⁰⁶ NATO, *Opening Statement by the Secretary General at the NATO-Russia Council at the Level of Ministers*, 20 November 2010; available at http://www.nato.int/cps/en/natolive/opinions_68836.htm.

¹⁰⁷ NATO, *NATO-Russia Council Joint Statement*, Lisbon (22 November 2010); available at http://www.nato.int/cps/en/SID-8F957130-9D430016/natolive/news_68871.htm.

¹⁰⁸ NATO, *Active Engagement, Modern Defence*, 19.

¹⁰⁹ NATO, "NATO's Role in Energy Security," available at http://www.nato.int/cps/en/natolive/topics_49208.htm?selectedLocale=en.

relevant.”¹¹⁰ I will not go that far in this article, because contingency planning, situational awareness, and minimum presence constitute routine military safeguard measures, and should not be regarded as escalatory acts. To a certain degree NATO must (as Russia does for the same reason) respond to the environmental changes in the High North in order to maintain its credibility as a collective defense organization. These are normal adaptations, and should not create any surprise.

¹¹⁰ Trenin and Baev, *The Arctic: A View From Moscow*, 12.

Nevertheless, one issue is proposed for further attention and investigation: Article V of the Washington Treaty provides the member states with a collective security guarantee in case of an armed attack.¹¹¹ Article VI defines the area and the object (territory, forces, vessel, or aircraft) of such an attack. This being said, the legal status of the Northwest Passage appears to be an issue, one that affects not only Canada and the U.S. but also all other NATO members.

The European Union

The Lisbon Treaty entered into force in December 2009 and removed the former three-pillar structure of the European Union.¹¹² EU policies are shaped by the influence of and interaction between the Council, the Commission, and the Parliament. The power of European institutions depends on the respective policy issues in question – either the Union has exclusive competence, or it shares competence with the member states, or it supports member states. According to Article 22 (1) of the Treaty on European Union (TEU),¹¹³ decisions about strategic interests and objectives related to the Common Foreign And Security Policy (CFSP) fall under the competence of the European Council. CFSP decisions require unanimity. For external actions, the EU is rather limited in terms of its “hard power” capabilities (meaning military ones), but is well equipped with “soft power” tools in order to fulfill its role as security actor. As of today, the EU still requires that the CFSP be harmonized between its own bodies, across various policy domains, and with the governments of its member states.

In terms of military affairs, TEU Article 42 (7) establishes the EU’s collective defense mechanism. It sets the obligation to provide aid and assistance in case of an armed attack against another member state, and determines that NATO remains the foundation of collective defense for those member states that are also members of the Alliance. Article 222 of the Treaty on the Functioning of the European Union (TFEU)¹¹⁴ contains the solidarity clause for cases of terrorist attacks and natural or man-made disasters.

¹¹¹ NATO, The North Atlantic Treaty, signed in Washington D.C., 4 April 1949; available at http://www.nato.int/cps/en/natolive/official_texts_17120.htm.

¹¹² European Union, Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community, signed at Lisbon, 13 December 2007 (Brussels: Office for Official Publications of the European Communities, 17 December 2007).

¹¹³ European Union, “The Treaty on European Union (Consolidated Version),” in Consolidated Treaties. Charter of Fundamental Rights (Brussels: Publications Office of the European Union. March 2010).

¹¹⁴ European Union, “Treaty on the Functioning of the European Union (Consolidated Version),” in Consolidated Treaties. Charter of Fundamental Rights, March 2010.

The “European Union is an Arctic player. Three out of eight Arctic countries are member states of the Union.”¹¹⁵ The “Northern Dimension” is a common policy shared by the EU, Russia, Norway, and Iceland, with the U.S. and Canada having observer status. It serves as an umbrella for regional cooperation in the Arctic.¹¹⁶ The EU runs cross-border cooperation programs in the Arctic in order to promote economic, social, and environmental development.

On 14 March 2008, the High Representative and the Commissioner for External Relations forwarded their policy paper “Climate Change and International Security” to the European Council that triggered the call for an EU Arctic policy. On 9 October 2008, the European Parliament (EP) welcomed the foundation of such a policy and requested the Commission to address energy and security policy in the Arctic region.¹¹⁷ The Commission replied to the parliament with a communication that contained the following assessment of the situation: “environmental changes are altering the geo-strategic dynamics of the Arctic with potential consequences for international stability and European security interests calling for the development of an EU Arctic policy.”¹¹⁸ Then the Commission defined three main policy objectives: protecting and preserving the Arctic and its population, promoting the sustainable use of resources, and contributing to enhanced Arctic multilateral governance. Several days earlier, the Commission had released its Second Strategic Energy Review, in which it identified Norway and Russia as important partners.¹¹⁹ With the Energy 2020 strategy, the European Commission underlined the link between the EU’s energy security and the CFSP.¹²⁰ It calls for the diversification of fuels, sources of supply, and

¹¹⁵ Hannu Halinen, “Finland’s Arctic Strategy.”

¹¹⁶ Finnish Prime Minister’s Office, “Finland’s Strategy for the Arctic Region,” 83.

¹¹⁷ European Union, European Parliament Resolution of 9 October 2008 on Arctic Governance, European Union/European Parliament, Document P6_TA(2008)0474 (Brussels: European Union, 9 October 2008); available at <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML+TA+P6-TA-2008-0474+0+DOC+WORD+V0//EN>.

¹¹⁸ European Union, Communication from the Commission to the European Parliament and the Council - The European Union and the Arctic Region, European Union/Commission of the European Communities, Document COM(2008) 763 final (Brussels: European Union, 20 November 2008); available at http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressData/en/reports/104895.pdf.

¹¹⁹ European Union, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Second Strategic Energy Review. An EU Energy Security and Solidarity Action Plan, Commission of the European Communities. Document COM(2008) 781 final, 13 November 2008, 8.

¹²⁰ European Union, *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Energy 2020. A strategy for competitive, sustainable and secure energy*, European Commission. Document COM(2010) 639 final (Brussels: European Union, 10 November 2010).

transit routes. Despite the Commission's evaluation in November 2008, the Arctic region received no special attention in the energy strategy. The EU's Arctic Policy is still in the drafting process. The Council requested the Commission to report on the progress by mid-2011, and expressed an interest in maintaining the Arctic as an area of peace and stability.¹²¹ Thus we can see that the Arctic enjoys a certain degree of de-securitization within the EU.

Summary and Final Conclusions

Melting ice constitutes a prerequisite for improved accessibility of the High North, which is the key to the realization of economic opportunities in the area. Northern sea routes are not always the shortest, and will not become attractive for commercial intercontinental shipping in the near future. While predictions indicate a rising demand for energy due to the recovery of Western economies and the needs of emerging economic powers like China, India, and Brazil, the sustainable supply of fossil fuels might be threatened by political instability within producing regions and along transport routes. The Arctic offers a potential alternative to other energy-producing regions. While the expected resources are of a significant scale, the volume of future oil and gas extraction in the High North remains a function of multiple variables and leaves us with a high degree of uncertainty.

Many authors argue that the impacts of climate change will trigger political tensions, foster legal disputes, and might even lead to an outbreak of hostilities. The research undertaken for this article suggests that this is unlikely. The players in the region have diverging interests and goals, as are described below:

- **Russia's** interests in the Arctic are predominantly of an economic nature. The country applies an approach of pragmatic cooperation with foreign governmental and non-governmental partners in order to pursue its goals. This offers great potential for foreign companies to benefit from broader cooperation with Russia.
- The **U.S.** will secure its territorial claims in Arctic waters against others, but so far they are not being challenged, and from the perspective of energy security there is no need for Washington to rush to the High North.

¹²¹ European Union, Council Conclusions on Arctic Issues. 2985th Foreign Affairs Council meeting Brussels, 8 December 2009, Council of the European Union (Brussels: European Union, 2009), http://ec.europa.eu/maritimeaffairs/pdf/arctic_council_conclusions_09_en.pdf.

- **Canada's** Northern Strategy determines four priority areas in order to address the region: sovereignty, social and economic development, environmental protection, and governance. In terms of military and law enforcement issues, Ottawa has to reinvent and reinforce its Arctic capacities. Canada regards the U.S. as its "premier partner in the Arctic," but has also committed itself to closer international cooperation, especially with Russia, Norway, Denmark, Sweden, Finland, and Iceland. Progress on outstanding boundary issues receives highest priority.
- The underlying assumption for the **Norwegian** government's policy is that the country should avoid isolation, and should pursue far-reaching partnerships in the Arctic. In terms of foreign policy, this means that the relationship between Moscow and Oslo is the key for success. Good political relations and advances in technology make Norwegian companies strong players when it comes to the exploitation of natural resources in the High North.
- The **Danish** government and Greenland's representation seek to strengthen the development of Greenland towards increased autonomy, and to maintain the Greenlandic-Danish position as a major player in the Arctic. Enhanced economic cooperation bears potential for Greenland to increase its sustainability and therefore to promote its independence from Denmark. The island continues to play a significant role in military strategic planning, especially for the "North American Defense Perimeter."
- In the wake of the financial crisis and the collapse of its banking system, **Iceland** raised significant attention by its search for new friends. Today, it seems less likely that Iceland will enter the EU within the coming years. The country does not have any territorial claims towards the Arctic Ocean, but it follows the developments there very closely.
- **Finland** strongly advocates the protection of the Arctic environment, and it seeks to benefit from emerging economic opportunities in the region.
- **China** is not an Arctic country, but in recent years it has demonstrated significant interest in the polar region. In practice, the Chinese outreach to the High North is characterized by the pursuit of economic interests. China is not the only Asian country that longs for increased economic influence in the High North, but at first glance it seems to be the preferred partner for Russia. Competition in the bid for strategic cooperation with Russian oil and gas companies also comes from Japan, Korea, India and Vietnam.

UNCLOS stipulates a legal framework to define all of these actors' mutual relations within the Arctic region, and it provides legitimacy as well as instruments and procedures for the settlement of claims and disputes. In the past, various disputes in the Arctic were addressed through a variety of peaceful channels. Climate change makes the polar ice cap in the North disappear and increases the accessibility of the region, but it has not led to any hostilities between the states that are interested in the region. In fact, no territorial disagreements in the Arctic have led or are likely to lead to military confrontation. Norway and Russia, Russia and Canada, as well as Canada and Denmark have achieved major progress in overcoming their respective territorial disputes and agreeing on permanent solutions. The complex interplay between governments, multi-lateral organizations, regional and local state authorities, NGOs, local populations, and commercial actors shapes geopolitics in the High North. The Arctic fosters new alliances. Present and future inter-state conflicts that arise directly or indirectly from a melting polar ice cap in the High North will be predominantly settled through other channels. Competition and cooperation as established in the High North can be explained by liberalist or constructivist approaches. The world is not witnessing an unconstrained struggle for hegemony in the Arctic, but, on the contrary, the achievement of mutual agreements on an equal footing, and the application of mediating principles as foreseen in UNCLOS. Commercial interests and commercial actors have already grown in importance, and it is likely that they will become even more powerful in the future.

Despite a high level of political and public recognition of the environmental, economic, and security related changes in the High North, both NATO and the EU remain restricted in their mandate, and limited in their capacities to contribute to Arctic security. In the ongoing process to reinvent NATO as a global strategic actor, the Arctic receives no special attention, either in terms of deterrence and defense or in terms of actions related to energy security.

This analysis concludes that NATO is not required to change its current policies and concepts in order to address the security challenges and risks in the High North. Adaptations must take place, but at lower levels than the strategic one, so they can be achieved within the given strategic guidelines and decisions. In the case of NATO, maintaining awareness in the region as well as the demonstration of a certain degree of military presence within its northern perimeter remain necessary. This is daily defense business, and implies no alteration of the Alliance's general cooperative posture with respect to Russia.

The EU is an Arctic actor, but Arctic security as such is not put high on the EU's agenda, because the member states are not pressing forward with this issue. The melting of the polar ice cap will require some attention in the fields of energy security and internal security. Nevertheless, following the idea of a comprehensive approach, the Arctic issue should remain an integral part of an overarching strategy and not

become relegated to a specific regional concept. Finally, the research question can be answered as follows: Neither NATO nor the EU is required to change its current security policies and concepts in order to address the challenges and risks imposed by a melting polar ice cap in the High North.

Bibliography

Herd, Graeme P., and Pál Dunay. "International Security, Great Powers and World Order." In *Great Powers and Strategic Stability in the 21st Century: Competing Visions of the World Order.*, 2010.

Johannessen, Ola M., and Martin W. Miles. "Critical Vulnerabilities of Marine and Sea Icebased Ecosystems in the High Arctic." *Regional Environmental Change* (2011).