

ISSUE

REPORT № 24 – June 2015

Arctic security matters

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Reports



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ISBN 978-92-9198-362-9

ISSN 2363-264X

QN-AF-15-002-EN-N

Doi: 10.2815/81890

Published by the EU Institute for Security Studies and printed in Condé-sur-Noireau (France) by Corlet Imprimeur.

Graphic design by Metropolis, Lisbon.

Cover photograph: Monaco Glacier, Liefdefjorden, Spitsbergen, Svalbard Islands. Credit: SUPERSTOCK/SUPERSTOCK/SIPA

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FOREWORD

Over the past couple of years, the European security environment has worsened significantly – to the east, the southeast, and the south. The only area that has remained relatively calm and stable to date is the Far North or, seen from the EU, northeast – in and around the Arctic. This may appear somewhat counterintuitive, as littoral countries include only Russia and NATO members. All relevant players, however, have so far displayed restraint and tried to insulate and decouple the Arctic region from the tensions arising elsewhere between Moscow and the West. But things may still change, in the light also of the wider economic prospects (energy, shipping and fishing) that the ongoing transformation in the region could open up.

Dealing with ‘Arctic security matters’, therefore, is a good opportunity to carry out a number of parallel and distinct – but ultimately intersecting – types of analysis. One strand is related to the potential strategic implications of climate change (however uncertain or contested climate science may be) in the Far North, including the pending territorial disputes among the Arctic states. Another strand is linked to the security challenges (old and new, hard and soft, present and future) stemming from or reverberating on the region, with a view to assessing and mitigating risk. And a third one, particularly relevant for the EU, is about opportunities and avenues for common action in what actually is another important segment of the Union’s ‘neighbourhood’ – although it is rarely conceptualised in these terms. There is indeed a ‘European Arctic’ and, with it, shared European interests to be articulated and brought to bear in a multilateral framework.

The debates and preparations leading up to the COP 21 climate change conference due to be held later this year in Paris; the forthcoming proposals from the Commission and the High Representative on EU Arctic policy, as well as the High Representative’s own report to the European Council on the changing global environment; and, last but not least, the recently launched review of the entire ENP (which may well lead to increasing differentiation among both individual neighbours and sub-regional neighbourhoods) – are all frameworks and contexts to which this report aims to contribute with its well-informed analyses and assessments.

The EUISS is extremely grateful to Juha Jokela and the small Task Force he has coordinated over the past few months for both the useful process of consultation and discussion between experts and policymakers and the excellent printed outcome they have produced.

*Antonio Missiroli,
Paris, June 2015*

INTRODUCTION

Juha Jokela

The Arctic region is undergoing major and rapid transformation, both environmentally and economically. In recent years climate change has had a profound impact on Europe's Far North: temperatures in the region are rising up to two or three times faster than the global average, and causing significant distress to critical marine and terrestrial ecosystems and nature-based livelihoods. The impact of melting ice and snow caps has also led to a new focus on the region's economic potential, especially in view of the prospect of faster shipping routes, and the estimated vast deposits of hydrocarbons and growing fish stocks. Even if current analysis also underlines many uncertainties related to the pace of economic development, longer-term projections indicate that the Arctic's untapped resources may yet yield substantial profits, and therefore the interest of regional and global trading powers in the region has grown steadily. However, it is currently far from clear that opportunities related to the economic development of the region will outweigh or even balance out the impacts and risks of climate change in the Arctic.¹

These Arctic transformations come with significant political and security implications. So far heightened interest in the region's dramatic environmental metamorphosis as well as economic potential has been marked by intensifying international cooperation in Arctic matters and a relatively low level of political or military tensions in the region. Yet the possibility of increasing national competition, disputes and even conflicts in Europe's Far North cannot be ruled out.

Local, regional and international cooperation has been deemed essential to mitigate and adapt to the effects of climate change in the Arctic, as well as to ensure sustainable economic development of the region. Concerns related to environmental, economic and human security have thus featured high on the agendas of key Arctic stakeholders, including the European Union. Significant uncertainties related to the current models of climate and environmental change, as well as economic development, have however led to calls for more robust cooperation aimed at establishing stronger regulation and enhanced rapid response capabilities to address risks and civilian safety concerns.

Some recent developments have also cast a shadow over the Arctic states' aspirations to actively promote political stability in the region. These developments are partly 'extra-Arctic' in the sense that they originate from outside the region itself. Non-Arctic actors have been keen to establish an Arctic presence and local responses to this have varied, ranging from interest in the prospect of broader international cooperation to concern over the possibility of increasing geopolitical competition

1. See *Strategic Assessment of Development of the Arctic: Assessment conducted for the European Union* (Arctic Centre: University of Lapland, 2014). Available at: <http://www.arcticinfo.eu/en/sada>.

in the region. The ongoing crisis in Ukraine and the deteriorating relations between Russia and the West provide the most topical example of how conflicts elsewhere might spill over into the Far North. The restrictive measures imposed on Russia by the West have affected cooperation between Western and Russian oil industries in the Arctic offshore and the resultant heightened tensions could potentially have an adverse impact on other fields of cooperation.

Thus the ‘extra-Arctic’ developments and political tensions could also intensify the ‘intra-Arctic’ ones. While the recent Danish claim under the United Nations Convention on the Law of the Sea (UNCLOS) to extend Greenland’s continental shelf (to include the North Pole) did not come as a surprise, the extent of its overlap with a previous Russian claim has caused concern among the Arctic states and observers at a time of acute political and military tensions in Europe.

Russia’s more assertive foreign policy, and its demonstrated will to resort to military means to advance its interests, has also raised concerns about an arms race in the region. Although Russia’s current military build-up in the Arctic seems to be part of its general ‘balancing’ strategy with the US and NATO, rather than specifically Arctic-related, the importance Russia attaches to the region as the nation’s gas and oil reservoir and to the Northern Passage as a potential global maritime route is a crucial element in the ongoing developments.

The recent events in the political and security sphere are indeed worrying, and deserve to be noted and analysed. It is however equally important to focus on the drivers – both old and new – of cooperation in the Arctic. First, the impact of climate change, and the damage and anxieties flowing from it, concerns all the Arctic stakeholders. The implications of thawing permafrost, changing weather and sea current patterns, and potential loss of species, for instance, extend also beyond the boundaries of the Arctic region itself. Notable unpredictability in the scientific projections of the large-scale environmental changes afoot continues to characterise joint efforts in understanding, anticipating and managing the ongoing transformation. Second, the envisaged economic opportunities in the region are greatly affected by regional political developments. Political stability is crucial for the Arctic states’ attempts to create a favourable environment for investment and financial risk-taking. Cooperation is also essential for the attempts to adequately manage the risks and safety concerns associated with increasing economic activity; that is, to strive for sustainable economic development in the Arctic.

Background to this report

The European Union has gradually become ever more deeply engaged in Arctic matters. Its Arctic policies (overtly developed since 2008) have aimed to promote sustainable development of the region, and have mainly focused on maritime and environmental issues. The EU has supported regional and sub-regional cooperation

in the Arctic, as well as scientific research and monitoring activities related to the transformation of the polar region.

The basis for the EU's increased engagement with the region lies first and foremost in its Arctic territories and the interests of its member states. Three of its 28 member states – Denmark, Finland and Sweden – have Arctic territories. Moreover, Iceland and Norway are members of the European Economic Area as well as the Schengen Area. All of these states have also formulated specific Arctic strategies setting out their policy priorities. Among the EU members, France, Germany, Italy, the Netherlands, Poland, Spain and the United Kingdom have sought and secured observer status in the Arctic Council, and furthermore the UK and Germany have also adopted specific Arctic strategies, while France is currently formulating one.

The EU's Arctic interests are also closely related to linkages between the Arctic's environmental and economic transformation on the one hand and the EU's climate, maritime and energy policies on the other. Even if the EU's efforts in engaging with Arctic matters have proven somewhat controversial and complex, both internally and externally, the EU is an Arctic stakeholder and notable partner in efforts aimed at managing the Arctic transformation.

As the EU is preparing to take further steps towards elaborating an integrated and coherent Arctic policy, it seems an opportune moment to elucidate and analyse developments related to the political and security environment(s) of the Arctic.

This report draws on a growing body of policy and academic analysis dealing with Arctic matters, and focuses on old and new challenges shaping the 'topography' of the Arctic's political and security landscapes. The aim is to identify and analyse key trends and drivers affecting ongoing developments, as well as to map out feasible options to address challenges.

The report is structured around three interconnected dimensions. Its first section focuses on the drivers of Arctic transformations. Chapters by Gerald Stang on the impact of climate change in the Arctic and by Kathrin Keil on the economic potential of the region present the newest 'twists and turns' in projections of environmental change and the economic potential of the Arctic. Both authors suggest that current forecasts need to factor in several 'known unknowns' and 'unknown unknowns'.

The second section deals with the political landscape of the Arctic. The chapter by Juha Jokela focuses on overlapping international, regional and sub-regional frameworks relevant to governing the Arctic transformation. The chapter by Mikkel Runge Olesen looks at common and competing national interests in the region with a particular focus on potential territorial disputes between the Arctic states. The following chapter by Pavel Baev analyses the rationale underlying Russia's Arctic aspirations, as well as their feasibility. This section suggests that while strong incentives for cooperation exist, the increased animosity between the West and Russia is increasingly shaping the political landscape of the region.

The final section of the report takes a detailed look at old and new security challenges in the region. The chapter by Duncan Depledge on hard security developments discusses the geostrategic importance of the Arctic and recent military developments in the region. It argues that military tensions are rising in the Arctic at a time when confidence-building measures have become increasingly difficult. The final chapter by Alyson Bailes focuses on the wider security spectrum and analyses the relevance of the notions of environmental, economic and human security in the Arctic context. It suggests that while the multi-functional approach to security is an important tool for addressing Arctic challenges, ultimately many problems can only be solved 'from the bottom up'.

Acknowledgements

This report has considerably benefited from discussions and exchanges that took place in two workshops organised by the EUISS as part of a project on 'Arctic security matters'. The editor and the authors would like to express their gratitude in particular to the other members of the 'Arctic Core Group' set up in the framework of this project: Zuzanna Bieniuk (European External Action Service), Fernando Garcés de los Fayos (European Parliament, Policy Department for External Policies), Jeffery Piper (European Commission, DG ENERGY) and Ramon Van Barneveld (European Commission, DG MARE).

The report has also benefited from discussions held by the European Defence Agency's Project Team focusing on the EU's maritime capabilities in the Arctic, and the editor would like to express his gratitude to Sakari Martimo (Ministry of Defence, Finland) and Eric Girard (EDA).

At the EUISS, Jackie Granger has provided invaluable assistance in facilitating activities and discussions in Brussels, and Gearoid Cronin is to be commended for his extremely thorough editing of the report. The editor would like to express his gratitude also to Alyson Bailes, Harri Mikkola and Juha Käpylä for supportive exchanges at several crucial junctures during this project. Any error in analysis is the sole responsibility of the authors.

Part One

**Drivers of Arctic
transformations**

I. CLIMATE CHANGE

Gerald Stang

For a region with such harsh climatic conditions, the Arctic is a fragile place. Over the last 60 years, it has warmed substantially, and over the next 60 years it will heat up considerably more, leading to significant physical, ecological, economic and social changes.¹ But the pace and degree of warming that will take place remains uncertain. Reducing the amount of disruption and damage to ecosystems and human lives therefore requires rapid and effective action to mitigate greenhouse gas emissions. Unfortunately, no matter how quickly the world cuts back on emissions, a significant amount of global climate change (and Arctic warming) is already locked in. Understanding what impact this will have on the region requires an understanding of what is known, what is likely, and what remains to be learned about the effects of a changing climate on the region.

For the foreseeable future, rising temperatures and increasing sea accessibility (as a consequence of melting sea ice) will bring new developments and disruptive change to those who live there, but will not change the basic nature of the Arctic: cold, inhospitable – and very expensive. But the future of climate change is difficult to predict and the possibility of abrupt shifts in the climate that do not correspond to model predictions cannot be ruled out.

Climate impacts

While climate modelling in general has improved immensely over the last decade, climate science is extraordinarily complex and predictive climate models are still beset by many uncertainties. And because of data limitations and the challenge of modelling the cryosphere (ice and snow), climate predictions for the Arctic are often made with a lower confidence level than for other regions.

But some trends, especially those that have already begun to make their impacts felt, are already understood by the scientific community. One key trend in particular makes the Arctic region a bellwether for the planetary effects of climate change: the rapid pace of warming in the region. Temperatures are increasing in the Arctic at a faster rate than in the rest of the world, a trend that is expected to continue. This will of course be disruptive for the region, but also contributes to quicker warming on a global scale via an amplification effect: as snow and ice melt, the darker exposed land and ocean surfaces absorb more solar energy rather than reflecting it back out to space.

1. Unless indicated otherwise, the climate impacts described in this section are from J.N. Larsen et al, 'Polar regions', chapter 28 in C.B. Field, V.R. Barros et al (eds.), *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge/New York: Cambridge University Press, 2014), pp. 1567-1612.

Another clear trend over the last 30 years has been the change in Arctic permafrost. There has been an increase in surface permafrost temperatures (of as much as 3 degrees in parts of northern Alaska) together with a reduction in both the thickness and extent of permafrost in most regions, trends which are expected to continue.² The release of large volumes of trapped greenhouse gases from the melting permafrost, especially methane, a potent 'climate forcer', could push the climate system towards accelerated warming, with disastrous consequences for the planet. The melting of permafrost also leads to northern expansion of vegetation and animal life, changes flow rates and biochemistry of freshwater bodies, and alters the stability of human settlements and infrastructures built on the permafrost (this is discussed in more detail below).

The wider process of Arctic melting will have global implications through rising sea levels, accompanied by changing ocean salinity (with potential impacts on ocean currents). Changing Arctic conditions, particularly the reduction in Arctic sea ice, are also expected to produce specific knock-on effects in mid-latitude regions, including increased likelihood of extreme weather events, such as droughts, floods, heatwaves and cold snaps.³ Reduced sea ice during summer and autumn may also increase the likelihood of a colder winter for Europe.

Rapid Arctic warming is part of the reason why the effects of climate change are more visible in the Arctic than anywhere else on earth. The conveniently measurable changes in snow and ice cover provide useful indicators for climate watchers, as parts of the region shift from closed ice to open water and from frozen tundra to living spaces that support vegetation. While the broad trends of warming and melting across the Arctic are reasonably clear, these impacts do not affect all Arctic areas equally or at the same rate. The Arctic is a huge and diverse region. The treeline has moved northward and upward in many but not all Arctic areas. While the duration of snow cover extent is decreasing in North America, for example, it has been increasing in Eurasia, under different precipitation patterns.

Moreover, the different impacts, such as those listed in Table 1, occur at inconsistent rates and do not always shift in the same direction year after year. For example, there was a greater retreat in summer ice in 2010-11 than in 2014-15 (see Figure 1 opposite). Patterns also vary throughout the year: winter warming exceeds summer warming by at least a factor of 4. Because the summer season is the season of peak human activity, with more light and better access, this differential matters for how quickly the region will open to new development.

2. Intergovernmental Panel on Climate Change (IPCC), 'Summary for Policymakers' in T.F. Stocker, D. Qin et al (eds.), *Climate Change 2013: The Physical Science Basis, Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge & New York: Cambridge University Press, 2013).

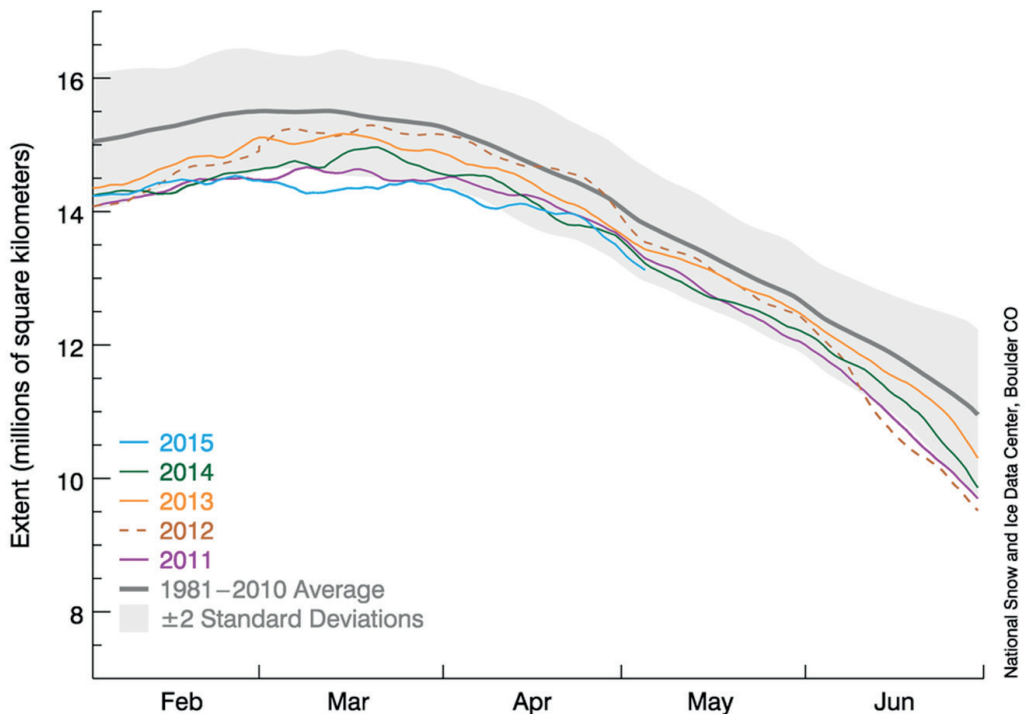
3. Adam Stępień, Timo Koivurova and Paula Kankaanpää (eds.), 'Strategic Assessment of Development of The Arctic', Arctic Centre, University of Lapland, September 2014.

Table 1: Selected observed climate impacts in the Arctic

Decreasing Arctic sea ice cover in summer
Reduction in ice volume in Arctic glaciers
Decreasing snow cover extent across the Arctic
Widespread permafrost degradation, especially in the southern Arctic
Increased river discharge for large circumpolar rivers (1997-2007)
Increased shrub cover in tundra in North America and Eurasia
Advance of Arctic treeline in latitude and altitude
Increased coastal erosion across the Arctic
Negative effects on non-migratory Arctic species
Decreased reproductive success in Arctic seabirds

Source: C. B. Field, V. B. Barros et al (eds.), 'Technical summary', in: *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press, 2014), pp. 35-94.

Figure 1: Arctic sea ice extent (area of ocean with at least 15% sea ice)



Source: National Snow and Ice Data Center, 2015.

But while it is not always linear or easily predictable, the change is happening, and more quickly than earlier models had predicted. The 7 lowest recorded minimum summer ice extents (since satellite observations began in 1979) have occurred in the last 7 years. The average sea ice extent for March 2015 was the lowest in the satellite record, just one in a long series of temperature and ice records that continue to be broken as the Arctic warms.⁴ The annual mean extent of Arctic sea ice dropped between 1979 and 2012 by close to half a million km² per decade, while the summer sea ice minimum extent dropped even quicker, by an estimated 0.73 to 1.07 million km² per decade.⁵ On land, snow cover is shrinking even faster than sea ice is retreating.

Yet just 20 years ago, the assessment report of the IPCC found ‘no convincing evidence of trends in Antarctic or Arctic sea-ice extent (low confidence).’⁶ While both the pace of change and our knowledge of the Arctic have evolved rapidly in the 20 years since, this highlights how quickly our understanding of the region is changing and how difficult it is to predict what the next 20 years will bring.

Gradual opening to shipping and development

Looking to the future, warming and melting trends are likely to accelerate. As in the rest of the world, the Arctic is also likely to be threatened by more frequent and severe extreme weather events. The possibility of the entire Arctic being ice-free at the height of summer is now expected to occur this century, while some predict that it could occur within just a few decades. Figure 2 opposite shows how open the Arctic Ocean is likely to be by the end of this century, even during the winter months.

As awareness of the pace of warming in the Arctic has spread, interest in expanded development in the region has risen. Governments, investors and resource firms have increasingly declared the need for Arctic strategies to properly take advantage of this new land of opportunity. Expectations for rapid opening up of the Arctic continue to be high and public expression of these expectations is often linked to discussions of oil and gas.

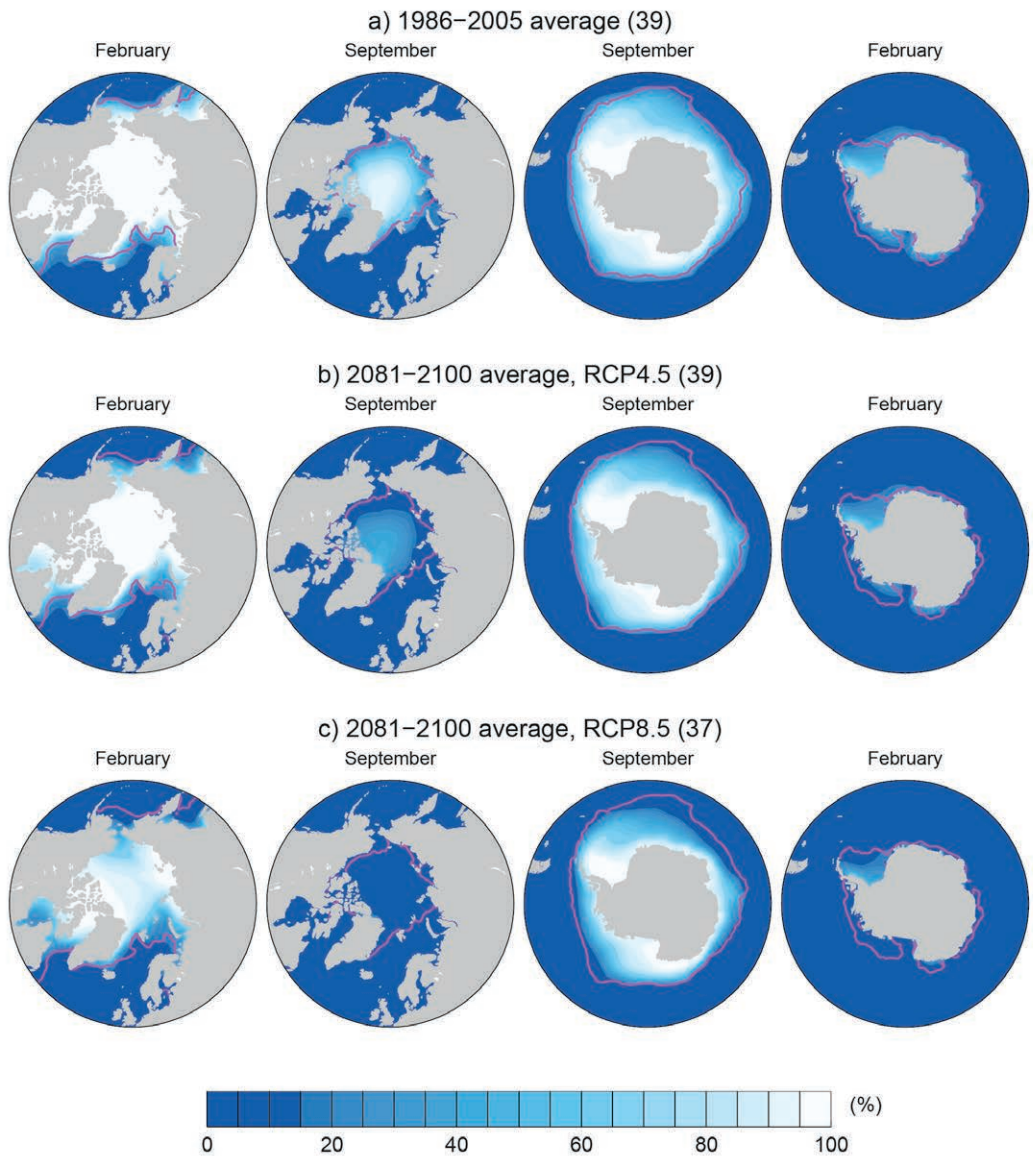
But while the Arctic is changing, and old patterns of life and economic activity are being disrupted, the pace of opening to new actors and interests has been slower than many have expected. The ‘workable’ parts of the Arctic, where the region’s 4 million people live and work today, are developing and changing. But while rising temperatures and increasing sea accessibility have whet appetites for rapid transformation and expanded access into a new region, the basic nature of the Arctic remains the same: inhospitable and shrouded in darkness for much of the year.

4. ‘A Double Dip’, National Snow and Ice Data Center, 7 April 2015. Available online at: <http://nsidc.org/arcticseaicenews/2015/04/a-double-dip/>

5. IPCC, op. cit. in note 2.

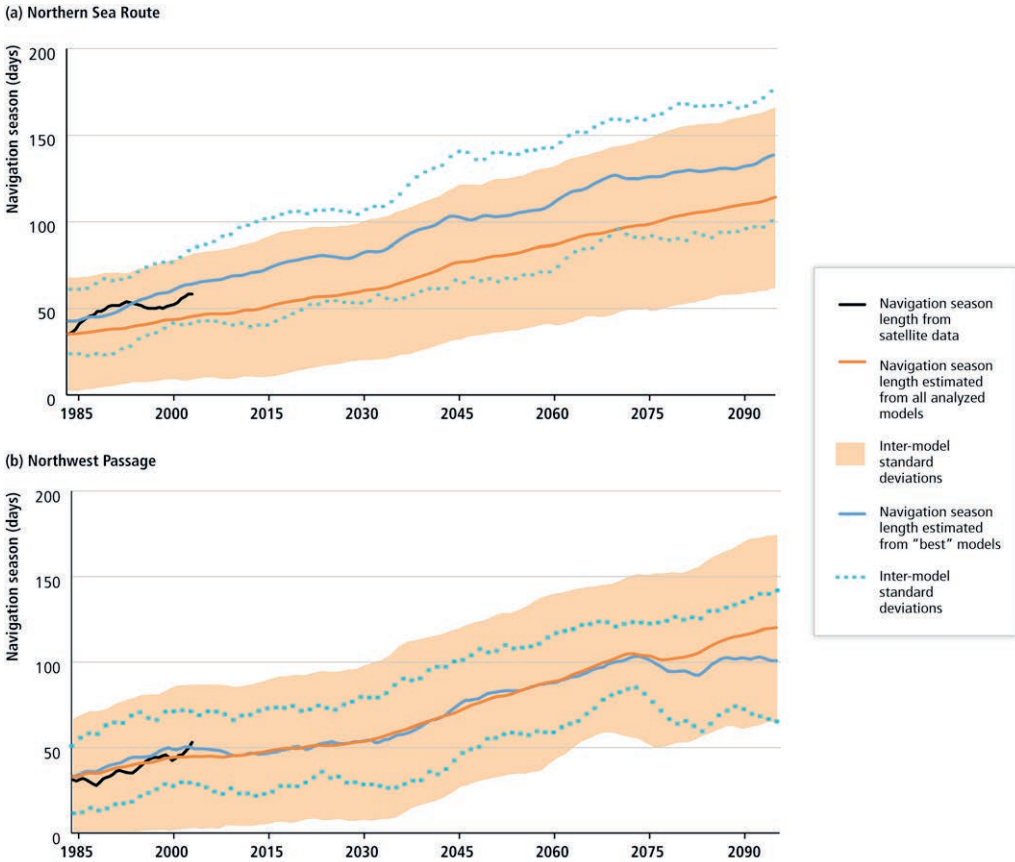
6. Intergovernmental Panel on Climate Change (IPCC), [Robert T. Watson, Marufu C. Zinyowera and Richard H. Moss (eds.)], *Climate Change 1995 - Impacts, Adaptations and Mitigation of Climate Change: Scientific-Technical Analyses: Contribution of Working Group II to the Second Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge & New York: Cambridge University Press, 1996).

Figure 2: Maps of multi-model mean Arctic sea ice concentration



Source: M. Collins et al, 'Long-term Climate Change: Projections, Commitments and Irreversibility', in [T.F.Stocker et al (eds.)]: *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge and New York: Cambridge University Press, 2013).

Figure 3: Projected opening of navigation period



Source: Larsen et al, *Climate Change 2014: Impacts, Adaptation, and Vulnerability* (2014).

Much of the serious planning for Arctic development thus remains focused on the medium to long term. Activity is happening today, but with expectations of longer time horizons until payoff is yielded for these efforts. The farthest northern regions close to the pole will not host much human activity for many decades to come, if ever. Continued exploration and development of offshore energy projects further into the northern seas is likely, but the role of climate change in instigating this new development is probably limited – global resource markets are the driving force.

For the polar region, resources will not be accessible this century anyway unless things go really wrong and climate change shifts abruptly into a more rapid mode (an unfortunate possibility). But any fossil fuels that remain in regions beyond those that are already being explored today may be unburnable by the time they are accessible anyway, for climate change mitigation reasons.

Quicker changes for bears and people

But while quick access and sudden transformation may not be on the cards for the shippers and drillers eyeing the region, the warming of the Arctic in recent years, particularly over the last two decades, has already begun to impact on the lives of the people, plants and animals who live there.

Freshwater, marine, and terrestrial ecosystems are at risk due to the impacts of changing sea ice, snow cover, river conditions, permafrost and ocean acidity and salinity. Increased CO₂ concentration in the atmosphere is expected to lead to higher levels of ocean acidification, particularly in the Arctic Ocean where the lower temperature water can dissolve more CO₂. This, in turn, could inhibit zooplankton and krill growth, with serious consequences for the food webs in polar areas, from the smallest sea life organisms up to the largest marine mammals. Food chain disruption may also arise in some ocean areas due to temperature-induced shifts in the timing and magnitude of seasonal biomass production and alterations in species composition. Habitat changes on both land and ice will be driven by the disappearance of sea ice, increased coastal erosion and flooding, changes to the spring snow melt, and increases in winter thaw-freeze frequency.

While the polar bear population for the Northern Beaufort Sea, for example, is stable, it is predicted to decline with regional warming. The polar bear population in the South Beaufort Sea, in comparison, may be decimated, with predictions of a 99% reduction in population by 2100.⁷ Polar bears and other species, such as walrus and ringed seals, have high levels of feeding specialisation and ice dependence, which limits their ability to adjust to habitat changes.

Warmer conditions in the Arctic are likely to bring new types of life from further south, including vegetation, trees, marine life, birds, insects and even diseases. In Iceland, for example, warming over the last 20 years has contributed to treelines shifting north, the productivity of some plants increasing and grain production expanding. Boreal forests are predicted to move north, with estimates that 11% to 50% of tundra may be displaced in the next century, and much of the vegetated areas within the Arctic may shift to another physiognomic class. These vegetative changes, along with warming itself, are expected to lead to range shifts for birds and terrestrial animals, including reindeer populations.

Where vegetation and animal ranges (on land, sea and air) are shifting, many local communities, especially those based around traditional livelihoods, may struggle to adapt. The IPCC concluded that ‘the rapid rate at which climate is changing in the polar regions will impact natural and social systems (high confidence) and

7. C.M. Hunter, H. Caswell, M.C. Runge, E.V. Regehr, S.C. Amstrup, and I. Stirling, ‘Climate change threatens polar bear populations: a stochastic demographic analysis’, *Ecology*, vol. 91, no. 10, 2010, pp. 2883-897.

may exceed the rate at which some of their components can successfully adapt (low to medium confidence).⁸

This challenge for successful adaptation means that lifestyles and livelihoods that have evolved over centuries to be suited to specific Arctic conditions are likely to be rapidly disrupted. The shifting of animal ranges and migration routes, for example, may affect food sources and livelihoods for many indigenous peoples, with potentially serious consequences for human health, longstanding cultural traditions, and community survival. Indigenous, isolated and rural populations will be particularly vulnerable due to their environmental dependence and existing challenges relating to political and economic marginalisation, health and poverty challenges, and proximity to exposed locations near water bodies.

The melting of permafrost will affect infrastructure, from domestic residences to transportation routes to industrial facilities, which were constructed to rely on the stability of the frozen earth. The risk of increased flooding and ice movement also represents a threat to Arctic settlements.

In areas where new resource-driven development is bringing new investment, sufficient resources may be made available to pay for adaptation efforts, but other regions will be forced to handle these changes without any corollary improvements in local investment or employment trends. There is also a possibility that non-Arctic actors are likely to receive more of the economic benefits that do flow from increased resource development.⁹ Thus, while increased economic development is likely to contribute to an expansion of overall Arctic GDP, and provide exciting new economic opportunities in some areas, these benefits may not materialise quickly enough, or broadly enough, for a dispersed Arctic population struggling to adjust to accelerating climate impacts.

So why worry?

For a sparsely populated region with an economy that accounts for less than 0.5% of global GDP, it may be asked why the region is the focus of such intense strategic analysis. A changing climate will be locally disruptive but it is not immediately clear that it will generate a major upheaval in the world. Yet the Arctic represents both a great worry and a great hope. It is a worry because it is being more rapidly affected by climate change than other regions, serving as a warning and as a gauge of how climate change is affecting our world. Climate-wise, the region highlights the uncertainty and variability of weather patterns, and the possibility of sudden change that also threatens the rest of the world.

8. Larsen et al, 2014, op. cit. in note 1.

9. G.K. Hovelsrud, B. Poppel, B.E.H. van Oort, and J.D. Reist, 'Arctic societies, cultures, and peoples', in: *Snow, Water, Ice and Permafrost in the Arctic (SWIPA)*, Arctic Monitoring and Assessment Programme (AMAP), 2011, pp. 445-83.

It is a hope for closely related reasons. As it warms, expectations for access to the Arctic are changing, with many eyes focused on the resources and shipping routes that will open up as a result of the altered physical environment. Strategists must thus take into account both the actual impacts of the changing climate and the conduct of the investors, scientists, diplomats, military leaders and local populations who are taking action based on their worries and hopes for the future of the region.

II. ECONOMIC POTENTIAL

Kathrin Keil

The increasing accessibility of the Arctic Ocean due to rapidly shrinking sea ice (as outlined in the previous chapter) has sparked growing interest in exploiting the region's natural resources. These concern predominantly:

- the conventional offshore oil and gas resources located on the continental shelves of the five Arctic coastal states; and
- the development of new fishing grounds in established northern fishing areas in Arctic countries' exclusive economic zones (EEZ), and potentially also in hitherto untapped areas in the international waters of the high Arctic Ocean.

The projected economic development of the region also has major implications for the possibility of using new shipping routes along northeastern and northwestern Arctic routes (for trade and tourism purposes).

Although this looks like a straightforward cause-and-effect equation – the decreasing Arctic sea ice leads to an expansion of economic activity in the region – the reality is much more complex and requires a thorough investigation of the economic potential of Arctic energy, shipping and fisheries options, including the role and influence of global actors and interests. This chapter outlines the recent developments, trends, prospects and challenges concerning the economic viability of these three domains. It argues that the shrinking Arctic sea ice cover is only one among many critical drivers of transformations currently underway in the Arctic that needs to be considered as external actors seek to unlock the region's economic potential.

The Arctic's oil and gas resources

The potential of the Arctic's oil and gas resources mean that the region has become a prime focus of attention and the object of 'great expectations' regarding an eagerly anticipated future Arctic economic bonanza. In order to gain a clear picture of the prospects of Arctic oil and gas exploration and development, we need to look carefully at the following factors:

- the estimates as to what quantity of Arctic oil and gas companies can expect to find;
- the limitations and uncertainties related to these expectations;
- the competitiveness of Arctic oil and gas resources within Arctic countries, since most Arctic states only have a part of their land and water masses

located in the Arctic. This also reveals significant political differences between Arctic countries when it comes to promoting investment and development of Arctic oil and gas resources; and

- relevant global trends determining the economic potential of Arctic oil and gas resources.

The most frequently cited source for the estimates of undiscovered Arctic oil and gas resources is a 2008 study by the United States Geological Survey Study.¹ According to this study, the Arctic holds about 22% of the world's undiscovered conventional oil and natural gas resources, which amounts to about 13% of the world's undiscovered oil and 30% of the world's undiscovered natural gas. Of these resources, 84% are expected to be offshore and located mostly in shallower waters on the five Arctic coastal states' continental shelves. While this study undoubtedly constitutes one of the most exhaustive existing surveys assessing the economic viability of the Arctic, it is by now seven years old and no update has been published since. In the meantime, in some areas oil and gas discoveries have been made (and the resources are thus no longer 'undiscovered') while in other areas no findings have yet been reported despite expectations raised by the USGS study.

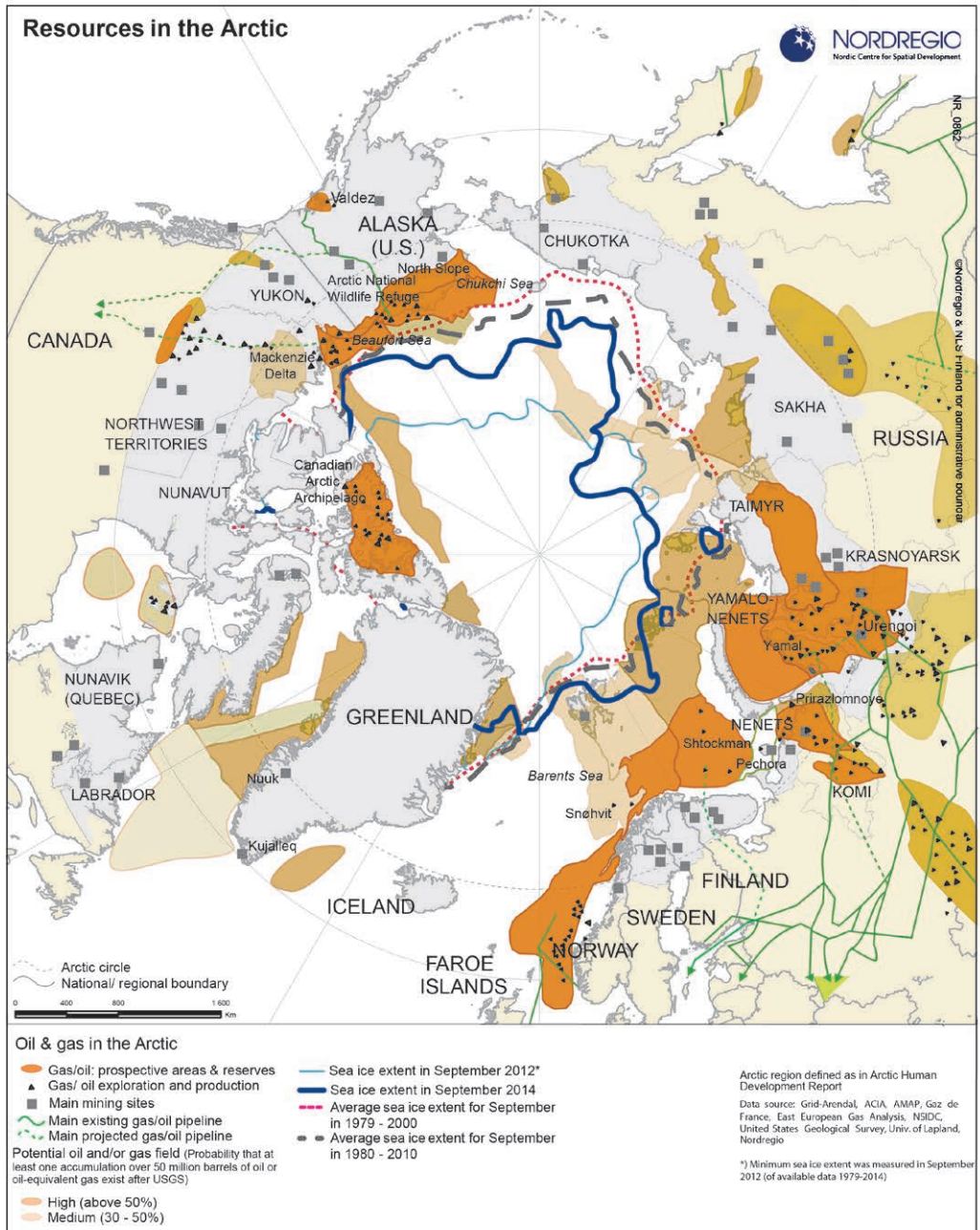
Furthermore, while these numbers look impressive, there are some significant limitations and uncertainties linked to them, which are acknowledged by the USGS but usually omitted in the public debate. The most important ones are as follows:

- USGS figures and statistics are subject to considerable uncertainty because they are based on geological probabilities and not actual finds;
- The USGS study is based on a number of simplifications. For example, they do not take account of technological or economic risks, while resources are assumed to be recoverable even in harsh conditions such as the presence of sea ice or oceanic water depths. Moreover, the results did not take the costs of exploration and development into consideration;
- Estimates are often based on very scant geological information, and our understanding of Arctic resources will certainly change as more data become available.

Another important piece of the puzzle in understanding Arctic oil and gas potential concerns the competitiveness of these resources within the Arctic. Canadian and US Arctic oil and gas resources are relatively uncompetitive domestically. Most proven and expected Canadian oil and gas resources are located outside of Canada's Arctic region, predominantly in the Western Canadian Sedimentary Basin that extends from southwestern Manitoba to southern Saskatchewan, Alberta, north-eastern British Columbia and the southwest corner of the Northwest Territories.

1. Kenneth J. Bird et al., 'Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle', US Department of the Interior, *US Geological Survey*, 2008. Available at: <http://pubs.usgs.gov/fs/2008/3049/fs2008-3049.pdf>.

Figure 1: Distribution of Arctic oil and gas resources



Source: Nordregio, 2014.

This area is also the major Canadian hub for oil and gas production, especially the oil sands in Alberta. Alaskan natural gas production is currently not commercially feasible because it is too remote from possible consumption markets with no adequate transportation infrastructure in place. Furthermore, the so-called 'shale gas boom' has swamped the US market with cheap gas, most of which is found in Texas, Louisiana, North Dakota and in the eastern US. Also, in terms of oil, Alaska only plays a minor role overall. While the state has long been the second-ranked oil-producing state, production at Prudhoe Bay has declined by more than two-thirds since its peak in 1988, when it accounted for 25% of US production. Today, the Gulf of Mexico and thus Texas are the most important oil-producing regions for the US.

In contrast, most of Russia's oil and gas reserves are located in Russia's north, especially in Western Siberia, making Arctic resources the country's most important hydrocarbon resources. Western Siberia is also Russia's most prolific oil and gas-producing region, and the bulk of expected oil and gas resources are on Russia's Arctic continental shelf, especially in the Barents and Kara Seas.

While most of Norwegian hydrocarbon exploitation is still taking place outside Arctic waters, future prospects and recent findings indicate that the Barents Sea will play a major role in Norway's future hydrocarbon production. As in Russia, the oil and gas sector is extremely important for Norway's overall economy and by far the biggest revenue and export sector.

As of today, Greenland has no proven oil or gas resources. The importance of oil and gas resources to Greenland lies in the *potential* of future development and realisation of profits from licensing and extraction. The official Arctic strategy² estimates that significant oil and gas deposits lie offshore Greenland's coasts. No hydrocarbon development industry exists (yet) and activities are so far limited to issuing licences.

While intra-Arctic resource competitiveness is a crucial factor, Arctic economic potential is further determined by broader, global trends. Three recent developments especially stand out as setting the tone for the future of Arctic oil and gas development. These are:

- the shale gas boom in the US;
- the oil price slump that occurred in the latter half of last year; and
- the economic sanctions imposed on Russia in the wake of the Crimea and Ukraine crises.

The 'shale gas revolution' needs to be seen in a broader perspective, reflecting the fact that oil and gas development activities generally depend on international political factors, which are however subject to great variation and uncertainty.

2. Government of Greenland, *Greenland's Oil and Mineral Strategy 2014-2018*, 2014. Available at: http://www.govmin.gl/media/com_acymailing/upload/greenland_oil_and_mineral_strategy_2014-2018_eng.pdf.

For example, for Russia and Norway the further development of climate and energy policies in the European Union generally and, in the case of Germany, the policy of *Energiewende*, is of crucial importance for their long-term plans, since these markets have traditionally been their major export destinations. Market diversification eastwards to Asia is also high on Russia's energy agenda, as the May 2014 deal on Russian gas deliveries to China indicates. Then again, competitors from elsewhere, such as strong liquefied natural gas (LNG) export countries like Qatar and Australia, are also eyeing the Asian market.

Moreover, shale gas might not be here to stay. Some critical voices emphasise that the shale gas revolution and unconventional oil and gas resources generally may turn out to be a relatively short-term 'bubble', especially because of the limited number of high-productivity shale gas fields, high decline rates and accordingly required high levels of capital input, low net energy yields in comparison to conventional fossil fuels, and severe collateral environmental damage. So it is entirely possible that in the mid-term future the US market might become available again for foreign producers, offering a new impetus notably to the Shtokman gas field in the Russian part of the Barents Sea, development of which was put on hold in 2012, partly because of the disappearance of the US as a major market.

The oil price has dropped by around 40% since summer 2014, at times to below \$50 a barrel. While almost everyone agrees that the oil price is one of the most important factors determining oil investment decisions generally, the reality is as always more complex and the picture is not so black and white, including in the Arctic. By no means all companies are pulling out of Arctic energy projects. Industry voices emphasise the long-term character of Arctic projects, with decades intervening between exploratory drilling and production, which is linked to the hope and expectation of a resurgent oil price. For example, the Italian multinational Eni still aims to bring the Goliat oil field in the Norwegian Barents Sea into production this year. On the other hand, Statoil has announced its intention to reduce investments in Arctic fields and lay off many workers employed on its offshore projects. In Greenland, no company currently has drilling plans but many licenses have been sold and the government plans to sell even more. On the US side, Shell has announced that it intends to resume drilling in the Chukchi Sea this summer. In sum, similar to the effects of the economic sanctions on Russia, we will see a slowdown in drilling activities and production starts, but there will not be a complete cessation of activities.

The economic sanctions against Russia affect plans to develop offshore oilfields in the Russian Arctic. Russia has embarked on several joint venture projects with international energy companies over the last few years, for example with Exxon, Eni, Total and Statoil. Due to the restrictive measures and the falling oil price, offshore oil projects in the Arctic may not make much progress in the near future. The EU and US restrictive measures on equipment, technology and related services for use in Arctic offshore oil projects and for shale oil projects, as well as the financial restrictions

on Russia, are expected to have an adverse impact on Russian offshore Arctic oil projects, especially if these measures remain in force over the mid- to long-term future. While it has been suggested that other countries, such as China, could be possible substitutes for American and European technology supply, many observers doubt this at least in the short term, also because the companies from these countries rely themselves on cooperation with Western companies for offshore development. While it is likely that Russian Arctic offshore oil projects will slow down significantly, other onshore projects and one offshore project are already in operation.

Arctic shipping – new ways to connect East and West?

To assess the economic potential of Arctic shipping and relevant trends, three key questions need to be addressed:

- Where in the Arctic can we expect increasing shipping activity, i.e. more on northwestern or on northeastern routes?
- When is Arctic shipping likely to become large-scale, taking into account the still significant uncertainties regarding the retreat of Arctic sea ice?
- For which kinds of shipping are Arctic routes relevant?

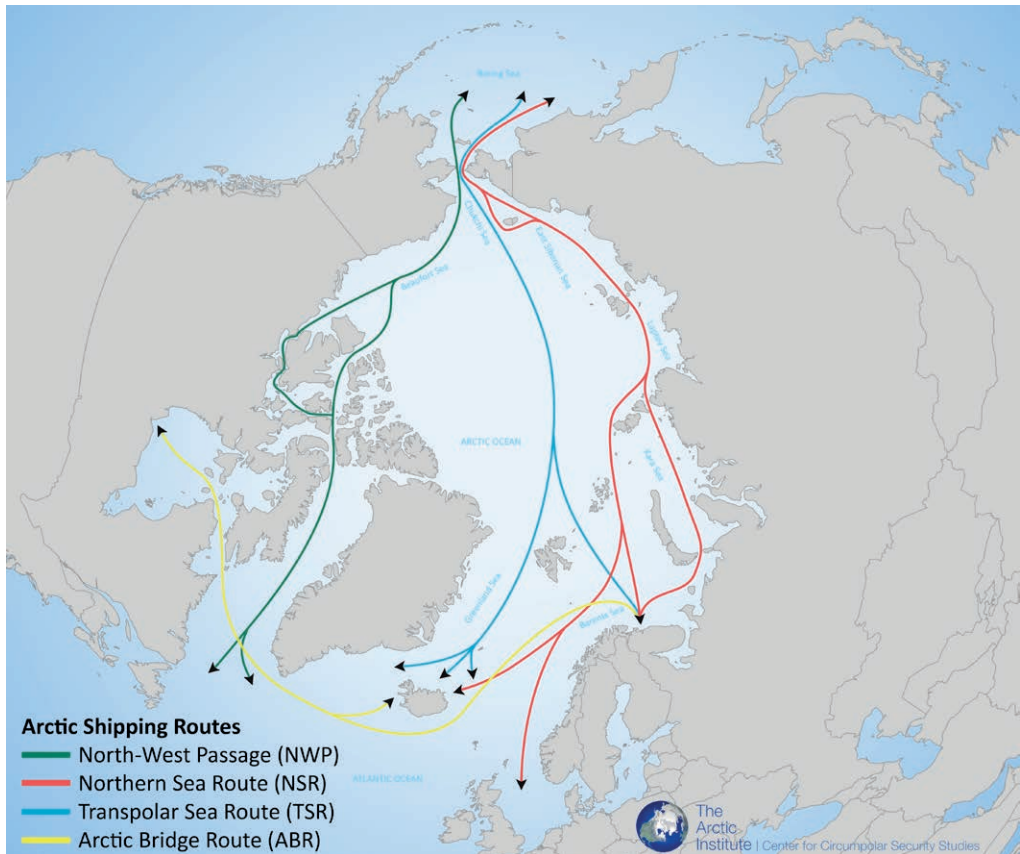
The latter point highlights the necessity of differentiating between the regional and international relevance of Arctic shipping routes when trying to assess the economic potential and likely future evolution of these routes. This includes attention to different kinds of Arctic shipping, such as destinational shipping (which is either from one specific place in the Arctic to destinations further south or vice versa), intra-Arctic shipping, and ships transiting the Arctic from the Atlantic to the Pacific Ocean and vice versa. Furthermore, we have to consider for which commodities or economic activities Arctic shipping routes are a sensible option, e.g. for raw materials which are developed in the north and exported, for bringing in supplies to oil and gas platforms and fisheries, or for general cargo or container shipping.

The key Arctic shipping routes are the Northwest Passage (NWP) with various routes through Canada's archipelago and along Alaska's northern shores, the Northern Sea Route (NSR) with different routes along Russia's and Norway's coast, as well as the transpolar sea route right through the high Arctic Ocean (see Figure 2).

While all three passages have been praised for offering substantial distance and time savings, there is a higher likelihood that northeastern routes will be more viable in the foreseeable future. There are a number of reasons for this. First, the phenomenon of decreasing sea ice has been especially extensive north of the Russian coast, and considerably less so within Canadian waters. Second, northeastern routes offer sufficient cargo potential – mostly Russian oil, gas, iron ore and nickel, and potentially also more and more LNG – to make the route viable. Third, the infrastructure situation is generally better in the Eurasian Arctic, although

significant investments and overhaul are also necessary, especially in Russia. Fourth, Russia has made a big leap forward in facilitating the administrative procedure for using the NSR, with the recently (2013) implemented ‘Rules of navigation on the water area of the NSR’.

Figure 2: Arctic shipping routes



Source: Malte Humpert, The Arctic Institute, Washington D.C.

International usage and relevance of Arctic shipping

Russia is clearly advertising the NSR to encourage stronger international and transit usage, and with recent reforms has reduced the costs and administrative burden involved in using it. However, icebreaking fees and potentially shorter routes are not the only or even the decisive factors which would relocate maritime trade from the established routes through the Suez and Panama Canals. Trading patterns are at least equally important.

Many trading routes for dry cargo are located too far south for northern routes to be viable transport options. Gibraltar and Singapore are seen as the geographical ‘break-even points’ with the northern route impracticable for any traffic south of these places. Container ships – the backbone of international trade and the most important type of international shipping – often operate in networks of routes calling at a number of ports, especially at key transshipment ports located in Singapore, India, the Middle East and the Mediterranean. Arctic maritime routes frequently do not turn out to be any shorter due to the required stopoffs at these transshipment hubs. More generally, trade patterns can change substantially within the timespans currently used to project a seasonally ice-free Arctic, usually up to 2100. The rising markets are located in Southeast Asia, South America and India and for reaching these markets northern routes are not relevant.

Crucially, all Arctic routes are confronted with the general challenge of the remaining uncertainty about the year-to-year sea ice cover variations (see previous chapter), leaving significant doubt as to the possibility and extent of time savings for ships using Arctic routes. Even in summer months, the uncertainty of ice and weather conditions can affect the reliability of shipping services making it especially difficult to stick to tight timetables. While for bulk shipping some variability in transit time can be acceptable, container shipping is a ‘just-in-time’ business, so delays are very costly. Arctic routes are thus not suitable for container shipping because reliability, consistency and schedule integrity are far more important for this kind of shipping than on average shorter and faster routes, which are however subject to considerable variability around this average. Furthermore – and this holds for all Arctic shipping except icebreaker-supported voyages – Arctic routes are and will remain seasonal routes because sea ice is still extensive during winter, meaning that ship operators have to adjust their schedules twice a year if using northern routes.

Nevertheless, substantial savings, especially in terms of time charter rates and bunker fuel costs, are possible when transporting for example iron ore, coal and LNG along the NSR. The time charter costs in particular for LNG vessels are very high and thus time savings can make a big economic difference. But this reinforces the necessity to look at the specific commodities for which Arctic shipping could be relevant, i.e. for energy and cargo shipments but much less so for container shipping.

Next to these general considerations, a look at the usage statistics of international shipping transiting through the NSR over the last few years since the record minimum in 2012 is revealing (Table 1). So far, the NSR is only used by a small number of cargo vessels in comparison to the thousands of ships using the Suez and the Panama Canals each year. In 2012, 46 vessels travelled through the NSR, 42 of which crossed both the western and eastern NSR boundary, while four did not cross the eastern boundary in the Bering Strait, i.e. they stayed within or close to Russian waters.³ While media reports highlighted the 71 ships that transited the NSR in 2013, the statistics reveal that in

3. The NSR is defined in Russian law as a set of marine routes from Kara Gate, south of Novaya Zemlya, in the west to the Bering Strait in the east.

fact only 46 crossed both boundaries. Even if taking the whole 71 as NSR transits, this is only a small fraction of the total 635 permits granted to vessels for transiting through the waters of the NSR. This points to a much stronger usage of Arctic waters for regional, destination, and in fact mostly Russian shipping than for transit.

Furthermore, although the number of vessels transiting through the NSR increased from 46 in 2012 to 71 in 2013, the volume of cargo has only increased by 7.5%. Also, the number of foreign flagged vessels actually declined from 28 in 2012 to 25 in 2013, indicating that the growth in vessel numbers is entirely due to increased Russian usage of the route. Finally, when adding the numbers from 2014, a drop in full transits to 31, in foreign-flagged ships to only 6, and an 80% reduction in cargo volumes can be observed, partly because of more challenging ice conditions in summer 2014. So there is no constant increase or even large increase discernible in the usage of the NSR.

Table 1: Northern Sea Route transit statistics 2012-2014

Year	Transits	Change compared to previous year (full transits)	Foreign-flagged ships	Russian-flagged ships	Cargo (in tons)	Change compared to previous year
2012	42 full, ¹ 4 partly ²	-	28	18 (14 full, 4 partly)	1,261,545	-
2013	46 full, 25 partly	+9.5%	25	46 (21 full, 25 partly)	1,355,897	+7.5 %
2014	31 full, 22 partly	-32.6%	6	47 (25 full, 22 partly)	274,000	-79.8 %

¹ Vessels which crossed both the western and eastern NSR boundary

² Vessels which crossed the western NSR boundary but not the eastern boundary

Source: Data from Northern Sea Route Information Office, Transit Statistics (http://www.arctic-lio.com/nsr_transits).

Regional usage and relevance of Arctic shipping

Regionally, most Arctic voyages so far take place on the periphery of the Arctic Ocean, chiefly along the Norwegian coast, the Barents Sea, around Iceland and the Faroe Islands, southwest Greenland and in the Bering Sea. While transit usage of the NSR is still rather limited as outlined above, it is likely that in the mid- to long-term future we will see increasing Arctic shipping on a regional level, and in particular destination shipping, due to the fact that the Eurasian Arctic is becoming a hub of economic activity. This is attested for example by the construction of the port of Sabetta at the Ob Delta on the Yamal Peninsula, which is being built in the context of the Yamal LNG project, where production is expected to start in 2016.

But here also the bigger picture must be kept in mind: shipping traffic has been passing through the western NSR and Barents Sea for a long time and we are nowhere near the peak tonnage numbers from Soviet days. The total volume of cargo transported via the NSR peaked at around 7 million tons in 1987, then declined to 1.5 million tons in the late 1990s, and has only recently started to rise again (with ups and downs as outlined above).

Arctic fishing: new opportunities?

Arctic fish stocks support extensive subsistence and commercial fisheries in many Arctic countries. However, fishing currently takes place exclusively in territorial waters and in the EEZs of the five Arctic coastal states. No commercial fishing activities are currently taking place in the High Arctic Ocean.

Processes of climate change accompanied by receding sea ice, warmer ocean water and changing levels of salinity have been raising hopes that at least some fish stocks that occur in sub-Arctic regions and in the Arctic periphery will move into more northerly areas, possibly extending fishing opportunities also for non-Arctic fishing actors. The Arctic Climate Impact Assessment (ACIA) study found that it is indeed likely that due to reduced sea-ice cover conditions for some of the most important commercial fish stocks such as Atlantic cod, herring and walleye pollock, stocks will improve through expansion of habitat areas and enhanced production levels.⁴ Some studies have already found that changes in the distribution and abundance of fish are happening, most prominently in the Arctic and northeast Atlantic. These changes manifest themselves in the form of northward shifts or in the deepening of distribution.

However, significant uncertainty about the prospects of new fishing opportunities in the Arctic remains due to the dearth of research about the ongoing climatic changes and their effects on fish species, stocks, distribution and ecosystems. Thus, only very tentative predictions about Arctic fisheries in a changing climate are possible. What we know already is that while a movement into the high Arctic Ocean, and thus into international waters, would benefit not only coastal states – since on the high seas the principle of the ‘freedom of the seas’ (Art. 78 UNCLOS) applies – few species are in fact likely to move that far north for reasons of depth and temperature. The deep central Arctic Ocean does not provide the right conditions for groundfish like cod and haddock in terms of water temperatures, bottom topography and available spawning grounds. Rather, cod and haddock tend to be concentrated in the shallow areas of the continental shelf, such as in the Barents and North Sea, which are almost exclusively confined to sea areas within the coastal states’ EEZs.

4. Hjalmar Vilhjálmsson and Alf Håkon Hoel, ‘Fisheries and Aquaculture’, Chapter 13 in *Arctic Climate Impact Assessment* (Cambridge University Press: 2004, p. 692, Available at: http://www.acia.uaf.edu/PDFs/ACIA_Science_Chapters_Final/ACIA_Ch13_Final.pdf).

Furthermore, while colonisation of new species could thus result in new opportunities for fisheries, the colonising species could also lead to the addition of new stressors to the ecosystem, new predators, enhanced competition and new parasites. Finally, migrating fish populations can lead to more but also to less voluminous stocks in different parts of the Arctic, due in part to reduced salinity as a consequence of fresh water influx from melting sea and glacial ice and increased acidification of the world's oceans due to increasing uptake of CO₂.

Future prospects

In sum, when assessing the potential for the future commercial utilisation of Arctic resources, the picture that emerges is quite complex and it is obvious that the declining extent of sea-ice cover is by no means the only relevant factor that needs to be analysed. Arctic energy resources and demand for Arctic shipping both depend on intra-Arctic policies, subsidy structures and competitiveness with other resources and regions, as well as on non-Arctic systems, processes and actors, not least because many Arctic commodities are destined for markets in mid-latitudes. The future of Arctic fishing opportunities, especially beyond the traditional fishing areas in Arctic coastal states' EEZs, is surrounded by a lot of uncertainty. Future research will hopefully shed more light on the economic potential of Arctic commodities and especially also on the need for all human activities in the Arctic to respect the principle of sustainable development and comply with environmental protection standards.

Part Two

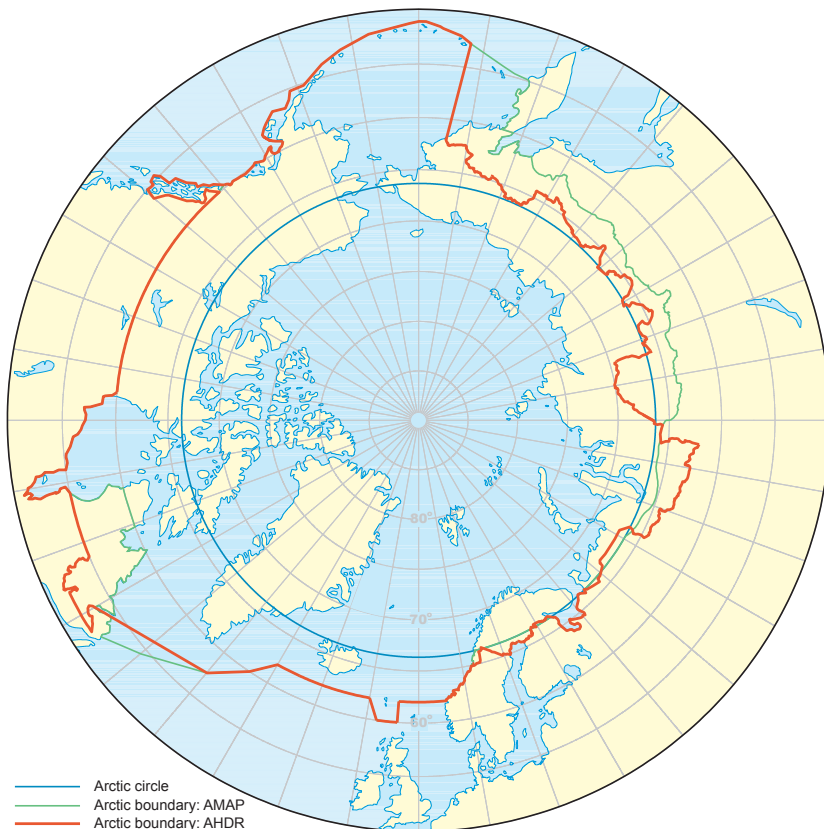
The political landscape: trends and prospects

III. ARCTIC GOVERNANCE

Juha Jokela

The challenges and opportunities embedded in the Arctic transformation discussed in the previous section have led to increasing regional and sub-regional cooperation as well as recognition of the value of coordinated international arrangements for dealing with Arctic matters. As a result, a somewhat fragmented landscape of multilateral Arctic cooperation has emerged. While developments during the last 20 years attest to growing interest in strengthening the existing governance structures, some overlaps and gaps in international regimes remain a feature of Arctic political cooperation. This chapter will map out and discuss the most relevant EU's increasing engagement in the region.

Figure 1: The Arctic region



Source: W.K. Dallmann, Norwegian Polar Institute. *Arctic Human Development Report* (The Stefansson Arctic Institute, 2004). (<http://www.loicz.org/cms02/science/hotspot/Arctic/index.html.en.html>)

Political cooperation

The boundaries of the Arctic region are not clearly delineated. The most straightforward definition of the region equates it with the land and sea masses above the Arctic Circle. It is, however, commonplace to operate within a broader definition of the Arctic Zone provided by the Arctic Monitoring and Assessment Programme (AMAP) or the Arctic Human Development Report (AHDR) in 2004.¹ These definitions also include areas below the Arctic Circle which are strongly connected to the Arctic in terms of climate, environment and culture.

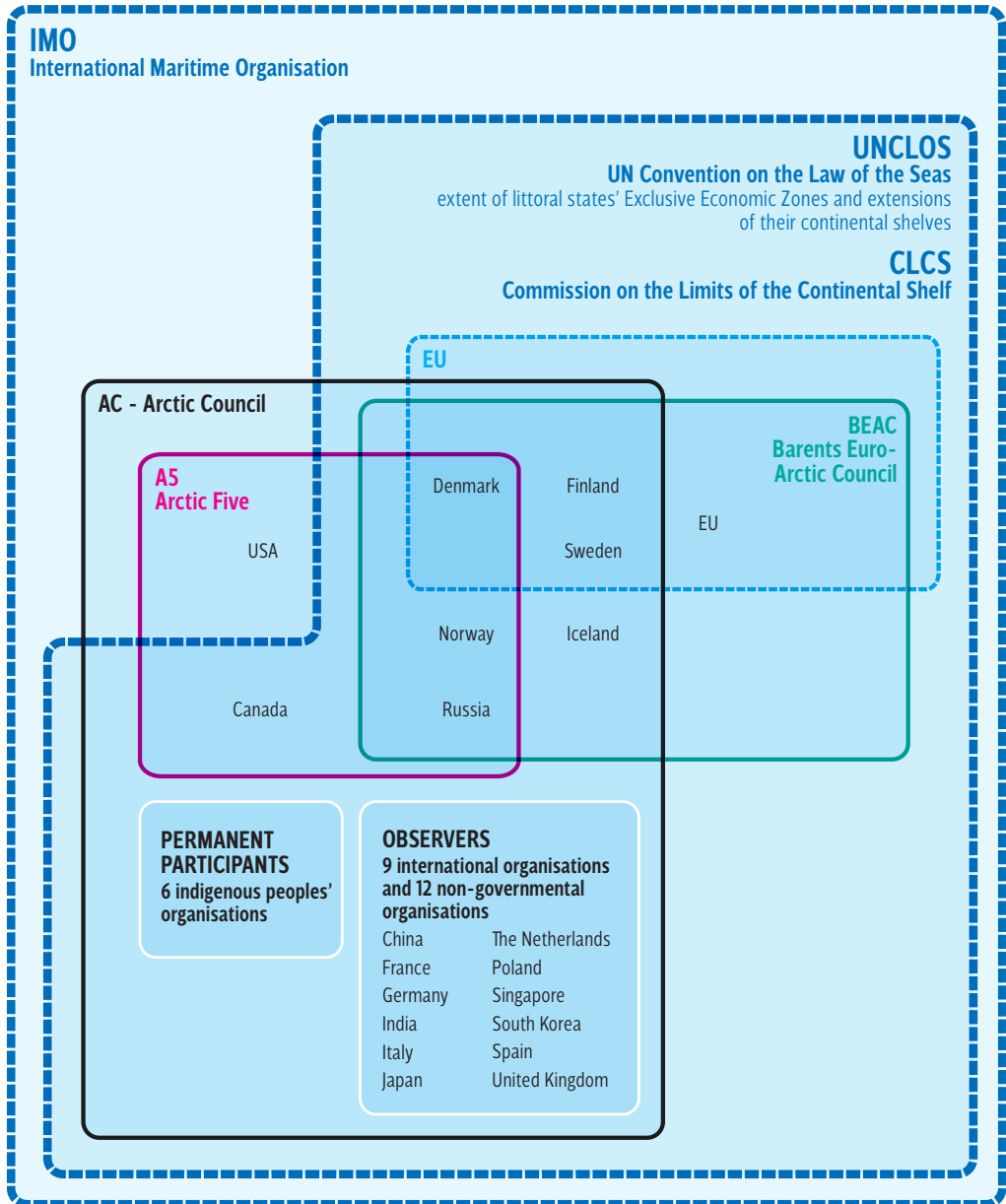
Unlike its southern counterpart – the Antarctic – the northern polar region is populated. Depending on the definition of what counts as part of the Arctic, the region is home to four to thirteen million people, including substantial indigenous populations. Crucially, and unlike the Antarctic, the region is marked by largely defined borders of sovereign states, and hence principally governed by national and sub-national jurisdictions. The Arctic states have also acknowledged the relevance of existing multilateral arrangements for Arctic matters, and the ‘European Arctic’ is furthermore subject to supranational governance through the extended impact of different layers of European integration.

The Arctic states have underlined the role of the UN Convention on Law of the Sea (UNCLOS) as the international legal framework for delineation of maritime terrains. The Convention defines the extent of coastal states’ territorial waters and Exclusive Economic Zones, with implications for ownership of seabed and marine resources as well as navigation. It also establishes the legal framework governing ocean and seabed resources as well as navigation in international waters jointly with other international maritime conventions.

The UNCLOS also stipulates the procedures for extending coastal states’ rights to seabed resources beyond their EEZs, which is a particularly important political question in the Arctic region. The recommendations made by the Commission on the Limits of the Continental Shelf (CLCS) under UNCLOS, based on scientific evaluation, are not however binding in situations where overlapping claims exist. Thus the delineation of continental shelves in the Arctic largely rests upon a political settlement among claimant states. Even if the US is not a party to UNCLOS, it has nevertheless noted the Convention’s relevance in the Arctic and engaged itself to behave in the region on the basis of international law. Within the UN framework the role of the International Maritime Organisation (IMO) in Arctic waters has recently been highlighted due to the adoption of the International Code for Ships Operating in Polar Waters (Polar Code) in 2014. The Polar Code aims to provide for safe ship operation and to protect the polar environment.

1. For definitions of the Arctic, see Niels Einarsson, Joan Nymand Larsen, Annika Nilsson and Oran R. Young (eds.), *Arctic Human Development Report* (Akureyri: Stefansson Arctic Institute, 2004), pp. 17-18; and Arctic Monitoring and Assessment Programme, ‘Geographical Coverage’ (available online at <http://www.amap.no/about/geographical-coverage>).

Figure 2: Arctic cooperation frameworks



The Arctic states have also established frameworks for regional and sub-regional cooperation in Arctic matters. Since it was established in its current institutional form in 1996, the Arctic Council (AC) has emerged as the pre-eminent forum for cooperation in Arctic affairs. It has largely focused on environmental issues and

advancing scientific knowledge on Arctic transformation, as well as improving living and working conditions and promoting sustainable economic development in the region.

As an inter-governmental forum without legal personality, the Arctic Council cannot independently issue binding regulations. Yet it has developed into an important decision-shaping institution that sets the agenda, and issues detailed guidelines, for national and international legislation concerning the Arctic. Under its auspices, two binding inter-governmental agreements have so far been reached by its member states, aimed at enhancing cooperation in oil-spill response and search and rescue (SAR) at sea.

The member states of the Arctic Council are Canada, Denmark (through Greenland and the Faroe Islands), Finland, Iceland, Norway, Russia, Sweden and the US. It also includes six participants, who represent various indigenous populations. These participants have been given official status alongside the governments. The AC has given observer status to 12 non-Arctic countries from Europe and Asia, and the recent inclusion of China, India and Singapore (among others) demonstrates the growing global relevance of the Arctic. AC observers also include a number of international organisations and non-governmental organisations with Arctic relevance.

The EU's aspiration to become an observer of the Council was initially put on hold in 2009, deferred in 2011 (jointly with several other applications), and conditionally approved in 2013 subject to a settlement of a bilateral dispute between the EU and Canada, mainly related to the EU's ban on seal products. Although the latter issue is now solved, deteriorating relations with Russia have cast a shadow over the EU's observer application. However, as the US will assume the chairmanship of the AC for two years from April 2015, the EU is likely to continue being invited on an *ad hoc* basis to future AC meetings.

Box 1: Arctic cooperation frameworks

The management of Arctic transformation has given rise to several global, regional and sub-regional frameworks, arrangements and institutions. In addition to UNCLOS, these range from international multilateral arrangements related to environmental (e.g. UNFCCC) and economic (e.g. WTO) issues, to indigenous peoples' rights (e.g. ILO), to regional and sub-regional trade agreements and fisheries regimes. This, in turn, brings into play a wide range of institutions and administrative bodies including UN agencies (e.g. IMO, WHO, UNEP, UNDP), regional and sub-regional institutions (e.g. AC, BEAC, EU, Nordic Council and West Nordic Council), and bodies such as fisheries management organisations. Transnational activities of local communities, indigenous peoples' groups and NGOs as well as corporations also feature as part of the management of Arctic matters.

The five Arctic Ocean littoral states – Canada, Denmark, Norway, Russia and the US – have also gathered in a more restricted and informal format over issues mainly related to the Arctic Ocean. They met at ministerial level in 2008 and 2010 to develop general principles for Arctic cooperation, and – despite the stated unhappiness of the remaining AC members – their officials still work together on issues considered not ripe for full AC treatment, including in 2014 the question of Arctic fisheries management. The EU has neither endorsed nor rejected the ‘A5’, yet it has insisted that the Arctic Council is the main body for Arctic cooperation.

The Barents Euro-Arctic Council (BEAC) was created in 1993 by the Nordic states, the EU and Russia to pursue sub-regional cooperation on land in the European High North. Over the years it has been closely linked to a joint policy of the EU, Iceland, Norway and Russia established under the rubric of the (EU’s) Northern Dimension. The BEAC and its inter-regional parallel structure the Barents Regional Council – providing a platform for cooperation among regional entities and groups – have a track record of promoting cross-border collaboration to solve environmental and socio-economic challenges.

The EU engagement

The basis for the EU’s increased engagement with the Arctic is linked to its (member states’) Arctic territories. Iceland and Norway are members of the European Economic Area as well as the Schengen area, and they tend to align themselves with EU foreign policy. This means that the EU norms, legislation and standards encompass the Arctic region. Its close political and economic relations with the remaining Arctic states further highlight its relevance. The recently agreed extensive free trade agreement with Canada and ongoing negotiations to establish the Transatlantic Trade and Investment Partnership (TTIP) with the US reflects the EU’s aspiration to establish an increasingly integrated North Atlantic economic space which extends into the Arctic region. Furthermore, bilateral formats of dialogue between the EU and Russia have been seen to open up possibilities for the EU to address some of the challenges related to the Arctic transformation jointly with Russia at regional and sub-regional level. The Ukraine crisis has however severely undermined EU-Russia cooperation in general, and the restrictive measures imposed on Russia by the EU have had direct implications also in the Arctic.

Given its presence and relevance in the Arctic region, the EU’s Arctic aspirations are also closely related to linkages between the Arctic transformations on the one hand and the EU’s climate, maritime and energy policies on the other. Its Arctic policies (overtly developed since 2008) have aimed to promote sustainable development of the region, and mainly focused on maritime and environmental issues as well as scientific research and monitoring activities related to the transformation of the polar region.

Even if the EU's efforts in engaging with Arctic matters have proven somewhat controversial and complex both internally and externally, the Union has nevertheless emerged as an Arctic stakeholder and notable partner in efforts aimed at managing the Arctic transformation and associated risks. The EU's expertise in setting regulatory standards at supra-national level is relevant for many Arctic matters such as fishing, climate change, the safety of shipping and offshore drilling, as well as environmental protection in general. The EU is therefore seen to have a constructive role to play in addressing many of the challenges in the Arctic.

Military cooperation

While questions related to a wider spectrum of environmental, economic and human security have featured high on national and international agendas concerning the Arctic, 'hard' security issues have been largely 'bracketed off' from institutionalised forms of Arctic cooperation. Yet the need to address 'softer' security issues has led to more or less frequent meetings of military and coast guard chiefs and some joint exercises. The geostrategic environment of the Arctic is however principally shaped by national military strategies. Nevertheless, the Arctic states' membership in European and North American security arrangements means that it is also characterised by several military and defence cooperation structures.

Four out of five Arctic Ocean littoral states are NATO members. Although the alliance has not developed formal or explicit Arctic policies, it forms the cornerstone of its members' territorial defence. Finland and Sweden, as non-NATO countries, have established close partnerships with the alliance. Although these activities have focused on international crisis management, they have enhanced the interoperability of Finnish and Swedish defence forces with NATO. Critically, cooperation between Russia and NATO has over the years become more difficult, and at the time of writing has halted because of the Ukraine crisis and Russia's annexation of Crimea. Earlier NATO-Russia cooperation arrangements were seen to bear some potential to defuse tensions that might arise in the Arctic.

The EU is rarely assigned a role in military developments in the Arctic. Its interests in maritime security and safety have however recently led to discussion on its military capabilities in the Arctic, and the European Defence Agency (EDA) has launched a project focusing on the EU's maritime capabilities in the region. Moreover, the Treaty of Lisbon strengthened cooperation among the EU member states by introducing solidarity and mutual assistance clauses.

The former provides for joint action if an EU member state is the object of a terrorist attack or the victim of a natural or man-made disaster, and therefore could apply to disasters in the Far North that might affect Denmark, Finland and Sweden. The mutual assistance clause states that 'if a member state is the victim of armed aggression on its territory, the other member states shall have towards it an

obligation of aid and assistance by all the means in their power'. This clause however notes the specific character of member states not belonging to a military alliance as well as the commitments made by states that are members of NATO, which 'remains the foundation of their collective defence'. Relatedly, and in the absence of specific structures to provide and receive assistance, the clause has been interpreted mainly as a political declaration, yet some member states (such as Finland) have recently started to discuss its implementation in terms of required changes in the national legislation to provide and receive assistance. The EU has also reinvigorated its attempts to enhance European defence capabilities amid recent national defence budget cuts. As these developments are linked to EU members' territorial defence capabilities, they have some geostrategic relevance for the Arctic.

Furthermore, Nordic cooperation has recently advanced, in particular in the field of defence. The five Nordic states have strengthened their previous cooperation, which was mainly focused on international crisis management, by establishing a more structured form of cooperation known as NORDEF. It aims to contribute also to the Nordics' national defence capabilities through joint procurement and the creation of some pooled or shared capabilities. In addition, Finland and Sweden have announced plans to deepen their peacetime defence cooperation considerably. Even if these Nordic initiatives are not explicitly Arctic-motivated, they have implications for these countries' defence capabilities. Specific cooperation activities have also spilled over into the Arctic region, notably in the case of joint air patrolling which has included Finnish and Swedish (unarmed) participation in NATO's Icelandic Air Policing exercise in 2014.

North American defence cooperation is manifest in the Arctic most visibly through the North American Aerospace Defense Command (NORAD) structure. It is a combined organisation of the US and Canada that provides early warning, protection of airspace sovereignty, and defence for Northern America with installations in Alaska, Canada and Greenland. Currently, Canada and the US are looking at possibilities for expanding its responsibilities to include monitoring Arctic waters.

Looking ahead

Existing forms of international, regional and sub-regional cooperation in the Arctic provide many opportunities to govern and manage the ongoing Arctic transformations. Yet significant challenges remain. The multilateral landscape is fragmented and marked by co-existing and overlapping arrangements. Their efficacy and ability to deliver can be questioned in the absence of strong legally binding instruments and the continuing salience of state sovereignty, light institutionalisation and funding, as well as the omission of some of the toughest questions – such as hard security – from the agenda. Yet any radical overhaul of the current principles and cooperation formats is difficult to achieve, and could turn out to be counter-productive. Moreover, the current framework enables the

Arctic states and stakeholders to work around the most contentious issues, and potentially also maintain dialogue and build up trust during times of heightened tensions. It also leaves room for gradual evolution and adaptation to address the persistent uncertainties that accompany the course of Arctic development.

IV. COMMON AND COMPETING INTERESTS

Mikkel Runge Olesen¹

In 2008 Canada, the Kingdom of Denmark,² Norway, Russia and the US (the Arctic Five) agreed on the Ilulissat Declaration. The declaration confirmed the commitments of each of the five to adhere to UNCLOS and to the orderly settlement of disputes and overlapping territorial claims.³ Thus far they have kept their word. And the 2010 agreement on the Barents Sea between Norway and Russia stands out as an example of such successful cooperation. However, recent developments, especially connected with the Ukraine crisis, highlight the question of whether the proclaimed will to settle overlapping territorial claims and other disputes and to cooperate on issues of common interest will prove sufficient in practice.

To answer this question, this chapter seeks to investigate the Arctic interests of key countries, most importantly the Arctic Five, but also other interested parties such as the rest of the Arctic Council member states and observers as well as the EU, with the aim of evaluating the state of play regarding the remaining disputes.

The nature of the stakes in the Arctic

The Arctic potentially holds significant resources. However, as chapter two makes clear, most of these resources are not easily accessible. Furthermore, when discussing resources as a source of friction in the Arctic, it is important to differentiate between the disputed and the undisputed parts of the Arctic. Thus, most of the resources are located in undisputed areas. Additionally, most of the resources that might be found in the disputed areas will be located very high in the North and very far from the coastlines of the Arctic states. The average costs for extracting those resources are therefore likely to be significantly higher than is the case for deposits in some of the undisputed areas. Migrating fish stocks and the general opening up of the Arctic Ocean for commercial fishing represent new challenges as well, but at the same time also an obvious area for cooperation. After all, unregulated or illegal fishing potentially hurt the long-term interests of all involved states. This being the case, agreeing on the creation of a Regional Fishing Management Organisation for the Arctic, with the participation of coastal states and states with interests in commercial fishing in the area, may at some point become necessary.

1. The research for this article was financed by the Defence and Security Studies programme at the Danish Institute for International Studies (DIIS).

2. The Kingdom of Denmark consists of Denmark, Greenland and the Faroe Islands.

3. Territorial claims/disputes are here understood broadly as disputes over land territory (only Hans Island remains), territorial waters, EEZs or extended continental shelf claims.

Finally, it is important to note that the Arctic Five are not equally economically exposed to instability in the region. Although all of the Arctic Five are vulnerable to capital flight caused by instability, Russia is more vulnerable than the others in one important respect: Russian firms lack the technology and know-how to extract resources from the more challenging deposits in the Arctic. This is especially the case when it comes to offshore extraction, since much of Russian expertise in oil and gas extraction has so far been primarily focused on extracting resources from the Russian tundra in Siberia.

Disputes between the NATO countries

Nevertheless, this is not to say that the Arctic region does not present particular challenges. A key issue is finding acceptable settlements for the remaining Arctic territorial disputes. Of the Arctic Five, all except Russia are NATO allies. The disputes in the Arctic can therefore generally be divided into two categories: those that involve Russia and those that do not involve Russia.

Beginning with the conflicts between NATO countries, these can in general be characterised as relatively manageable. The Hans Island conflict between Canada and the Kingdom of Denmark, the only conflict over land in the Arctic, is mostly an irritant in the relationship between the two countries. Thus, the most important issues in that conflict – rights to the sea territories – have generally already been agreed upon. The disputes between the Kingdom of Denmark and Norway about the sea north and north-east of Greenland and the disputes between the Kingdom of Denmark, Iceland and Norway north of the Faroe Islands are likewise very unlikely to cause real trouble as the countries in these cases confirmed their willingness to secure orderly settlements already back in 2006.

The disagreements between Canada and the US (and others) over the Northwest Passage is potentially more serious. While Canada insists that the Northwest Passage is part of its territorial waters, the US stresses freedom of the sea. No end is in sight to this dispute, but for now the parties have agreed to disagree on the issue. The Beaufort Sea conflict between Canada and the US has also proven problematic to solve not least because the US has so far not yet officially ratified UNCLOS as the legal framework for solving the dispute due to resistance in the US Congress. This difficulty, however, should not be overemphasised, as US behaviour in the Arctic has largely been in accordance with UNCLOS.

Finally, the dispute over the extended continental shelves in the Arctic Ocean, not least on the basis of the geological nature of the Lomonosov Ridge, remains difficult to solve. Theoretically, this conflict could involve all four of the Arctic littoral NATO members states (for the Russian involvement in this conflict see below), but among the NATO countries the Kingdom of Denmark and Canada are expected to be the chief claimants, with Norway having staked a claim to only a small part of the seabed territory and the US having yet to ratify UNCLOS.

Figure 1: Maritime jurisdiction and boundaries in the Arctic region



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| Internal waters | Russia territorial sea and EEZ | Straight baselines |
| Canada territorial sea and exclusive economic zone (EEZ) | Russia claimed continental shelf beyond 200 M (note 4) | Agreed boundary |
| Potential Canada continental shelf beyond 200 M (see note 1) | Norway-Russia Special Area (note 5) | Median line |
| Denmark territorial sea and EEZ | USA territorial sea and EEZ | 350 M from baselines (note 1) |
| Denmark claimed continental shelf beyond 200 M (note 2) | Potential USA continental shelf beyond 200 M (note 1) | 100 M from 2500 m isobath (beyond 350 M from baselines) (note 1) |
| Iceland territorial sea and EEZ | Overlapping Canada / USA EEZ (note 6) | Svalbard treaty area (note 8) |
| Iceland claimed continental shelf beyond 200 M (note 2) | Russia-USA Eastern Special Area (note 7) | Iceland-Norway joint zone (note 9) |
| Norway territorial sea and EEZ / Fishery zone (Jan Mayen) / Fishery protection zone (Svalbard) | Unclaimed or unclaimable continental shelf (note 1) | Main 'Northwest Passage' shipping routes through Canada claimed internal waters |
| Norway claimed continental shelf beyond 200 M (note 3) | | |

Source: IBRU, Durham University, UK (<http://www.durham.ac.uk/ibru/resources/arctic>).

While UNCLOS and the Commission on the Limits of the Continental Shelf (CLCS) have been recognised by both Canada and the Kingdom of Denmark, the lack of a joint application means that overlapping claims may be recognised by the committee. In such a case a final round of negotiations between the Kingdom of Denmark and Canada is required.

Nevertheless, as these negotiations are between long-term allies, they are unlikely to escalate beyond irritation. They can delay expanded cooperation in the Arctic, such as when the EU observer status bid ground to a halt over the EU ban on Canadian seal products. Such disputes are potentially serious, if clashing interests mean missing a window of good relations between the West and Russia (pre-Ukraine), but otherwise, in themselves, such disputes are unlikely to cause long-term problems.

Disputes involving Russia

Far more pressing are the conflicts that involve Russia. As previously mentioned, Russia has a vested interest in keeping the Arctic stable due to its need for Western investments and know-how for off-shore oil and gas extraction in difficult conditions. However, the Ukraine crisis represents a wild card in this regard. While Russia has been anxious to keep the two issues separate, the Arctic does represent an obvious target for Western sanctions. This became evident over the summer of 2014 when sanctions hit primarily Russian oil extraction in the region and, secondarily, gas extraction as well (while gas was not being directly targeted, fields aimed at extracting both oil and gas were affected). Such sanctions may play an important role for a general Western strategy in the Ukraine crisis. However, they are not without costs in the Arctic. Cutting the Russians off from Western knowledge and know-how regarding oil and gas extraction in the Arctic might lead Russia to scale down its aspirations. But the possibility remains that Russia might simply choose to forge ahead with its economic projects in the Arctic anyway. Doing so offers Russia prospects to diversify its energy partners – China and others might be able to provide alternative sources of funding. However, Western technology and expertise is not easily replaced. If Russia chooses to go ahead without it, the potential risks of possible Russian failures to cope with the significant technological challenges in operating under harsh Arctic conditions represent a very real threat to the fragile Arctic environment, and possible accidents could place even greater strain on Arctic cooperation.

Even more importantly, however, sanctions in the Arctic threaten to undercut the chief pillar of stability in the region: Russia, the only country with whom any kind of serious disputes in the Arctic can be expected from a Western perspective, has so far had the greatest interest in preserving the region's stability. This is especially important since several disputes between Russia and the rest of the Arctic Five still await resolution.

The disagreement over the Northern Sea Route (NSR) is very similar to the Northwest Passage conflict. The US (and others) champion freedom of the seas against Russia, which claims the passage as its own national waters. However, it also presents significant differences. First, because the NSR is more developed than the Northwest Passage, making it a more immediately attractive route for commercial shipping, meaning that the economic stakes are higher in the short to medium term. Secondly, because of the poor condition of US-Russian relations following the Ukraine crisis. A solution was not within sight before the crisis and is now therefore even more unlikely to be found in the immediate future. A US-Russian tacit agreement to disagree, while in practice developing standard operating procedures for the use of the passage, might be the best to hope for.⁴

The conflict over extended continental shelves in the Arctic Ocean as previously mentioned potentially involves all the Arctic Five, but first and foremost Canada, the Kingdom of Denmark and Russia. Russia submitted its Arctic claims already in 2001, although it was subsequently asked by CLCS to conduct more extensive research. It is expected to resubmit in the near future. Canada submitted a partial claim to Arctic territory in 2013 and is likewise expected to submit further claims soon. Finally, the Kingdom of Denmark submitted its claim to the ridge on 15 December 2014, almost exactly on the day that marked the official deadline of the ten year period since ratification of UNCLOS (the Kingdom of Denmark ratified UNCLOS in 2004).

Taking a closer look at the most recent submission, the Danish one, tells us a bit about what to expect from territorial disputes in the future. Since joint applications to CLCS are possible, the very existence of separate Danish, Canadian and Russian applications can be taken as a bad sign. Nevertheless, efforts have obviously been taken to downplay negative consequences of submitting rival claims. And these efforts have largely been successful. Thus, if one considers the executive summary of the Danish application of December 2014, it is very clearly stated that dialogue had been going on with both Russia and Canada prior to the Danish submission. Specifically this led to the exchange of notes from March 2014 between the Kingdom of Denmark and Russia in which it was made clear that:

‘When one State makes its submission to the Commission on the Limits of the Continental Shelf, the other State immediately forwards a diplomatic note to the UN General Secretary which will specifically say the following:

- One state will not raise an objection against the Commission considering the submission of the other State and making recommendations on it;
- Recommendations made by the Commission in regard to the submission of one State are without prejudice to the rights of the other State during the consideration of its own submission by the Commission;

4. To the list of US-Russian disputes could also be added Russia’s refusal to ratify the Russia-United States maritime boundary agreement concerning the boundary between Alaska and Russia, but as this potential conflict has thus far stayed dormant, it will not be treated here.

- The above recommendations with respect to either State are without prejudice to the delimitation of the continental shelf between the two States.⁵

What does this mean? Basically it means that the conflict is postponed until at least one and possibly until all the countries have had their case treated by the CLCS. Since it takes the CLCS a long time to treat each application, this can easily result in the problem being postponed for a decade or more. In the light of the present crisis in Ukraine this seems like a very sensible option. While there is no guarantee, it is not unreasonable to hope that the relationship between the West and Russia might be better at that point than it is now. But it should be borne in mind that the problem has only been postponed – not solved. The CLCS judges on the basis of scientific data that can easily end up validating overlapping claims between the three countries. If so, the CLCS is not authorised to settle such disputes, and bilateral negotiations will be required to sort out the differences.

For a small country like the Kingdom of Denmark, and even for a larger country like Canada, negotiating a good deal directly with the Russians might prove a challenge. Especially if relations between Russia and the West have not improved by then. Lessons from the Barents Sea agreement between Norway and Russia in 2010 are not ground-breaking, but might still offer the best example for the Kingdom of Denmark and Canada to follow. The agreement succeeded not so much because of purely legal considerations. Legal arguments and practices formed the basis of negotiations, but meant little without interpretation and adaption to the case and did not, in themselves, point the countries towards a concrete settlement. Rather, it succeeded because the two countries managed to hammer out a political compromise. Doing so was in the economic interests of both countries, as removing the uncertainty about the boundary was a prerequisite for effective economic utilisation of the area. This is not the case to the same extent with the Lomonosov Ridge where many prospects for economic exploitation are simply unrealistic for anything but the very long term. That could mean less incentive for cutting a deal. On the flip side, however, lower immediate economic potential could also mean that there is less to fight about.

Timing played a central part in the 2010 Barents Sea agreement as well, as Russia, under the Medvedev presidency, was then actively trying to demonstrate its willingness to cooperate in the Arctic and elsewhere in the spirit of the 2008 Ilulissat Declaration, and it was willing to risk criticism from the Russian political right for doing so. A similar window of opportunity seems far away right now, but Canadian and Danish diplomats should nevertheless look hard for such signs when the CLCS process is nearing completion. Additionally, the intervening time should not be wasted, but rather used to prepare for those upcoming negotiations. Common cause

5. Geological Survey of Denmark and Greenland (GEUS), *Partial Submission of the Government of the Kingdom of Denmark together with the Government of Greenland to the Commission on the Limits of the Continental Shelf The Northern Continental Shelf of Greenland* (Denmark: GEUS, November 2014).

between Canada and the Kingdom of Denmark could be a possibility if the two countries can solve their own outstanding issues first. Furthermore, even if the Barents Sea agreement seems to have gone through mostly due to Russia having a vested interest in making it work, it might nevertheless be worthwhile for Danish and Canadian civil servants to ask their Norwegian counterparts for advice in the matter. As a close ally of both countries, it is not inconceivable that the Norwegian government might be willing to share some details from their own successful negotiations with Russia.

Finally, for the Kingdom of Denmark specifically, it is worth considering whether to try to bring in the EU on the Kingdom's behalf. On the one hand, this would be a departure from the understanding between the Arctic Five that they handle their disputes among themselves, but on the other, the distinctive nature of the EU might make it well suited to help the Kingdom of Denmark get a good deal from Russia. As a soft power, without direct territorial interests except through its member states, involving the EU might not seem as threatening to Russia as compared to involving other states or a more militarily focused organisation like NATO. Nevertheless, the EU's approach should be pragmatic and centred on the needs of the member state, Denmark, in order to avoid doing more harm than good. Initiatives for increased information-sharing and coordination on both Arctic policies and Russian policies between the relevant EU and Danish offices might be a good place to start.

For the EU, this seems an obvious way to enhance its role as an Arctic actor, and to improve its standing in Greenland which left the EU/EEC in 1985 and is today affiliated to the EU only through Denmark as one of the OCT (Overseas Countries and Territories). For the Kingdom of Denmark, it is more a matter of finding out if anything the EU has to offer can benefit the overall Danish strategy in the Arctic in concrete terms.

Non-Arctic actors in the Arctic

Even far beyond the melting icecaps, the Arctic is beginning to attract the attention of non-Arctic nations. This has led to a rush of states applying for and often being granted observer status in the Arctic Council. The list of observers is getting longer and longer and right now includes China, France, Germany, India, Italy, Japan, the Netherlands, Poland, Singapore, South Korea, Spain and the United Kingdom. The EU applied for such status as well back in 2008, but its application, which was delayed initially due to a conflict over seal products with Canada, is still pending. The EU remains an active *ad hoc* observer, however. The observer countries have very varying interests in the region. These interests range from science, the utilisation of new trade routes and the Arctic as a possible target for investments in various resource extraction enterprises. In as far as these interests are in sync with the interests of the Arctic countries – the Arctic Council member states (the Arctic Eight), but especially the littoral states (the Arctic Five) – they are likely to be received warmly, as also

shown by the previously mentioned granting of observer status to several new countries. However, when they do clash with these countries' interests, the Arctic Five in particular have so far firmly and jointly insisted on their exclusive rights as littoral states, most clearly articulated through the Ilulissat Declaration. Ironically, conflicts between non-Arctic and Arctic states in this regard might actually help in keeping the Arctic stable. Thus, as long as the Arctic Five can find a common interest in keeping everybody else out of the region, it might ease the tensions emanating from their various disputes.

Looking ahead

The melting of the icecaps is increasing the urgency to find solutions to a long list of Arctic challenges – initiatives that are long overdue. A territorial settlement of the last disputed areas and the two new sea-routes are high on this list, as is more cooperation on common tasks in the Arctic region such as surveillance, search and rescue and environmental protection. Powerful incentives encourage maintaining and expanding existing cooperation as well as reaching pragmatic solutions to the last existing territorial disputes. However, such constructive developments have suffered from spill-over from the Ukraine conflict. Agreeing to postpone the territorial disputes between Russia and the Kingdom of Denmark and Canada has been a wise move. By the time that the CLSC has finished considering the geological data, we might hope that Russian-Western relations are better than they are today. However, the time gained should not be squandered, but rather used to develop a strategy for how to reach a compromise on the issues. Possibilities include striving to build closer cooperation between the Kingdom of Denmark and Canada, considering whether to bring in the EU and asking Norway for first-hand advice.

V. RUSSIA'S ARCTIC ASPIRATIONS

Pavel K. Baev

Russia's central role in shaping the security agenda for the Arctic is beyond doubt, but its posture in this respect has changed significantly – and alarmingly – since the outbreak of the Ukraine crisis in spring 2014. From the middle of the previous decade, the Kremlin's Arctic policy had followed a two-pronged strategy: strong emphasis on developing international cooperation on the one hand, and the sustained build-up of military capabilities on the other. Presently, Russia's interest in building ties with the Arctic neighbours is on the wane, while the intensity of military activities has reached a new high. The climate of good-neighbourly partnership in the High North and the mode of practical interaction in joint projects have inevitably been negatively affected by the fast-evolving confrontation between Russia and the West, particularly since seven members of the Arctic Council partake fully in the sanctions regime against the eighth member. Moscow keeps sending diplomatic signals about its preference for keeping cooperative initiatives on track and contributing constructively to the proceedings of the working groups in the Arctic Council. However, the scope of its preparations for military operations in the Arctic theatre, as demonstrated, for instance, in the snap military exercises conducted in mid-March 2015, raise acute concerns among stakeholders in the region's security, including NATO and the EU. This chapter examines the trajectory of Russia's current policies in the Arctic and provides a brief evaluation of risks and opportunities for preserving security and upholding cooperation in the wider Arctic region.

The Northern dimension of the Russian economic downturn

The interest in Arctic matters developed by the Russian leadership and the high priority accorded to this region in Russia's state policy are to a great extent underpinned by the perception of lucrative hydrocarbon resources that will become available for exploitation on the shelf of the Arctic seas. The estimates of the contents of this 'treasure trove' are seriously inflated, but the misperceptions have been deliberately cultivated by the management of state-owned giants Gazprom and Rosneft, which are deeply dismayed by the fast-developing shifts in the global energy market. The first clear signal on the need to lower expectations came in mid-2012, when the Shtokman project (a joint venture set up by Gazprom, Total and Statoil) collapsed notwithstanding the support it had received from the Kremlin. The exploration continued despite the diminishing cost-efficiency of potential projects, and in September 2014 Rosneft announced with great fanfare the discovery of a new oilfield in the Kara Sea.¹ Work on this

1. See Vladimir Soldatkin, 'Rosneft discovers offshore Arctic oil jointly with Exxon', Reuters, 27 September 2014. Available at: <http://www.reuters.com/article/2014/09/27/rosneft-arctic-discovery-idUSL6N0RS04Z20140927>.

project has been put on hold due to the sanctions targeting the Russian Arctic offshore oil sector, but more significantly, the drop in oil prices to a new plateau of \$US50-60 per barrel has dispelled any hopes regarding the profitability of offshore projects in the Arctic shelf.

This new economic reality has not as yet been internalised by the Russian leadership, and it also has a significant impact on the second big plan for developing a circumpolar Russia: the opening of the Northern Sea Route (*Sevmorput*) to international shipping. This plan is only marginally linked to the projections of decreased ice cover as a result of global warming; for that matter, the *Sevmorput* was widely used for domestic (but not international) navigation in the 1960s-1980s. Russia was quick to advertise the advantages of this shorter maritime route between East Asia and Europe and in 2013 introduced quite strict but efficiently applied rules and procedures for foreign users. A hard and unexpected blow to the expectations for fast expansion of maritime traffic was the decline in the volume of shipped cargo by as much as 77% in 2014.² The main reason for this setback was not the economic sanctions imposed by the EU, but Asian clients' realisation that the costs and risks of this navigation route are too high, as long as Russia fails to invest in the upgrade of ageing infrastructure.

In the first half of the current decade Moscow invested significant financial resources in many ambitious projects in the Northern regions, prioritising in particular the development of the South-Tambeyskoe gasfield on the Yamal peninsula and the construction of an LNG terminal at Sabetta. However, the economic downturn experienced by Russia in 2014, which looks set to continue in 2015, with GDP forecasts indicating a decline of more than 5%, has cast a pall over expectations of an Arctic petroleum bonanza. For that matter, one of the projects that the government has axed in the 2015 budget is the construction of two nuclear ice-breakers, for which 13.9 billion roubles had been earmarked.³ The most severe spending cuts are likely to target areas that are crucial for addressing numerous education, public health and environmental problems in Arctic Russia.

Ultimately, the Russian leadership has been dismayed to discover that its hopes of deriving lucrative oil revenues from new offshore projects in the near future seem unlikely to materialise, and this, combined with the inability to channel money into the advancement of the Kremlin's Arctic ambitions, has led to a general sense of disillusionment concerning the High North.

2. See Trude Pettersen, 'Northern Sea Route traffic plummeted', *Barents Observer*, 16 December 2014. Available at: <http://barentsobserver.com/en/arctic/2014/12/northern-sea-route-traffic-plummeted-16-12>.

3. See Petr Netreba, Yana Milyukova, Svetlana Bocharova, 'Finance Ministry proposes new budget sequestration', *RBC.ru* (in Russian), 19 February 2015. Available at: <http://top.rbc.ru/economics/19/02/2015/54e4ab6d9a79477dae112a21>.

Arctic policymaking and court intrigues at the Kremlin

A key explanation of why the Arctic occupies such a prominent position in Russia's political landscape is the personal interest that President Vladimir Putin takes in this region, with its geostrategic importance, rich resources and unique natural beauty. Whatever the particular reasons for the Russian president's preoccupation with the Arctic, it is clear that many Kremlin courtiers have sought to encourage and manipulate it. While Alexei Miller (CEO of Gazprom), Igor Sechin (CEO of Rosneft) and Gennady Timchenko (the owner of Novatek) have played up the prospects of oil and gas riches, Nikolai Patrushev (secretary of the Security Council) and Sergei Shoigu (Minister of Defence) have been keen to emphasise the issue of geopolitical competition for the Arctic. Presently, Putin may be irked by the dismal prospects for harvesting dividends from the investments in the energy sector, but his focus on the opportunities for exploiting Russia's military dominance in the Arctic theatre has only become sharper. The appointment of deputy prime minister Dmitri Rogozin to the newly-created position of chairman of the State Commission for Arctic development signifies the priority attached by the Kremlin to 'hard security' matters' in the region and does not bode well for international cooperation.⁴ Rogozin is well known in Brussels – and not as a proponent of closer ties – and he has been included in both the US and the EU sanctions lists.

One particular issue that the ill-assorted Arctic 'lobby' in the Kremlin have presented to Putin as a matter of crucial geopolitical importance and high state prestige is the extension of the Russian continental shelf up to the North Pole. The propaganda hype around this issue was triggered by the famous flag-planting expedition in August 2007, and since then every year political promises regarding the resubmission of the claim to the UN Commission on the Limits of the Continental Shelf (UN CLCS) for 1.2 million square kilometres between the Lomonosov and Mendeleev underwater ridges have been reiterated. As of May 2015, the paperwork is still not done, and it has transpired that the claim has no chance of being approved, since Denmark presented its own claim on 15 December 2014, and the CLCS cannot make any recommendation on the overlapping claims, unless all the parties involved agree to its judgement.⁵ The only way to achieve a positive outcome is to coordinate the Russian, Danish and Canadian claims, but in the current climate of confrontation, such harmonisation is clearly beyond reach.

4. See Sergei Goryashko, and Ivan Safronov, 'Commission for all ice matters', *Kommersant* (in Russian), 17 March 2015. Available at: <http://www.kommersant.ru/doc/2688114?isSearch=True>.

5. Russia presented its original claim in December 2001, and already in July 2002 it was returned for necessary revisions. On the political agendas of clashing claims, see 'Frozen conflict: Denmark claims the North Pole', *The Economist*, 20 December 2014. Available at: <http://www.economist.com/news/international/21636756-denmark-claims-north-pole-frozen-conflict>.

The 'hybrid war' as an instrument of Arctic policy

While the combat operations in Eastern Ukraine are 'confined to several minor battlefields, the scope for confrontation between Russia and the West is far greater, and the Arctic has emerged as one of the key theatres. Moscow wages this 'hybrid war' by various means, and in the High North the demonstrations of military might are combined with a stream of bellicose political statements. Despite the obvious need to concentrate efforts in Donbass, the Russian top brass firmly insist that the Arctic remains a top priority in the allocation of resources for strategic planning, and have proceeded with building up power projection capabilities under the newly-created Joint Strategic Command *Sever* (the Russian word for 'North').⁶ The strategic rationale for this priority remains blurred because Russian interests in the Arctic are not currently encountering any kind of military threat, although the neighbours are increasingly concerned about the real goals of such steps as, for instance, the basing of a newly-established 'Arctic brigade' in the isolated town of Alakurtti, just 50 km from the Finnish border.⁷

What distinguishes Russian military activities in the High North from the Baltic area (where NATO counter-measures are concentrated) is the extensive deployment of nuclear assets, including strategic aviation patrols and tests carried out at the naval strategic platforms of the Northern Fleet. These demonstrations reflect the increasingly strong emphasis on nuclear options in the official discourse on the evolving confrontation. The heavy workload placed on some ageing weapon systems (like the Tu-95MS *Bear-H* bombers) and some new but long-in-construction *Borey*-class submarines (armed with the far from reliable *Bulava* missiles) generates a high risk of serious technical failures. Comparing with the August 2000 *Kursk* submarine disaster, it is possible to assume that were such circumstances to occur again Moscow would be far less inclined to accept Western help in search and rescue operations, and far more inclined to blame NATO for any possible accident.

Despite putting military pressure on the Northern neighbours, Moscow still cannot find any way of translating its superiority in deployable military capabilities in the Arctic theatre into tangible political advantages.⁸ As incentives for and expected benefits from political cooperation in the Arctic institutions are decreasing, Russia may step up its attempts to leverage its perceived position of power in the region.

6. See Vladimir Muhin, 'Defence Ministry takes the Arctic under special control', *Nezavisimaya gazeta* (in Russian), 19 January 2015. Available at: http://www.ng.ru/armies/2015-01-19/1_arctic.html.

7. See Jeremy Bender, 'Russia is constructing Arctic stronghold 30 miles from Finnish border', *Business Insider*, 14 January 2015. Available at: <http://www.businessinsider.com/russian-arctic-base-miles-from-finnish-border-2015-1>.

8. See Duncan Depledge, 'Putin's Arctic ambitions send chill through neighbors', *Newsweek*, 19 March 2015. Available at: <http://www.newsweek.com/putins-arctic-ambitions-send-chill-through-neighbors-315089>.

The China connection in Russia's Arctic policymaking

One direct consequence of the new confrontation between the West and Russia is the strong imperative for Moscow to expand and upgrade its strategic partnership with China, a task to which President Putin devoted much attention in 2014. By spring 2015 however, it has become clear that the character of the Sino-Russian partnership has evolved, to Russia's detriment, into a one-sided dependency as Beijing prioritises building a 'new type' of relationship with the US, while the volume of trade between Russia and China has registered a significant decline instead of the projected expansion. The implementation of the much-trumpeted gas deal has become highly uncertain due to the plunge in oil prices, and Beijing refuses both to provide the promised pre-payment and to take a stake in the hugely expensive pipeline project.

These zigzags in bilateral relations have significant implications for Russian Arctic policy, which has to take Chinese interests in the region into serious account. Moscow seeks to focus these interests on expanding the Chinese engagement in the Yamal/Sabetta LNG project (in partnership with Total), despite its shaky economic foundation.⁹ At the same time, the prospect of a fleet of Chinese tankers and icebreakers establishing a trade route along the long and deserted Russian coastline touches upon the sensitive issue of sovereignty.¹⁰ Seeking to solidify its control over the Eastern part of the *Sevmorput*, the Russian Defence Ministry has launched the construction of several bases from the Kotelnny island to Chukotka, but the sustainability of these efforts is undermined by the inevitable cuts in the budget allocations.

China's investments and interests in the Arctic may not be at this stage be particularly extensive, but Beijing nevertheless is able to exert a restraining influence on Russia's behaviour. In much the same way as China's insistence on de-escalating the Ukraine conflict through negotiations on the basis of respect for Ukrainian territorial integrity constrains Russia's experiments with escalating the 'hybrid war', the clearly expressed Chinese preference for developing international cooperation in the Arctic (seen not in terms of overlapping claims for sovereignty but as a 'global common') curbs Russia's aspirations for exploiting its perceived position of power.

9. See Brian Spegele and Andrew Peaple, 'Total taps Chinese banks to fund Russian project', *Wall Street Journal*, 23 March 2015. Available at: <http://www.wsj.com/articles/total-seeks-10-billion-to-15-billion-in-chinese-financing-for-russian-project-1427093833>.

10. On the building of this fleet, see Geoff Hiscock, 'Arctic tankers on order for Yamal LNG shipments', *The Australian*, 6 March 2015. Available at: <http://www.theaustralian.com.au/business/news/arctic-tankers-on-order-for-yamal-lng-shipments/story-e6frg906-1227250757996>.

An agenda for the EU

Russia's course towards militarisation of inter-state relations in the Arctic region presents a difficult problem for the EU, which has to rely on 'soft power' instruments in building its profile as an 'Arctic actor'. At the same time, the EU has assumed a central role in the complex confrontation with Moscow as the sanctions regime – in combination with lower oil prices – is having an increasingly painful impact on the targeted sectors of the Russian economy. Seeing the EU as a key antagonist, Moscow has effectively prevented it from gaining observer status in the Arctic Council – and will expect this institution to take an anti-Russian stance as the chairmanship passes from Canada to the US.

It is rather easy to predict a gradual return to 'business-as-usual' in Arctic cooperation if the conflict in Eastern Ukraine were to abate and a political or diplomatic solution to the crisis were to be found. It is clear, however, that this conflict is in a very precarious and essentially unsustainable limbo as of spring 2015, and the probability of new spasms of its escalation is perhaps higher than that of progress towards resolution. This poses a challenge for policy planners because figuring out what Putin is up to, where he might make another move in the 'hybrid war' and when, amounts to an exercise in thinking about the unthinkable. It is clear, however, that the Arctic may well be an area where he could attempt to exploit Russia's perceived position of strength. The range of possible proactive manoeuvres is quite wide – from the surprise appearance of 'polite green men' (as Russian special operations forces are now known) in Spitsbergen to the resumption of nuclear tests in Novaya Zemlya (a single low-yield atmospheric test is certain to have colossal political resonance). It is also clear that the EU is not well positioned to respond to such moves and would have to play a supporting role to counter-measures initiated by the US, NATO and some Arctic states. Where the EU is better positioned is in preventing a sudden deterioration of the security situation in the Arctic. This it can try to do by carefully dissuading Russia from experiments in power projection in this region and exploring opportunities for maintaining cooperative ties and joint projects in those areas that are not closed off by the sanctions regime, including maritime search-and-rescue operations and emergency response to major technological (including nuclear) accidents.

Part Three

The security landscape: challenges old and new

VI. HARD SECURITY DEVELOPMENTS

Duncan Depledge

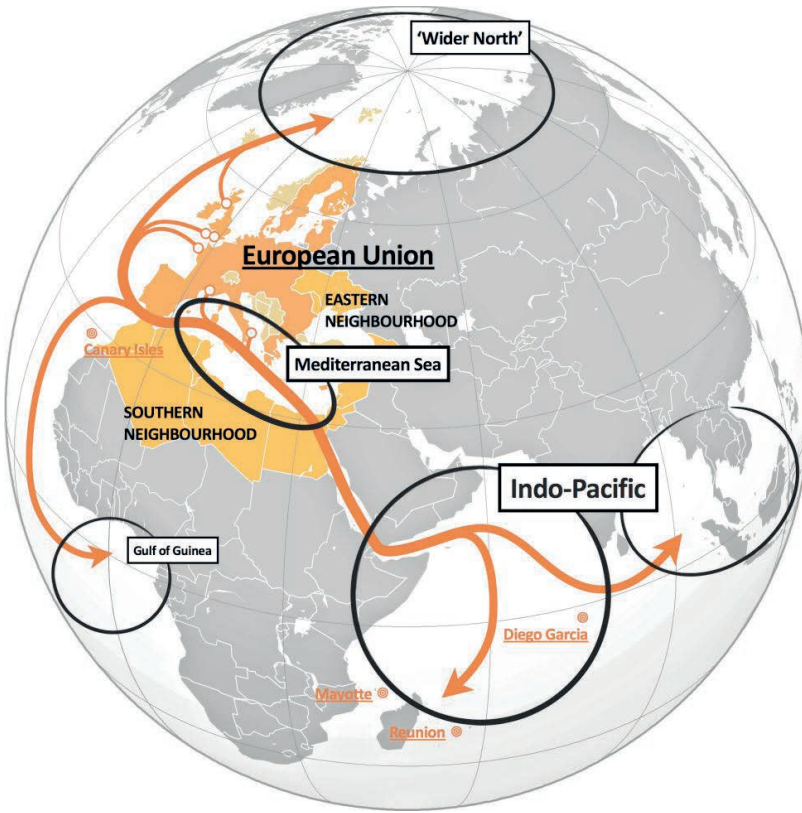
When the European Security Strategy was published in 2003, the Arctic did not feature as an explicit part of the imagined threat landscape. At that time, even the Arctic states did not regard the Arctic as a source of inter-state tensions or of serious danger to national or international security. For more than a decade after the end of the Cold War, the Arctic was characterised as a zone of cooperation, shaped by shared interests in environmental protection and sustainable development, and institutionalised in circumpolar intergovernmental bodies such as the Arctic Council.

Over this period, military activity dramatically declined in all of the Arctic states, with the possible exception of the US. The former Soviet Union was the most heavily impacted as its military spending dwindled and its forces degraded. In 1996, the Arctic Military Environmental Cooperation (AMEC) programme was formed between the US, Norway and Russia (the United Kingdom joined later) to share the costs of safely decommissioning decaying nuclear submarines based on the Kola Peninsula in the northwest of Russia's Arctic zone. AMEC was emblematic of the broader shift away, in the 1990s, from thinking about the Arctic as a military theatre of critical importance to national security towards a greater concern for environmental and human security.

Despite the low level of inter-state tension in the Arctic, the increased global attention that the Arctic has received since the mid-2000s has made a number of the Arctic states increasingly nervous about their sovereignty and national security interests in the region. From 2005, all of the Arctic states started to make proclamations about their national security interests in the Arctic and, although they emphasised the importance of keeping tensions low, they have all initiated new procurement programmes to rebuild their military forces in the region.

Over this period, the Arctic has also grown in importance for EU security interests. As an 'area of privileged interest' (see Figure 1 overleaf), we can anticipate that what happens in the Arctic will be of increasing relevance to broader questions about EU security, especially those concerning maritime access rights (for trade, fisheries, marine disasters, naval projection), EU-Russia relations, and the territorial integrity of EU borders. Nevertheless, the EU will need to act delicately and with considerable sensitivity if it is to enter debates about Arctic security and stability, especially where this relates to 'hard' matters of EU defence and security.

Figure 1: The EU’s areas of privileged interest 2013-2015



Source: EUISS.

Recent military activity in the Arctic

Over the past decade, geopolitical intrigue over the potential for conflict in the Arctic has been growing. In 2007, the AMEC came to an abrupt end after Norwegian officials were expelled from Russia for allegedly engaging in espionage. A few months later there was international indignation over the planting of a Russian flag on the seabed at the North Pole by a private expedition team that had received support from the Kremlin. Although the flag was only symbolic, it reminded the international community that territorial claims in the Arctic are still being negotiated.

The international community has also been reminded of the contested status of maritime access rights in the Arctic. The Kremlin showed in its response to the 'Greenpeace 30' in 2013 that it would not tolerate any precedent to be set that might undermine Russia's authority over what it regards, at least in *de facto* terms, as its Arctic waters. Canada has made similar statements with regard to the Northwest Passage (NWP).

Extra-regional tensions have further heightened concerns about the stability of the Arctic. The 2007 cyberattacks on Estonia, the short Russia-Georgia war in 2008, and most recently the crisis in Ukraine/Crimea have all contributed to the periodic deterioration of relations between Russia and the West. These extra-regional conflicts have typically been followed by greater attention from Western defence planners to the security architecture of the Arctic and Northern Europe, as is currently the case in response to events in Ukraine.

The national security reasoning behind recent military activity in the Arctic differs from country to country.¹ Canada, for example, is primarily focused on ensuring sovereignty over its terrestrial, maritime, and air spaces. Since 2005, Canada has been especially concerned about encroachment from Russia, but is also wary of potential interference from China, as well as close allies such as the US, and EU member states such as the UK which have vocally contested Canada's interpretation of the legal status of the Northwest Passage. The focus of Canada's military procurement strategy in the Arctic has therefore been on surveillance systems, land and sea patrols and air interception.

In contrast, the US's military interest in the Arctic continues to be shaped by global security interests, just as it was during the Cold War. Although it attracted little public attention, the US, unlike the other Arctic states, actually maintained its military presence in the Arctic after the Cold War as a consequence of broader strategic concerns. For example, in 2003, the US installed anti-missile interceptors at Fort Greely, Alaska in response to a perceived threat from North Korea, and has recently upgraded its radar systems in Thule, Greenland (also for the purposes of missile defence). Although 'national security' was identified as the US's number one priority in the Arctic in 2009, the level of interest in the region continues to be characterised by globally-oriented security concern (early warning, submarine patrols, missile defence), rather than Arctic warfare *per se*. Such a stance is unsurprising given the broader lack of interest Washington has shown in the Arctic since the end of the Cold War (although Washington's stance did appear to be changing as it prepared to take over the chairmanship of the Arctic Council from 2015 to 2017, for example with the publication of an updated 'Arctic Roadmap' by the US Navy).

Norway's recent military activity in the Arctic has been strongly affected by its relationship with the Kremlin. It is a relationship characterised by a delicate balancing act that promotes security cooperation with Russia, while at the same time maintaining close links to the US and NATO for strategic reassurance. The importance of the 'High North' to Norway was emphasised in the 2005 Soria Moria Declaration and the subsequent publication of a 'High North Strategy' in 2006, as well as the decision to move its military headquarters north of the Arctic Circle to Bodø in 2010. Similarly to Canada, Norway's security strategy appears to be primarily focused on preserving Norway's sovereignty and interests in the European Arctic.

1. The recent military activities of the Arctic states are examined more extensively in Siemon T. Wezeman, 'Military Capabilities in the Arctic', SIPRI Background Paper, March 2012.

Norway's national wealth has allowed the government to invest in modern combat-capable forces which are likely to far exceed the demands of sovereignty patrols but are critical for 'threshold defence'.² These forces also perform an important secondary function of strengthening Norway's defence relationship with the US (through the procurement of US systems) and promoting interoperability between Norway and its NATO allies – a strategy which offers an additional source of deterrence to potential aggressors.

Albeit to a lesser extent than the US, Danish military activity in the Arctic has also been more enduring. The Danish military built a number of ice-capable patrol vessels in the late 1980s and early 1990s which remain in service. Nevertheless, in 2009 the Danish government set out plans to develop modern Arctic-capable combat forces. The core of this strategy has seen a focus on modular forces which can be rotated between Arctic and out-of-area operations. This is allowing the Danish military greater flexibility in its operations, enabling deployments for the purpose of maritime patrols in the icy waters off Greenland (where Denmark has also established an Arctic Command), while at the same time having the capacity to support its allies in overseas operations such as anti-piracy in the Indian Ocean. Such a strategy suggests only limited concern within the Danish government about growing military activity among the Arctic states.

The Russian military is still recovering from a chronic lack of investment during the 1990s. Nevertheless, Russia's emergence as an energy superpower in the 2000s has allowed the Kremlin to fund an extensive programme of military modernisation. Like the US, much of this activity has been directed at Russia's global security interests, including, for example, the stationing of the Northern Fleet, which makes up two thirds of the whole Russian Navy, at bases along the Kola Peninsula. At the same time, the consolidation of the Kremlin's control over Russia's natural resources in the Arctic has re-established the Russian Arctic as an area of critical importance to Russia's national security. Also relevant are the Kremlin's concerns about securing the Northern Sea Route (the Russian section of the NEP) and Exclusive Economic Zone.

Since 2008, Russia has established two Arctic-warfare brigades (consisting of approximately 9,000 troops), reopened naval facilities, airbases and radar sites along the outer edges of the Russian Arctic, and invested heavily in upgrading the Northern Fleet. Observers have noted that Russia consequently has the biggest military footprint in the region of all the Arctic states. This is unsurprising given that both the size and the accessibility of the Russian Arctic far exceed those of the other Arctic states. However, such observations are also complicated by the fact that given the strategic importance of the Kola Peninsula to Russia's global security interests, it remains difficult to establish which forces are being developed to protect national economic interests in the Arctic and which are intended for global operations and nuclear deterrence.

2. The term 'threshold defence' is used by Norwegian defence planners to describe the need for Norway's armed forces to be able to independently respond to any threat that is not sufficient for triggering an immediate Article V response from NATO.

The 'hard' security implications of Arctic change for Sweden and Finland differ significantly from the challenges faced by the Arctic Ocean littoral states. This is because Finland and Sweden are not directly affected by the opening up of maritime access points in the region. Nevertheless, both countries have issued Arctic strategy documents which emphasise the importance of the Arctic to their national security. In Sweden's case, the government recognises that the stability of the Arctic fundamentally depends on relations between NATO and Russia and emphasises the responsibility of Arctic countries to pursue security collectively. At the same time, closer cooperation between Sweden and Finland bilaterally, and with their other Nordic partners (i.e. NORDEFCON), in both cases appear as part of broader national security strategies which do not have a specific Arctic component in terms of military activity (although both countries have taken part in joint military exercises in the Arctic with NATO and Nordic partners). Significantly, both countries have pointed to a potential future role for the EU in this area (Sweden explicitly so), signalling broader interest in seeing further development of the EU's Common Security and Defence Policy.

Assessing the existing security architecture

The development of the circumpolar security architecture in the post-Cold War period has led to increased cooperation between the Arctic states on security-related matters relating to search and rescue, environmental protection and emergency preparedness. However, when it comes to 'hard' security challenges relating to the military activities of the Arctic states the current architecture has proven partly insufficient. These challenges relate primarily to questions of civilian-military and military-military cooperation over maritime disaster response and constabulary duties (e.g. to prevent illicit activity that threatens marine resources, infrastructure and the environment), confidence- and trust-building initiatives to improve sharing of communications and domain awareness, and maritime access rights (e.g. for trade, fisheries and military transits between the Atlantic and the Pacific).

The difficulty in addressing these issues within the existing circumpolar security architecture is rooted in the fact that the institutional successes of the post-Cold War period were to a large part dependent on the exclusion of 'hard' security interests from circumpolar forums. The Arctic states all have different reasons for engaging in military activity in the Arctic, ranging from local sovereignty patrols to global security concerns. However, determining which activities are directed at local Arctic security concerns and which are directed at global security is not straightforward. This situation has led a number of observers to claim that we are witnessing a classic 'security dilemma' in the Arctic, wherein all of the Arctic states are claiming to be adopting defensive military postures while at the same time raising concerns about the aggressive actions of their neighbours.³

3. For a more detailed discussion of the emerging security dilemma in the Arctic, see Kristian Åtland, 'Interstate Relations in the Arctic: An Emerging Security Dilemma?', *Comparative Strategy*, vol. 33, no. 2, 2014, pp. 145-66.

A security dilemma such as this is only likely to be resolved through greater transparency, trust and cooperation over military activities. However, the existing circumpolar security architecture is limited in this respect, not least because Canada, Russia and the US are unwilling to subjugate their national security interests to multilateral bodies. The primary intergovernmental forum for circumpolar affairs is the Arctic Council, the establishment of which was fundamentally dependent on the exclusion of 'hard' security issues from its mandate. A number of commentators have observed that the subsequent success of the Arctic Council stems from this decision since it has created a positive atmosphere of trust and collaboration between the Arctic states around the 'softer' challenges facing the Arctic. As a consequence, there is currently little appetite to expand the Arctic Council's mandate any time soon.

NATO's Article V commitment to defend its members from aggression remains relevant to the security architecture in the Arctic, at least for those countries which are part of the Alliance. However, following the short Russo-Georgian war in 2008, Norway called on NATO to increase its awareness of security challenges emerging in the Arctic and to ensure that NATO members retained the capacity to defend Norway. For a short time it appeared that NATO would direct more attention to Arctic issues under the framework of 'comprehensive security'. The renewed focus on territorial defence as a core task under the Strategic Concept of 2010 provided further impetus for Norway and other northern allies to work on their concerns bilaterally with the allied authorities and for early warning, reinforcement and exercising plans to be updated.

Russia, unsurprisingly, has been vociferously opposed to any increased NATO presence in the Arctic. In 2010, resistance also came from within as Canada voiced its own opposition to NATO involvement in the Arctic, fearing that it would dilute Canada's sovereignty in the Canadian Arctic. Since the crisis in Ukraine, Canada has come under increasing pressure to revise its position. Ottawa's fears are likely to be allayed to an extent by the fact that any increased NATO presence would probably focus on the European Arctic. However, since such a move would still be seen as a provocation in Russia, NATO remains ill-positioned when it comes to building a circumpolar security architecture.

Common Nordic defence systems are also proving provocative to Russia. As the Nordic countries pull closer together, the Kremlin is concerned that Sweden and Finland's traditional neutrality (which for decades maintained the 'Nordic Balance' between East and West) will be further weakened. Although the Kremlin would likely prefer this outcome to one in which Sweden and Finland become full members of NATO, enhanced interoperability and cooperation among the Nordic states will mean that Sweden and Finland will increasingly be plugging into wider NATO operations and systems on which Denmark and Norway depend. Moreover, Finland and Sweden might expect help from fellow EU members under the Lisbon Treaty, although such support is not yet institutionalised in EU structures. In either case, the increasing interoperability between Nordic, NATO and CSDP forces will continue to deepen Russia's isolation.

On a more positive note, there have been some cooperative developments that have helped to reduce Russia's isolation when it comes to circumpolar military cooperation in the Arctic. The annual meeting of the Arctic chiefs of defence (CHODs) since 2012 has been used to discuss civil-military relations in the North, environmental stewardship and search and rescue. A separate joint US/Norwegian initiative, the Arctic Security Forces Roundtable (ASFR), also brings together representatives from the eight Arctic states (and a number of observers from sub-Arctic states including France, Germany, the UK and the Netherlands) to discuss military-military cooperation in the areas of communications and domain awareness. Although Russian participation in these meetings has so far been limited, both forums provided nascent potential for future dialogue between the Arctic states on military-related activity in the Arctic.

In addition to the meetings of the CHODs and the ASFR, a number of joint military exercises involving Russia have also been held. Although such exercises are not circumpolar in scope, they have provided a further avenue for increasing transparency and building confidence between Arctic militaries in a way which involves Russia as an equal partner.

Nevertheless, the existing circumpolar security architecture continues to have limited influence over military activity in the Arctic. Those initiatives which have been developed – such as the CHODS and ASFR meetings, as well as various joint military exercises – have proven to be the most vulnerable, having been immediately suspended when relations deteriorated over the crisis in Ukraine/Crimea. The suspension of NATO's military-to-military cooperation with Russia more broadly may be further prolonged, and could possibly become 'the new normal' in the Arctic. Thus, the general deterioration of Russia-Western relations after the Ukraine crisis may negatively affect the security situation in the Arctic and possibly lead to a heightened level of tension at the interstate level. In a situation marked by a mutual lack of trust and transparency, the 'security dilemma' dynamics in the Arctic may become more prominent. This issue is unlikely to be resolved unless further efforts are made to reduce Russia's sense of isolation when it comes to developing the security architecture of the Arctic.

Prospects for EU engagement

From a geostrategic perspective, there are at least three reasons why the EU might need to look for new ways to engage with the emerging security architecture of the Arctic. The first relates to preserving the integrity of the Arctic territories of EU member states. This issue is complicated by the presence of NATO as the primary guarantor of European security, not least because Sweden and Finland technically fall outside this umbrella. It is further complicated by the fact that Denmark has opted out of the CSDP and Greenland (which has been a self-governing country within the Danish Kingdom since 1979) has left the EU altogether. The traditional

view is that NATO has responsibility for any 'hard security' threat against Europe, while the EU performs a 'softer' security function. However, when it comes to northern Europe and the Arctic, this division of responsibility is more challenging to uphold since it effectively leaves Sweden and Finland isolated. These countries could potentially receive assistance from other EU countries if they are victims of armed aggression under the mutual assistance clause included in the Treaty of Lisbon. As the clause however notes some EU members' specific security and defence policy character, and reinforces the role of NATO in the collective defence of its members, the practical implications of the clause remain uncertain.

The second source of future EU engagement with the Arctic security architecture could spring from the EU's security relations with Russia. The Kremlin views any expansion of NATO activity in the Arctic as an existential threat. Moreover, any move by Sweden and Finland to join NATO will only further antagonise Russia. Even closer security cooperation with their Nordic partners and the EU will likely be taken as a provocation in Russia, but the Kremlin would no doubt regard such arrangements as preferable to Finland or Sweden joining NATO. The EU is generally viewed as a 'softer' geopolitical force by the Kremlin: a source of mutually profitable coexistence, as well as a counterbalance to US influence on the broader European security architecture, although the recent crisis in Ukraine has shown the EU's capacity to damage Russia economically with targeted sanctions.

Such reasoning would suggest that there might, in the future, be an opportunity to explore closer cooperation between the EU and Russia over Arctic security challenges, including trust-building initiatives in areas of civil-military relations, surveillance and domain awareness, and potentially even joint military exercises (if the EU develops a stronger military profile). Although all of the Arctic states are also members of the Organisation for Security and Cooperation in Europe (OSCE) which commits them to various confidence and security-building mechanisms (CSBMs) that extend into Arctic areas, there is potential for new measures to be negotiated.⁴ However, such ventures would be difficult to achieve in the current diplomatic climate. Russia has so far appeared reluctant to let the EU become more broadly involved in Arctic affairs, despite signing an Arctic Council Ministerial Declaration in Kiruna in 2013 which signalled a consensus between the Arctic states to accredit the EU with observer status, once an outstanding issue between the EU and Canada over the international trade in seal products was resolved. Nevertheless, it seems unlikely that Russia would support an expanded role for the EU in the Arctic for hard security purposes, even if the EU would be a preferable security partner to NATO. Moreover, while the current EU sanctions regime targeting economic activities in the Russian Arctic remains in place, the Kremlin will in all likelihood resist the EU's attempts to become an accredited observer to the Arctic Council.

4. The prospects of Arctic CSBMs is discussed in more detail in Benjamin Schaller, 'Confidence- & Security-Building Measures in the Arctic: the Organisation for Security & Cooperation in Europe as a role model for the area?', in *Arctic Yearbook 2014*, 2014. Available at: www.arcticyearbook.com.

Consequently, as long as the sanctions on the Russian Arctic remain in place, it seems inconceivable that the EU will be able to build security relations with Russia in the Arctic.

The third source of future EU engagement with the circumpolar security architecture is likely to be found in the maritime arena. Over the past decade, the EU has become far more cognisant of the importance of global maritime security to the interests of its member states, as demonstrated by the naval missions it has undertaken in the Indian Ocean to protect trade routes from piracy, as well as the publication of the EU's first Maritime Security Strategy in 2014. Such interests are primarily linked to concerns about energy and resource security, but also to the rights of member states seeking access to economic opportunities for 'blue growth' (for example, in shipping, fisheries and tourism). As maritime activity in the Arctic grows, demand for increased surveillance, policing, patrolling and provision of anti-pollution and ice-strengthened patrol vessels, as well as the training of crews and personnel to operate safely in Arctic waters, may exceed the capacity of individual European Arctic states. These trends were recognised by former High Representative, Javier Solana, in his 2008 paper to the European Council on 'Climate Change and International Security'. Solana presaged the emergence of greater EU interest in Arctic security, observing that the region would become relevant to Europe's ability to effectively secure its trade and resource interests in the region, and tensions there could put pressure on relations with key partners.

Indeed, the assertion of the EU's maritime rights and associated security interests in the Arctic will likely prove provocative to both Canada and Russia. As such, although the deployment of EU naval patrols to protect maritime supply chains and access rights in Arctic waters may well prove to be a necessity under the EU's commitment to maritime security, such actions would need to be weighed against the reaction this would likely provoke from the Arctic states. Limited EU interests on the North American side of the Arctic mean the situation is likely best left to the US, Canada and Denmark to resolve, with EU participation if invited (a prospect that would be enhanced if Denmark decides to reverse its opt-outs on the CSDP). On the Eurasian side, the economic interests of member states are likely to be far greater. Seeking cooperation with Norway to build a joint-maritime security architecture with Russia for the Eurasian Arctic (involving, for example, closer cooperation on domain awareness, constabulary duties, hydrographic services and marine crisis response) might well be the best approach, although as indicated above, there first needs to be a substantial improvement in the diplomatic climate before any such proposal can even be ventured.

VII. WIDER SECURITY ANGLES

Alyson J.K. Bailes

The notion that security has (many) more dimensions than just ‘hard’ military defence has become something of a twenty-first century commonplace. Back in 1994, the Human Development Report of the UN Development Programme (UNDP) identified the economy, environment, food and health as crucial for human survival and welfare, and called for them to be guaranteed at the political (= state), community, and individual levels. In Europe, the term ‘societal’ is increasingly used as shorthand for a similar many-sided security concept adapted to developed societies.

The EU itself increasingly uses the societal word in contexts such as promoting security research, but has of course also framed its own multi-functional agenda in the original European Security Strategy of 2003 and the report on its implementation published in 2008. The former focused more on global threats, albeit with internal implications: terrorism, proliferation of weapons of mass destruction (WMD), regional conflicts, state failure and organised crime; while the 2008 update added the ‘softer’ issues of cybersecurity, energy security and climate change. While external factors go a long way to explain this apparent European shift of focus towards the less warlike threats and risks for humanity, it reflects a trend seen also in other regions and institutions of the globalised world.

The case for applying a similar multi-functional analysis to the Arctic should need no further argument. But how much of the potential wider security spectrum actually applies? A number of threats arising from deliberate human action are barely relevant: there is no violent internal conflict, and little prospect of one, in the Arctic nations and the High Northern territories of larger circumpolar states. Terrorism, piracy, and organised international crime have not yet touched these areas, although it is by no means foolish to speculate (as US policymakers in particular have done) on openings for such intrusions in future. Indeed, in the shorter term the most likely triggers for violent incidents could be actions by Greenpeace or similar eco-activists, especially if they are met with immoderate official responses.

These features may reflect not only the Arctic’s remoteness, but also the fact that its smallest and weakest nations are not ‘weak states’ in the sense of current security parlance. The Nordic states, all with populations of under 10 million, and even the small non-sovereign North Atlantic nations of Greenland and the Faroe Islands – parts of the realm of Denmark – have efficient democratic administrations and high levels of GDP, and in most cases enjoy high reputations abroad for their active contributions to international security. As the previous chapter pointed out, all are also shielded at the higher strategic level, directly or indirectly, by the power of the United States and NATO. While a scenario of future Greenlandic and/or Faroese independence would bring new and somewhat

fragile state actors into the picture, these small nations would not have far to seek for effective military shelter or indeed, for economic, cultural, and 'soft' security support from the other Nordic states.

To find out what the key non-military dimensions of Arctic security are, and thus where the Arctic states' real vulnerabilities lie, one may turn to the Arctic strategies published by these states themselves. All of them mention several such issues together with relevant aspects of management and regulation.¹ As an organising principle for the rest of this chapter, however, it may be particularly relevant to look at the strategies produced by Iceland (2011) and the Faroes (2013), two small nations whose territory lies entirely within the broader Arctic zone. Research on small states suggests that such entities should be particularly alert to existing and developing security challenges, like 'canaries in a coalmine'. In our present case, what the two small nations both identify as Arctic security priorities are: (i) environment protection and climate change; (ii) economic security with its sub-sets of resource management, transport, energy, food and so on; and (iii) human and societal issues including those relating to indigenous peoples. Both nations have also expressed particular concern about the consequences of major accidents at sea, partly because they possess so few assets for tackling them; but shipping, under both its military and civil aspects, has been covered earlier in this report. The rest of this chapter will explore the other three issue-sets listed above in greater detail.

Environmental security and climate change

The notion of environmental security, elaborated since mid-Cold War times, has two complementary aspects: protecting and preserving the natural environment against human damage, and defending humans from the violence and extremes of nature. Climate change is today's single largest challenge under both headings. It is almost universally seen now as man-driven and demands corresponding human action to mitigate it, mostly by populations outside the Arctic since that is where the bulk of damaging emissions come from. There are, however, pollution 'black spots' above the Arctic Circle, many of them Russian industrial centres, which have inspired international clean-up programmes. Worries about further pollution, habitat destruction and disruption provide the main motive for those opposing further economic development in the High North – as discussed further below.

Within the Arctic, it is the risks to ecosystems, humans and societies from rapid warming that predominate, and call for action under the second wing of climate change policy: adaptation. Loss of ice especially interferes with indigenous lifestyles, but rising sea levels threaten cities and harbours as well as villages.

1. Alyson J.K. Bailes and Lassi Heininen, *Strategy Papers on the Arctic or High North: A comparative study and analysis* (Reykjavik: Centre for Arctic Policy Studies, 2012). Available at: http://ams.hi.is/wp-content/uploads/old/arctic_strategies_innsidur.pdf.

The effects of warming, at least so far, include more extreme temperatures (cutting both ways) and rapid climate oscillations that multiply the frequency of natural disasters such as floods, storms and freak snowfalls. These are already interfering with established occupational patterns and inflicting substantial economic costs. Together with changing currents and ice patterns at sea, they heighten the risk of transport accidents and of breakdowns in infrastructures including pipelines, cables and supply chains more generally. Scientists have even suggested that thinning ice cover will make it easier for volcanoes to erupt – an issue that affects Alaska as well as Iceland, and the transport regions around them.

Some more specific problems are worth noting *inter alia* because they have figured on international agendas in the Arctic Council (AC) or elsewhere. Oil-spills at sea impact on security in more than one way, because of damage to commercial fisheries and coastal environments as well as wildlife; the AC has already devoted one of the two legally binding agreements drawn up between its member states to this issue. The AC is currently also studying the impact of black carbon (soot) on the Arctic climate, and possible remedial measures. Nuclear pollution as a result of toxic waste and unsafe disposal of obsolete nuclear items – above all in Russia – is likewise a challenge for fisheries as well as human and animal health, and has drawn cooperation efforts from Nordic nations, Japan and others. Another major worry that links Russia, Canada and Alaska in particular is the accelerating pace of melting in frozen ground, ‘permafrost’, and in marshy areas previously under ice. This poses obvious problems for structures built on permafrost – roads, railway lines, oil rigs and in some cases whole towns – but it also releases trapped methane gas which is a notorious ‘climate forcer’, likely to further boost the rise in Arctic temperatures.

Through weather effects and sea-level rises, the travails of the Arctic environment are already affecting life across much of Europe. They would do so even more dramatically if – as some scientists fear – excessive warming in the North Atlantic gateway alters the mechanism that brings the tempering influence of the Gulf Stream to North and West European shores. The most obvious way that Europeans currently contribute to mitigating the problem is through the EU’s climate change policy, commonly regarded as the world’s most advanced. However, EU assets and policies also have a role to play in climate research and monitoring: maintaining situational awareness, analysing specific environmental processes, identifying related risks and helping to set priorities and directions for palliative efforts. Perhaps worth exploring further would be possible EU contributions to the growing challenge of Arctic civil emergency management, which includes the shipping safety issues already mentioned but also many other kinds of potential accidents and disasters – several of which could outstrip local response capacities. The Nordic group of nations, who have been seeking closer cooperation in this field under the ‘Haga’ process launched in 2009, could provide an appropriate bridge in this regard.

Economic security, present and future

The meaning of economic security is in a sense obvious. States and their peoples need a certain level of resources, or reliable access to them, in order to function and – not least – to sustain an adequate ‘hard’ defence capacity when they need it. Some sub-sets of the concept relate to particular critical supplies – energy, food, water – or to the infrastructure systems and services (like banking and IT) vital for communication, distribution and consumption. Others relate to the fair distribution of resources and public support, such as social and income security, safety at work or labour rights. Events since the global crash of 2008 have underlined that none of these things is assured or unproblematic even for the world’s richest countries, including those in Europe.

In the Arctic, attention so far has focused less on such issues and more on the *sustainability* of economic development, in the light of environmental security concerns. There are fears that a heedless race for resources could not only hasten the degradation and collapse of natural environments, but worsen the climate challenge (because of feedback effects as mentioned above), and even flout good economic sense by exhausting reserves too soon. As explained earlier in this report, the spectre of an ‘oil and gas rush’ or massive growth in shipping may have receded in present conditions, but the point still holds good in other contexts. Hundreds of proposals for new mining enterprises are being looked at around the Arctic – not only in Greenland where they have been most publicised. There are risks of at least localised over-fishing as the warming makes stocks migrate, provoking disputes (like the one between the EU and Iceland over mackerel) about the need to adjust quotas.² The number of tourist cruises has boomed in recent years, especially but not only around Alaska, creating risks for sensitive habitats (as already seen in the Antarctic) as well as for the tourists themselves, whose security would be far from assured in the event of accidents.

There is, however, another side to the problem: economic security for the Arctic’s own inhabitants. They typically do not own the most profitable commercial ventures operating on their territories, or even receive royalties, but have below-average primary incomes requiring subsidisation by governments in the South. As climate change continues to undermine established lifestyles and occupations, these populations will face several challenges in the effort to make a living. Even if Arctic oil and gas flows eventually ease some security of supply problems for the world energy market, local energy security will remain an issue given the far-stretched and fragile infrastructures. Even Iceland, with its 80% self-sufficiency in sustainably produced energy, is contemplating an electricity supply link to the UK not least because it would allow *imports* in a crisis. Sustainability of financing and insurance for new Arctic enterprises is a further concern: should a speculative

2. ‘Cod wars’ with actual violence are hopefully less likely, as forecasts show the major new stocks arising within accepted territorial waters and EEZs.

'bubble' develop and burst, few would be more damaged than the locals hoping for new income sources and employment. This last is an issue in itself, as there is no guarantee that new Arctic jobs would go to the locals rather than imported labour, or that the profits would be fairly distributed among local societies.

These issues have been somewhat under-discussed up to now, including in European circles. They concern, however, fields of policy at the core of EU competence and of decades-long European experience. The application of suitable regulatory models, including models of process in economic policymaking, of other types of know-how, and of targeted funding would seem to be one where potential European inputs could be developed through bilateral channels and existing structures, regardless of the EU's formal status in the AC. Given the awareness of and pride in local identities that characterises the northernmost populations even within Europe's own Arctic states, it would demand a detailed background knowledge and sensitivity of approach that Brussels now sees the need for, but still needs some work to develop.

Human and societal issues

This brings us appropriately to the broader security concerns of communities and individuals in a rapidly changing Arctic. According to the Arctic Human Development Report (AHDR) definition mentioned above, the extended Arctic zone contains some ten million people of whom, at most, one and a half million qualify as 'indigenous'. The environmental focus of much Arctic debate has highlighted threats to the lifestyle of this latter group, but tends to obscure the fact that millions of Arctic dwellers live in cities much like those further South, with the same consumer needs and infrastructure dependence but in far more challenging conditions. Around the zone, there is thus huge variation not just in ethnic and language groups, but in occupations, living standards, social norms and expectations, formal rights and *de facto* roles in local and national politics. Handling Arctic development is already a sensitive issue within several nations' domestic debates and could become even more contentious, although hopefully falling short of triggering internal violence. It must also be recognised that many groups are already damaged in the sense of having been deracinated by earlier 'civilising' pressures, or brought in to work and then robbed of their *raison d'être* by economic shifts. Threats to human security in the Arctic include those of alcoholism and substance abuse, venereal disease, person-on-person violence and above-average rates of suicide.

It may seem hard, as a result, to identify any single human or societal security agenda for the region: but some common themes may be mentioned. *Health* is already an issue, confronted not only with the just-mentioned phenomena, but with problems of guaranteeing care delivery in the remoter parts even of the Nordic countries. These isolated populations could be especially hard-hit by pandemics that reach them, as could the animal, bird, and marine life that they depend on. With rising

temperatures they will face a widening disease spectrum, and unfamiliar problems of food safety. *Migration* is a sore spot in many contexts, likely to involve movements away from existing settlements as well as influxes of local and external labour to new development areas. Aside from the usual pressures and risks confronting people in unfamiliar, and sometimes unwelcome, environments, it has consequences for the intangible side of societal security: identity, solidarity – including the mastering of cultural divisions – and collective resilience.

Ownership and stewardship

As anywhere else in the world, how the peoples of the Arctic come through these difficulties will depend not least on their own actual and perceived place in the process. New developments both jeopardise their control of their own lives (and livelihoods), and provide opportunities to empower them and address long-standing weaknesses through improved education, increased and diversified chances of employment, and stronger civic participation. The discourse about Arctic stewardship has thus far tended to focus on actions of states, regions, businesses and international non-governmental movements, seeing the locals as a group to be consulted or ‘taken into account’ at best. One of the particularities of a multi-functional approach to security, however, is that it highlights how many problems can only be solved in the last resort from the bottom upwards. The significance of a given security event, say an accident or freak terrorist attack, can be transformed for good or ill by the way the people concerned react to it. Longer-term issues of economic and social development are shaped to a higher degree than we often recognise by the mass of individual choices. The challenge of how to engage and activate the highly diverse millions of Arctic dwellers for good security outcomes is, thus, another area where creative reflection on possible EU roles would be timely.

CONCLUSION

Juha Jokela

The drivers of Arctic transformation – climate change resulting in higher temperatures and the retreat of ice and snow caps, as well as growing interest by external actors in the economic potential of untapped resources, faster maritime transport routes and rising fish stocks – are bound to gain more momentum. Yet significant uncertainties remain in terms of the impact of climate change and the pace of economic development in this remote region. The ‘known unknowns’ and ‘unknown unknowns’ add to risks and challenges related to the transformation of the Arctic. The potential negative repercussions of thawing permafrost, changes in the sea ice extent, currents and weather patterns, as well as major accidents caused by increased economic activity are not difficult to envisage in light of the available scientific data and analysis. While increasing economic development is likely to contribute to an expansion of the overall Arctic GDP, and provide exciting opportunities in some areas, these benefits may not materialise quickly or broadly enough to balance or outweigh the risks associated with the ongoing developments.

This report suggests that Arctic states and local communities have a vested interest in fostering peace and stability in the Arctic region: to this end these actors have sought to create a favourable political environment in which to address some of the imminent challenges in the Arctic. The acknowledgement of the applicability of international arrangements and law, as well as the related aspiration to seek diplomatic solutions to existing and potential disputes, has also been reflected in the endeavour to strengthen regional and sub-regional cooperation. Even if the Arctic states have shied away from supranational forms of governance, and highlighted their national sovereignty as the key organising principle of Arctic cooperation, regional and sub-regional institutions are an increasingly important feature of the management of Arctic matters. They are influencing the agenda and issuing detailed guidelines for international and national legislations concerning the Arctic – as attested by the recent adoption of the Polar Code under the aegis of the International Maritime Organisation or the two binding agreements signed in the Arctic Council, one on maritime oil spill response and the other on search and rescue operations.

These positive developments have created expectations that the Arctic states’ ability to work around some of the thorniest questions related to territorial disputes and military tensions and focus pragmatically on issues of common interest will gradually lead to a shared understanding of the need for a concerted effort to slow down Arctic warming and recognise the medium and longer-term benefits of environmental and economic sustainability. The involvement of Russia and recent inclusion of non-Arctic states and actors in these efforts has also generated optimism about the prospects for overcoming potential geopolitical and geo-economic rivalry in the Arctic. As a number of major trading powers are currently

present in the Arctic, the cooperative political landscape of the region could also serve as an example of mutual trust-building and problem-solving with potential positive spillover effects to other regions as well.

The US chairmanship programme for the Arctic Council for the next two years prioritises Arctic Ocean safety, security and stewardship; improving economic and living conditions in Arctic communities; and addressing the impacts of climate change. This agenda reflects a sober analysis of key challenges at stake in the Arctic, which are also underlined in this report's chapters on climate change, the region's economic potential and the wider security spectrum of the Arctic. The US priorities are also closely connected with the EU's Arctic policy and to the major domains of its external relations such as climate and energy, maritime affairs, and the general aspiration to promote sustainable development as well as human and minority rights, including indigenous peoples' rights, in the Arctic region.

Under the seemingly calm political landscape of the Arctic, however, some increasingly worrying trends have begun to emerge. These are analysed in this report's chapters on common and competing interests, Russia's Arctic aspirations and hard security developments in the region. Although the management of Arctic matters could constitute a field in which Western-Russia cooperation continues, thereby helping to balance current tensions, some developments point in the opposite direction and suggest that the Arctic is not immune to the disputes and conflicts occurring in other parts of the world.

Due to the restrictive measures imposed on Russia by the West, Russia now has additional reasons to diversify its partners and explore new channels for much-needed external investments in – and support for – potentially risky business ventures in the Arctic. This, in turn, could lead certain non-Western powers, notably China, to take a greater interest in Arctic matters. Yet the prospects for closer China-Russia cooperation in Arctic matters appear rather limited. Should Russia decide to pursue oil projects without being able to rely on crucial Western expertise and know-how, the risk of environmental disasters occurring in the Arctic might increase, and this could deal another damaging blow to Arctic cooperation.

The dramatic changes in the European security environment caused by the Ukraine crisis and Russia's annexation of Crimea have also drawn attention to military developments in the Arctic region in terms of a potentially deepening security dilemma and arms race. Russia's increased military presence has been seen as an indication of the importance the Kremlin attaches to the region as a future gas and oil reservoir and a global maritime 'highway'. On the other hand, its current military build-up there seems to be part of its general 'balancing' strategy with the US and NATO rather than specifically Arctic-related. Importantly, the extensive deployment of Russian nuclear assets in the Arctic highlights the region's geostrategic importance and the need for confidence-building measures in the region. Currently, the latter are, however, unlikely to materialise given the tensions over Ukraine, which have led NATO to halt its members' military cooperation with Russia.

These developments have also given rise to some concern that the Arctic Ocean littoral states might renege on their commitment to actively seek resolutions to the existing and potential future territorial disputes in accordance with the applicable international law. The recent visit by Russian Deputy Prime Minister Dmitry Rogozin to Svalbard, and purported Chinese interest in acquiring a swathe of land in this Arctic archipelago with its unique legal status, might signal increasing rivalry in Europe's Far North.¹

This report suggests that while these and other worrying developments in the region should be taken seriously by policy and military planners and analysts alike, equally serious attention should be devoted to the strong incentives for continuing cooperation in Arctic matters. Limiting and managing climate change, implementing regulations aimed at the sustainable use of resources such as hydrocarbons, minerals and fish stocks, as well as promoting the safety of increased maritime activities, should constitute a joint agenda for Arctic actors. The EU's contribution to such an agenda should be welcomed. The Union's achievements in promoting effective multilateral arrangements and political stability as well as its demonstrated aspiration to seek resolution of disputes and conflicts through mediation supported by crisis management operations, if needed, would be directly relevant if potential disputes intensify in the Arctic. The current stand-off between the EU and Russia might however limit the EU's options in addressing these challenges. Because a successful resolution of the Ukraine crisis is far from certain, and recent developments in the European security environment might turn out to be longer-term in any case, strategic thinking as well as broad and coherent utilisation of the EU's external relations toolbox is much in demand in the Arctic. This could open up possibilities also for constructive EU engagement in security matters in its Far North. As a distinctively 'soft' security actor, its posture and instruments could prove useful in attempts to build up mutual trust and to give assurances that military assets in the Arctic create stability, and are also crucial to civilian safety and environmental accident response as well as credible policing of borders and illegal flows. While much of this positive assessment of the role that the EU may be able to play in the Arctic is largely dependent on future environmental, economic and political developments occurring beyond the boundaries of the Arctic region, political will, translated into strategic action, is now needed to secure the foundations of Arctic cooperation laid down during previous decades.

1. Denmark, France, Italy, Japan, the Netherlands, Norway, Sweden, the United Kingdom and the United States signed a treaty in 1920 which gives Norway sovereignty over the Svalbard islands but grants every country that signed the treaty unfettered access to them. Currently 42 nations – including Russia – have signed the treaty.

ANNEXES

ABBREVIATIONS

A5	Arctic Five (<i>Canada, Denmark, Norway, Russia, USA</i>)
AC	Arctic Council
ACIA	Arctic Climate Impact Assessment
AHDR	Arctic Human Development Report
AMEC	Arctic Military Environmental Cooperation programme
ASFR	Arctic Security Forces Roundtable
BEAC	Barents Euro-Arctic Council
CEO	Chief Executive Officer
CHODs	Chiefs of Defence
CLCS	Commission on the Limits of the Continental Shelf
CO ₂	Carbon dioxide
CSBMs	Confidence and Security-Building Mechanisms
CSDP	Common Security and Defence Policy
EDA	European Defence Agency
EEC	European Economic Community
EEZ	Exclusive Economic Zone
GDP	Gross Domestic Product
GEUS	Geological Survey of Denmark and Greenland
ILO	International Labour Organisation
IMO	International Maritime Organisation
IPCC	Intergovernmental Panel on Climate Change
IT	Information Technology
LNG	Liquefied natural gas
NATO	North Atlantic Treaty Organisation
NEP	Northeast Passage
NORAD	North American Aerospace Defence Command
NORDEFECO	Nordic Defence Cooperation
NSR	Northern Sea Route
NWP	Northwest Passage
OCT	Overseas Countries and Territories
OSCE	Organisation for Security and Cooperation in Europe

SAR	Search and Rescue
TTIP	Transatlantic Trade and Investment Partnership
UNCLOS	United Nations Convention on the Law of The Sea
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
USGS	United States Geological Survey
WHO	World Health Organisation
WMD	Weapons of Mass Destruction
WTO	World Trade Organisation

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