

Issue 31 July 2019

Walking on Thin Ice: A Balanced Arctic Strategy for the EU

European **Political Strategy** Centre

A remote frontier for thousands of years, the Arctic is rapidly gaining international attention. Global warming is causing the Central Arctic Ocean's ice to melt at an unprecedented rate, threatening crucial ecosystems and biodiversity in the wider Arctic region. As a result, global sea levels are rising, with potentially cataclysmic global social, economic and environmental consequences over the long term, irreversible on a timescale relevant to human societies.

Somewhat paradoxically, these climatic changes are also opening new opportunities for resource extraction and transport, resulting in increased **economic – and military – activity in the region**, both from the Arctic Circle countries – most prominently Russia – and new players such as China.

With three EU Member States – Denmark, Finland and Sweden – and some half a million EU citizens situated in the Arctic, the EU has a natural and important role to play in the region. And, as the Arctic becomes a focal point of economic and geopolitical competition, and is increasingly recognised as being central to human and planetary survival, the **EU must step up its engagement with Arctic states and other stakeholders. Never has ensuring a peaceful and sustainable Arctic been so important**.

Arctic sea ice, from bad to worse

Frozen for thousands of years, the Arctic is melting faster than ever. Although the sources of Arctic warming and pollution primarily originate from outside of the region – pointing to the global nature of the challenge and the need for multilateral solutions – this could change as human activity in the region intensifies, driven by the new opportunities of a more accessible Arctic.

A renewed EU Arctic Strategy

As the Arctic becomes more strategic than ever, the EU also needs to become more strategic in its approach to the region. Building on its 2016 Joint Communication, it needs a comprehensive strategy that more staunchly preserves the fine balance between protecting the environment and facilitating the sustainable economic and social development of the region and its inhabitants.

From cold periphery to a 'hot spot' of global politics

Potentially lucrative new opportunities in resource extraction – namely hydrocarbons and rare earth materials – as well as transport and connectivity, are drawing a growing number of public and private actors to the region. As China seeks to integrate the Arctic's Northern Sea Route into its Belt and Road Initiative in order to access the region's riches, Russia is leading a military build-up aimed at asserting control over its resources.

Global solutions for global problems

Given the global implications of Arctic developments, the EU must systematically include the Arctic in its thinking when developing sectoral policies and engaging with third parties. Ensuring peace and stability, as well as environmental preservation and sustainable development will require continued engagement with the US, Russia and China.

EPSC Strategic Notes are analytical papers on topics chosen by the President of the European Commission. They are produced by the European Political Strategy Centre (EPSC), the European Commission's in-house think tank.

Disclaimer

The views expressed in the EPSC Strategic Notes series are those of the authors and do not necessarily correspond to those of the European Commission.

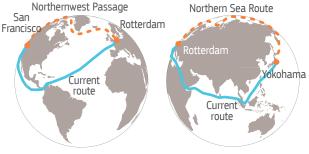
The Arctic and mankind: a story older than the wheel

The six percent of the Earth's surface area located north of the Arctic Circle (66° 33'N)1 – today encompassing the sovereign territories of eight states (Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden and the United States), and home to over four million people, including over 40 different indigenous ethnic groups and half a million EU citizens² have long been the object of much fascination.

The first European exploration of the Arctic dates back to the **10**th **century**, when explorers began seeking out shorter maritime commercial routes, namely towards Asia. However, these attempts proved fruitless until the turn of the 20th century when the North-western and North-eastern passages were successfully traversed for the first time (Figure 1).

Figure 1: Shorter sea routes act as a major driver of Arctic interest

Northwest Passage and Northern Sea Route compared to current routes

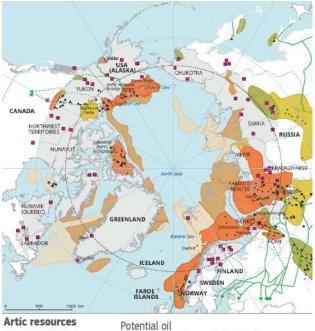


Source: GRID-Arendal

While the first pioneers failed to pass through the Arctic's frozen waters, they nevertheless began the first Arctic explorations, giving way to a wave of **scientific study** of the region's ecosystem and rich biodiversity, with the first scientific observation stations built in the region already back in 1882-83.

In subsequent years, rich mineral resources discovered in the region - gold, diamonds, copper, nickel, coal, and most prominently oil and gas - led to a flurry of exploration and economic developments. It is only recently, however, that the likely full extent of the Arctic's natural resources was revealed, with a 2008 geological survey by the United States estimating that the region potentially contains some 13% of the world's undiscovered oil and 30% of its natural gas (Figure 2)3 - half of which are thought to be under Russian control.4

Figure 2: The Arctic is thought to host some of the world's largest undiscovered mineral and fossil fuel resources



Oil, gas and mining

- ▲ Oil and gas exploration and production sites
- Main mining sites .. Main projected pipeline
- Main existing gas and oil pipeline
- Prospective areas and reserves

and/or gas field

- Medium (30-50%), sea ■ High (>50%), sea
- Medium
 - (30-50%), land High (>50%),

Other features

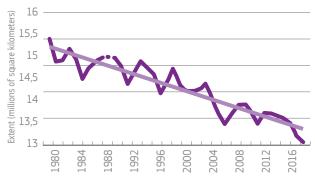
- · Arctic circle National/regional boundaries
- Arctic region defined as in Arctic Human Development project

Sources: European Environment Agency, Nordregio

A jewel under threat

Historically an icy wonderland accessed only by the most intrepid explorers, the Arctic has today become a major source of international concern. Global greenhouse gas emissions are causing the **Arctic** to warm at a much faster rate than the global average, compounded by the region's greater sensitivity to global temperature changes - referred to as 'polar amplification'. As a result, Arctic winter temperatures are already 2.5°C higher than pre-industrial temperatures⁵ and **sea ice and snow in the region** are melting at an unprecedented rate (Figure 3). During the summers of 2007 and 2012 as much as 40% of the Central Arctic Ocean already consisted of open water.6

Figure 3: Arctic sea ice is melting at an unprecedented speed



Source: US National Snow and Ice Data Center (NSIDC)

Despite its remoteness, the region is particularly sensitive to atmospheric pollutants, in particular black carbon - the sooty black material emitted from coalfired power plants, gas and diesel engines, and other sources that burn fossil fuel - which deposit on sea ice, turning it black so that it starts to absorb solar radiation - rather than reflect it. Not only does this accelerate melting, it contributes to a vicious cycle whereby the Earth's white, reflective ice surface shrinks in favour of darker surface areas made up of ocean and bare rock, which absorb more heat, thereby further precipitating global warming and Arctic ice melting. In turn, thawing permafrost has the potential to release billions of tonnes of CO2 equivalents more than humanity has hitherto emitted, thus transforming the Arctic into a major source of heat.7

Current estimates consider some **70% of inhabited or built permafrost areas to be prone to thawing**, with the risk of infrastructure, homes, and other buildings collapsing, forcing local communities to relocate. In Alaska, for instance, an estimated 16% to 24% of total permafrost will degrade by the end of the century.⁸

This is already having grave repercussions on Arctic biodiversity, populations and ecosystems, but also on the world as a whole. Lakes and ponds are disappearing. Dangerous levels of organic pollutants and heavy metals are entering the food chain, putting animal and human health at risk.9 Melting sea ice threatens the survival of many species such as polar bears and walruses. **Acidification** is affecting entire oceans and underwater ecosystems, with the international scientific community anticipating mass extinctions. 10 Global sea levels are expected to rise **by 74 cm** by the end of the century, 11 with major repercussions on coastal areas the world round, while rising global temperatures are causing more frequent **extreme weather** events around the globe – droughts, rainstorms and floods.12

Recent studies also show an unprecedented number of microplastics frozen in Arctic sea ice,¹³ with further concerns that a sixth 'garbage patch', i.e. a concentration of marine debris, could be forming in the Arctic waters.¹⁴ The Arctic ice not only acts as a store for ocean debris that could potentially be released as global temperatures get warmer, but the movement of sea ice could also deposit microplastics in areas that were previously plastic-free.

Although there are still relatively few sources of plastic, carbon dioxide, black carbon and other pollutant emissions within the Arctic region itself, that could change as human activity in the region increases rapidly, driven by the new opportunities of a more accessible Arctic.¹⁵

And yet, the fact that most of the sources of Arctic warming and pollution originate from outside of the Arctic region, while the consequences extend well beyond it – taking on a planetary dimension – highlight the global nature of the challenges faced in the Arctic region – and thus the need for global solutions.

Melting ice opens vast new economic opportunities

As the Arctic sea ice melts, its vast natural and mineral resources become more accessible, at a time when global resources are coming under increasing pressure.

Of particular interest are the region's potentially vast reserves of **rare earth elements** – central to the ongoing global digital and low-carbon economic transition. Currently, 90% of global rare earth production stems from China, which claims its reserves could run out in the next twenty years due to overextraction. On the one side, by gaining control of the Arctic's reserves, China could maintain its domination over these precious materials. On the other, those countries that are currently heavily reliant on Chinese imports are eager to gain access to an alternative source of supply, in particular as the US-China trade war heats up and China threatens to impose restrictions on rare earth material exports.

Locals are eager to make the most of new opportunities – whether in terms of fishing, agriculture, or exploitation of mineral and fossil fuel resources. But they are not alone. Although considerable uncertainty remains over whether much of the Arctic's oil, gas and mineral resources are extractable at all¹⁹ – be it for economic, social, political, logistical or technological reasons – **investments are being poured into exploration and extraction** across the region.

For instance, Gazprom already extracts hydrocarbons from the Russian Prirazlomnoye field on the Arctic shelf,²⁰ while a rare-earth elements mine project on the Kvanefjeld site in Greenland is awaiting final decision by the environmental authorities of the government of Greenland.²¹

Figure 4: The number of licenses issued for mineral mining in Greenland increased fivefold since 2002



Source: Government of Greenland, 2019

In parallel, as previously permanently frozen areas give way to open water, comes the promise of a new logistical hub of global significance, with new possibilities for shipping between Asia, Europe and North America, either through the Northwest Passage – shorter than the Panama route – and, most prominently, through the Northern Sea Route, which is shorter than the Suez route by several days, making it less energy-intensive and cheaper to navigate.²²

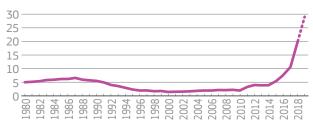
Although some estimate the Northern Sea Route may become navigable year-round without the use of icebreaker escort by the 2040s or 2050s,²³ **there are many obstacles to be addressed**.

First, significant investments in harbour facilities are needed along the entire Russian coast of the route. Second, the remaining sea ice and occasional shallow waters prevent ships from travelling full speed, thus reducing expected time-gains. Third, the iceresistant ships required to travel along the route are more expensive, also reducing the expected financial savings. Fourth, the risk of accidents is higher than along the traditional routes, due to the weather and the scarcer search and rescue capabilities - likely requiring additional training and insurance. The dependence on Russian governance over the route, as well as its icebreaker services may also act as a deterrent, although other countries, including several EU Member States, also have substantial icebreaker capacities,24 while Finland is a leading supplier, with 60% of the global icebreaker fleet designed and built in the country.²⁵

As a result of these barriers, the average number of ships using this passage for transit remains under 20 a year,²⁶ compared to over 17,000 ships using the Suez Canal route.²⁷ Nonetheless, **transported cargo volumes are increasing rapidly**, with some 20.2 million tonnes of freight passing through the Northern Sea Route in 2018 – twice as much as the previous year (Figure 5).²⁸ The vast majority of freight volumes consist of hydrocarbon exports (crude oil and liquefied natural gas) from the Arctic coast of Russia, with Russian President Vladimir Putin setting a target for shipments to grow to 80 million tonnes by 2024.

Figure 5: The Arctic Northern Sea Route is getting busy as cargo carriers seek shorter transit times

Annual freight traffic on the Northern Sea Route in million tonnes



Source: Atomflot, 2019

Shorter transport routes are not the only advantage being reaped by investors. As the Arctic ice melts, it creates new passageways under the oceans, creating shorter paths for underwater cable connections, such as the **Arctic Connect data cable** that will link Europe and Asia, thereby accelerating the speed at which digital data can be carried from one continent to another. Projected investments could turn the region into **an international traffic node for data communication**, contributing to the socio-economic development of Arctic areas, while also generating significant global economic benefits – e.g. for telecommunications providers and financial markets that rely on speedy connections.²⁹

New actors and new interests

As new economic opportunities abound, the race for control intensifies in a region that is already home to overlapping claims on the territory's resources (Figure 6), and where new actors from outside the region – including a fast-growing and ever-more assertive China – are taking a keen interest.

The Arctic has already long proven to be a key strategic location — connecting some of the world's superpowers from North America to Europe and the Soviet Union, all the way to

China. In fact, it played a key role during World War II, providing a route for transporting supplies and weaponry,³⁰ as well as in the subsequent Cold War, when the region not only provided the shortest route for US and Soviet strategic nuclear bombers and missiles, but also training waters for nuclear submarines that would become the foundations of continuous-at-sea deterrence.³¹ Today, the region links Russia's oil and gas to China's growing economy, China's exports to the Single European Market, and Russia's Northern Fleet to warmer seas.³²

To date, the Arctic region has remained a haven of peace, largely thanks to the governance framework put in place in the 1980s and 1990s that has helped it to remain largely – but not entirely – isolated from otherwise sometimes strained relations between certain Arctic countries.³³

Figure 6: Territorial claims in the Arctic



Note: This map does not account for the May 2019 Canadian Arctic continental shelf <u>submission</u> with the UN Commission on the Limits of the Continental Shelf.

Sources: Centre for Borders Research (IBRU) - Durham University, Ministry of Foreign Affairs, Denmark

International Arctic Governance

International Arctic governance was minimal during the Cold War, as the 1982 **United Nations Convention on the Law of the Sea** (UNCLOS) that defines and regulates, *inter alia*, territorial waters and Exclusive Economic Zones (EEZs), entered in force only in 1994.³⁴ UNCLOS contains provisions to adjudicate on competing claims over extended continental shelves,³⁵ even if **Arctic countries can negotiate and conclude international treaties delimitating their respective waters and continental shelves themselves** – as have done Russia and Norway bilaterally in 2010.³⁶

In 1989, as the Cold War was coming to an end, Finland launched what became known as the 'Rovaniemi' process – largely considered as the origin of current intergovernmental Arctic cooperation. The move came in the midst of an international rapprochement with Russia, but also amid rising concern for environmental protection in the Arctic regions. The process has since led to the creation of several regional structures focusing on the Arctic. Most prominently, the Barents Euro-Arctic Council was created in 1993 with the EU as a founding member, focusing on the sustainable development of the Barents region.

The Arctic Council followed in 1996 – an intergovernmental forum promoting cooperation, coordination and interaction among the Arctic States, Arctic indigenous communities and other Arctic inhabitants on common Arctic issues, in particular on issues of sustainable development and environmental protection. While strictly speaking, membership of the organisation is limited to the eight countries located within the Arctic Circle,³⁷ many non-Arctic states as well as non-governmental and international organisations hold the status of **observer** in the Arctic Council. These notably include seven EU Member States,³⁸ Switzerland, China, Japan, India, the Red Cross, the Saami Council, the UN Development Programme and others. However, despite being a crucial source of expertise, funding and information for the Arctic Council's work, **the EU itself does not hold a formal observer status**, largely due to initial Canadian resistance over seal trade and to subsequent Russian obstruction since 2014.³⁹ Nevertheless, the EU does participate to the Arctic Council's work as a *de facto* observer, upon invitation.

To date, the Arctic Council has produced tangible results, among which three **agreements legally binding** the Arctic member states on issues ranging from search and rescue cooperation (2011), to marine oil pollution preparedness and response (2013), and scientific cooperation (2017).

Several sectoral initiatives also contribute to the international governance of the Arctic. Most prominently, the **2015 Paris climate agreement**⁴⁰ aims to ensure that global temperatures do not rise by over 2°C.⁴¹ In addition, the global Climate and Clean Air Coalition (CCAC) to Reduce Short-Lived Climate Pollutants has been working on the Black Carbon problem since 2012, with a secretariat hosted by the **United Nations Environment Programme** (UNEP).

However, the growing diversity of actors and interests in the region could put existing frameworks to the test.

Within the Arctic Council itself, there is a growing divide between, on the one hand, the proponents of prioritising environmental sustainability and multilateral solutions, and, on the other, those placing economic development and national sovereignty concerns above all else.

While the first group are perhaps more numerous – encompassing the European Arctic states and Canada, the latter group includes the two global heavyweights – the US and Russia. What is more, even among those listing environmental protection and the peaceful and sustainable exploitation of natural resources as key concerns, not all do so with the same degree of assiduity – be it in words or in deeds.

Beyond the Arctic Council, a growing number of other non-Arctic states – China in particular – are taking a keen interest in developments in the Arctic, questioning the exclusiveness of regional cooperation settings.

Euro-Arctic and Canada pledge sustainability first

Sweden has been pushing hard for robust regulatory frameworks focusing on environmental sustainability and respecting international norms and United Nations Conventions.⁴² **Finland** also places the sustainable development of the region as a priority, while also highlighting the importance of digital and physical connectivity, and of **good-neighbourly** relations with other Arctic states, notably Russia. 43 Similarly, the Kingdom of **Denmark**⁴⁴ underscores peace and security, sustainable development, protection of the environment, climate and biodiversity, and international cooperation,45 as do Canada, Norway⁴⁶ and Iceland - with both Oslo and Reykjavik also stressing the need to take **economic advantage** of their natural resources (energy, minerals, fish, and others) and of potential new **shipping possibilities**. 47 Norway and Sweden are also rapidly developing their national and cross-border infrastructure in the High North, including airports, roads, railroads and harbours. Canada aims to maintain its sovereign rights and deter any encroachments on it, but without provoking other actors, and to manage the growing interest from non-Arctic countries.

All five of these countries also emphasise the **rights of indigenous peoples** – associated with the issue of social harmony in Canada.

Russia pursues national sovereignty and economic growth, backed up by military clout

By contrast, Russia's official policy regarding its Arctic resources is oriented towards expanding Russia's resource base to satisfy its energy needs and socio-economic development. 48 It has significantly stepped up its Arctic activities in the fields of natural resources, transport, and defence and its stated objective is for offshore Arctic oil to account for 20-30% of Russian production by 2050,49 to compensate for the progressive depletion of its other reserves.50 Indeed, as much as two thirds of Russia's oil and gas are thought to be in Russia's Arctic Exclusive Economic Zone. 51 However, getting its hands on these reserves is not so easy. Unilateral exploration and extraction of hydrocarbons in the Arctic is expensive and complex due to technological and logistical reasons, and therefore increasingly requires international cooperation.⁵² This goes a long way to explaining Russian's willingness to sustain an environment that is conducive to effective international cooperation and foreign **investment** in the Arctic – as well as its expanding Arctic collaboration with a cash-rich and energy-hungry China.

Indeed, while Russia's state-controlled oil and gas companies, Rosneft and Gazprom, have sought cooperation with American and European counterparts (e.g. BP and Rosneft formalised two joint ventures to assess prospects of extraction in the Russian Arctic, in 2016 and 2017⁵³), Russia's illegal annexation of Crimean Peninsula in 2014, its deliberate destabilisation of Ukraine and the consequent **Western sanctions imposed on Russia have complicated cooperation with Western companies**. ExxonMobil, for instance, failed to obtain permission from the US Treasury to drill jointly with Rosneft in the Russian Arctic.⁵⁴ More broadly, the **sanctions deny Moscow access to the technology and capital necessary** to exploit its Arctic resources.⁵⁵

In addition to its exploration and exploitation activities, Russia views the Northern Sea Route as a source of national and regional development, officially designating it as an international maritime navigation route subject to Russia's jurisdiction. As a result it is keen to ensure the logistical investments needed along the route – improving infrastructure, such as ports, lines of communications, search and rescue stations and effective border control services. But it is also eager to remain fully in control of the route.

This explains why **Moscow is creating regulatory** and administrative barriers to foreign navigation along the route – in addition to pre-existing obstacles – namely with rules on pollution, tariffs, proof of liability and insurance. Foreign ships are even required by law⁵⁷ to pay for weather and ice reports, for Russian pilots and for Russian icebreaking services – which explains why **re-building its nuclear-powered icebreaker fleet**⁵⁸ – while they are forbidden from transporting oil or gas extracted in Russia along the route.⁵⁹

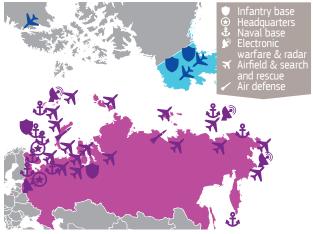
In a bid to protect its interests, the Russian Ministry of Defence recently announced restrictions on foreign warships passing through the Arctic Ocean. 60 It is also engaging in a large-scale military build-up in the **Arctic**, across the different branches of Russia's armed forces, explicitly designed to protect its resources and the Northern Sea Route (Figure 7).61 Among others, strategic bomber and Northern fleet patrols resumed for the first time since the end of the Cold War already in 2007, and the **Northern Fleet has been significantly upgraded** since, becoming the largest of Russia's four fleets. Moscow has also expanded naval patrols near its neighbours and increased its submarines' operational radius. 62 Large investments have been made in Russia's missile defence systems, and the Russian Ministry of Defence has announced over 100 military facilities in the region. Six new military bases have been established since 2015.63

As a result of this build-up, some **commentators** have proclaimed a 'new Cold War', or suggested that Russia is preparing to conquer the Arctic.⁶⁴ Yet these fears seem largely exaggerated. First, Russia's military build-up must be seen in a wider context of military restructuring and appears to be largely defensive rather than offensive, aimed primarily at defending Russia's borders and national interests in the Arctic. 65 Second, as most of Russia's Arctic oil and gas is within its uncontested Exclusive Economic Zone,66 and as existing international law favours countries with a coastline on the Arctic Ocean, 67 Russia's selfinterest is to uphold existing international law and UNCLOS particularly.68 Moscow has therefore committed to do so and to keep the Arctic a region of peaceful cooperation, 69 agreed with the US on six new and safer two-way maritime routes in the Bering strait,70 and co-led the discussions leading to the 2017 Agreement on Enhancing International Arctic Scientific Cooperation.⁷¹

All in all, Russia's strategy in the Arctic appears to be multifaceted, comprising elements of geopolitical competition as well as practical cooperation. While undoubtedly, Russia's engagement in the region is partly driven by a desire to achieve

great power status and, as the only non-NATO Arctic coastal state, to defend its territory against potential attacks, it is also defined by economic interests dictating international cooperation and legal stability.⁷²

Figure 7: Russia's military build-up in the Arctic



Source: Foreign Policy

United States slowly waking up

The **previous US administration** under President Barack Obama viewed the Arctic primarily as an illustration of the need to **tackle global warming** more forcefully. It thus created new positions, such as a Special Representative to the Arctic, and new protected lands and waters in the American Arctic to protect the environment from potential negative developments.⁷³

The current **US** administration, however, has been retreating from international environmental governance as well as from the US' domestic environment protection agenda set up by the previous administration. However, the Arctic is increasingly becoming a priority for the US, in particular in light of the growing rapprochement between Russia and China.

A recent US Department of Defense Arctic Strategy highlights that the region's security environment is becoming more complex and is entering an 'era of strategic competition'.⁷⁴ And, while the US appears to remain **committed to multilateral governance in the Arctic**, a new **geopolitical struggle** could emerge, as demonstrated by US Secretary of State Michael Pompeo's speech in May 2019, in which he singled out **China**'s expanding capabilities and ambitions in the region and highlighted the risk of Beijing transforming the region into 'a new South China Sea'.⁷⁵

China's 'near-Arctic' state strategy

A self-styled 'near-Arctic state' with the ambition of becoming a 'Polar power',⁷⁶ China released its first ever White Paper on Arctic Policy in January 2018.⁷⁷ It starts with the premise that 'the Arctic is a global issue that cannot be left to Arctic states alone',⁷⁸ all the while recognising Arctic states' sovereignty and rights, but arguing that international cooperation is required for mutually beneficial outcomes.

Due to its large reliance on energy imports and fears of overdependence on the Malacca straights or on waters dominated by the US navy, 80 China considers the Northern Sea Route to be of strategic importance. This is why it is seeking to create a 'Polar Silk Road' as part of its Belt and Road Initiative (BRI).79

Chinese shipping company COSCO has already expressed its interest in starting summer traffic along the route, 81 and Chinese investors have expressed theirs in funding the Rovaniemi – Kirkenes railway and the Helsinki – Tallinn railway tunnel projects, which would connect the European Arctic to the Single Market. 82 The completion of this railway would result in the Arctic Ocean and Mediterranean Sea being linked by rail, effectively closing the circle of China's Belt and Road Initiative. 83 China also launched its first domestically built icebreaker in 2018, and has opened a bid to build a nuclear-powered icebreaker, which contains the requirement for foreign companies involved to transfer technology to their Chinese partners. 84

China's interests extend well beyond the Northern Sea Route: **China is involved in resource extraction activities in Greenland**, including for rare earth minerals, ⁸⁵ while it has provided financial backing for hydrocarbon extraction projects, in particular in the Russian Arctic, such as the Yamal liquefied natural gas (LNG) project in Siberia.

At the same time, Beijing is conscious of the importance of **environmental protection.**⁸⁶ In 2017, it published non-binding guidelines for a '**green Belt and Road'**⁸⁷ in an attempt to **balance environmental protection and sustainable development**. They state that China will aim to preserve the health of oceans, maritime ecosystems and biodiversity, and to strengthen international cooperation against climate change.⁸⁸

To date, China has succeeded in positioning itself as a proponent of Arctic development, rather than as a rival to the Arctic states, earning it **observer status in the Arctic Council as of 2013**. As a result, it recognises existing international law applicable to the region, notably UNCLOS. In return, it expects its own rights, such as freedom of navigation, to be respected by Arctic states.⁸⁹

A growing, albeit complex Sino-Russian cooperation

China and Russia are increasingly looking for ways to cooperate in the Arctic, leading discussions since 2015 on potential collaboration between the Eurasian Economic Union, the Moscow-dominated regional association, and China's Belt and Road Initiative. The 2017 'China-Russia Joint Statement on Further Strengthening Comprehensive, Strategic and Cooperative Partnership' specifically mentions cooperation in the Arctic in the fields of transport, scientific research, energy resources, tourism and environmental protection.⁹⁰

Western-imposed sanctions have also forced **Russia to look East, and notably to China, to support investments both along the Northern Sea Route and for the extraction of hydrocarbons**. For instance, when Western companies withdrew their funding for the Yamal LNG project, the Chinese National Petroleum Company and the China Development Bank stepped in. Indeed, Beijing has shown itself very keen to assist, viewing the **insufficient infrastructure along the Northern Sea Route as an economic opportunity** rather than an obstacle. In 1932

Notwithstanding this, **Russia remains somewhat** cautious in its interactions with China, as it wants to maintain control over the Northern Sea Route, and is not too keen on China developing its own icebreaker fleet. This goes in contradiction with China's interests in maintaining freedom of navigation, and it is unclear how Beijing may react to Russian administrative and regulatory barriers to foreign navigation on the medium—to long-term.⁹⁴

Rising interest among other non-Arctic countries

Within Europe, several non-Arctic EU Member States have long taken a keen - primarily scientific interest in the Arctic, significantly contributing to international polar research, and being granted observer status at the Arctic Council. These include **Poland**, which has had a manned **research station** in Svalbard since 1958.95 The **Netherlands**, too, conducts scientific research from its Svalbard polar station, with a view to mitigating climate change, and to contributing to the sustainability and preservation of the Arctic. 96 Similar considerations motivate the research activities of other EU Member States, such as Spain,97 Italy,98 and prominently the United **Kingdom**, the **Arctic's 'nearest neighbour'**, 99 which ranked fourth among non-Arctic states in the amount of scientific publications on the Arctic. 100 Along with the UK, Germany, France and Spain also recognise

the economic possibilities and environmental challenges of the region, and the potential for geopolitical competition. Accordingly, Paris and Berlin call for greater international cooperation and for the enforcement of the highest environmental standards when exploiting the region's resources.¹⁰¹ As for **Switzerland**, which has observer status in the Arctic Council since 2017, its primary interest also relates to climate research.

Outside of Europe, the two other Arctic Council observer countries are Japan and India.

Although it still foresees that most ships will continue using the Suez route under current circumstances, Japan is preparing for the eventuality of the **Northern Sea Route gaining in prominence.** 102 As a result, it is paying particular attention to Russia's military build-up in areas surrounding its territory - all the while investing in Russian Arctic liquefied natural gas. 103 On its side, **South Korea** is dissatisfied with Russia's practice of charging a fee for traversing the international waters composing the Northern Sea Route, while **Singapore**, as a small island nation has environmental concerns regarding projected sea level rise, and the Northern Sea Route may jeopardise its status as a global maritime transportation hub. 104 Accordingly, both Japan and Singapore cooperate closely with other Arctic countries, notably the US.

Finally, while its broader strategic interests remain unclear, **India** is **wary of competition from China** and engages with the region, having concluded a twenty-year agreement on **liquefied natural gas supply** with Gazprom,¹⁰⁵ and being involved in **scientific research in Svalbard (Norway)**.¹⁰⁶

What is clear is that all these countries are eager to see the Arctic Council engage more with non-Arctic countries and consider their interests more strongly. Indeed, the benefits that Arctic coastal states derive from existing international law, notably UNCLOS, are seen by countries, such as India among others, ¹⁰⁷ as being disproportionate and at the expense of states without an Arctic coastline. Accordingly, India and others would prefer the Arctic governed collectively at the international level rather than becoming a terrain for geopolitical competition.

The EU in the Arctic: a responsible actor with intricate ties

The EU's engagement with the Arctic is decades old and dates back to Denmark's accession in 1973 - at which time Greenland also joined. However, following a referendum held in 1982, the Arctic island withdrew from the EU and is now associated to the EU under the Overseas Association Decision. The Arctic came back on the EU agenda in 1995, when two more Arctic states – Finland and Sweden - joined the EU. At that time, the **EU played a pivotal role** in the process leading to the establishment of the **Northern Dimension** (ND) as a regional forum in 1999. The Northern Dimension provides a framework for dialogue, cooperation, and outreach to non-governmental stakeholders, 108 and is organised around four partnerships, 109 notably the Northern Dimension Environmental Partnership (NDEP). 110 Launched as an EU policy in 1999, it became a joint policy with Iceland, Norway and Russia in 2006.

Although the EU acknowledges that **the primary** responsibility for Arctic policy rests with the Arctic states themselves, the fact that three of these are also EU Member States means that the Arctic is de facto an object of EU internal policy. However, the EU's legal competence vary depending on the specific policy area.¹¹¹ For instance, while it has exclusive legal competence regarding the conservation of marine biological resources under the common fisheries policy, it may only support, coordinate, or complement national industrial or tourism policies. 112 Therefore, the EU acts mostly 'as an external actor' in the Arctic. 113 And vet, the growing interest and involvement of non-Arctic EU Member States in the region – some of which participate as observers in the Arctic Council – points to the need for greater coordination at EU level in order to make the most of possible synergies.

Despite having so far been denied observer status in the Arctic Council, the EU has thus continued to develop its policies towards the Arctic, in a series of Communications, the first one dating from 2008, and setting three main policy objectives: protecting and **preserving the Arctic** in unison with its population, promoting the sustainable use of resources, and contributing to enhanced **Arctic multilateral** governance. 114 A later 2012 Joint Communication on Developing a European Union Policy towards the Arctic Region built on these objectives and proposed increased EU support for **research** to address climate change, responsible EU action to ensure that economic development of the region is sustainable, and intensified **EU engagement** with other states, entities, and indigenous peoples.115

The latest EU document specifically addressing the Arctic region is the 2016 **Joint Communication on 'An integrated EU policy for the Arctic'**. Building on its predecessors, it confirms the three priorities of the EU regarding the Arctic, while stressing the importance of **research, science and innovation** across all of them (Figure 8).¹¹⁶

- 1. Climate change and safeguarding the environment, with a focus on research, climate mitigation and adaptation strategies, and protecting the environment:
- **2. Sustainable development in and around the region**, with a focus on sustainable innovation, investment, space technology and maritime safety.
- 3. International cooperation, revolving around international organisations and fora, bilateral cooperation, engagement with indigenous peoples, fisheries governance and scientific cooperation

In parallel, the **2016 EU's Global Strategy** reaffirms the **EU's strategic interest in the Arctic 'remaining a low-tension area**, with ongoing cooperation ensured by the Arctic Council, a well-functioning legal framework, and solid political and security cooperation.' In this endeavour, the Global Strategy goes on, the EU will work on **climate action**, **environmental research**, **sustainable development**, all the while **cooperating with Arctic states**, **institutions**, **indigenous peoples and local communities**.¹¹⁷

To help it achieve these objectives, the EU has appointed, since September 2017, an 'EU Ambassador at Large for the Arctic' to raise awareness of, and discuss, Arctic issues with the wider public and with the EU's partners.¹¹⁸

Figure 8: The EU's Arctic Strategy as defined in the 2016 Joint Communication on an integrated European Union policy for the Arctic

Climate Change and Safeguarding the Arctic Environment

Research

Arctic research funding (Horizon 2020 and ESIF), EUPolarNet Initiative, Space programmes, pan-Arctic research programmes

Climate mitigation and adaptation strategies

2030 Climate and Energy Framework, ESIF funding, 20% of EU budget committed to climaterelated objectives, contribution to efforts to limit short-lived pollutants

Protecting the environment

Multilateral engagement (2015 Paris Agreement, ongoing UN BBNJ process), support to phasing out organic pollutants, measures against invasive species, oil & gas standards

Source: European Political Strategy Centre

Sustainable Development in and around the Arctic

Support for sustainable innovation

Funding of projects through Horizon 2020's InnovFin programme, Digital Single Market Strategy

European Arctic stakeholder forum

To identify key investment and research priorities, Interreg Northern Periphery and Arctic Programme

Investment

Through EFSI, EBRD, EIB, TEN-T

Space technology

Copernicus and Galileo support monitoring and navigation, support of GEO Cold Region Initiative

Safe and secure maritime activities

Funding of an emergency preparedness network, enhancing Search and Rescue

Sustainable Development in and around the Arctic

International organisations and fora

Support of UNCLOS, Arctic Council, Barents Euro-Arctic Council, Northern Dimension policy

Bilateral cooperation

Cooperation with all Arctic partners

Dialogue with Arctic indigenous peoples

European Commission annual dialogue meetings, funding to local communities

Fisheries management

Agreement to prevent unregulated high seas Fisheries in the Central Arctic Ocean

Scientific cooperation

Multi-resolution map of the seabed, European Marine Observation and Data Network

Keeping pace with the Arctic: Implications for the EU's Arctic Strategy

Just as the Arctic is changing rapidly, so are the strategies of Arctic players – big and small. This is also happening within the EU. For instance, the UK updated its Arctic Policy Framework in April 2018, while Poland's Arctic strategy is expected this year, and the Netherlands and Sweden are in the process of updating and/or publishing theirs.

The new Finnish government inaugurated in June 2019 has also committed to renewing the Finnish Arctic Strategy. ¹²⁰ In this context, as a recognised by many Member States, ¹²¹ the EU is uniquely well-placed to help coordinate and complement Member States' Arctic policies, as it has done for twenty years already. With this in mind, the 2016 Joint Communication is undoubtedly a useful blueprint, striking a delicate but necessary balance between environmental protection and sustainable development of the region, and recognising the centrality of multilateral cooperation in achieving this balance.

Yet, as the Arctic region grows in geopolitical and geo-economic significance, the EU also needs to reflect on its key strategic interests there, and update its approach to take into account the new **developments in the region** – such as the acceleration of climate change, as well as the predominance of Chinese plans and investments in Arctic logistics and infrastructure projects. Indeed, the new opportunities and rising interest in the Arctic from inter alia China and Russia can only mean one thing: coordination of European Arctic policies is needed now more than ever. Even if the Arctic remains primarily the responsibility of the Arctic States, only through **broader** cooperation among all Member States - as well as other actors in the region, be they local or global – can the EU address the challenges and opportunities of the region.

Clarity on its engagement

One of the criticisms to date regarding the EU's engagement in the Arctic is that it has been more about gaining a seat at the table than about implementing a clear Arctic strategy that puts the sustainable development of the region as a central focus. While this criticism seems unfair in light of the – widely recognised valuable – work that the EU does in the Arctic Council Working Groups, there is clearly scope for the EU to define its positioning vis-à-vis the Arctic in a more strategic, visible and integrated manner – as done by the Chinese.

This could be achieved through the development and implementation of a new 'Arctic Strategy', based on the experience and lessons drawn from the 2016 Joint Communication, with a timeframe aligned with other relevant EU policies, such as the 2030 Sustainable Development Goals (SDGs). Such a strategy must be elaborated in close consultation and cooperation with all Member States and competent EU institutions and services to have the desired impact and to include all Arctic-relevant policies. In addition, the EU should mainstream its Arctic objectives into all areas of EU action – from transport and energy, to agriculture, fisheries, investment, research and innovation, environmental, and other policies.

While the new strategy should continue to promote a balance between sustainable economic development and protecting the environment, it must be more precise in how this can be achieved and push for clearer 'rules of the game'. Currently, even though most Arctic actors claim to place environmental protection and sustainability at the top of their agenda, they also vocally or tacitly endorse the exploitation of the Arctic's energy and other natural resources for their own energy security and economic development. Indeed, this is to be expected given that the Arctic's resources are likely to be crucial for the global and European economy in the near future. In 2016, the EU imported 86.7% of the petroleum it consumed, and 44.4% of these imports originated either from Russia or Norway. The respective figures for gas are even higher: 70.4% and 64.7%, and growing each year. 122 The EU therefore has as much as an interest as China or Russia in expanding extraction activities in the region.

Yet, reflecting the Arctic's unique characteristics and value, a specific Arctic environmental impact assessment could be warranted. Such an initiative already has the European Parliament's support, ¹²³ and could be carried out by the European Environmental Agency. Indeed, as a growing number of public and private actors compete to reap the benefits of the Arctic's resources and its growth potential, the EU has a key role to play in developing and promoting the necessary international frameworks – regulatory or not – for a much more sustainable and environmentally friendly approach to economic activities in the area.

Finally, the EU should more actively promote the participation of local communities, including indigenous peoples, in decision-making on matters that concern them. This could be done by increasing availability of information, and by developing specific outreach initiatives to ensure that relevant expertise is reflected in EU policies towards the region. The EU should also consider opening programme offices/contact points in Greenland and the Faroe islands to provide additional platforms for dialogue and to raise awareness of the EU's prospective programmes.

Giving the Arctic the prominence it deserves in the EU's institutional setup and funding programmes

The EU's Arctic strategy needs to be reflected across the EU's institutional set-up, and within its **programmes**, **projects**, **finances and relevant legislation**.

In the European Commission, there needs to be a more strategic and comprehensive approach to the Global Commons in general and the Arctic in particular. The increasing competition over common properties – be it cyber, space, high seas or atmosphere – calls for an overarching, cross-cutting strategy. The Arctic is central to such an effort, not the least because of its close proximity and central importance to European security and economic interests. Given the multitude of issues to be dealt with, it is unlikely that a single Commissioner could cover the breath of policies pertaining to the Arctic. However, entrusting a coordinating function for Arctic policies to one (or more) Vice-President(s) could yield real dividends in terms of 'connecting the dots' and better anticipating the future trajectory of this important region.

This would also serve to facilitate cooperation between the European Commission and the European External Action Service, which should maintain its successful Arctic ambassador scheme - and strengthen this position with adequate resources. The **Council of the EU** should have a specific **working** party covering Northern Europe and the Arctic in a comprehensive manner as suggested already in 2016 joint communication. This portfolio is currently assigned to the Working Party on Eastern Europe and Central Asia (COEST). If a new working party cannot be created, the Arctic matters should be given a **higher profile in COEST** to reflect its growing importance, and cover environmental protection and sustainable development in the region. There should also be regular updates regarding Arctic developments at the Political and Security Committee and during Council meetings. Furthermore, the role of the **European Parliament should be strengthened** in the EU's Arctic policy formulation. This could take the form of regular debates on Arctic Policy in the **plenary**, through activities of a specifically designated **Interparliamentary Delegation**, which would have a special responsibility for the Arctic cooperation. A rapporteur for Arctic matters could also be elected within the European Parliament for the duration of the preparation of the next Joint Communication.

The European Structural and Investment Funds (ESIF) and the InvestEU Programme (currently the European Fund for Strategic Investment), which could be complemented with an Arctic Investment Platform, should remain an important part of the financial tools

that the EU can leverage to develop the Arctic region for the duration of the **2021-27 Multiannual Financial Framework (MFF)**. Future investments should adequately reflect the growing importance of transport, logistics and telecommunications infrastructure in a region that remains largely remote to date. This includes the planning of the **Trans-European Transport Network** as well as investments in ICT and infrastructure to connect the EU's Arctic regions to European and global digital networks, in line with the Commission's strategy on Connectivity for a **European Gigabit Society.**¹²⁴ **Space policy** must not be forgotten either, nor the infrastructure for space research already present in the EU's Arctic regions. The EU should also look at the possibilities for playing a key part in facilitating digital solutions suited to the Arctic environment by, for example, expanding existing satellite **programmes** to cover the Arctic region's specific needs.

The planned future **Neighbourhood, Development** and International Cooperation Instrument (NDICI) will also be an important tool in the next financial framework, as will **the future Decision on the Overseas Association** – that now includes Greenland – and which highlights the clear Arctic dimension of EU cooperation in the region. Indeed, one could imagine funding activities to tackle climate change and other challenges in the Arctic. Likewise, Arctic research funding should be coherently increased in the coming **Horizon Europe programme**.

Engaging selectively with global partners to ensure mutual interest are met

The Northern Dimension policy and partnerships should be considered a platform of political dialogue and a toolkit of practical cooperation in the Euro-Arctic region.

As a part of the EU's policies towards Russia, the EU should continue its selective engagement with Russia in areas of common interest. In the Arctic, these might include peace and stability, environmental protection, education and research, health, culture, transport, management of shared fish stocks, search and rescue capabilities, and nuclear safety. The EU should also take a pro-active role in the Black Carbon question by making full use of existing mechanisms and by providing instruments for cross-border cooperation between Russia and the EU. The EU should also explore constructive approaches to questions related to military security in the Arctic by encouraging coast guard cooperation and cooperation in maritime safety.

The EU should also initiate a dialogue with China and other Asian states to address common interests such as peaceful cooperation, climate change and connectivity, as it has in the EU-China Blue Partnership for the Oceans. 125 At the same

time and notwithstanding possibilities for pragmatic cooperation on these issues, the EU should exercise caution in its engagement, as China's long-term aspirations remain unknown.

Similarly, the **EU should intensify its dialogue with the US** to address our common interests in the Arctic. The EU and the US should be able to find common interests in environmental preservation and sustainable economic activities in the Arctic.

More broadly, the **EU should mainstream its Arctic objectives into all areas of external action** and systematically take into account the Arctic in its external relations with Arctic and non-Arctic states, as well as in international negotiations where applicable.

It must also continue to **promote the Arctic Council as an inclusive, consensus-based international forum**, and to become a formal Arctic Council observer. In addition, it should also support the **Arctic Economic Council** to obtain first-hand access to input from the Arctic business community in the formulation of various Arctic-related policies and legislation. The EU should further encourage full respect by the private sector of the **Arctic Investment Protocol**, developed by the World Economic Forum but transferred to the Arctic Economic Council in 2018.

Conclusion

The Arctic is no longer a cold and remote periphery. Climate change acceleration means it has become a geopolitical hot topic that will only gain in prominence in the coming years and decades. **The EU must have its own strategy and narrative for the future of the Arctic** that combines climate resilience, environmental protection, sustainable development, and peaceful cooperation to contribute to the security and stability of the region. The different EU policies concerning the Arctic must be brought together under a real overarching strategy.

The overall aim of the EU's action in Arctic international relations should be to **engage all interested parties**, on the basis of multilateral and rules-based diplomacy, in order to avoid a fragmentation of Arctic cooperation. A safe, stable, sustainable and prosperous Arctic is important not just for the European Union but for the whole world.

Notes

- This definition is used throughout the Note, despite the absence of universally agreed definition. Accordingly, it includes the Central Arctic Ocean, as well as the lands located within the Arctic Circle.
- Arctic Centre, 'Arctic Indigenous Peoples'; European Commission, 'Arctic', June 2016.
- Devyatkin, P., 'Russia's Arctic Strategy: Energy Extraction (Part III)', February 2018.
- Ibid.; De Agreda AG. (2017) 'From cylinder to sphere: the impact of climate change in the Arctic beyond the Polar Circle', in Conde E and SI Sanchez (eds.) Global Challenges in the Arctic Region: Sovereignty, environment and geopolitical balance, London and New York: Routledge: 347-363.
- The Intergovernmental Panel on Climate Change, 'Special Report: Global Warming of 1.5°C', World Wildlife Foundation, 'The Arctic Tipping Point: What Happens after 1.5°C?', January 2019.
- 6. NASA, 'Arctic Sea Ice Minimum', June 2019
- United Nations Climate Change, 'Why Methane Matters', August 2014.
- 8. World Wildlife Foundation, op. cit.
- See for example: Arctic Monitoring and Assessment Programme (2009) 'AMAP Assessment 2009: Human health in the Arctic', June 2009
- World Wildlife Foundation, op. cit., The Intergovernmental Panel on Climate Change, 'Special Report', op. cit.;
- Arctic Monitoring and Assessment Programme (2017) 'Snow. Water, Ice and Permafrost in the Arctic: Summary for Policymakers', 2017.

- 12. Cheek, J. 'Is a changing Arctic influencing weather in the midlatitudes', January 2013
- Peeken, I. et al., 'Arctic sea ice is an important temporal sink and means of transport for microplastic', April 2019.
- 14. Bergmann, M. (2016), 'Observations of floating anthropogenic litter in the Barents Sea and Fram Strait, Arctic', Polar Biology, 39(3), pp. 553-560; EcoWatch, 'Plastic Trash Found in Arctic Ocean, Likely Forming Sixth Garbage Patch', October 2015. Note: To combat marine litter worldwide including in the Central Arctic Ocean, the European Parliament and the Council of the EU approved in 2019 a Single-Use Plastics Directive that will, inter alia, ban single-use plastic items by 2021 and set ambitious collection targets for plastic bottles. However, the impact of this Directive is unlikely to be significant, as only 2% of the litter in the world's oceans directly originate from Europe and the US put together (and 82% from Asia), highlighting the need for international cooperation on this issue.
- Yirka, B., 'Long term study shows sources of black carbon in the Arctic', February 2019
- Buixadé Farré A. et al (2014) 'Commercial Arctic shipping through the Northeast Passage: routes, resources, governance, technology, and infrastructure', Polar Geography, 37(4); Harvey, F., 'The rare earth riches buried beneath Greenland's vast ice sheet'. July 2012.
- Mining Technology, 'Mined into extinction: is the world running out of critical minerals?', April 2017.
- Daly, T. and Singh, S., 'China rare earth prices soar on their potential role in trade war', June 2019.
- Pezard, S. et al, 'The Future of Arctic Cooperation in a Changing Strategic Environment', 2018.

- 20. Gazprom, Prirazlomnove field
- 21. McGwin, K., 'A decade on, a Greenland rare-earths mine is close to final approval', September 2018.
- 22. The Economist, 'What is the Northern Sea Route?', September 2018.
- Lipponen, P., 'For an ambitious EU Arctic and Northern Policy', September 2015.
- USCG Office of Waterways and Ocean Policy, 'Major icebreakers of the world', May 2017.
- 25. Gurzu A., 'Finland finds global warming's upside', April 2016.
- Northern Sea Route Information Office, <u>Transit Statistics</u>, last accessed June 2019.
- Suez Canal Authority, <u>Navigation Statistics</u>, last accessed June 2019
- Northern Sea Route Information Office, News review of the events on the NSR #2 May 2019, June 2019.
- Nilsen, T., 'Major step towards a Europe-Asia Arctic cable link', June 2019
- Bennett, M., 'Remembering When the Arctic Was a War Zone', June 2017.
- 31. Young, O. R. (2005). 'Governing the Arctic: From cold war theater to mosaic of cooperation'. Global Governance, 11(9).
- 32. Pezard, S., 'The New Geopolitics', op. cit.
- Exner-Pirot, H. et al., 'Form and Function: The Future of the Arctic Council', February 2019; Clifford, R., 'How has cooperation in the Arctic survived Western-Russian geopolitical tension?', January 2017.
- 34. United Nations Convention on the Law of the Sea
- 35. An extended continental shelf gives a country exclusive right to resources on or below the seabed of the extended area.
- IBRU: Centre for Borders Research, 'Norway and Russia sign historic maritime boundary agreement', September 2010.
- 37. The Arctic Council is composed of Canada, the Kingdom of Denmark, Finland, Iceland, Norway, Russia, Sweden and the United States. Iceland is currently holding the rotating presidency and will be followed Russia.
- Germany, Spain, France, Italy, the Netherlands, Poland and the United Kingdom.
- 39. Depledge, D., 'The EU and the Arctic Council', April 2015.
- 40. United Nations Climate Change, The Paris Agreement, 2015.
- 41. Khorrami, N., 'Sweden's Arctic Strategy: An Overview', April 2019.
- 42. See: Prime Minister's Office, Finland, 'Action Plan for the update of the Arctic Strategy', March 2017; Standish, R., 'Finland's race for Arctic riches', March 2018; and Arctic Finland, 'Constructing new digital highways in the Arctic regions', June 2017.
- 43. In order to distinguish geographical Denmark (i.e. Jylland and 443 islands) from Denmark as a sovereign country under international law, the term 'Kingdom of Denmark' in this Note designates geographical Denmark, as well as Greenland and the Faroe Islands.
- 44. Interview with representatives of the Kingdom of Denmark.
- 45. Norway expects to publish a new Arctic Strategy this year or next, according to interviews with Norwegian officials.
- Based on informal consultations with representatives from Norway, Iceland and Canada.
- 47. Government of the Russian Federation, 'About the Strategy for the Development of the Arctic regions of the Russian Federation and for National Security up to 2020', [О Стратегии развития Арктической зоны Российской Федерации и обеспечения национальной безопасности на период до 2020 года], 2013.
- 48. Dillow, C., 'Russia and China vie to beat the US in the trillion-dollar race to control the Arctic', February 2018.
- 49. Ministry of Energy of the Russian Federation, 'Russia's Energy Strategy up to 2030', [Энергетическая стратегия России на период до 2030 года], 2009.

- Claes DH and A Moe (2014), 'Arctic Petroleum Resources in a Regional and Global Perspective', in R Tamnes and K Offerdal (eds.), Geopolitics and Security in the Arctic: Regional Dynamics in a Global World, London: Routledge: 97-120.
- 51. Devyatkin, P. 'Energy Extraction', op. cit.
- 52. Rosneft, "Rosneft' and BP have completed the creation of a joint venture to develop prospective resources in Eastern and Western Siberia', [«Роснефть» и ВР завершили создание совместного предприятия по разработке перспективных ресурсов. Восточной и Западной Сибири»], October 2016; Slav, I., 'BP, Rosneft Team Up on Arctic Exploration' December 2017.
- Henry, D., 'Treasury won't grant Exxon drilling waiver for Russia', April 2017.
- 54. Skolkovo Moscow School of Management, Perspectives for Russian Petroleum Extraction: Life under Sanctions, [Перспективы Российской Нефтедобычи: Жизнь под Санкцями], March 2018.
- 55. Government of the Russian Federation, 'About the Strategy for the Development of the Arctic regions of the Russian Federation and for National Security up to 2020', [О Стратегии развития Арктической зоны Российской Федерации и обеспечения национальной безопасности на период до 2020 года], 2013.
- Heininen L, Sergunin A, & G Yarovoy (2014), 'Russian Strategies in the Arctic: Avoiding a New Cold War', Moscow, Valdai Discussion Club. 68-70.
- 57. CNBC, 'Russia, eyeing Arctic future, launches nuclear icebreaker', May 2019.
- 58. TASS, Putin reckons that only ships sailing under the Russian flag will be allowed to transport hydrocarbons on the NSR, [Путин. рассчитывает, что только судам под флагом РФ разрешат перевозить углеводороды по СМП]. November 2017.
- 59. The Moscow Times, 'Russia Will Restrict Foreign Warships in Arctic Ocean', November 2018.
- Gramer, R., 'Here's What Russia's Military Build-Up in the Arctic Looks Like', January 2017.
- 61. Zysk, K. (2008) 'Russian Military Power and the Arctic', The EU-Russia Centre Review: Russian Foreign Policy, (8): 80-86.
- 62. Grishenko, N., 'Russia is building over 100 military facilities in the Arctic', [Россия построит в Арктике более 100 военных объектов], January 2017.
- Ahmari, S., 'Putin Opens an Arctic Front in the New Cold War', June 2015; Holloway, H., 'Russia moves to conquer the Arctic: Putin's troops prep for very Cold War', February 2017.
- 64. Government of the Russian Federation, Basics of the National Policy of the Russian Federation for the Arctic up to 2020 and longer-term perspective, [Основы государственной политики Российской Федерации в Арктике на период до 2020 года и дальнейшую перспективу], 2008.
- 65. Devyatkin, P. 'Energy Extraction', op. cit.
- 66. Pezard, S. et al., 'Future of Arctic Cooperation', op. cit.
- 67. Breum, M., 'Why Russia is likely to remain cooperative in the Arctic'. November 2018.
- 68. Presidency of the Russian Federation, Decree of the President of the Russian Federation n°683 of December 12, 2015 on the National Security Strategy of the Russian Federation, [Указ Президента Российской Федерации от 31.12.2015 г. № 683 О Стратегии национальной безопасности Российской Федерации], December 2015.
- 69. World Maritime News, 'IMO Approves US-Russian Proposal on Bering Strait Shipping Routes', June 2018.
- Arctic Council, 'Scientific Cooperation Agreement enters into force', May 2018.
- Devyatkin, P., 'Russia's Arctic Strategy: Aimed at Conflict or Cooperation?', February 2018.
- Conley H. and Melino M., 'The Implications of U.S. Policy Stagnation toward the Arctic Region', May 2019.

- Humpert, M, 'New U.S. Department of Defense Arctic Strategy Sees Growing Uncertainty and Tension in Region', June 2019.
- Pompeo M., 'Remarks at the Arctic Council Ministerial Meeting', May 2019.
- Descamps, M., <u>'The Ice Silk Road: Is China a 'Near-Arctic-State'?'</u>, February 2019.
- 76. The State Council Information Office of the People's Republic of China, 'China's Arctic Policy', January 2018.
- 77. Pezard, S., 'The New Geopolitics', op. cit.
- 78. Nengye L., 'China's New Silk Road and the Arctic', May 2017.
- 79. China Youth Daily, 'China's Malacca Dilemma', June 2004.
- 80. South China Morning Post, '<u>Chinese shipping firm COSCO plans</u> to launch services to Europe through Arctic Northeast Passage, saving days in travel time', October 2015.
- 81. Nilsen, T., 'Lipponen asks EU to launch 'missing link' railways to Kirkenes', November 2015.
- 82. Indeed, the Belt and Road would connect Europe to Asia via the Mediterranean Sea (notably the Piraeus port in Greece) and via the Arctic Ocean (notably in Kirkenes, Norway). There already are railways linking Rovaniemi to the Mediterranean Sea, and so the last remaining rail links between the Arctic and Mediterranean are the Kirkenes-Rovaniemi railway and the Helsinki-Tallinn tunnel project.
- 83. Descamps, M., op. cit.
- Lanteigne M. and Mingming S., 'China Steps up Its Mining Interests in Greenland', February 2019.
- 85. China Ministry of Foreign Affairs, 'Wang Yang: Work Together to Open Up a Bright and New Future for the Arctic', March 2017.
- 86. That is, prior to the Northern Sea Route becoming formally a part of the Belt and Road Initiative.
- 87. China Ministry of Environment, '<u>Guidance on Promoting Green</u> <u>Belt and Road</u>', May 2017.
- 88. Nengye L. (2018, April) 'Will China build a green Belt and Road in the Arctic?', Review of European, Comparative & International Environmental Law, Volume 27, Issue 1, pp. 55-62.
- 89. Xinhua, '<u>China–Russia Joint Statement on Further Strengthening</u>
 <u>Comprehensive, Strategic and Cooperative Partnership</u>', July
 2017
- Sørensen CTN. and Klimenko E. (2017) 'Emerging Chinese– Russian Cooperation in the Arctic', SIPRI Policy Paper 46, pp. 41–42
- 91. Kommersant, Novatek and Chinese CNPC agreed on strategic cooperation, [HOBATЭК и китайская CNPC договорились о стратегическом сотрудничестве], November 2017.
- 92. Nengye L., 'Green Belt and Road?', op. cit.
- 93. Pezard S. and Smith T., 'Friends if We Must; Russia and China in the Arctic', May 2016; Sørensen CTN. and Klimenko E., op. cit.; and Pezard, S., 'The New Geopolitics', op. cit.
- 94. Hornsund, 'The station', last accessed June 2019.
- 95. Ministerie van Buitenlandse Zaken, 'Nederlandse Polaire Strategie 2016-2020: Samen voor duurzaam', January 2017.
- 96. Schulze, VG., 'Arctic Strategy Round-Up 2017', October 2017.
- Italian Ministry of Foreign Affairs and International Cooperation, 'Towards an Italian Strategy for the Arctic National Guidelines', 2015.
- 98. British Antarctic Survey, 'Britain in the Arctic', last accessed June 2019.
- 99. UK Arctic Office, 'Arctic Office: About', last accessed June 2019.

- 100. Ministère des affaires étrangères et du développement international, '<u>The Great Challenge of the Arctic: National Roadmap for the Arctic</u>', June 2016; Auswärtiges Amt, '<u>Germany's Arctic policy guidelines</u>', November 2013.
- See: The Headquarters for Ocean Policy, 'Japan's Arctic Policy', October 2015.
- 102. Humpert, M., 'Japan's Mitsui and Mitsubishi take 10 percent stake in Novatek's Arctic LNG 2', June 2019.
- Shen Y., 'Can Singapore's Shipping Hub Survive China's Maritime Silk Road?', March 2019.
- 104. See: Business Standard, 'India gets cheapest LNG as Russia's Gazprom begins supplies of worth \$25 bn', June 2018.
- 105. National Centre for Polar and Ocean Research, '<u>Himadri station</u>', last accessed June 2019.
- 106. See: Ministry of External Affairs, Government of India, 'India and the Arctic', June 2013.
- European External Action Service, 'Northern Dimension', May 2016.
- 108. The Northern Dimension Environmental Partnership (NDEP), Northern Dimension Partnership in Public Health and Social Wellbeing (NDPHS), Northern Dimension Partnership on Transport and Logistics (NDPTL), and Northern Dimension Partnership on Culture (NDPC).
- 109. <u>Northern Dimension Environmental Partnership</u>, last accessed June 2019
- 110. Art. 3 of the Treaty on the Functioning of the European Union
- 111. European Parliament, '<u>EU Competencies affecting the Arctic</u>', October 2010; Kobza, P. (2015) 'Civilian Power Europe in the Arctic: How Far Can the European Union Go North?' EU Diplomacy Paper 01/2015. Bruges: College of Europe.
- 112. Keil, K. & A. Raspotnik (2014) "The European Union's Gateways to the Arctic", European Foreign
- 113. Affairs Review, 19(1): 101-120.
- 114. Commission of the European Communities, '<u>The European Union and the Arctic Region</u>', November 2008.
- 115. European Commission and High Representative of the European Union for Foreign Affairs and Security Policy, '<u>Developing a</u> <u>European Union Policy towards the Arctic Region: progress since</u> <u>2008 and next steps</u>', June 2012.
- 116. European Commission and High Representative of the European Union for Foreign Affairs and Security Policy, 'An integrated European Union policy for the Arctic', April 2016.
- 117. European Union, 'Shared Vision, Common Action: A Stronger Europe. A Global Strategy for the European Union's Foreign and Security Policy', June 2016.
- 118. Delegation of the European Union to Japan, '<u>EU Arctic</u> <u>Ambassador visiting Japan</u>', June 2018.
- 119. Foreign and Commonwealth Office, 'Beyond the ice: UK policy towards the Arctic', April 2018.
- 120. Based on informal consultations with national representatives.
- 121. Based on informal consultations with national representatives.
- 122. European Commission, '<u>EU energy in figures : Statistical pocketbook 2018</u>', 2018.
- 123. Pietikäinen, S., 'Fragile Arctic must be protected', July 2018.
- 124. European Commission, 'Connectivity for a European Gigabit Society'. May 2019.
- 125. European Commission, '<u>EU and China sign landmark partnership on oceans</u>', July 2018.