



U.S. AIR FORCE



ARCTIC RESOURCE COMPILATION

Foreign Government and Nation Influences in the Arctic Region



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Preface

This report creates a catalog of resources for use on the topic “Foreign Government and Nation Influences in the Arctic Region.” This catalog of resources is in response to a request by the U.S. Air Force (USAF) Air University (AU) Academic Centers, USAF Culture and Language Center (AFCLC) at Maxwell Air Force Base (AFB), Alabama and is in support of the AFCLC mission.

The mission of the AFCLC is to serve as the USAF focal point for creating and executing programs that sustain career-long development of Linguistically, Regionally, and Culturally competent Total Force Airmen to meet the Service’s global mission. In addition to providing subject matter expertise and support for Air Force Language, Regional Expertise, and Culture (LREC) governance, the AFCLC accomplishes this mission by designing, developing and delivering: 1) LREC familiarization education to AU officer, enlisted, and accessions programs; and 2) pre-deployment training and training products.

As a Research Analyst for Metro Accounting and Professional Services, the researcher has identified open source material on Foreign Government and Nation Influences in the Arctic Region by using multiple sources during his research. This catalog includes academic journal articles, books and other legitimate peer-reviewed, academic resources. Sources are categorized by topic and broken down into relevant sub-topics based on the request of the AFCLC representative or on the discernment of the researcher. Catalog entries include Title, Author, Source, Date and Content Abstract, Summary or Overview that gives the end user a sense of what the author has to say about the selected topic and sub-topic. **The text used in this compilation is taken verbatim from the source, and none of this information is intended to be viewed as a product of AFCLC or Metro Accounting and Professional Services. Inclusion in this compilation does not constitute endorsement of the source by AFCLC.**

Arctic Region Overview:

“Arctic Ocean,” Central Intelligence Agency: The World Factbook, 14 May 2020 [1]
<https://www.cia.gov/library/publications/resources/the-world-factbook/geos/xq.html>

Overview:

The Arctic Ocean is the smallest of the world's five oceans (after the Pacific Ocean, Atlantic Ocean, Indian Ocean, and the Southern Ocean). The Northwest Passage (US and Canada) and Northern Sea Route (Norway and Russia) are two important seasonal waterways. In recent years the polar ice pack has receded in the summer allowing for increased navigation and raising the possibility of future sovereignty and shipping disputes among the six countries bordering the Arctic Ocean (Canada, Denmark (Greenland), Iceland, Norway, Russia, US).

Current & Relevant Information:

Geography

Location: body of water between Europe, Asia, and North America, mostly north of the Arctic Circle

Geographic coordinates: 90 00 N, 0 00 E

Map references: Arctic Region

Area:

total: 14.056 million sq. km

note: includes Baffin Bay, Barents Sea, Beaufort Sea, Chukchi Sea, East Siberian Sea, Greenland Sea, Hudson Bay, Hudson Strait, Kara Sea, Laptev Sea, Northwest Passage, and other tributary water bodies

Area - comparative: slightly less than 1.5 times the size of the US

Coastline: 45,389 km

Climate: polar climate characterized by persistent cold and relatively narrow annual temperature range; winters characterized by continuous darkness, cold and stable weather conditions, and clear skies; summers characterized by continuous daylight, damp and foggy weather, and weak cyclones with rain or snow

Terrain:

central surface covered by a perennial drifting polar icepack that, on average, is about 3 m thick, although pressure ridges may be three times that thickness; the icepack is surrounded by open seas during the summer, but more than doubles in size during the winter and extends to the encircling landmasses; the ocean floor is about 50% continental shelf (highest percentage of any ocean) with the

remainder a central basin interrupted by three submarine ridges (Alpha Cordillera, Nansen Cordillera, and Lomonosov Ridge)

major surface currents: two major, slow-moving, wind-driven currents (drift streams) dominate: a clockwise drift pattern in the Beaufort Gyre in the western part of the Arctic Ocean and a nearly straight line Transpolar Drift Stream that moves eastward across the ocean from the New Siberian Islands (Russia) to the Fram Strait (between Greenland and Svalbard); sea ice that lies close to the center of the gyre can complete a 360 degree circle in about 2 years, while ice on the gyre periphery will complete the same circle in about 7-8 years; sea ice in the Transpolar Drift crosses the ocean in about 3 years

Elevation:

mean depth: -1,205 m

lowest point: Molloy Deep -5,607 m

highest point: sea level

Natural resources: sand and gravel aggregates, placer deposits, polymetallic nodules, oil and gas fields, fish, marine mammals (seals and whales)

Natural hazards: ice islands occasionally break away from northern Ellesmere Island; icebergs calved from glaciers in western Greenland and extreme northeastern Canada; permafrost in islands; virtually ice locked from October to June; ships subject to superstructure icing from October to May

Environment - current issues: climate change; changes in biodiversity; use of toxic chemicals; endangered marine species include walruses and whales; fragile ecosystem slow to change and slow to recover from disruptions or damage; thinning polar icepack

Geography - note: major chokepoint is the southern Chukchi Sea (northern access to the Pacific Ocean via the Bering Strait); strategic location between North America and Russia; shortest marine link between the extremes of eastern and western Russia; floating research stations operated by the US and Russia; maximum snow cover in March or April about 20 to 50 centimeters over the frozen ocean; snow cover lasts about 10 months

Economy

Economy - overview: Economic activity is limited to the exploitation of natural resources, including petroleum, natural gas, fish, and seals.

Marine fisheries: the Arctic fishery region (Region 18) is the smallest in the world with a catch of only 52 mt in 2016, although the Food and Agriculture Organization assesses that some Arctic catches are reported in adjacent regions; Russia and Canada were historically the major producers; in 2017, the five littoral states

including Canada, Denmark (Greenland), Norway, Russia, and the US agreed to a 16 year ban on fishing in the Central Arctic Ocean to allow for time to study the ecological system of these waters

Transportation

Ports and terminals: major seaport(s): Churchill (Canada), Murmansk (Russia), Prudhoe Bay (US)

Transportation - note: sparse network of air, ocean, river, and land routes; the Northwest Passage (North America) and Northern Sea Route (Eurasia) are important seasonal waterways

Transnational Issues

Disputes - international: Canada and the US dispute how to divide the Beaufort Sea and the status of the Northwest Passage but continue to work cooperatively to survey the Arctic continental shelf; Denmark (Greenland) and Norway have made submissions to the Commission on the Limits of the Continental shelf (CLCS) and Russia is collecting additional data to augment its 2001 CLCS submission; record summer melting of sea ice in the Arctic has renewed interest in maritime shipping lanes and sea floor exploration; Norway and Russia signed a comprehensive maritime boundary agreement in 2010

“Arctic,” Jeannie Evers, ed., National Geographic, 6 October 2016 [\[2\]](https://www.nationalgeographic.org/encyclopedia/arctic/)
<https://www.nationalgeographic.org/encyclopedia/arctic/>

Overview:

The Arctic is the northernmost region of Earth.

Most scientists define the Arctic as the area within the Arctic Circle, a line of latitude about 66.5° north of the Equator. Within this circle are the Arctic ocean basin and the northern parts of Scandinavia, Russia, Canada, Greenland, and the U.S. state of Alaska.

The Arctic is almost entirely covered by water, much of it frozen. Some frozen features, such as glaciers and icebergs, are frozen freshwater. In fact, the glaciers and icebergs in the Arctic make up about 20% of Earth’s supply of freshwater.

Most of the Arctic, however, is the liquid saltwater of the Arctic ocean basin. Some parts of the ocean’s surface remain frozen all or most of the year. This frozen seawater is called sea ice. Often, sea ice is covered with a thick blanket of snow.

Sea ice helps determine Earth’s climate. Sea ice has a very bright surface, or albedo. This albedo means about 80% of sunlight that strikes sea ice is reflected back to space. The dark surface of the liquid ocean, however, absorbs about 90% of solar radiation. Due to thermohaline circulation, the Arctic’s thick, reflective sea ice moderates ocean temperatures around the world.

The Arctic experiences the extremes of solar radiation. During the Northern Hemisphere's winter months, the Arctic is one of the coldest and darkest places on Earth. Following sunset on the September equinox, the Earth's tilted axis and its revolution around the sun reduce the light and heat reaching the Arctic until no sunlight penetrates the darkness at all.

The sun rises again during the March equinox, and increases the light and heat reaching the Arctic. By the June solstice, the Arctic experiences 24-hour sunshine.

Current & Relevant Information:

Life in the Arctic

Marine Ecosystem:

The Arctic ocean basin is the shallowest of the five ocean basins on Earth. It is also the least salty, due to low evaporation and huge influxes of freshwater from rivers and glaciers.

River mouths, calving glaciers, and constantly moving ocean currents contribute to a vibrant marine ecosystem in the Arctic. The cold, circulating water is rich in nutrients, as well as the microscopic organisms (such as phytoplankton and algae) that need them to grow.

Marine animals thrive in the Arctic. Primary consumers such as jellies and shrimp consume plankton, the basis of the Arctic marine food web.

Secondary consumers include fish, seabirds (such as gulls and puffins), and a wide variety of baleen whales, including giant blue whales and bowhead whales.

Tertiary consumers, animals that prey mostly on other carnivores, include toothed whales and dolphins (such as orcas and narwhals) and pinnipeds such as seals, sea lions, and walruses.

Scavengers (including some sharks and crabs) and decomposers such as marine worms and algae break down dead and decaying materials. Organic nutrients are thus recycled into the marine ecosystem of the Arctic.

Terrestrial Ecosystems:

The varied landscapes of the Arctic provide for a variety of ecosystems. The Arctic includes the peaks of the Brooks mountain range in western North America, the enormous Greenland ice sheet, the isolated islands of the Svalbard archipelago, the fjords of northern Scandinavia, and the grassland plateaus and rich river valleys of northern Siberia.

Although some forests lie near the Arctic Circle, plant life is mostly limited to grasses, sedges, and tundra vegetation such as mosses and lichens. These

autotrophs have the ability to survive despite being covered in snow and ice for much of the year.

Insects such as mosquitoes and moths are common, especially as ice melt creates ponds during spring and summer. Insects and insect larvae provide a crucial diet for birds, such as wrens and sandpipers, and freshwater fish.

Primary consumers across the region range from tiny lemmings to enormous muskoxen. One of the most familiar Arctic herbivores is the caribou, often known as the reindeer in Europe and Asia.

Secondary consumers include Arctic foxes, and raptors such as owls and eagles. The polar bear, the iconic apex predator of the Arctic, is equally able to hunt on land and around ice floes.

Like the polar bear, many other animals of the Arctic are white: beluga whales, snowy owls, juvenile harp seals. This coloring helps camouflage them in heavy snow and ice.

Many Arctic animals even change their coloration seasonally. Species of Arctic fox and Arctic hare, for example, are snowy white in winter but molt and grow a brownish or greyish fur coat during the summer months. Even fluffy white baby seals will ultimately grow up to a dark brown—better to blend in with the dark Arctic ocean waters instead of blinding white ice floes.

People in the Arctic

Indigenous Cultures:

People established communities and cultures in the Arctic thousands of years ago, and continue to thrive today. They have all developed smart, innovative ways to adapt to the unique challenges posed by the region's severe climate.

Housing or other shelter, for example, poses unusual challenges for Arctic peoples. Thick blankets of seasonal snow and lack of abundant trees for lumber historically limited the development of wood or stone structures common in subarctic climates.

Inuit bands in Canada and Greenland, for example, engineered “snow houses”—more commonly known as igloos. Igloos were circular structures made of stacked ice (often sea ice), insulated with snow. The rectangular blocks were stacked in tight spiral pattern, giving the igloo a domed shape. Igloos could hold as few as two and as many as 20 people.

Igloos were just one type of Inuit dwelling. Inuit communities also built tents with poles crafted from driftwood and whale bones or baleen. Animal hides covered these poles, and snow provided excellent insulation.

The historically nomadic Sami (an indigenous people of Scandinavia and northwestern Russia) also built temporary tent-like structures, called lavvu. Instead

of relying on driftwood, however, Sami communities had access to the rich taiga, or boreal forests, of the European subarctic.

More permanent Sami structures included storehouses, where foods, textiles, and other valuables could be stored for later use or trade. These storehouses, which resemble log cabins, are notable for being elevated on stilts, centimeters or even meters from the ground. Elevation protected the valuables from excess rot due to snow or water seeping into the storehouse, as well as vermin such as mice or rats.

Today, Arctic cultures such as the Inuit and Sami have access to high-quality building materials and sophisticated structural engineering plans. Still, buildings throughout the Arctic are reliant on efficient insulation and weatherization. (Weatherization is the process of protecting a dwelling from extreme temperature changes, precipitation, and wind.)

Challenges of Indigenous Cultures:

Rights to land and natural resources are an important part of contemporary culture and survival of indigenous peoples in the Arctic. Indigenous Arctic communities face tremendous challenges, often the result of colonization and exploitation of land and energy resources.

For hundreds of years, for instance, European and Asian explorers interacted with Inuit communities in the Canadian Arctic, searching for the North Pole and the elusive “Northwest Passage.” (The Northwest Passage is a sea route connecting the North Pacific and North Atlantic Ocean basins.)

Increased contact with Europeans and European Americans often came with conflict. Inuit social structure, schools, and language were replaced with Western traditions.

Starting in the late 20th century, regional, national, and international organizations increasingly recognized the political and cultural sovereignty of Arctic peoples. Rights to land and natural resources are an important part of this sovereignty.

An agreement between the government of Canada and Inuit bands, for instance, ultimately resulted in the creation of the territory of Nunavut in 1999. Nunavut, Canada’s largest territory, stretches far into the central Canadian Arctic. More than half the population of Nunavut identifies as Inuit, and Inuktitut is the most-spoken language.

Exploration:

European and Asian exploration of the Arctic began with Viking settlement of northern Scandinavia and Iceland in the 900s. Russian explorers navigated the “Northern Sea Route” of the Northeast Passage and the Siberian Arctic, eventually crossing the Bering Strait in the 1600s.

The pursuit of the Northwest Passage, which would save untold time and money in trade between Europe and Asia, drove Arctic exploration during the Age of Discovery. Explorers such as John Cabot, Martin Frobisher, and Henry Hudson all failed to find an open-water route. The Northwest Passage was not completely navigated until 1906, when legendary Norwegian explorer Roald Amundsen and his crew made the voyage from Greenland to Alaska. Shifting sea ice made the trip hazardous; it took about three years, and required a relatively small ship (a converted fishing vessel).

Resources in the Arctic

The Arctic has enormous deposits of oil and natural gas. In Alaska, many oil companies work with indigenous groups known as “native corporations” to drill and export millions of barrels of oil every year. Alaska’s North Slope contains 6% of the largest oil fields in the United States and one of the 100 largest natural gas fields.

Engineers and geographers estimate that oil and gas deposits in the Arctic make up 13% of the world’s undiscovered petroleum resources, and 30% of undiscovered natural gas resources.

The Arctic is also rich in minerals, such as nickel and copper ore. Mineral resources also include gemstones and rare earth elements, which are used in batteries, magnets, and scanners. Some of these mineral deposits are underground, while others are buried beneath the Arctic Ocean.

Mines and drilling operations are often dependent on the weather. In the winter, machinery can freeze, and the frozen ground becomes too hard to drill. In warmer weather, the Arctic permafrost can thaw and machinery can become unstable and damage the environment.

Race for the Arctic:

Almost all Arctic nations are scrambling to assert authority over the rich resources of the Arctic. This diplomatic conflict has been nicknamed the “New Cold War” or simply the “Race for the Arctic.”

The exclusive economic zones of Russia, Norway, Denmark, Iceland, Greenland, Canada, and the United States extend to 200 nautical miles off their coasts. A country can explore and exploit all resources within its exclusive economic zone (EEZ).

However, some Arctic nations are claiming territory on their continental shelves, not just their coastlines. Russia, Greenland, Denmark, and Canada, for instance, all claim the Lomonosov Ridge. The Lomonosov Ridge is an undersea mountain chain that stretches from the Canadian Arctic, through the North Pole, all the way to the waters off Siberia.

Changing Climate in the Arctic

Climate change is radically redefining the geography, biodiversity, and political units of the Arctic.

The extent of sea ice in the Arctic is shrinking. The 21st century has marked record lows in both the winter maximum and summer minimum extent of sea ice. Most climatologists estimate that by the year 2100, most Arctic sea ice will melt every summer.

The “twilight of the Arctic ice” would devastate many habitats. The plight of polar bears, for example, has become a symbol of global warming in the Arctic due to the cascading impacts of sea ice loss.

Without sea ice, polar bears cannot catch enough seals to survive their annual winter fast. Polar bears that do survive are less likely to produce healthy offspring, reducing the population over generations. Scarcer food sources also drive polar bears into more contact with human populations, often relying on trash heaps for nutrition. This food sources impacts the health of polar bears and increases the incidents of conflict with human communities in the Arctic.

The species range of the polar bear is also altered by climate change. Logic might indicate that polar bears would migrate further north as their traditional range heats up. Currents carry sea ice south, however, as it breaks up. Polar bears follow the sea ice habitat, and so their range has actually drifted south. This has brought polar bears into even closer contact with human populations, as well as prey species that have not adapted to the bears’ predatory behavior.

The increasingly shrinking Arctic sea ice provides clear shipping routes for trade and travel. The Northwest Passage is still the most lucrative shipping lane in the Arctic. Experts estimate that shipping time may be cut by 40% if the Northwest and Northeast passages were ice-free all year. These deep-water shipping lanes also allow for larger, heavier ships than the Panama Canal, which would increase trade and profit even further.

The tourism industry could also benefit from shrinking sea ice. In 2016, a luxury cruise ship traveled through the Northwest Passage for the first time. The ship, filled with more than 1,500 tourists, made the journey in three weeks.

“All About Arctic Climatology and Meteorology,” National Snow & Ice Data Center, 4 May 2020 [3] <https://nsidc.org/cryosphere/arctic-meteorology/index.html>

Overview:

The Arctic is not just a region but also a system—physical, biological, chemical, climatological. The region encompassing the north polar region (the area north of the Arctic Circle) is largely an ocean basin surrounded by land. Over the ocean, sea ice grows throughout the autumn and winter, and melts throughout the spring and summer. On land, snow accumulates during the autumn and winter, and retreats

over the summer. Snow retreat exposes tundra, which blooms with lichens, shrubs, and grasses in the warmest months of the year. To the south, tundra slowly transitions to forest.

Although the Arctic may seem far removed from the rest of the globe, Arctic climate and weather are closely linked with climate and weather elsewhere. Cold conditions in both the Arctic and Antarctic help to drive global circulation patterns in the atmosphere and ocean. Those circulation patterns in turn affect climate and weather phenomena at lower latitudes, such as heatwaves, cold snaps, storms, floods, and droughts. At the same time, the Arctic's location and configuration creates phenomena rarely found elsewhere.

Current & Relevant Information:

What is the Arctic?

The region surrounding the North Pole consists of a large ocean surrounded by land. This ocean, called the Arctic Ocean, is like no other ocean on Earth; and because of its special location and climate, the lands that surround it are unique.

Most commonly, scientists define the Arctic as the region above the Arctic Circle, an imaginary line that circles the globe at approximately 66° 34' N (dashed blue circle in the map below). The Arctic Circle marks the latitude above which the sun does not set on the summer solstice, and does not rise on the winter solstice. At the North Pole, the sun rises once each year and sets once each year: there are six months of continuous daylight and six months of continuous night. At lower latitudes, but north of the Arctic Circle, the duration of continuous day and night are shorter.

But other people use different definitions when talking about the Arctic. Some scientists define the Arctic as the area north of the arctic tree line (green line in map at right), where the landscape is frozen and dotted with shrubs and lichens. Other researchers define Arctic based on temperature. Using this definition, the Arctic includes any locations in high latitudes where the average daily summer temperature does not rise above 10 degrees Celsius (50 degrees Fahrenheit).



This map shows three definitions of the Arctic: the tree line; the 10 degrees Celsius isotherm, and the Arctic Circle at 66° 34' North. Click on image for a higher resolution version.

—Credit: Map courtesy The Perry-Castañeda Library Map Collection. Treeline added at NSIDC based on information from National Geographic 1983, Armstrong et al. 1978, and Young 1989.

Arctic People

The extreme Arctic climate makes the region a forbidding place to travel and a challenging place to live. Even so, people have found ways to explore and live in the Arctic. Indigenous peoples have lived in the Arctic for thousands of years. Explorers, adventurers, and researchers have also ventured into the Arctic to explore its unique environment and geography.

In the winter, cold Arctic temperatures and extreme wind chills make it dangerous to venture outdoors without proper clothing and gear. Strong storms can make travel difficult. And heating a home can be challenging and expensive without trees to cut for firewood. However, people have found ways to adapt, survive, and thrive in the Arctic.

Indigenous People:

Residents of the Arctic include a number of indigenous groups as well as more recent arrivals from more southern latitudes. In total, only about 4 million people live in the Arctic worldwide, and in most countries indigenous people make up a minority of the Arctic population.

Archaeologists and anthropologists now believe that people have lived in the Arctic for as much as twenty thousand years. The Inuit in Canada and Greenland, and the Yu'pik, Iñupiat, and Athabascan in Alaska, are just a few of the groups that are native to the Arctic. Traditionally, Arctic native peoples lived primarily from hunting, fishing, herding, and gathering wild plants for food, although some people also practice farming, particularly in Greenland. Northern people found many different ways to adapt to the harsh Arctic climate, developing warm dwellings and clothing to protect them from frigid weather. They also learned how to predict the weather and navigate in boats and on sea ice. Many Arctic people now live much like their neighbors to the south, with modern homes and appliances. Nonetheless, there is an active movement among indigenous people in the Arctic to pass on traditional knowledge and skills, such as hunting, fishing, herding, and native languages, to the younger generation.

Arctic Exploration:

Compared to indigenous people who have lived in the Arctic for thousands of years, European explorers are relative newcomers. Europeans started venturing north into Arctic regions of Scandinavia and Russia only around a thousand years ago, with much exploration taking place in the 18th and 19th centuries.

Vikings from Scandinavia traveled to Greenland around A.D. 930, during an unusually mild period throughout most of the Northern Hemisphere. They settled for a time along the south and southwest coasts, the only habitable part of Greenland. For nearly five centuries the Norse settlements persevered, depending on their cattle, sheep and goats, as well as on seal and caribou hunts.

Contacts between the Norse settlements and the outside world ceased in the late 1400s. We now know that as the weather got steadily colder and the pasture and farming lands shrank under the advancing ice and snow, the inhabitants suffered a painful annihilation. The rapid cooling that signaled the beginning of the Little Ice Age in the early 1300s caused sea ice to expand over the North Atlantic, which made it impossible to navigate between Greenland and Iceland, trapping people in their settlements and halting trade.

Russians began exploring the northern regions of their country in the 11th and 12th centuries, and by the 17th century they had explored many Arctic islands. During the 1800's, many explorers searched for a Northwest Passage. Irish explorer, Sir Robert McClure, is credited with finding it in 1851. The first reported person to reach the North Pole is American explorer, Robert Edwin Peary. He accomplished this in 1909, however there are some doubts as to whether he actually made it or not.

People in the Modern Arctic

Many people in the Arctic today live in modern towns and cities, much like their neighbors to the south. People also work in the Arctic, extracting oil and gas from rich deposits beneath the permafrost, working in tourism, or conducting research. Other people in the arctic still live in small villages much the way their ancestors did.

Arctic people today face many changes to their homes and environment. Climate change is causing sea ice to melt and permafrost to thaw, threatening coastal villages with bigger storms and erosion. And the declining sea ice means that the Arctic Ocean could open up for commercial shipping or tourist cruises.

“Basic information about the Arctic,” Arctic Centre University of Lapland [4]
<https://www.arcticcentre.org/EN/arcticregion#>

Overview:

The Arctic region, or the Arctic, is a geographic region spreading around the North Pole. There is no single correct definition of the region as the southern boundary varies.

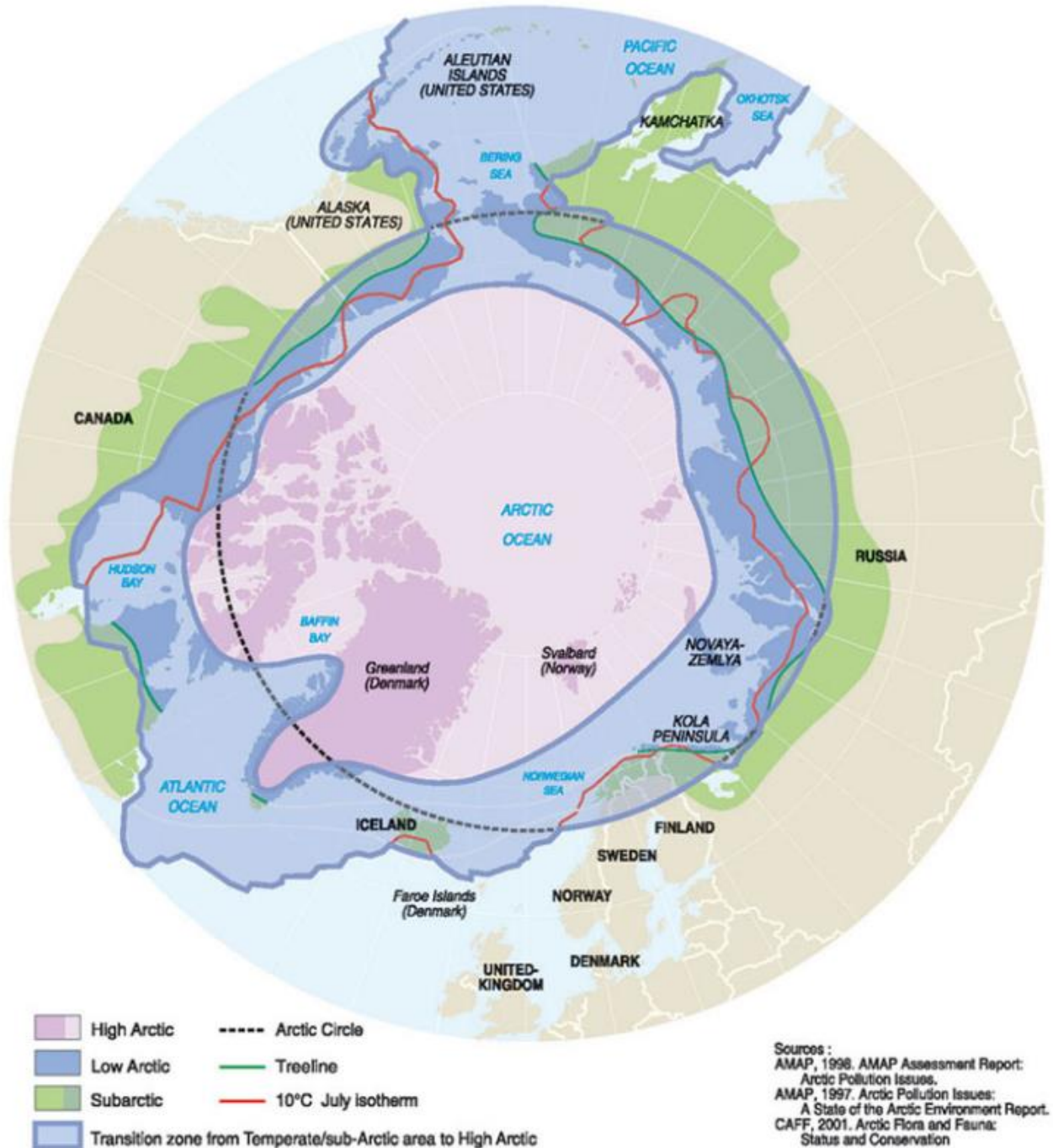
Current & Relevant Information:

Key ways to define the Arctic:

- The Arctic Circle (66 ° 33'N) delimits the Arctic in terms of solar radiation. In theory, areas north of the Arctic Circle have at least one day without daylight in the winter and at least one night less night in the summer. In practice, this does not happen everywhere because the surface of the earth is uneven, and the light refracts in the atmosphere.
- Based on temperature, the monthly average temperature in the Arctic is below + 10 ° C throughout the year, even in summer.

- The forest line follows a temperature-defined area. The forest line is not a narrow line but a zone tens of kilometers wide between the northern coniferous forest and the tundra. In this demarcation, the Arctic is predominantly wooded tundra and glaciers.
- Permafrost increases the area of Russian Arctic compared to the other delimitations. Permafrost is soil that stays frozen for at least two consecutive years.
- The ice cover determines the Arctic nature of marine areas. Sea ice is highest in February-March and lowest in September. The surface of the Arctic ice is monitored almost in real time by satellites.
- Culturally defined, the Arctic covers the homelands of northern indigenous peoples.
- Political delimitations vary according to how they serve, for example, the interests of states or international cooperation.

As the climate warms, the Arctic shrinks if defined by temperature, forest line, permafrost, or ice cover. Cultural and political boundaries also vary. The Arctic Circle is the most permanent of the delimitations, although also the polar circle moves very slowly due to the variation of the Earth's axial tilt.



“Arctic Region,” Library of Congress, November 2011 [5]

https://www.loc.gov/today/placesinthenews/archive/2011arch/20111109_arcticregion.html

Overview:

The Arctic Region covers the northernmost area of the earth and is centered on the North Pole. The arctic regions are not coextensive with the area enclosed by the Arctic Circle (latitude 66° 30'N). The regions include the Arctic Ocean; the north

reaches of Canada, Alaska, Russia, Norway, and the Atlantic Ocean; Svalbard; most of Iceland; Greenland; and the Bering Sea. The Arctic Region is one of the world's most sparsely populated areas.

Current & Relevant Information:

In the center of the Arctic Region is a large basin occupied by the Arctic Ocean, which is slightly less than 1.5 times the size of the United States. The basin is nearly surrounded by the ancient continental shields of North America, Europe, and Asia, with the geologically more recent lowland plains, low plateaus, and mountain chains between them. Surface features vary from low coastal plains (swampy in summer, especially at the mouths of such rivers as the Mackenzie, Lena, Yenisei, and Ob River) to high ice plateaus and glaciated mountains. Tundra, extensive flat and poorly drained lowlands, dominate the regions. The most notable highlands are the Brooks Range of Alaska, the Innuitians of the Canadian Arctic Archipelago, the Urals, and the mountains of east Russia. Greenland, the world's largest island, is a high plateau covered by a vast ice sheet except in the coastal regions and smaller ice caps are found on other Arctic islands.

The climate of the Arctic, classified as polar, is characterized by long, cold winters and short, cool summers. The climate is moderated by oceanic influences, with regions abutting the Atlantic and Pacific oceans having generally warmer temperatures and heavier snowfalls than the colder and drier interior areas. The Arctic Ocean stays frozen throughout the year. Great seasonal changes in the length of days and nights are experienced north of the Arctic Circle, ranging from 24 hours of constant daylight ("midnight sun") or darkness at the Arctic Circle to 6 months of daylight or darkness at the North Pole. The Aurora Borealis, or northern lights, is a well-known occurrence in the arctic night sky. On November 9, 2011, a powerful Bering Sea storm hit the arctic area of western Alaska; the last time a similar storm of this magnitude hit the area was 37 years ago in November 1974 and before that in 1913.

"The Arctic Region," Geographic Guide [6]
<https://www.geographicguide.com/arctic.htm>

Overview:

The Arctic is the region around the North Pole, usually understood as the area within the Arctic Circle. It includes parts of Russia, Scandinavia, Greenland, Canada, Alaska and the Arctic Ocean.

Current & Relevant Information:

During winter, the whole area is normally covered by ice and temperature easily reaches -60° C. During summer, the tundra is the main vegetation and, in the warmest parts of the Arctic, shrubs, willow, and birch can be found. Animal life is

poor in the number of species. There are, for example, polar bears, arctic foxes and musk oxen. See a [map of the Arctic Region](#).



Dog teams and icebergs in the Northwest Passage, Canada. Since the 16th century, explorers searched for the Northwest Passage to India, the Canadian Arctic lands began to be discovered by these European explorers.



Ice formations in an Iceberg, in the Arctic region.



A person approaches an iceberg in the Northwest Territories. A region of the Arctic.



Eskimos are the native population of the Arctic regions of Canada, Greenland, Alaska and Siberia. There are different groups of Eskimos, such as Inuit, Alutiit, Yupik, and Inupiat, living in different regions or speaking different dialects.

It is estimated that Eskimos live in the Arctic or sub-Arctic regions for more than 3,000 years. Today the total population of Eskimos is more than 100,000 people.



Ice construction of an Eskimo.



Polar bear drifting on an iceberg, in the Arctic.



Russian Arctic, Bering Sea. Where Asia meets America. During winter, the Bering Sea can be completely frozen. The Bering Strait is a relatively shallow passage of about 30 to 50 meters, in depth.

“Arctic region briefing - The European environment — state and outlook 2015,”
European Environment Agency, 11 May 2020 [7]

<https://www.eea.europa.eu/soer/2015/countries/arctic>

Overview:

The Arctic region consists of the partly ice-covered Arctic Ocean and land areas of the surrounding eight Arctic states; Canada, Denmark (including the Faroe Islands and Greenland), Finland, Iceland, Norway, Russian Federation, Sweden and the US

(Alaska) as well as their shallow sub-regional seas. The Arctic is home to and provides livelihoods for four million people, most of whom live in northern Scandinavia and Russia. This includes three indigenous peoples; the Sami, the Inuit and the Nenets in the European part of the Arctic. The Arctic region is an area of growing strategic importance in terms of increasing access to natural resources and new transport routes as ice and snow conditions are undergoing rapid change. Economic developments are accelerating which can be beneficial for the region and the global economy, yet they will also have repercussions on the Arctic's fragile environment if not managed with care. The Arctic has therefore been identified as a focus region for the European Union (EU) in the 7th Environment Action Programme (7th EAP). In the Arctic context, the EU maintains strategic partnerships with Canada, Russia and the USA, and has close partnerships with Greenland, Iceland and Norway.

Current & Relevant Information:

Brief Introduction

The region is varied in many aspects and many parts are characterized as being relatively clean and remote. The high Arctic has an extreme environment and many areas lack infrastructure. An exception to this can be found in the more populated and developed parts of northern Scandinavia and northwest Russia. The overall level of economic activity is still relatively low although it has been increasing in recent decades in certain areas. The region's economy and resources now play a role in a global perspective. This role could increase if the region's potential in natural resources, shipping and tourism are exploited further. This may lead to improved local living conditions and create growth and jobs. Arctic states and international partners are working to ensure a prudent development that limits further Arctic warming or jeopardizing ecosystem resilience. The sensitive Arctic environment is already challenged by rapid changes such as climate change, biodiversity loss and hazardous substances transported over long distances that influence human health. Arctic warming affects traditional ways of life of indigenous peoples, puts stress on ecosystems and can have global implications. Climate change is therefore a threat in terms of Arctic ecosystem resilience and functions. It is also a challenge with regards to ensuring timely adaptation measures, while mitigation efforts are strengthened at a global scale. The EU has increasingly recognized that European activities affect the Arctic environment and that Europe in turn will be influenced by the changes that occur in the region.

In 1991, environmental cooperation in the region was formalized in the Environmental Protection Strategy for the Arctic which in 1996 became the Arctic Council, composed of the eight Arctic states and six Permanent Participants that represent indigenous peoples. It has six working groups coordinating assessments and studies which contribute towards the overall vision of promoting sustainable development in the region. Five member countries of the European Environment

Agency (EEA) are members of the Council and seven are observers. The EU is allowed to observe proceedings in the Council until a final decision is made on its application to become an observer. The key challenges facing the region, which are also reflected in the 7th EAP and the EU's Arctic policy (currently under development) can be summarized as follows:

- increasing economic development of the Arctic;
- global climate change and its rapid effects on the Arctic;
- policy developments and international cooperation related to the Arctic.

What are the main problems/threats related to the Arctic region?

Major economic activities take place in the region. Sub-regional Arctic seas now represent more than 10% of global marine fisheries, including large catches in the European part. Similarly, the production of hydrocarbons has increased, including in the Barents and Norwegian seas, and about 22% of the world's natural gas and 10% of oil are produced in the Arctic. In 2012, Russia and Norway alone provided more than half of the EU's oil and gas imports, much of which was produced in the Arctic region. Arctic shipping is increasing, most significantly to and from Arctic ports but also in trans-Arctic voyages. The Northern Sea Route along the Russian coast has seen an increase from four trips in 2010 to 71 in 2013. Meanwhile, the Northwest Passage through Canadian waters increased from two trips in 2009 to 18 in 2013. In certain areas, Arctic cruise passenger ships are also increasing in numbers and size. These ship numbers are small when comparing globally but with retreating sea ice, there is potential for an increase in trips with shorter travel routes for parts of the year. Sea-based activities in the Arctic are challenging due to waters with varying ice-cover, lack of sea charts, light conditions in winter and remoteness in case of accidents. Remoteness is also a problem when tackling potential pollution incidents.

The region plays a vital role in the Earth's climate system and energy balance. As reflective snow and ice diminish, due to Arctic warming or black carbon deposits, solar energy is increasingly absorbed in the ocean and land area. The Arctic is experiencing rapid warming compared to other parts of the globe causing extensive loss of sea ice which in addition to ocean warming has implications for ice-dependent species and for ocean acidification since open waters absorb more CO₂ from the atmosphere. The increase in average temperatures since 1980 has been twice as high over the Arctic as it has been over the rest of the world. As a consequence, snow cover has been declining up to 53% in summer and the Greenland ice sheet has been losing mass at an accelerated rate (almost tenfold in the past two decades). This massive loss of ice from the Greenland ice sheet contributes to global sea-level rise which over the next century will leave coastal areas at risk with regards to people, economic assets and coastal ecosystems, including in Europe.

Warming conditions thaw permafrost damaging infrastructures and transport systems. Melting permafrost is also a significant source of CO₂ and methane to the atmosphere and these emissions can be of significance with regard to keeping global temperature change below a 2 °C increase, as agreed under the UN Framework Convention on Climate Change (UNFCCC).

The region is home to a number of sensitive marine and terrestrial ecosystems, some of global importance, as the Arctic is a breeding ground for a number of migrating species. More than half of the world's wetlands are in the Arctic and sub-Arctic region. Climate change is the most serious threat to Arctic biodiversity, not least as the UNFCCC upper limit of 2 °C global warming is projected to result in a temperature increase of 2.8 to 7.8 °C in the Arctic, with severe impacts to biodiversity. Arctic species and ecosystems are also affected by pollution (especially persistent organic pollutants (POPs) and mercury) and marine litter from long-range transport and local sources. Some pollutants accumulate in the food web, as cold conditions slow down the degradation processes, while others are absorbed in fatty tissues and released into the animals during the natural seasonal starvation. Local communities with a diet derived mainly from local marine food items are exposed to these pollutants with subsequent health implications.

International efforts have been made in Arctic observation and monitoring, such as the ongoing Circumpolar Biodiversity Monitoring Programme (CBMP) and the Trends and Effects Monitoring Programme, along with the associated pollution assessments under the Arctic Council and the recent International Polar Year. However, there are still many unknowns when it comes to growth in economic activities, forecasting the rate of change, assessing ecosystem responses or understanding the interactions between various drivers of change and their cumulative impacts.

What are the main policy responses to key challenges?

Nationally, Arctic states already have legislation in place to regulate economic developments taking place on their territories. Regionally, the Arctic Council has adopted legally binding agreements regarding search and rescue and oil spills and is making recommendations for policy responses on the basis of scientific assessments. Internationally, a number of conventions and protocols have been put in place to regulate harmful substances such as POPs or mercury, to regulate economic activities like shipping or provide guidelines for activities including off-shore oil and gas.

In an EU context, the 2014 Council Conclusions for the Arctic call for strengthened EU environmental protection in the Arctic. The EU has demonstrated willingness to contribute actively towards such efforts. Investments in satellite observations in the region and the EU Framework Programme for Research and Innovation (Horizon 2020) will significantly contribute to a better understanding of relevant developments

and processes. This includes improved knowledge on the resilience of Arctic ecosystems and identifying potential tipping points which can have large-scale impacts. Such work will help the EU and its partners address some of the potential serious impacts on Europe from a changing Arctic such as from sea-level rise and extreme weather events from climate change. International scientific cooperation has increased, promoting free and open access to data and avoiding costly duplication, thereby reducing costs while strengthening the knowledge base. The Sustaining Arctic Observation Networks (SAON) initiative and the CBMP are positive steps in that direction.

The Council of the European Union has requested that an integrated and coherent EU Arctic policy be presented by December 2015 building on three overarching objectives proposed by the Commission, namely; i) strengthening the knowledge base to address the challenges from environmental and climate changes; ii) contributing responsibly towards a sustainable development in the region; and iii) intensifying constructive engagement with Arctic states, indigenous peoples and partners regarding challenges that require an international response. This policy will complement existing EU environmental and climate policies which are of relevance in addressing Arctic challenges. The size of any future EU Arctic footprint will be lower if EU Member States are able to adhere to agreed targets, such as reducing greenhouse gases by 40% before 2030 and 80% before 2050 (global emission reductions are also needed), phasing out long-range polluting substances, or moving towards a more resource-efficient and circular economy.

The importance of the Arctic to Europe's environment has been recognized by the EU for some time. The EEA has published a number of reports dedicated to the Arctic and in 2010 the EU produced an EU Arctic footprint report as a response to the geopolitical and environmental changes in the region. Most recently, in 2014, the EU funded a strategic assessment of development in the Arctic with recommendations on how the EU could respond to challenges identified in the assessment. At national level, a dozen EEA member countries are involved in ongoing environmental monitoring and assessment work in the region. These efforts, together with the work of the Intergovernmental Panel on Climate Change (IPCC) and other Arctic partners, have raised the level of understanding of the processes, changes and drivers at play as well as providing data, including some used in EEA indicators.

What are the main challenges ahead?

One of the societal challenges will be to balance global energy demands with the need for environmental protection of a sensitive area while not dismissing local and indigenous communities the opportunity for jobs, development, improved living conditions and health standards. Estimates indicate that 13% of undiscovered oil and 30% of undiscovered gas can be found in the Arctic. Utilizing these resources would challenge the transition to a low-carbon society, as outlined in the 7th EAP,

since it is recommended that two-thirds of known global fossil resources must remain in the ground if the UNFCCC 2 °C target is to be achieved. An important step in the right direction will be if an ambitious global legally binding agreement on mitigation and adaptation is reached at the UNFCCC's 21st Conference of the Parties (COP 21) meeting in Paris in 2015. Addressing black carbon emissions in and beyond the Arctic similarly requires an international and regional response, and steps are being taken under the Climate and Clean Air Coalition to Reduce Short-Lived Climate Pollutants, where a number of countries and the EU have committed to mitigate short-lived climate pollutants including black carbon.

Regarding Arctic shipping, further international cooperation is needed to ensure it is safe and clean. Preventing and responding to potential oil spills or search and rescue operations still remain major challenges. An agreement on marine oil spill prevention in the Arctic is expected to be adopted by the Arctic Council and full implementation of such an agreement can address some of the concerns. It remains essential to ratify and implement the International Maritime Organisation's Convention on ballast water management by all coastal states to reduce the risk of introducing alien species in the ecosystems in the Arctic Ocean and sub-regional seas. With increased Arctic shipping, the establishment of support infrastructures, including icebreakers and port facilities, along the northern shipping routes will be needed as well as addressing use and carrying of heavy fuel oils in the Arctic.

It will be a challenge for local and indigenous communities in the region to adapt to climate change. The Arctic Council is currently developing a knowledge base on how drivers interact with and affect people and nature. Adaptation actions, including in the Barents region, are being explored as a key component. Adaptation strategies and best practices are being collected and shared in the EU Climate-Adapt platform as part of the EU strategy on climate change adaptation. The establishment of more protected areas to conserve the region's unique and climate-sensitive wildlife and culturally historic sites, while allowing for local growth and development, is also needed. If appropriate strategies with prudent and integrated management plans are implemented at an early stage, the region can contribute significantly towards the 2050 vision of environmental sustainability as outlined in the 7th EAP.

“Arctic Ocean – International,” Steve Ganey, The PEW Charitable Trusts, 2019 [\[8\]](https://www.pewtrusts.org/en/projects/archived-projects/arctic-ocean-international)
<https://www.pewtrusts.org/en/projects/archived-projects/arctic-ocean-international>

Overview:

The Arctic is one of the planet's most pristine marine regions. But as its permanent ice disappears because of climate change, the international waters of the Central Arctic Ocean, which borders the territorial waters of five countries—the United States, Russia, Norway, Greenland (Denmark), and Canada—are increasingly accessible to commercial fishing.

Current & Relevant Information:

Central Arctic Ocean Fishing Moratorium to Protect Newly Opened Waters

1.1 million square miles of high seas covered by agreement



Source: Flanders Marine Institute, Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 9, accessed Feb. 17, 2017, <http://dx.doi.org/10.14284/242>

© 2018 The Pew Charitable Trusts

Recognizing the need to protect this sensitive ecosystem and better understand the rapidly changing environment, The Pew Charitable Trusts in 2010 began to support an international fisheries agreement that would close the Central Arctic Ocean to commercial fishing unless and until scientific knowledge and management measures can ensure a sustainable fishery.

This goal was achieved in November 2018 with the signing of the International Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean by nine governments: the five Arctic border nations plus China, Japan, South Korea, and the European Union. The agreement will prohibit commercial fishing in the Central Arctic Ocean for at least 16 years, and the signatories plan to use that time to study the changing Arctic ecosystem and its marine life and determine whether any fishing could be ecologically sustainable. They further committed to collaboratively support scientific research and integrate Indigenous knowledge to improve the international community's understanding of the open ocean that is emerging from millennia encased in ice. This effort will inform precautionary management measures to ensure that any authorized fisheries are sustainable from the start.

In May 2019, delegations from all the signatories met in Ottawa, Ontario, to begin implementing the agreement and pledged to form a provisional scientific group to coordinate the work of experts and further develop the joint program of research. The program will incorporate Indigenous knowledge, collect and map baseline information of the Central Arctic food web to better understand the ecosystem before it can be further affected by human activities.

1. Arctic Council:

“The Arctic Council: About,” Arctic Council, 2020 [9] <https://arctic-council.org/en/about/>

Current & Relevant Information:

The Arctic Council is the leading 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 in the Arctic. It was formally established in 1996.

Who chairs the Arctic Council?

The Chairmanship of the Arctic Council rotates every two years among the Arctic States. The first country to chair the Arctic Council was Canada (1996-1998), followed by the United States, Finland, Iceland, Russia, Norway, the Kingdom of Denmark, and Sweden. The second cycle of Chairmanships began in 2013.

Iceland chairs the Arctic Council from 2019 to 2021, and the Russia Federation chairs from 2021 to 2023.

“Arctic Governance: Synthesis and assessment of Arctic governance mechanisms and recent policy actions,” Flavius Mihaies, The Aspen Institute: Energy and Environment Program [10]

<https://assets.aspeninstitute.org/content/uploads/files/content/upload/23%20Arctic%20Governance%20Synthesis%20COLOR.pdf>

Summary:

While several institutions are involved in the governance of the Arctic marine area, the most prominent among them is the Arctic Council. The Arctic Council was established as a high level inter-governmental forum in 1996 to “provide a means for promoting cooperation, coordination and interaction [...] on common arctic issues, in particular issues of sustainable development and environmental protection in the Arctic”.

The Arctic Council was established by non-legally binding declaration and is a consensus-based organization. Decisions of the Council do not have any binding effect on individuals.

The eight Arctic states are Members of the Arctic Council and eight Non-Arctic States are Official Observers. A variety of governmental organizations and NGO’s also hold observer status. Of particular interest, the Arctic Council establishes significant participation by the indigenous peoples of the Arctic, whom the Council Members must consult prior to any consensus decision-making.

The Council’s current responsibilities pertain to research, advising on policy, and disseminating voluntary guidelines on the main topical areas that it is concerned with, including climate change, sustainable development, Arctic monitoring and assessment, persistent organic pollutants and other contaminants in the Arctic and other issues covered by its six Working Groups.

According to Arctic expert Brooks Yeager, the Arctic Council has made major contributions to the Arctic region, by “identifying issues of importance to the conservation of the Arctic environment and the well-being of Arctic people, and in developing assessments that have become the basis for cooperative action by the Arctic governments.” The Council has also issued guidelines and manuals of good practices, particularly related to the Arctic marine area.

Current & Relevant Information:

The Arctic Council is based on international soft law; therefore, it has neither a legal personality nor regulatory powers which are found in international treaties (e.g. UNCLOS) or organizations (e.g. OPSAR Commission). The Arctic Council is mainly a consultative council.

The Ottawa Declaration on the Establishment of the Arctic Council does not impose any legally binding obligations on its Members, nor does the Declaration empower the Arctic Council to impose any binding obligations. Others have observed that the Arctic Council is not a monitoring body and does not systematically evaluate whether its non-legally binding guidelines are being followed and therefore their impacts are

difficult to determine. Finally, the Arctic Council lacks structural funding and a permanent independent secretariat. In the absence of a permanent secretariat, the work of the Arctic Council is influenced by the priorities that the chair State lays out for its two-year chair period.

“Arctic Region,” U.S. Department of State: Office of Ocean and Polar Affairs [11]
<https://www.state.gov/key-topics-office-of-ocean-and-polar-affairs/arctic/>

Current & Relevant Information:

Arctic Council:

Established by the Ottawa Declaration in 1996, the Arctic Council is the preeminent intergovernmental forum for addressing issues related to the Arctic Region. The members of the Arctic Council include the eight Arctic States (Canada, Denmark, Finland, Iceland, Norway, Sweden, the Russian Federation, and the United States). The Arctic Council is not a treaty-based international organization but rather an international forum that operates on the basis of consensus, echoing the peaceful and cooperative nature of the Arctic Region. The Council focuses its work on matters related to sustainable development, the environmental protection; its mandate explicitly excludes military security. Traditionally, the Council is chaired by the foreign minister of the country holding the chairmanship. Its day-to-day work is carried out by the eight Senior Arctic Officials (SAO) and six PP representatives, with input from working groups, expert groups, and task forces.

The United States held the rotating chairmanship of the Arctic Council from 1998-2000 and 2015-2017.

“Changes in the Arctic: Background and Issues for Congress,” Congressional Research Service, 22 May 2020 [12] <https://fas.org/sqp/crs/misc/R41153.pdf>

Summary:

The diminishment of Arctic sea ice has led to increased human activities in the Arctic, and has heightened interest in, and concerns about, the region’s future. The United States, by virtue of Alaska, is an Arctic country and has substantial interests in the region. The seven other Arctic states are Canada, Iceland, Norway, Sweden, Finland, Denmark (by virtue of Greenland), and Russia.

The Arctic Council, created in 1996, is the leading international forum for addressing issues relating to the Arctic. The United Nations Convention on the Law of the Sea (UNCLOS) sets forth a comprehensive regime of law and order in the world’s oceans, including the Arctic Ocean. The United States is not a party to UNCLOS.

Current & Relevant Information:

The Arctic Council is the leading international forum for addressing issues relating to the Arctic. It was created in September 1996, following a series of meetings initiated

by Finland in 1989. Its founding document is the Ottawa Declaration of September 19, 1996, a joint declaration (not a treaty) signed by representatives of the eight Arctic states. The declaration states that the council “is established as a high level forum to,” among other things, “provide a means for promoting cooperation, coordination and interaction among the Arctic States, with the involvement of the Arctic indigenous communities and other Arctic inhabitants on common Arctic issues, in particular issues of sustainable development and environmental protection in the Arctic....”

The council describes itself on its website as “the leading 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 in the Arctic.” The State Department describes the council as “the preeminent intergovernmental forum for addressing issues related to the Arctic Region.... The Arctic Council is not a treaty-based international organization but rather an international forum that operates on the basis of consensus, echoing the peaceful and cooperative nature of the Arctic Region.

Thematic areas of work addressed by the council include environment and climate, biodiversity, oceans, Arctic peoples, and agreements on Arctic scientific cooperation, cooperation on marine oil pollution preparedness and response in the Arctic, and cooperation on aeronautical and maritime search and rescue in the Arctic. The Ottawa Declaration states explicitly that “The Arctic Council should not deal with matters related to military security.”

A. Membership:

“Changes in the Arctic: Background and Issues for Congress,” Congressional Research Service, 22 May 2020 [13] <https://fas.org/sgp/crs/misc/R41153.pdf>

Summary:

The diminishment of Arctic sea ice has led to increased human activities in the Arctic, and has heightened interest in, and concerns about, the region’s future. The United States, by virtue of Alaska, is an Arctic country and has substantial interests in the region. The seven other Arctic states are Canada, Iceland, Norway, Sweden, Finland, Denmark (by virtue of Greenland), and Russia.

The Arctic Council, created in 1996, is the leading international forum for addressing issues relating to the Arctic. The United Nations Convention on the Law of the Sea (UNCLOS) sets forth a comprehensive regime of law and order in the world’s oceans, including the Arctic Ocean. The United States is not a party to UNCLOS.

Current & Relevant Information:

Eight Member States and Their Senior Arctic Officials (SAOs)

The Arctic Council's membership consists of the eight Arctic states. Each member state is represented by a Senior Arctic Official (SAO), who is usually drawn from that country's foreign ministry. The SAOs meet at least twice per year.

Indigenous Permanent Participants

In addition to the council's eight member states, "six organizations representing Arctic indigenous peoples have status as Permanent Participants. The category of Permanent Participant was created to provide for active participation and full consultation with the Arctic indigenous peoples within the Council. They include: the Aleut International Association, the Arctic Athabaskan Council, Gwich'in Council International, the Inuit Circumpolar Council, Russian Association of Indigenous Peoples of the North and the Saami Council."

Observers

Thirteen non-Arctic states have been approved as observers to the council: Germany, the Netherlands, Poland, and the United Kingdom (approved in 1998); France (2000); Spain (2006); China, India, Italy, Japan, Singapore, and South Korea (2013); and Switzerland (2017). A November 22, 2019, press report states that "in 2015, uncertainty about their role led to a hiatus in observers being admitted." Estonia has announced it will apply to be admitted as an observer in 2021. In addition to state observers, 14 intergovernmental and interparliamentary organizations and 12 nongovernmental organizations have been approved as observers, making for a total of 39 observer states and organizations. The most recently added observer was the International Maritime Organization (IMO), which was added to the list of intergovernmental and interparliamentary observer organizations in 2019.

"The Arctic Council: About," Arctic Council, 2020 [14] <https://arctic-council.org/en/about/>

Abstract:

The Arctic Council is the leading 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 in the Arctic. It was formally established in 1996.

Current & Relevant Information:

Arctic States

[The Ottawa Declaration](#) defines these states as Members of the Arctic Council.

[Canada](#)

[The Kingdom of Denmark](#)

[Finland](#)

[Iceland](#)

[Norway](#)

[The Russian Federation](#)

[Sweden](#)

[The United States](#)

Permanent participants

Permanent Participants are organizations representing Arctic Indigenous peoples in the Council. They are supported by the [Indigenous Peoples Secretariat](#).

[Aleut International Association](#)



The Aleut International Association (AIA) is a not-for-profit corporation that represents Indigenous peoples of Aleut descent in the United States and the Russian Federation.

[Arctic Athabaskan Council](#)



The Arctic Athabaskan Council (AAC) is an international treaty organization that represents approximately 45,000 Indigenous peoples of Athabaskan descent spanning 76 communities in Alaska, US, Yukon and Northwest Territories in Canada.



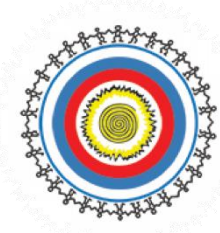
[Gwich'in Council International](#)

Gwich'in Council International (GCI) represents the Gwich'in in Canada and USA.

[Inuit Circumpolar Council](#)

The Inuit Circumpolar Council (ICC) is an international Indigenous Peoples Organization that was founded in 1977 by the late Eben Hopson, Sr. of Utqiagvik, Alaska.





[Russian Association of Indigenous Peoples of the North](#)

The Russian Association of Indigenous Peoples of the North (RAIPON) represents 41 groups of Indigenous peoples that live in the North of the Russian Federation.



[Saami Council](#)

The Saami Council is a non-governmental organization that represents between 50,000 to 80,000 Saami that live in Finland, the Russian Federation, Norway and Sweden.

Observers

[Observer](#) status in the Arctic Council is open to non-Arctic states, along with inter-governmental, inter-parliamentary, global, regional and non-governmental organizations that the Council determines can contribute to its work.

[Non-Arctic states](#)

Thirteen Non-arctic States have been approved as Observers to the Arctic Council.

[Intergovernmental and interparliamentary organizations](#)

Thirteen Intergovernmental and Inter-Parliamentary Organizations with an approved observer status.

[Non-governmental organizations](#)

Twelve Non-governmental Organizations are approved Observers in the Arctic Council.

“Maps: Arctic Council—Member States and Observers,” Arctic Portal, April 2016
[15] <https://arcticportal.org/maps-arctic-council>

Overview:

The Arctic Council is a high-level intergovernmental forum to provide a means for promoting cooperation, coordination and interaction among the Arctic States, with the involvement of the Arctic Indigenous communities and other Arctic inhabitants of common Arctic issues, in particular issues of sustainable development and environmental protection in the Arctic. The Arctic Council Member states are highlighted on the map. The Arctic Council Secretariat is located in Tromsø. It was established to increase the ability of the council to address future challenges in the region. The establishment was also viewed as an integral part of the efforts set by the

Council in order to strengthen its position through the Nuuk Declaration. The Arctic Council Secretariat helps to coordinate the work of the Arctic Council and its working groups.

Current & Relevant Information:



Arctic Council Member States

AC member states
 The Arctic Council consists of the eight Arctic States:
 Canada,
 Denmark (including Greenland and the Faroe Islands),
 Finland,
 Iceland,
 Norway,
 Russia,
 Sweden,
 United States

Six international organisations representing Arctic Indigenous Peoples have permanent participant status:

- Arctic Athabaskan Council (AAC)
- Aleut International Association (AIA)
- Gwich'in Council International (GCI)
- Inuit Circumpolar Council (ICC)
- Russian Association of Indigenous Peoples of the North (RAIPON)
- Saami Council (SC)

Source: Arctic Council, edited by Arctic Portal



The above map shows the Member states of Arctic Council.



Arctic Council Observer States

AC Observer states

Twelve non-arctic countries have been admitted as observers to the Arctic Council:

- France
- Germany
- Netherlands
- Poland
- Spain
- United Kingdom
- People's Republic of China
- Italian Republic
- Japan
- Republic of Korea
- Republic of Singapore
- Republic of India

Nine Intergovernmental and Inter-Parliamentary Organizations have been given observer status:

- International Federation of Red Cross & Red Crescent Societies (IFRC)
- International Union for the Conservation of Nature (IUCN)
- Nordic Council of Ministers (NCM)
- Nordic Environment Finance Corporation (NEFCO)
- North Atlantic Marine Mammal Commission (NAMMCO)
- Standing Committee of the Parliamentarians of the Arctic Region (SCPAR)
- United Nations Economic Commission for Europe (UN-ECE)
- United Nations Development Program (UNDP)
- United Nations Environment Program (UNEP)

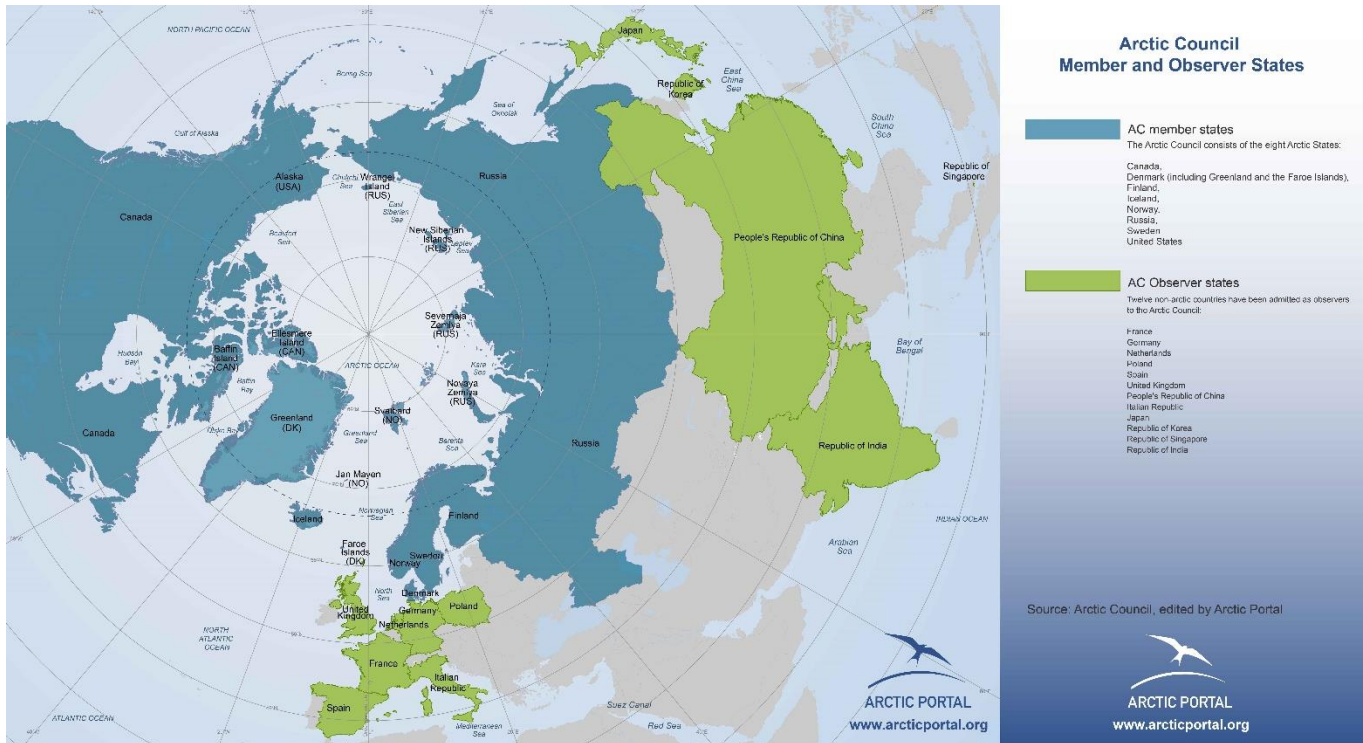
Eleven Non-governmental organizations are observers in the Arctic Council:

- Advisory Committee on Protection of the Seas (ACOPS)
- Arctic Institute of North America (AINA) - Formerly Arctic Cultural Gateway (ACG)
- Association of World Reindeer Herders (AWRH)
- Circumpolar Conservation Union (CCU)
- International Arctic Science Committee (IASC)
- International Arctic Social Sciences Association (IASSA)
- International Union for Circumpolar Health (IUCH)
- International Work Group for Indigenous Affairs (IWGIA)
- Northern Forum (NF)
- University of the Arctic (UArctic)
- World Wide Fund for Nature-Global Arctic Program (WWF)

Source: Arctic Council, edited by Arctic Portal



The above Map shows the Observer states of the Arctic Council.



The above Map shows both the Member states and Observer states of the Arctic Council.

“Arctic Council Adds 6 Nations as Observer States, Including China,” Steven Lee Myers, The New York Times, 15 May 2013 [16]
<https://www.nytimes.com/2013/05/16/world/europe/arctic-council-adds-six-members-including-china.html>

Overview:

The Arctic Council agreed on Wednesday to expand to include six new nations, including China, as observer states, as a changing climate opens the Arctic to increasing economic and political competition.

Current & Relevant Information:

The inclusion of observer states to the council came after a spirited debate at its biennial meeting and reflected the growing prominence of the issues facing the region. The council is made up of the eight Arctic nations: Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden and the United States.

With the Arctic ice melting, the region’s abundant supplies of oil, gas and minerals have become newly accessible, as have shortened shipping routes and open water for commercial fishing, setting off a global competition for influence and economic opportunities far beyond the nations that border the Arctic.

“There is nothing that should unite quite like our concerns for both the promises and the challenges of the northernmost reaches of the earth,” Secretary of State John Kerry, who brokered a compromise over the observer nations, said on Wednesday at the council’s final session. He added, “The consequences of our nations’ decision don’t stop at the 66th parallel.”

In addition to China, the other nations granted observer status to the Arctic Council were India, Italy, Japan, Singapore and South Korea.

All have sought economic opportunities in the region and viewed participation in the Arctic Council as a means of influencing the decisions of its permanent members. The European Union also applied as an observer, but its final status remained unresolved pending resolution of a dispute with Canada over trade in seal products.

Sweden’s foreign minister, Carl Bildt, said the addition of the observers strengthened the council by recognizing the pre-eminence of the permanent nations’ sovereignty in the Arctic.

“I would say it demonstrates the broad international acceptance of the role of the Arctic Council, because by being observer, these organizations and states, they accept the principles and the sovereignty of the Arctic Council on Arctic issues,” he said when asked if adding participants threatened to dilute the council’s effectiveness. “As a matter of fact, it strengthens the position of the Arctic Council on the global scene.”

The council, created in 1996, has matured from a largely symbolic organization to one addressing the quickening pace and consequences of climate change in the Arctic, prompting what has already been called a new “Great Game.” Meeting here above the Arctic Circle in Sweden, the council adopted only its second legally binding agreement: one to prepare and coordinate a response to potential spills that could result from increasing oil and gas exploration.

Two years ago, in Greenland, the council adopted a similar agreement to coordinate search and rescue operations over 13 million square miles of ocean.

The ballooning interest has raised concerns of reckless development that could harm what is a fragile environment, as several scientific studies presented to the council made clear. Outside the municipal building here in Kiruna, where ministers from the council met, protesters called for restrictions on economic development. “No Arctic Oil, Please,” one banner said.

The council’s final declaration, though, recognized “the central role of business in the development of the Arctic,” though it called for development to be conducted in ways that would sustain indigenous peoples and the environment.

The Northern Sea Route, once largely a wish, has become increasingly viable during longer stretches of the summer, allowing ships traveling from Asia to Europe to

traverse the Arctic in far less time than they would on the traditional route through the Indian Ocean, the Suez Canal and the Mediterranean.

In 2010, only four ships carrying 111,000 tons of cargo made the northern passage; by last year, 46 did, carrying 1.26 million tons. Among those was China's first ship through the Arctic, an icebreaker called Xuelong, or Snow Dragon.

The United States had not previously taken a public position on the question of observer states at the Arctic Council, but after Mr. Kerry brokered a compromise during a debate over dinner on Tuesday night that became spirited, it joined the others in expanding the council's future participants.

The Arctic Council plans to hold its next meeting in 2015 in Canada.

“Observers to the Arctic Council and their Benefits,” Liz Bowman, Polar Research & Policy Initiative, 27 July 2017 [17] <http://polarconnection.org/arctic-council-observers-benefits/>

Overview:

The Arctic Council has been widely accepted as the forum in which Arctic states convene to discuss the region's high level and working level affairs. The Council consists of the 8 Arctic states, 6 permanent participants, and as of the last ministerial meeting, 39 observers including non-Arctic states, intergovernmental or inter-parliamentary organizations, and non-governmental organizations. The 7 newest observers are: Switzerland, the World Meteorological Organization, the International Council for the Exploration of the Sea, Oceana, the Oslo-Paris Commission, the West Nordic Council, and the National Geographic Society. Although the latest round of accepted observers did not draw nearly as much attention as the batch admitted in 2013, there is still much to be explored about observers to the Arctic Council.

Current & Relevant Information:

The [Arctic Council Observer Manual](#), published in 2013, serves as a guide for observers and those interested in the position that observers fill within the Arctic Council. Those who become observers must be decided upon with consensus from the Arctic states and it must be established that “the Council determines (the observer) can contribute to its work.” Furthermore, observer status only continues so long as consensus exists among the Council's ministers, and any observer that acts to violate the provisions set out in the Ottawa Declaration or Rules of Procedure may have their Observer status terminated. Observer states are encouraged to make relevant contributions, particularly within the working groups of the Council. Relevant contributions include participation in working group projects through knowledge sharing or financial support.

If observers play by the above rules, there are many opportunities for each to form lasting partnerships with one another – other Arctic states, permanent participant groups, or even other observers. Some of these partnerships are visible at the working group level of the Arctic Council, where an observer might partner on a project of mutual interest between a member of the Council and itself. For instance, the Protection of the Arctic Marine Environment (PAME) Working Group, highlights many projects within its bi-annual work plan that include partnerships with observers. One of these projects, led by the United States and Aleut International Association, aims to create a framework for enhanced engagement from observers in the Council. The observers on this specific project are Italy and the Republic of Korea.

Another venue for observer contributions encouraged by many within the Arctic Council is the recently established Álgu Fund. This fund is meant to provide a stable source of financial support for the permanent participants of the Council in order to foster greater participation on projects and programs from their communities. Many observers see this as an opportunity to directly support the needs of indigenous peoples of the Arctic region.

However, the Arctic Council forum is not the only formal avenue for non-Arctic entities with regional interests to engage. Another emerging option is the Arctic Economic Council, initially created by the Arctic Council, which is an independent organization that aims to foster circumpolar business partnerships. This organization allows non-Arctic business partners as non-voting members and provides business insight to the Arctic Council's activities. The information on this type of engagement is fairly limited as the [Arctic Economic Council](#) is a young organization, established only in late 2014.

The biggest question remains: what are the benefits of observer status within the Arctic Council? Perhaps the most obvious is the ability to sit in the back of the room at Arctic Council meetings. Any information gleaned can have an impact on the formulation of one's own national policies or strategies (if the observer is a state/regional body) or on the type of projects that one should pursue (if the observer is an NGO). Additionally, the access that one has to high-level government officials within the confines of the Council provides a unique opportunity to form relationships that operate outside the auspices of the forum. The majority of air time for observers within the council, however, is at the working group level. It is here that observers can make substantive contributions of intellectual, financial, or otherwise valuable resources to the ongoing work that is formally accepted within the Arctic. This ensures that the observer is a welcome contributor. For many, the Arctic Council's granting of observer status is a legitimizing stamp of approval for one to have Arctic interests, be it a state, IGO, or NGO, and to act on those interests within the norms set by the Arctic community.

In return, what do the Arctic states and permanent participants of the Council gain from increased observer participation? Many gain new partners for achieving the

work that needs to be done. This could be anything from scientific research on climate change to regional community development projects. Observers not only provide a fresh perspective, but they also bring critical resources to help complete projects that might otherwise not happen. Likewise, observers often participate in other Arctic programming that benefits the Arctic region based off of their status within the Council. For instance, many observers are also members of the International Arctic Science Committee and the University of the Arctic, both which support critical components of Arctic research and education. In the end, Arctic Council members and observers need one another as the impacts of the Arctic are realized around the globe.

“Arctic Council,” Drishti IAS, 17 September 2019 [18]

<https://www.drishtias.com/important-institutions/drishti-specials-important-institutions-international-institution/arctic-council>

Overview:

The Arctic Council is the leading 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 in the Arctic.

The Arctic Council works as a consensus-based body to deal with issues such as the change in biodiversity, melting sea ice, plastic pollution and black carbon.

Current & Relevant Information:

The Council has members, ad hoc observer countries and "permanent participants"

- Members of the Arctic Council: Ottawa Declaration declares Canada, the Kingdom of Denmark, Finland, Iceland, Norway, the Russian Federation, Sweden and the United States of America as a member of the Arctic Council.
 - Denmark represents Greenland and the Faroe Islands.
- Permanent participants: In 1998, the number of Permanent Participants doubled to make up the present six, as, the Aleut International Association (AIA), and then, in 2000, the Arctic Athabaskan Council (AAC) and the Gwich'in Council International (GGI) were appointed Permanent Participants.
- Observer status: It is open to non-Arctic states, along with inter-governmental, inter-parliamentary, global, regional and non-governmental organizations that the Council determines can contribute to its work. It is approved by the Council at the Ministerial Meetings that occur once every two years
 - Arctic Council Observers primarily contribute through their engagement in the Council at the level of Working Groups.
 - Observers have no voting rights in the Council.
 - As of May 2019, thirteen non-Arctic states have Observer status.
 - Germany, 1998

- Netherlands, 1998
- Poland, 1998
- United Kingdom, 1998
- France, 2000
- Spain, 2006
- China, 2013
- India, 2013
- Italy, 2013
- Japan, 2013
- South Korea, 2013
- Singapore, 2013
- Switzerland, 2017

Criterion for Admitting Observers

In the determination by the Council of the general suitability of an applicant for observer status the Council will, inter alia, take into account the extent to which observers:

- Accept and support the objectives of the Arctic Council defined in the Ottawa declaration.
- Recognize Arctic State's sovereignty, sovereign rights and jurisdiction in the Arctic.
 - India has therefore officially recognized the territorial jurisdiction and sovereign rights of the Arctic states.
- Recognize that an extensive legal framework applies to the Arctic Ocean including, notably, the Law of the Sea (UNCLOS), and that this framework provides a solid foundation for responsible management of this ocean.
 - India has also accepted the UNCLOS as the governing instrument for the Arctic implying that jurisdiction over both the continental shelf and maritime passage, and the resources of the ocean will primarily lay with the eight Arctic States.
- Respect the values, interests, culture and traditions of Arctic indigenous peoples and other Arctic inhabitants.
- Have demonstrated a political willingness as well as financial ability to contribute to the work of the Permanent Participants and other Arctic indigenous peoples.
- Have demonstrated their Arctic interests and expertise relevant to the work of the Arctic Council.
- Have demonstrated a concrete interest and ability to support the work of the Arctic Council, including through partnerships with member states and Permanent Participants bringing Arctic concerns to global decision-making bodies.

“Explained: India’s re-election as observer to the Arctic Council,” Amitabh Sinha, The Indian Express, 15 May 2019 [19]
<https://indianexpress.com/article/explained/india-re-election-observer-arctic-council-importance-5727126/>

Overview:

India is one of the very few countries to set up a permanent station in the Arctic for the purposes of scientific research. The station has been used to carry out a variety of biological, glaciological and atmospheric and climate sciences research projects in the last one decade.

Last week at the Arctic Council ministerial meeting at Rovaniemi, Finland, India was re-elected as an Observer to the Arctic Council. India was first granted the Observer status in 2013, along with five other nations.

Current & Relevant Information:

The Arctic Council

The Arctic Council calls itself “the leading intergovernmental forum” for discussing and addressing issues concerning the Arctic region, including scientific research, and peaceful and sustainable use of resources in the region.

The Council was established by the eight Arctic States — the countries whose territories fall in the Arctic region — through the Ottawa Declaration of 1996. The eight Arctic States — Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden and the United States — are the only members of the Arctic Council.

Besides them, six organizations representing the indigenous people of the Arctic region have been granted the status of permanent participants. All decision-making happens through consensus between the eight members, and in consultation with the permanent participants.

The Council is not a treaty-based international legal entity like the UN bodies or trade, military or regional groupings like WTO, NATO or ASEAN. It is only an intergovernmental ‘forum’ to promote cooperation in regulating the activities in the Arctic region. It is much more informal grouping.

Through six working groups, each dealing with a specific subject, the Arctic Council seeks to evolve a consensus on the activities that can be carried out in the Arctic region in keeping with the overall objective of conserving the pristine environment, biodiversity, and the interests and well-being of the local populations.

India’s role in Arctic Council

India, along with 12 other countries, is Observers to the Arctic Council. So are 13 intergovernmental and inter-parliamentary organizations like the UN Environment Program, and the UN Development Program, and 12 other non-governmental

organizations. The Observers are not part of the decision-making processes, but they are invited to attend the meetings of the Council, especially at the level of the working groups.

The Observer status is granted to entities that support the objectives of the Arctic Council, and have demonstrated capabilities in this regard, including the ability to make financial contributions. The renewal of Observer status is a formality. The status, once granted, continues till there is a consensus among the members that the Observer was engaging in activities that run counter to the objectives of the Arctic Council.

India had been given the Observer status in 2013, along with five other countries — China, Italy, Japan, South Korea, and Singapore. Prior to this group, only France, Germany, the Netherlands, Poland, Spain and the United Kingdom were granted Observer status. In 2017, Switzerland too became an Observer.

“Establishing the Role of Permanent Participants on the Arctic Council: How Arctic Indigenous groups gained recognition on the Arctic Council,” Elizabeth Mayer, Jackson School of International Studies University of Washington, 31 January 2019 [20] https://jisis.washington.edu/wordpress/wp-content/uploads/2019/01/Elizabeth_Mayer_attachment.pdf

Abstract:

Rising temperatures due to climate change disproportionately impact the Arctic, opening up the Arctic Ocean to mineral exploitation and increased shipping, resulting in increased global attention on the area. The Arctic Council is one of the few organizations with political clout in the region, representing the interests of the eight Arctic states, Canada, Iceland, Denmark (Greenland), Norway, Sweden, Finland, the United States, and the Russian Federation. Also, on the Council are six groups representing various Indigenous peoples of the Arctic known as Permanent Participants, who are able to speak and provide input at meetings, though they cannot vote in Ministerial meetings. The establishment of this novel role is due to three key things; Mikhail Gorbachev’s Murmansk speech, Indigenous activism, and the non-legally binding structure of the Arctic Council.

Gorbachev’s Murmansk speech in 1987 both provided the impetus to create the Arctic Council’s precursor organization, the Arctic Environmental Protection Strategy, and identified the importance of Arctic Indigenous peoples and cultures to the region. Building off of the larger Indigenous rights movement, Arctic Indigenous activists within and outside the Soviet Union took the principles established in Gorbachev’s speech and applied them to the Indigenous context. Activists within the Inuit Circumpolar Council, the Russian Association of Indigenous Peoples of the North, and the Saami Council worked to both establish and strengthen the role of

Permanent Participants as actors within the newly-formed Arctic Council. These efforts were bolstered by the Arctic Council's non-legally binding structure, which encouraged Arctic states to join by lowering the stakes of participation, as they would not be held legally accountable to the Council's regulations and declarations. Together, these three elements allowed for the creation of the Permanent Participant position within an international decision-making body of the Arctic Council.

Current & Relevant Information:

Introduction

Once considered a frozen wasteland, the Arctic is now seen as a valuable asset by both Arctic and non-Arctic states, especially as increasing global temperatures impact the region. Awareness about the consequences of large carbon emissions have recently risen to the forefront of international news, as climate change sparks extreme weather events across the globe, and a report from the United Nations-backed Intergovernmental Panel on Climate Change (IPCC) issues a dire warning about the negative impacts of increased and unmitigated warming. The global rise in temperature disproportionately impacts the Polar regions, and already warming is "two to three times higher in the Arctic", leading to summer sea ice loss in the Arctic ocean. As summer sea ice retreats, an estimated "13% of the world's oil and as much as 30% of its gas" could be accessed, and the Arctic ocean could be used for shipping, all of which would come at the cost of biodiversity and leave a large carbon footprint in this ecologically delicate area. These ventures would provide a large boost to the economies of countries within the Arctic, especially Russia, whose Northern Sea Route would connect Asian and European markets.

Given the rising tensions between Russia and Western powers, the Arctic remains a place of collaboration through the revolutionary Arctic Council, which seeks to both address the issues of climate change and provide a peaceful forum for intergovernmental relations. The Arctic Council, founded September 19, 1996, is one of the few organizations with a political presence in the Arctic, bringing together nation-states, Indigenous groups, and various other stakeholders within the region. Member states, also known as 'Arctic states', include Sweden, Norway, Denmark, Iceland, Canada, Finland, the United States of America, and the Russian Federation. Six Arctic Indigenous groups representing various cultures across the Arctic have been granted the status of 'Permanent Participant'. Permanent Participant status grants these Indigenous groups special rights not afforded to other non-Arctic state actors, including the right to "active participation and full consultation... within the Arctic Council." While Permanent Participants cannot vote when the Arctic Council is in session, because the Council decides on issues via group consensus, the Permanent Participants have a de facto veto whereby their rejection of a proposal before the session could influence the outcome of the vote. The ability of Indigenous peoples to have a 'seat at the table' is important in the context of climate change, given that Arctic Indigenous peoples are among those

most heavily impacted by increased global temperatures, and that several Arctic states, including the U.S., are among the largest carbon polluters. In practice, this means that the Arctic Council provides a space for communication between these Arctic states and their most vulnerable Arctic constituents in a venue that fosters cooperation.

While this inclusion of Indigenous peoples as Permanent Participants on the Arctic Council is deemed revolutionary, it is quite puzzling when taken in context of the relationship between these Indigenous peoples and Arctic countries. Arctic states have routinely suppressed the language rights and cultural identities of their Indigenous peoples, and while efforts have been made in the recent past to remediate some of these assimilation practices, systemic problems persist. Furthermore, when the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) was adopted in 2007, the United States and Canada outright voted against it, while the Russian Federation abstained from voting on the matter. UNDRIP established a theoretical framework for respecting Indigenous rights on an international stage, and embodied many of the same principles of Indigenous representation that are present in the Permanent Participant position on the Arctic Council. Therefore, it seems strange that the Arctic states would support giving Indigenous groups the role of Permanent Participant on the Arctic Council in the late 1990's, when they refused to afford them similar rights in 2007. Why, then, did the Arctic States decide to incorporate Indigenous peoples as Permanent Participants on the Arctic Council? In this paper, I propose that Arctic states incorporated Indigenous peoples as Permanent Participants on the Arctic Council for three interrelated concepts; the foundational principles established in Mikhail Gorbachev's Murmansk speech, Indigenous activism in the Arctic, and the non-binding legal structure of the Arctic Council.

Conclusion

While the Arctic Council is far from perfect as an organization, the inclusion of Indigenous groups as Permanent Participants is both revolutionary and puzzling. Although the Arctic states have before and since avoided granting full rights and recognition to Indigenous peoples, during the establishment of the Arctic Council they allowed for the creation of Permanent Participants, who can speak and provide feedback during Ministerial meetings, though they cannot vote on these same issues.

The establishment of the Permanent Participants within the Arctic Council is due to three interconnected concepts; the ideas discussed in Mikhail Gorbachev's Murmansk speech, Indigenous activism, and the non-legally binding structure of the Arctic Council. Gorbachev's Murmansk speech reignited global interest in the Arctic region, leading to the establishment of the Arctic Environmental Protection Strategy (AEPS), which eventually began promoting ideals of sustainable development and recognizing the importance of Indigenous knowledge due to efforts from Arctic

Indigenous activists. These activists built off of a long history of Arctic Indigenous activism to fight for increased representation in first the AEPS, and eventually within the Arctic Council. Through the work of the Inuit Circumpolar Council, the Saami Council and the Russian Association of Indigenous Peoples of the North, the role of Permanent Participant was created for Arctic Indigenous peoples, providing for the privileges they currently enjoy on the Arctic Council.

All of this work would have gone to waste if the Arctic Council did not have a nonbinding legal structure. This allowed the Arctic Council to avoid tricky questions of state sovereignty and Indigenous rights, and incentivized reluctant states to join the organization, as they would not be held legally liable for the initiatives or regulations established by the Council. Taken together, these three elements fostered the growth of the Permanent Participant role for Indigenous peoples on the Arctic Council, providing the impetus and the necessary framework to carry this revolutionary idea into reality. The Arctic Council still has room to improve, and would greatly benefit from further incorporating Indigenous voices by allowing Permanent Participants the right to vote in Ministerial meetings. However, the vital role Permanent Participants play within this international decision-making body marks an important step for Indigenous rights both within the Arctic and across the globe, as their participation proves that inclusion of Indigenous voices is both possible and beneficial to the organization as a whole.

B. Function:

“Changes in the Arctic: Background and Issues for Congress,” Congressional Research Service, 22 May 2020 [21] <https://fas.org/sgp/crs/misc/R41153.pdf>

Summary:

The diminishment of Arctic sea ice has led to increased human activities in the Arctic, and has heightened interest in, and concerns about, the region’s future. The United States, by virtue of Alaska, is an Arctic country and has substantial interests in the region. The seven other Arctic states are Canada, Iceland, Norway, Sweden, Finland, Denmark (by virtue of Greenland), and Russia.

The Arctic Council, created in 1996, is the leading international forum for addressing issues relating to the Arctic. The United Nations Convention on the Law of the Sea (UNCLOS) sets forth a comprehensive regime of law and order in the world’s oceans, including the Arctic Ocean. The United States is not a party to UNCLOS.

Current & Relevant Information:

Working Groups

The council’s work is carried out primarily in six working groups that focus on Arctic contaminants; Arctic monitoring and assessment; conservation of Arctic flora and fauna; emergency prevention, preparedness and response; protection of the Arctic

marine environment; and sustainable development. The council may also establish task forces or expert groups for specific projects.

Secretariat

The council's standing Secretariat formally became operational in June 2013 in Tromsø, Norway.

Chairmanship

The council has a two-year chairmanship that rotates among the eight member states. The United States held the chairmanship from April 24, 2015, to May 11, 2017, a period which began during the Obama Administration and continued into the first 16 weeks of the Trump Administration. The United States had previously held the chairmanship from 1998 to 2000, and will next hold it in 2031-2033. On May 11, 2017, the chairmanship was transferred from the United States to Finland. On May 7, 2019, it was transferred from Finland to Iceland, which will hold the position until May 2021.

Decision-making

The council states that "All decisions of the Arctic Council and its subsidiary bodies are by consensus of the eight Arctic Member States." More specifically, the council states that "Decisions at all levels in the Arctic Council are the exclusive right and responsibility of the eight Arctic States with the involvement of the Permanent Participants," and that "Arctic Council assessments and recommendations are the result of analysis and efforts undertaken by the Working Groups. Decisions of the Arctic Council are taken by consensus among the eight Arctic Council States, with full consultation and involvement of the Permanent Participants."

Limits of Arctic Council as a Governing Body

Regarding the limits of the Arctic Council as a governing body, the council states that The Arctic Council is a forum; it has no programming budget. All projects or initiatives are sponsored by one or more Arctic States. Some projects also receive support from other entities. The Arctic Council does not and cannot implement or enforce its guidelines, assessments or recommendations. That responsibility belongs to each individual Arctic State. The Arctic Council's mandate, as articulated in the Ottawa Declaration, explicitly excludes military security.

"The Arctic Council: About," Arctic Council, 2020 [22] <https://arctic-council.org/en/about/>

Overview:

The Arctic Council is the leading 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 in the Arctic. It was formally established in 1996.

Current & Relevant Information:

Working Groups

Research, monitoring and the other work of the Council is primarily carried out by Working Groups.



Arctic Contaminants Action Program

ACAP's mission is to contribute to the efforts to reduce environmental risks and prevent pollution of the Arctic environment. ACAP acts as a strengthening and supporting mechanism of the Arctic Council, encouraging national actions to reduce emissions and releases of pollutants and to reduce environmental, human health and socio-economic risks.



Arctic Monitoring and Assessment Programme

The mission of the Arctic Monitoring and Assessment Programme Working Group (AMAP) is to monitor and assess pollution and climate change issues in the Arctic. AMAP produces independent, science-based and peer-reviewed assessments of the status of pollution and climate change in the Arctic in order to provide the basis for sound policy- and decision-making.



Conservation of Arctic Flora and Fauna

CAFF is the biodiversity working group of the Arctic Council and consists of National Representatives assigned by each of the eight Arctic Council Member States, representatives of Indigenous Peoples' organizations that are Permanent Participants to the Council, and Arctic Council observer countries and organizations. The CAFF Working Group operates by the Arctic Council Rules of Procedures.



Emergency Prevention, Preparedness and Response

The EPPR Working Group is mandated to contribute to the prevention, preparedness and response to environmental and other emergencies, accidents and search and rescue (SAR). While not an operational response organization, EPPR conducts projects to address gaps, prepare strategies, share information, collect data, and collaborate with relevant partners on

capabilities and research needs that exist in the Arctic.

Protection of the Arctic Marine Environment



The Protection of the Arctic Marine Environment (PAME) Working Group is the focal point of the Arctic Council's activities related to the protection and sustainable use of the Arctic marine environment.



Sustainable Development Working Group

The Sustainable Development Working Group (SDWG) focuses on the human dimensions of the Arctic. It works to protect and enhance the environment, economy, social conditions and health of Indigenous communities and Arctic inhabitants.

Other subsidiary bodies

The Council may also establish Task Forces or Expert Groups to carry out specific work.

Who chairs the Arctic Council?

The Chairmanship of the Arctic Council rotates every two years among the Arctic States. The first country to chair the Arctic Council was Canada (1996-1998), followed by the United States, Finland, Iceland, Russia, Norway, the Kingdom of Denmark, and Sweden. The second cycle of Chairmanships began in 2013.

Iceland chairs the Arctic Council from 2019 to 2021, and the Russia Federation chairs from 2021 to 2023.

What doesn't it do?

The Arctic Council is a forum; it has no programming budget. All projects or initiatives are sponsored by one or more Arctic States. Some projects also receive support from other entities.

The Arctic Council does not and cannot implement or enforce its guidelines, assessments or recommendations. That responsibility belongs to each individual Arctic State.

The Arctic Council's mandate, as articulated in the Ottawa Declaration, explicitly excludes military security.

“The Arctic Council: How We Work,” Arctic Council, 2020 [23] <https://arctic-council.org/en/explore/work/>

Current & Relevant Information:

Arctic Council assessments and recommendations are the result of analysis and efforts undertaken by the Working Groups. Decisions of the Arctic Council are taken by consensus among the eight Arctic Council States, with full consultation and involvement of the Permanent Participants.

Generating data and knowledge

At any given time, the Council’s subsidiary bodies – the Working and Expert Groups – are engaged in close to 100 projects and initiatives.

Current projects focus on preventing pollution, fostering mental health, averting oil pollution risks, manage biodiversity and marine ecosystems, and monitoring Arctic climate change – to name just a few. With this substantial body of knowledge, the Council continues to produce the most comprehensive circumpolar assessments and reports of issues and trends that impact the Arctic environment and Arctic inhabitants.

The inclusion of traditional knowledge and local knowledge is vital for exploring solutions to emerging challenges in the Arctic and to provide the best available knowledge as a basis for decision-making. The active participation of the Permanent Participants is one of the key features of the Arctic Council. Continuous efforts are made to enhance capacities within Arctic Indigenous communities, to enable them to contribute to the work of the Arctic Council.

Monitoring

As the Arctic continues to experience a period of intense and accelerating change it has become increasingly important to have better information on the status and trends of the Arctic environment.

Historically, monitoring practices in the Arctic have been largely fragmented and incomplete.

To address this shortcoming, the Arctic Council has increased long-term monitoring efforts and inventories to address key gaps in Arctic knowledge. These continuous efforts allow Arctic states to better facilitate the development and implementation of conservation and management strategies.

The 2004 [Arctic Climate Impact Assessment \(ACIA\)](#) recommended that long term Arctic biodiversity monitoring be expanded and enhanced.

In response, two of the Council's working groups — the Conservation of Arctic Flora and Fauna (CAFF) and Arctic Monitoring and Assessment Program (AMAP)

examined the report's findings and developed follow-up programs that address key projections for the future of the Arctic.

“The Arctic Council: Topics,” Arctic Council, 2020 [24] <https://arctic-council.org/en/explore/topics/>

Current & Relevant Information:

These are some of the Arctic Council's areas of focus. Learn more about our projects.

Biodiversity

The Arctic is often perceived as a harsh environment. But difficult living conditions have given rise to unique ecosystems in the far North. Some of the most iconic species in the world are endemic to the Arctic, such as the polar bear, walrus, narwhal, snowy owl and Arctic fox. But the Arctic also contains thousands of lesser-known species, often remarkably adapted to survive in extreme cold and highly variable climatic conditions.

In all, the Arctic is home to more than 21,000 known species of highly cold-adapted mammals, birds, fish, invertebrates, plants and fungi and microbe species. This extensive biodiversity provides essential services and values to people. They provide not only food, but the everyday context and basis for social identity, cultural survival and spiritual life.

Extremes of cold and seasonality and limited accessibility have kept human influence low, allowing ecological processes to function largely undisturbed. But climate change and an increasing demand for Arctic resources are driving a new era of human activity with subsequent consequences for Arctic biodiversity.

How does the Arctic Council safeguard Arctic biodiversity?

Ever since its establishment, environmental protection has been at the core of the work of the Arctic Council. In the Council's founding document, the Ottawa Declaration, the eight Arctic States affirmed their commitment to protect the Arctic environment and healthy ecosystems, to maintain Arctic biodiversity, to conserve and enable sustainable use of natural resources. It does so through defined actions based on scientific recommendations.

Life on land, in the sea and in the air:

The Arctic contains a diversity of marine, freshwater and terrestrial habitats, such as vast expanses of lowland tundra, wetlands, mountains, extensive ocean shelves, millennia-old ice shelves, pack ice, and huge seabird coastal cliffs. All of these ecosystems are affected by a changing Arctic – and each one in its unique way.

The Conservation of Arctic Flora and Fauna (CAFF) Working Group is assessing the state of Arctic biodiversity across the elements, and is developing monitoring plans

to observe and understand how life is changing – in the tundra and in wetlands, in lakes and rivers, in the Arctic Ocean, and even in the air, as the Working Group follows Arctic migratory birds on their flyways across the world.

Managing Arctic marine ecosystems:

The Arctic Council has developed a framework for implementing an ecosystem approach to management. In the context of the Arctic Council this means comprehensive and integrated management of human activities based on the best available scientific, traditional and local knowledge about the ecosystem.

The Protection of the Arctic Marine Environment (PAME) Working Group is leading the Council's work on managing Arctic marine ecosystems, and has produced guidelines, fact sheets and indicators to implement the theory into practice. CAFF is working to address these issues both in terrestrial, freshwater, marine and coastal ecosystems.

With an ecosystem approach to management, the Council aims at identifying and taking action on factors that are critical to the health of ecosystems – with the goal to achieve sustainable use of ecosystem goods and services and to maintain of ecosystem integrity.

Mainstreaming biodiversity:

Biodiversity is impacted by multiple factors, including climate change, infrastructure development, and resource extraction. In order to address these factors and protect Arctic biodiversity, CAFF has pledged to encourage all those working on development activities in the Arctic to incorporate biodiversity considerations in their planning and operations, a process known as mainstreaming. While there are a wide variety of industries engaging in activities in the Arctic, such as oil and gas, and tourism, CAFF has agreed to initially focus on one sector: the mining industry.

Pollutants

While most regions of the Arctic are far removed from large industrialized areas, the environment in the high North carries the traces of human-induced pollution – from soot to plastics, from methane to pesticides. To an extent, pollutants originate in the Arctic for example through wood combustion or oil and gas flaring. Yet, many contaminants are transported over long distances, traveling to the high latitudes via rivers, oceans, and the air – where they can have far reaching negative impacts on the environment and human health.

Several of the Arctic Council's Working Groups are closely monitoring and addressing the impacts of pollutants and contaminants on the Arctic ecosystems. Their findings have raised awareness on the serious implications of pollution in the Arctic and contributed to both national actions and international conventions.

Persistent organic pollutants:

Persistent organic pollutants (POPs) are chemicals of global concern because they can potentially be transported over long distances, remain in the environment, accumulate in ecosystems, and have significant negative effects on human health and the environment. Humans are exposed to these chemicals in a variety of ways, mainly through contaminated food and polluted air. Many everyday products can contain POPs, such as flame retardants or detergents. As a result, POPs can be found virtually everywhere on the planet in measurable concentrations.

Since its establishment in 1991, the Arctic Monitoring and Assessment Programme (AMAP) has documented the extent and effects of pollution in the Arctic and tracked new developments in order to inform policy decisions. Its assessments have contributed significantly to the negotiation of international agreements, such as the 'UN ECE's Convention on Long-range Transboundary Air Pollution (LRTAP) Protocol on Persistent Organic Pollutants' and the 'Stockholm Convention on Persistent Organic Pollutants'.

The Arctic Contaminants Action Program (ACAP) assesses the emissions of POPs in local factories, develops inventories of emission sources, and promotes the decrease of pollution with local authorities, businesses, trade organizations and environmental stakeholders.

Black carbon and methane:

The short-lived climate pollutants black carbon and methane are contributing to atmospheric warming. In addition, black carbon that falls on snow and ice accelerates the melting of these reflective surfaces and consequently global warming. Black carbon and methane emissions also contribute directly to air pollution that harms human health.

Due to their proximity to the Arctic, Arctic States are uniquely positioned to slow Arctic warming caused by emissions of black carbon: despite generating just ten percent of global black carbon emissions, Arctic States are responsible for 30 percent of black carbon's warming effects in the Arctic.

AMAP has monitored black carbon and methane emissions and reported on their effects as Arctic climate forcers. Based on AMAP's findings, ACAP has developed pilot projects that build capacity and demonstrate emission reduction activities. These projects are aimed at encouraging national actions to reduce emissions and releases of these pollutants.

The Council's Expert Group on Black Carbon and Methane in turn has been tasked by the Arctic States to develop a biennial "Summary of Progress and Recommendations" based on the national reports and other relevant information. These reports contain recommendations for an aspirational collective goal on black carbon.

Marine Litter:

Over the past years, marine litter has emerged as one of the most pervasive problems affecting the marine environment globally. The Arctic is no exception. The Icelandic Chairmanship (2019-2021) has thus placed plastic pollution in the Arctic marine environment high on its agenda and is drawing on the findings of the first Desktop study on marine litter in the Arctic, which was developed by the Protection of the Arctic Marine Environment (PAME) Working Group. PAME is currently developing a Regional Action Plan on Marine Litter in the Arctic in close collaboration with other Arctic Council working groups.

Waste management:

The environmentally sound destruction of hazardous waste and best waste management practices for small and remote Arctic communities are continuous efforts of the Council's Working Groups. Currently, ACAP and the Sustainable Development Working Group (SDWG) are cooperating on scaling up solid waste management activities by working closely with local communities, developing capacity building planning tools and a template for a community standards model.

Arctic Peoples

The Arctic is home to almost four million people today – Indigenous peoples, more recent arrivals, hunters and herders living on the land and city dwellers. Roughly 10 percent of the inhabitants are Indigenous and many of their peoples distinct to the Arctic. They continue traditional activities and adapt to the modern world at the same time. Yet, as the Arctic environment changes, so do livelihoods, cultures, traditions, languages and identities of Indigenous peoples and other communities.

Changes in the Arctic affect inhabitants in various ways. Arctic communities are already facing challenges that result from the impacts of climate change, demonstrating the need for action to strengthen resilience and facilitate adaptation. At the same time, the Arctic offers potential for sustainable economic development that both brings benefits to local communities and offers ground for innovation transcending the region.

How does the Arctic Council contribute to human well-being in the Arctic?

To cater for the differing needs of Arctic inhabitants, the human dimension of the Arctic Council's work covers a wide array of areas, from mental and physical health and well-being, to sustainable development, local engagement, education, youth and gender equality. Arctic peoples are represented in the Council by the Permanent Participants, and their work is supported by the Indigenous Peoples' Secretariat.

Improving physical and mental health:

Several groups of people in the Arctic are highly exposed to environmental contaminants, such as mercury. Their level of exposure is greatly dependent on their lifestyle, including diets. The Arctic Monitoring and Assessment Programme (AMAP)

has been assessing the impacts of various contaminants on human health since 1998 and is continuing to contribute to a substantial knowledge base on the issue.

Arctic communities are also experiencing elevated rates of suicide, especially amongst young people. The Sustainable Development Working Group (SDWG) has been leading the Council's efforts to address this issue and to engage those most affected in an open discussion about mental health and suicide prevention.

Engaging Indigenous peoples and local communities:

Indigenous peoples have lived in the Arctic for centuries. They have learned to adapt to a changing environment over time, and thus hold a fundamental knowledge base of the lands and waters of their homelands. The Arctic Council and its Working Groups acknowledge that the inclusion of traditional knowledge and local knowledge is vital for exploring solutions to emerging issues in the Arctic, and to provide the best available knowledge as a basis for decision-making.

The active participation of the Permanent Participants is one of the key features of the Arctic Council and both the Protection of Arctic Marine Environment (PAME) Working Group and SDWG have developed good practices for an active involvement of Indigenous Peoples and local communities.

Giving a voice to Arctic youth:

"Arctic youth is not just the future but also the present."

Indigenous youth leaders coined this slogan when they gathered for the first Arctic Leaders' Youth Summit in Rovaniemi, Finland. They called for a more active involvement in the issues that affect them – now and in the future.

Over the years, the Arctic Council has stepped up its efforts to engage youth. Working Groups like CAFF and SDWG have been forerunners in not just looking at how youth is affected by a changing Arctic but in actively involving them in their projects. Now the Arctic Council is taking its effort to involve youth to the next level and is exploring cooperation possibilities with organizations like the Arctic Youth Network.

For a gender equal Arctic:

Changes in the Arctic affect both men and women – although sometimes in different ways. Gender equality is therefore an important element for achieving sustainable development. The Icelandic Chairmanship of the Arctic Council (2019-2021) has made it a priority to promote a dialogue on gender equality in the Arctic and to strengthen a network of experts and stakeholders in the field.

Climate

The temperatures in the Arctic continue to rise at more than twice the global annual average, driving many of the changes underway in the Arctic. Most prominently,

snow and ice are melting at an increasing rate. This impact both local ecosystems and the global climate system. It contributes to rising sea levels, and is likely to provoke extreme temperature events beyond the Arctic. The effects of a shifting Arctic climate are felt across the high latitudes and beyond – with environmental, economic, and social implications.

While the effects of climate change are pronounced in the Arctic, their causes are often linked to activities taking place outside the region. This underlines the importance to raise awareness of Arctic change on a global level, and to integrate Arctic issues in global frameworks and conventions. The Arctic Council and its Working Groups are therefore collaborating closely with the Council's Observer states and organizations and other stakeholders on addressing the implications of a changing climate in the high North.

How does the Arctic Council Address the changing Arctic climate and its effects?

Acknowledging the scope of the changes taking place and their possible effects on livelihoods, societies, the environment and economy, the Council's Working Groups commit to working closely together. Through their ever-growing body of reports and assessments, the Arctic Council serves as knowledge broker and global advocate for Arctic topics.

Climate change and adaptation actions:

Understanding how climate change will affect the climate system and ecosystems is key to adapting livelihoods and to inform decision making on regional, national and international levels. AMAP has developed landmark assessments on climate impacts in the Arctic for more than 20 years and is continuing to do so.

In close collaboration, AMAP and CAFF are also assessing climate impacts on Arctic marine, coastal, freshwater and terrestrial ecosystems, as well as ecosystem feedbacks to climate.

PAME is developing Factsheets related to MPAs and Indigenous Peoples' Lives in a changing climate in collaboration with AMAP and CAFF. PAME is engaged with ICES and PICES for the purpose of information and synergies on their work on Integrated Ecosystem Assessment of the Central Arctic Ocean (WGICA).

Wildfires are an emerging topic across Arctic Council Working Groups. As the environment and communities in the circumpolar North have been affected by unprecedented wildfires over the past few years, Arctic States and Permanent Participants provide specific expertise for a holistic approach on how to tackle future wildfire seasons.

Green energy solutions:

The Icelandic Chairmanship of the Arctic Council (2019-2021) has made the development and application of practical green energy solutions in the Arctic region

a priority during its two-year term. These solutions are aiming at enabling communities to reduce emissions and improve air quality. Thus, the Arctic Council continues to promote knowledge exchange and aims to support small and remote Arctic communities in transitioning to sustainable energy.

Resilience:

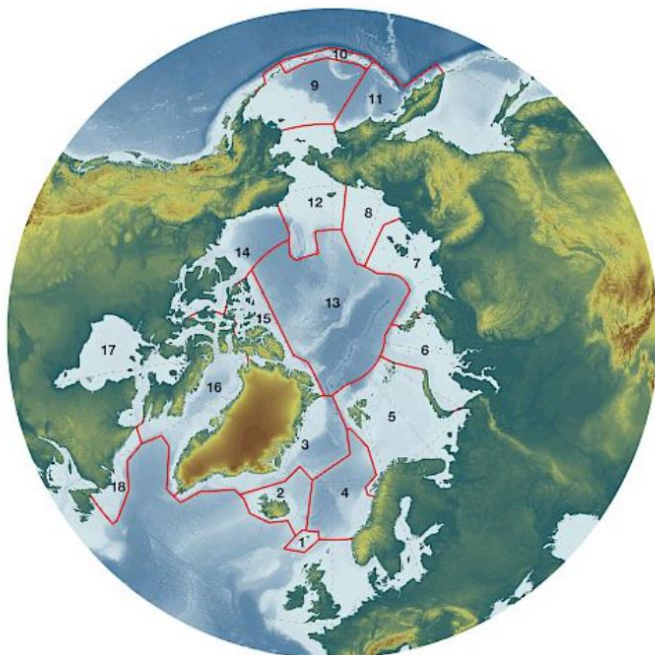
Resilience is the capacity of communities and systems to recover and restore themselves from crises and disturbances. The Arctic region is changing rapidly, and the speed of ongoing change makes adaptation extremely challenging.

Governments, Indigenous peoples, local communities, researchers, and businesses are therefore working together to build resilience to the social-ecological changes that are underway in the Arctic – and it is a cross-cutting theme across the Arctic Council's Working Groups.

Ocean

With sea ice cover shrinking, the Arctic Ocean has taken centerstage in global discussions related to climate change and economic opportunities. While open waters may bring new opportunities to the region, increasing accessibility to the High North also presents risks for Arctic inhabitants and ecosystems, including through oil spills and shipping accidents.

The Arctic States hold a responsibility to safeguard the future development of the region and to develop models for stewardship of the marine environment. This requires both a better understanding of the drivers and effects altering the Arctic marine environment and enhanced cooperation amongst the Arctic States, local inhabitants, external actors and international legal frameworks.



The 18 Large Marine Ecosystems of the Arctic

1. Faroe Plateau
2. Iceland Shelf and Sea
3. Greenland Sea
4. Norwegian Sea
5. Barents Sea
6. Kara Sea
7. Laptev Sea
8. East Siberian Sea
9. East Bering Sea
10. Aleutian Islands
11. West Bering Sea
12. Northern Bering-Chukchi Seas
13. Central Arctic Ocean
14. Beaufort Sea
15. Canadian High Arctic-North Greenland
16. Canadian Eastern Arctic-West Greenland
17. Hudson Bay Complex
18. Labrador-Newfoundland

How does the Arctic Council contribute to a sustainable Arctic Ocean?

To protect the Arctic marine environment and counteract possible detrimental effects of climate change and pollution, the Arctic States have recognized the need to work together closely – and they do so on a wide range of marine issues. These include issues related to marine pollution, sustainable shipping practices, search and rescue operations, marine cooperation and risk management.

Tackling marine pollution:

Over the past years, marine litter has emerged as one of the most pervasive problems affecting the marine environment globally. The Arctic is no exception. The Icelandic Chairmanship (2019-2021) has thus placed plastic pollution in the Arctic marine environment high on its agenda and is drawing on the findings of the first Desktop Study on Marine Litter in the Arctic, which was developed by the Protection of the Arctic Marine Environment (PAME) Working Group. PAME is currently developing a Regional Action Plan on Marine Litter in the Arctic as a follow-up to the Desktop Study.

Another pollution risk stems from increased shipping and exploration activities in the Arctic: oil spills. In 2013, Arctic Ministers signed the Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic (MOSPA). Its objective is to strengthen cooperation, coordination, and mutual assistance on oil pollution preparedness and response in the Arctic in order to protect the marine environment from pollution by oil. The Emergency Prevention, Preparedness and Response (EPPR) Working Group has been tasked to implement the agreement and its operational guidelines.

Sustainable and safe shipping:

Safe and sustainable shipping and operations in Arctic waters is another important component of safeguarding the Arctic marine environment – and a prerequisite has been to evaluate current and future use of the Arctic Ocean. One of the outcomes was the 2009 Arctic Marine Shipping Assessment (AMSA), which was developed by PAME. Its recommendations, such as the need to enhance Arctic marine safety, protect Arctic people and the environment and building the Arctic marine infrastructure continue to guide activities of the Council. PAME continues to work on projects and initiatives to promote safe and sustainable shipping in the Arctic. Some key ones are the launching of a comprehensive shipping activity database; the development of the Arctic Shipping Best Practice Information Forum in support of effective implementation of the IMO's Polar Code; and a number of projects on use and carriage of Heavy Fuel Oil in the Arctic and the development of a Regional Reception Facilities Plan, of which outcomes from both have been communicated to the International Maritime Organization.

Key to safe operations in the Arctic Ocean is cooperation amongst the eight Arctic States and other stakeholders. EPPR collaborates with international bodies and fora to identify best practices, exchange information, and develop a repository for lessons learned in Arctic search and rescue exercises and incidents.

One international instrument for cooperation on search and rescue operations in the Arctic that was negotiated under the auspices of the Arctic Council is the Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic, which was signed by the Arctic States in 2011.

Enhancing marine cooperation:

The Arctic Council's Arctic Marine Strategic Plan 2015-2025 (AMSP) provides a framework to guide its actions to protect Arctic marine and coastal ecosystems and to promote sustainable development. The AMSP articulates how the Arctic Council can increase its understanding of the impacts of human activities, climate change and ocean acidification. The AMSP recognizes the importance of acquiring a better understanding of Arctic change so that actions can be taken that allow Arctic inhabitants, including Arctic indigenous peoples to further adapt to the change. The strategic actions identified in the AMSP guide the work of the Arctic Council and its subsidiary bodies on marine-related activities.

In an effort to enhance strategic and policy guidance, as well as collaboration and coordination of marine activities in the Arctic Council, the Senior Arctic Officials have been assigned a central role. As government representatives from the Arctic States, Senior Arctic Officials are well positioned to engage in holistic discussions on marine issues of which the AMSP plays an important role. Going forward, they will do so jointly with marine experts that bring in both scientific findings and indigenous expertise. The objective of this mechanism is – amongst other tasks – to give strategic guidance to the Council's Working Groups on marine issues, to provide policy guidance, and to develop a unified marine workplan for the Arctic Council.

Emergencies

The Arctic is an environmentally sensitive area with an extreme climate characterized by low temperatures, winter-time darkness, snow, ice and permafrost. Harsh conditions and the sparse and limited amount of infrastructure in much of the Arctic increase risks and impacts and hinder response activities.

Actions for prevention, preparedness and response must be carefully pre-planned and adapted to the conditions and remoteness of the Arctic to maximize the use of available resources. Accordingly, international cooperation in this area is of vital importance.

“The Arctic Council: Projects,” Arctic Council, 2020 [25] <https://arctic-council.org/en/projects/>

Current & Relevant Information:

Projects	Working Groups	Lead	Status
Arctic Migratory Birds Initiative (AMBI)	CAFF	Canada Norway The Russian Federation The United States	On track
Circumpolar Biodiversity Monitoring Program (CBMP)	CAFF	The Kingdom of Denmark The United States	On track
The Tundra Project	ACAP		Completed
Circumpolar Local Environmental Observer Network (CLEO)	ACAP	Canada The United States	On track
Arctic Black Carbon Case Studies Platform	ACAP	The United States	On track
Sustaining Arctic Observing Networks (SAON)	AMAP	Iceland Norway The United States Canada Finland The Kingdom of Denmark The Russian Federation Sweden	On track
Circumpolar Oil Spill Response Viability Analysis Phase II (COSRVA II)	EPPR	Norway	On track
Protection from Invasive Species	CAFF	Sweden	Awaiting Info
Regional Action Plan on Marine Litter	PAME	Canada The Kingdom of Denmark Finland Iceland Norway Sweden The United States Aleut International Association	On track
Arctic Ship Traffic Data - ASTD	PAME	The United States Norway	On track
Blue Bioeconomy in the Arctic Region	SDWG	Canada Iceland	On track
Indigenous Youth, Food Knowledge and Arctic	SDWG	Canada Norway Saami Council	On track

Projects	Working Groups	Lead	Status
Change (EALLU) II			
Project CREATEs	SDWG	Canada The Kingdom of Denmark Finland Inuit Circumpolar Council	Completed
Arctic Shipping Best Practice Information Forum	PAME	Canada Iceland The United States	On track
Good Practices for impact assessments and engagement	SDWG	Canada Finland The Kingdom of Denmark Gwich'in Council International	Completed
Arctic Resilience Action Framework (ARAF)	SDWG	Finland Sweden The United States	Completed
Arctic Sustainable Energy Futures Toolkit	SDWG	Canada The Kingdom of Denmark Gwich'in Council International	Completed
Prevention, Preparedness and Response for small communities	EPPR	Canada The Kingdom of Denmark Norway The United States Aleut International Association	On track
Arctic Biodiversity Data Service	CAFF		On track
Arctic Remote Energy Networks Academy (ARENA)	SDWG	Canada Iceland The United States Gwich'in Council International	On track
Risk Assessment methods and metadata	EPPR	Norway	On track
Arctic Marine Microplastics and Litter	AMAP	Canada Norway	On track
Mainstreaming Biodiversity in Arctic Mining	CAFF	Sweden	On track
Resilience and	CAFF	Sweden	On track

Projects	Working Groups	Lead	Status
management of Arctic wetlands			
Actions for Arctic Biodiversity 2013-2021	CAFF	Sweden	On track
Coastal Biodiversity Monitoring	CAFF	The Kingdom of Denmark The United States	On track
Solid Waste Management in Small Arctic Communities	SDWG	Canada Finland Aleut International Association	Completed
Marine Biodiversity Monitoring	CAFF	Canada The United States	On track
Freshwater Biodiversity Monitoring	CAFF	Canada Sweden	On track
Terrestrial Biodiversity Monitoring	CAFF	Iceland Sweden	On track
Local 2 Global: Circumpolar collaboration for suicide prevention and mental wellness	SDWG	Canada The Kingdom of Denmark Finland Inuit Circumpolar Council Sweden	On track
Arctic Children – Preschool Education and Smooth Transition to School	SDWG	Finland The Russian Federation Russian Association of Indigenous Peoples of the North	Delayed
Gender Equality in the Arctic	SDWG	Finland Iceland Sweden Aleut International Association Saami Council	Completed
One Health	SDWG	Canada Finland The United States	Completed
Integrated Ecosystem Assessment (IEA) of the Central Arctic Ocean	PAME	Norway The United States	On track

“New Strategy to Invigorate the Arctic Council,” Hege Eilertsen, High North News, 5 Feb 2019 [26] <https://www.highnorthnews.com/en/new-strategy-invigorate-arctic-council>

Overview:

For the first time since the establishing of the Arctic Council in 1996, work is going on to develop a unique strategy for this international high-level forum. The strategy intends to increase the Council’s planning and implementation capacity, and the plan is for it to be finalized by the time the Arctic foreign ministers meet in May.

Current & Relevant Information:

Finland assumed the rotating Chair of the Arctic Council in the spring of 2017, following an American two-year term.

In a few months, Iceland will take over leadership of the intergovernmental body that is described by the Norwegian foreign ministry as the most important cooperation forum for the eight Arctic states.

Groundbreaking work

The most important work at the Council right now is the developing of a new strategy. For the first time since its establishing, a strategic plan for the Council’s work will be prepared. This is groundbreaking work, states Senior Advisor Tommy Flakk at the Norwegian MFA’s High North desk.

When the Arctic Council was established more than 20 years ago, based on the Ottawa Declaration signed in Canada, the goal of the Council was to promote cooperation and coordination among the Arctic states.

The declaration also covered inclusion of the Arctic indigenous peoples and the inhabitants of the High North, in particular on shared issues such as environmental protection and sustainable development.

Will sharpen priorities

While the Council’s strategy is now to be sharpened and clarified, it nevertheless still rests on the old declaration that the countries negotiated at its establishing.

The new strategy will be a kind of upgrading of the Ottawa Declaration, the MFA Senior Advisor explains to High North News.

The new strategy is to give a direction for the Council’s further work and it will be very important in the Council’s future work, Flakk says.

Growing interest

The MFA Senior Advisor is one of the people currently negotiating on Norway’s behalf.

When asked what will be new in the strategy, he says there will be an attempt to continue the spirit of the Kiruna Vision (from the Swedish chairmanship period in 2013, *journ.note*).

It says more about what the Arctic Council is and does; however, it is also an attempt to provide some guiding signals for the coming years. The Council has grown, new members have been added and there is also a larger general interest in the Arctic now than before.

The number of projects in the working groups has increased too, currently counting more than 100. The question now is how to prioritize among the most important projects. A good strategy is needed in order to do so, and that is why there are current attempts to increase the implementing capacities of the Council, he adds.

The working groups for environmental protection and climate are currently receiving most attention.

Norway prioritizes people and economy

The Arctic Council has delivered on environment. However, there are also many in Norway who will argue that the Council should prioritize social and economic development for people in the High North. This is a priority for Norway and Russia, while other countries argue that this should be less emphasized, Flakk says.

One of the challenges in developing a new strategy is the differences between the Council's various member states, which may vary significantly.

Whereas the Nordic countries share several features, there are others – for instance the Arctic parts of Canada or Alaska – that differ quite significantly from Scandinavia. The Council member states also all have their own interests that they want to promote or defend, in addition to the joint emphasis on shared initiatives.

All Council decisions have to be unanimous, i.e. everyone have to agree.

It takes only one country to disagree for the entire decision to fall, Flakk reminds us.

Smooth process – so far

I don't know where the work on the strategy stands at present, however, it has been a smooth process so far. If there are any disagreements, I suspect they will only appear towards the end of the work process, says Marti Ruokolainen, Information Manager at the Finnish Ministry of Foreign Affairs, to High North News.

The transferring of the chairmanship from Finland to Iceland will take place during the ministerial meeting in Rovaniemi on the 6th and 7th of May.

More activity in spring

Each of the Arctic Council working groups meets regularly and has several on-going projects at any given time, themes spanning from environmental monitoring (AMAP)

to sustainable development (SDWG) as well as emergency response programs (EPPR).

The current focus for most of the groups is to finalize as much as possible before a final plenary meeting takes place in March, organized by the Finns. At this event, the so-called SAO's (Senior Arctic Officials), foreign policy bureaucrats holding a special responsibility for Arctic cooperation, meet in Ruka.

More activity and attention to the Council is expected during the spring and in the lead-up to the ministerial meeting, when much of the current processes are finalized.

However, as Flakk says, it also depends on what happens in the near future.

Good mood on the top level

What is the mood like on top level? Are there e.g. meetings between Russia and the USA?

- The mood is good, which is not a given, says Flakk, just like his top-level boss Ine Eriksen Søreide, the [Norwegian] Minister of Foreign Affairs. During the High North conference Arctic Frontiers in Tromsø, [she made a point of highlighting the same.](#)

In the words of Senior Advisor Flakk, the Arctic Council is first and foremost a foreign minister forum, not an organization.

When the foreign ministers convene in May, it has been two years since their previous Arctic Council ministerial meeting. The SAO's meet between the ministerial meetings, and there has been good cooperation amongst them in the past few years, Flakk says.

The American SAO is actually the one holding the longest-lasting office. Vladimir Barbin (the Russian SAO), on the other hand, is now out because he was appointed Russian Ambassador to Denmark, Flakk adds.

Praising Finland

What do you think about the Finnish efforts so far in this chairmanship period?

- I think Finland has presented an outstanding example. They have taken a series of good grips, such as focusing on economic development and inviting the Arctic Economic Council to the SAO meetings. That is an innovative feat. Finland has also developed cooperation with the Council's many observers; not just states, but also organizations.

The Senior Advisor adds that Finland has done a tremendous job when it comes to broadband, for communities and people in the Arctic to have sufficient and reliable connectivity.

When the Office of the Auditor General looked into Norwegian authorities' work through the Arctic Council, there was criticism that the organizing of the Council was not expedient and that its governing of its work was found wanting.

Recommendations must be followed up

From the Norwegian side, it is important that we do something about this, Flakk says, referring to the Auditor General's criticism from a few years back.

When an Arctic Council recommendation is presented, it is important that we follow up and do something about it. If not, it reflects poorly on both the Council as well as its member states, Flakk says.

The implementation of the advice provided will thus be an important part of future work, and following up the various issues will therefore be more significant than potentially doing something about the structure of the Council, he says.

When HNN asks MFA State Secretary Audun Halvorsen (Conservatives) about how important the Norwegian authorities consider the Council to be, at a time when the political situation is still rather tense, he says:

- The Arctic is a region characterized by stability and good international cooperation, based on public international law. This is not a given, but a result stemming from political choices and targeted work from the Arctic states.

State Secretary: - Very important

To Norway, the work carried out in the Arctic Council as well as in the Barents cooperation, is very important. The Arctic Council is the only political cooperation body on government level between the eight Arctic states, and it is clearly the most important cooperation body in the North.

Do you still consider the Council a good arena for international dialogue?

- The Arctic Council serves two goals. Firstly, the Council works on specific issues like environment, climate and emergency preparedness. In that way, the Arctic Council contributes to promoting international cooperation on cross-border challenges that no country can solve on its own. Secondly, the Council serves as an important meeting place for the countries in the region. In this way, the Council constitutes a key arena for international dialogue, which contributes to building confidence for peace and stability in the region, the State Secretary says.

Halvorsen's colleague Tommy Flakk emphasizes the same:

- The Council holds an important function as a facilitator of confidence building, and as a platform for communication and cooperation. It is important that we manage to maintain it as the premier cooperation forum for the eight Arctic states. It is, after all, the only forum that includes all the Arctic states as well as its indigenous peoples.

“Arctic Council,” Drishti IAS, 17 September 2019 [27]

<https://www.drishtias.com/important-institutions/drishti-specials-important-institutions-international-institution/arctic-council>

Overview:

The Arctic Council is the leading 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 in the Arctic.

The Arctic Council works as a consensus-based body to deal with issues such as the change in biodiversity, melting sea ice, plastic pollution and black carbon.

Current & Relevant Information:

Mechanism of Council:

- The work of the Council is primarily carried out in six Working Groups.
- Arctic Contaminants Action Program (ACAP): it acts as a strengthening and supporting mechanism to encourage national actions to reduce emissions and other releases of pollutants.
- Arctic Monitoring and Assessment Programme (AMAP): it monitors the Arctic environment, ecosystems and human populations, and provides scientific advice to support governments as they tackle pollution and adverse effects of climate change.
- Conservation of Arctic Flora and Fauna Working Group (CAFF): it addresses the conservation of Arctic biodiversity, working to ensure the sustainability of the Arctic’s living resources.
- Emergency Prevention, Preparedness and Response Working Group (EPPR): it works to protect the Arctic environment from the threat or impact of an accidental release of pollutants or radionuclides.
- Protection of the Arctic Marine Environment (PAME) Working Group: it is the focal point of the Arctic Council’s activities related to the protection and sustainable use of the Arctic marine environment.
- Sustainable Development Working Group (SDWG): it works to advance sustainable development in the Arctic and to improve the conditions of Arctic communities as a whole.

Working of Council:

- Arctic Council assessments and recommendations are the result of analysis and efforts undertaken by the Working Groups. Decisions of the Arctic Council are taken by consensus among the eight Arctic Council States, with full consultation and involvement of the Permanent Participants.
- The Chairmanship of the Arctic Council rotates every two years among the Arctic States. The first country to chair the Arctic Council was Canada (1996-1998).
 - The next country to assume the Chairmanship will be Iceland (2019-2021).

Accomplishment of Council:

- The Arctic Council regularly produces comprehensive, cutting-edge environmental, ecological and social assessments through its Working Groups.
- The Council has also provided a forum for the negotiation of three important legally binding agreements among the eight Arctic States.
 - The first, the Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic, was signed in Nuuk, Greenland, at the 2011 Ministerial Meeting.
 - The second, the Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic, was signed in Kiruna, Sweden, at the 2013 Ministerial meeting.
 - Third, the Agreement on Enhancing International Arctic Scientific Cooperation, was signed in Fairbanks, Alaska at the 2017 Ministerial meeting.

“Limits and possibilities of the Arctic Council in a rapidly changing scene of Arctic governance,” Timo Koivurova, Polar Record, 2010 [28]

<https://www.arcticcentre.org/loader.aspx?id=d5187a54-0988-4b9f-9d9d-73d98f9211fa>

Abstract:

In a very short time, discussions on Arctic governance have moved from being a topic of scholarly attention and NGO advocacy onto the agendas of states and of the European Union (EU). Increasingly, the various alternatives propounded by a diverse set of actors over what Arctic governance should look like appear as pre-negotiation tactics, a type of testing period before a regime change. The article examines whether the still predominant inter-governmental forum, the Arctic Council, is facing a threat of being supplanted by other forms of governance. It will study how resistant the Arctic Council, and its predecessor the 1991 Arctic environmental protection strategy, are to change in order to understand whether the council could renew itself to meet future challenges. It will also examine the various proposals for

Arctic governance set out by states, the EU and the region's indigenous peoples. All this will permit conclusions to be drawn on where the Arctic Council stands amid all these proposals and whether, and in what way, it should change to support more sustainable governance in the Arctic.

Current & Relevant Information:

The change in how we perceive the Arctic as influencing the priorities of the working groups

The preceding analysis shows the limits and possibilities of the Arctic Council. Yet, there seems to be a clear shift in the way the working groups function largely due to the vast change in how the Arctic is understood and perceived as a region. Even though it is possible to discern a perceptual change underlying the endeavors in the working groups, it is useful to keep in mind that identification of such perceptual changes simplifies the reality in order to grasp something of the essence of change.

The metaphor of 'frozen desert' underlying the work of the Arctic environmental protection strategy (AEPS):

The negotiations that led to the adoption of the AEPS constructed the Arctic as one integrated region for international policy purposes. The AEPS was very much built on the idea of protecting vulnerable Arctic ecosystems from human induced pollution, both from within the region and, perhaps more importantly, from outside it. It is an intensely conservationist document, albeit taking into account the cultural values of a region's indigenous peoples in protecting these ecosystems. This is apparent from the first two objectives of the AEPS:

To protect the Arctic ecosystem including humans. To provide for the protection, enhancement and restoration of environmental quality and the sustainable utilization of natural resources, including their use by local populations and indigenous peoples in the Arctic (AEPS 1991: 2.1. (i, ii)).

The AEPS was also an ambitious instrument of international environmental protection, given the final promise of its objectives which was to do no less than '[to] identify, reduce, and, as a final goal, eliminate pollution' (AEPS 1991: 2 (1v)). The AEPS was still built on the traditional image of the Arctic as a 'frozen desert', which is well captured in the opening passage of the AEPS:

The Arctic is highly sensitive to pollution and much of its human population and culture is directly dependent on the health of the region's ecosystems. Limited sunlight, ice cover that inhibits energy penetration, low mean and extreme temperatures, low species diversity and biological productivity and long-lived organisms with high lipid levels all contribute to the sensitivity of the Arctic ecosystem and cause it to be easily damaged. This vulnerability of the Arctic to pollution requires that action be taken now, or degradation may become irreversible (AEPS 1991: 1. Introduction)

Here the image is one of ecosystems that are inherently vulnerable because of the cold and hostile environment, requiring stronger measures of environmental protection. From the beginning, the AMAP working group was tasked to study the function of these vulnerable remote ecosystems whose function had not been studied sufficiently, as well as pollution problems that threatened these ecosystems. There is no sign here of a region that was undergoing a broad and intense transformation.

The metaphor of the 'Arctic in change' introduced by the Arctic climate impact assessment (ACIA):

It was not the founding of the Arctic Council that changed the image of the 'frozen desert' to the one of 'Arctic in change' but the process to produce the Arctic climate impact assessment (ACIA). It is important to remind ourselves that during the 1990s, climate change efforts were focused on mitigating, or even stopping, climate change from taking place. The policy discourse and the general media did not yet seriously think of adaptation to climate change consequences but how to prevent this phenomenon from occurring (in much the same way as the international community was able to take affirmative action to reduce chlorofluorocarbons (CFCs)) and, in the long run, to control and erase the problem of ozone depletion. This priority in the climate regime was about to change dramatically and, arguably, one of the main reasons for this perceptual change was the ACIA conducted under the auspices of the Arctic Council. ACIA, as any scientific assessment, is not only an objective undertaking but involves choices that need to be made throughout the process, thus making it an act of producing knowledge, as shown by Nilsson in her study of the ACIA process (Nilsson 2007: 204).

As has been shown by her, the planning process for ACIA was multi-faceted and involved other organizations than those of the Arctic Council (Nilsson 2007: 98–110). The work carried out in the international Arctic science committee, a non-governmental science body, was instrumental in ensuring that ACIA took place. Another important factor was the willingness of the US as chair of the Arctic Council (1998–2000) to push for such an assessment and to fund it. These were the times of the Clinton administration when the US was one of the key players in negotiating the Kyoto protocol to the UNFCCC, which partly explains the important role the US was willing to play in producing ACIA. After a couple of seminars on the topic during the US chair period, it was decided to launch ACIA with CAFF, AMAP, IASC and indigenous representative sitting as members in the steering committee.

The ACIA was the first regional climate change assessment and it focused on the consequences of climate change for the region and its indigenous peoples. Even though the 2001 inter-governmental panel on climate change (IPCC) synthesis report also mentions the Arctic in passing (IPCC 2001), it was the ACIA that established the Arctic as the early warning place of global climate change, a region where climate change had already caused very concrete problems for ecosystems

and human communities, and a region that was likely to warm twice as fast as the rest of the world.

The ACIA dramatically changed the way we perceive the Arctic as a region. Instead of the 'frozen desert' image that had influenced the work of the AEPS, it became almost the opposite, a region undergoing a vast and long transformation process.

It is also good to keep in mind that the ACIA started to influence the perceptions of the Arctic among the Arctic Council actors even before the synthesis report was released in 2004. As early as the 2002 Inari ministerial meeting, it was noted with concern 'the ongoing significant warming of most of the Arctic, and recognize that the impacts of global climate change with increased possibilities of extreme weather events will have large consequences in the Arctic, and that the Arctic can act as an early warning of global climate changes' (Inari declaration: paragraph 8). This development culminated in the release of the synthesis report before the 2004 Reykjavik ministerial meeting, which in turn led to policy recommendations in the Reykjavik declaration and the acknowledgement of the 'the need to further organize the work of the Arctic Council and its subsidiary bodies based on the findings of the ACIA and direct the SAOs to report on the progress made at the 2006 Ministerial Meeting' (Reykjavik declaration 2004).

The ACIA changed the priorities for most of the working groups, directing them to conduct scientific assessments as to the consequences of climate change in the region. These 'second generation' assessments examine in more detail some of the consequences to the Arctic environment and the growing interests of the business community in making use of the Arctic.

The 2004 Arctic marine strategic plan by PAME established the Arctic marine shipping assessment (AMSA) as a major priority. This inclusive and high-profile assessment aims to map out the current shipping volumes in various parts of the Arctic marine regions, and to make projections for 2020 and 2050, given the opening sea ice and economic globalization. AMSA will release its findings and policy recommendations at the April 2009 ministerial meeting that ends the Norwegian chair period. Another major AMAP assessment concluded in 2007 evaluated the volume and consequences of increasing oil and gas activities in light of climate change and economic globalization (AMAP 2008). The Arctic biodiversity assessment aims to evaluate the changes in Arctic biodiversity caused by increasing economic activities, climate change and ultra-violet radiation.

It would be a mistake to think that the Arctic Council could easily be turned into a treaty-based body having regulatory powers. The Arctic wide intergovernmental cooperation, even though changed from the AEPS to the Arctic Council in fairly short time frame, has been very much the same kind of inter-governmental forum from 1991 onwards to the present day. Since this is the case, it can also be presumed that it is fairly resistant to change, the present institutional forms having been in

existence already for quite some time. This is not to say that no evolution has occurred in Arctic cooperation. The working groups have started to function on the basis of a new perception of the 'Arctic in change', which has already mainstreamed climate change into most work done in the council.

The Arctic Council has also been adamant in rejecting any treaty proposals. The current Arctic Council chair, Norway, has defended the no treaty approach against anyone proposing it and has even sent its foreign minister to the European Parliament to defend that view (Støre 2008). The SAO meetings have not overtly criticized the Greenland coastal state meeting, although Iceland has expressed concern over why not all Arctic Council members were invited. There is currently no sign from within the Arctic Council that it would be willing to rethink its own fundamental opinions on governance. Norway has in its period as chair studied the effectiveness and efficiency of the Arctic Council, but there has not been any serious engagement to examine whether the Arctic Council should be thinking of reforming its structures. Instead, the study has focused on how better to involve the observers in the work of the Arctic Council and thinking about whether the tasking of the working groups could be done in a better way (Arctic Council 2008a). Overall, it does seem that there is not much willingness in the council to make any but simply cosmetic changes to its structure or working methods.

On the other hand, it is also the case that the Arctic Council sponsored ACIA and the related assessments have been catalysts for all the actors to perceive the Arctic as a region in change, an area which contains multiple commercially interesting opportunities. As we know from the sociology of science, knowledge production is no innocent objective endeavor but also a part of the struggle over whose reality becomes dominant. The ACIA process changed the image of the Arctic upon which the pragmatic strategies and everyday realities of the council are built and produced a somewhat paradoxical situation. While ACIA and the connected assessments of the council have produced a reality that cries for real governance over economic activities waiting to enter the region, the council as it presently stands is ill equipped to engage in any sort of governance.

The days are over during which the council could be celebrated as the symbol of the emergence of the Arctic as an international political region (Young 2000: 15). As shown above, there is a new dynamic in the region; various states and entities like the EU are redrawing their Arctic policies and framing new governance possibilities. This discourse has finally reached the halls of power, having been a topic of scholarly concern for many years, then being taken on by NGOs and finally entering the policy making agendas of states. The challenges now facing the Arctic Council may mean that it is gradually being supplanted by sectoral governance regimes evolving in a piecemeal manner, or even by an Arctic framework convention. It would be high time, thus, for serious discussions in the Arctic Council as to its future.

In making such an assessment, the council should focus on what are its relative strengths in finding a new niche for its future work.

The Arctic Council has been successful in at least three things. It has been able to promote scientific assessments and undertakings that have been important not only for discovering Arctic pollution problems but also for influencing international environmental policy making processes (Reiersen and others 2003). The council ministerial meetings have also offered a platform for discussing the future of the Arctic with a broad and diverse group of participants. Thirdly, the fact that the council has accorded a unique role for the region's original occupants has certainly served its legitimacy and also contributed to a new way of perceiving how indigenous peoples should be involved in international policy making (Koivurova and Heinämäki 2006). If the council could engage in an honest and open discussion of its future role in Arctic governance, this would mean that whatever type of regime or governance arrangements emerge to govern the changing Arctic, the council would be able to support the overall development in the Arctic by focusing on its strengths. For instance, Oran Young has recently argued that the Arctic Council could play a useful role as a scientific (assessment, monitoring and evaluation) body, providing dynamic information on the region in change to the more specific functional governance bodies that make the actual governance decisions (Young 2009).

The possibility for the Arctic Council to engage in serious strategic discussion over its place in Arctic governance does not, however, seem likely. As studied above, the Arctic inter-governmental cooperation has been resistant to change, at least up till now. There are some changes that have been made to the overall makeup of the Arctic inter-governmental cooperation over the years, but these are firmly built on the fundamental governance premises of the Council (soft law nature, ad hoc funding etc.). All the discussions over possible reformation in the council seem to end up in dealing with cosmetic changes within the accepted structure rather than revisiting the governance fundamentals in a critical manner.

The Arctic Council stands very much at a crossroad. The assessments the council has sponsored seem increasingly to challenge the very fundamentals of the cooperation. The new image of the 'Arctic in change' has produced a reality in which the region is seen as an early warning system of global climate change, undergoing a rapid transformation, with plentiful economic opportunities for all states of the world. This has invoked a kind of pre-negotiation stage, in which the Arctic actors define the governance structures of their liking on the basis of various justifications, a phase which often precedes the creation of new power structures. And given the stakes of the melting Arctic, it is easy to predict that this contest of arguments by various Arctic actors, loaded with perceived factual realities, legal arguments and moral justifications, will not provide an easy path to a new governance arrangement. This suggests that we might have to live with the Arctic Council for some time as the predominant forum for Arctic cooperation. We may only hope that the council would

start seriously thinking of its strengths and weaknesses, and would be able to transform its functions in the light of the governance challenges ahead.

C. Agreements:

“The Arctic Council: About,” Arctic Council, 2020 [29] <https://arctic-council.org/en/about/>

Overview:

The Arctic Council is the leading 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 in the Arctic. It was formally established in 1996.

Current & Relevant Information:

What are some Arctic Council accomplishments?

The Arctic Council regularly produces comprehensive, cutting-edge environmental, ecological and social assessments through its Working Groups.

The Council has also provided a forum for the negotiation of three important legally binding agreements among the eight Arctic States:

1. [Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic](#) (2011)
2. [Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic](#) (2013)
3. [Agreement on Enhancing International Arctic Scientific Cooperation](#) (2017)

“Arctic Region,” U.S. Department of State: Office of Ocean and Polar Affairs [30] <https://www.state.gov/key-topics-office-of-ocean-and-polar-affairs/arctic/>

Current & Relevant Information:



AGREEMENT ON ENHANCING INTERNATIONAL ARCTIC SCIENTIFIC COOPERATION
NON-BINDING ILLUSTRATIVE MAP

This non-binding illustrative map shows the approximate extent of the Identified Geographic Areas described in Annex 1 of the Agreement on Enhancing International Arctic Scientific Cooperation. It is intended for illustrative purposes only and does not form part of the Agreement.

- Approximate Extent of Identified Geographic Areas
- 62°N
- - - Arctic Circle
- Additional areas covered voluntarily by Canada

Continental shelf areas are not depicted.
 U.S. Department of State, OES/OPA, April 12, 2019

Arctic Science Agreement (2017)

In May 2017, the eight Arctic States signed the [Agreement on Enhancing International Arctic Scientific Cooperation](#) during the [10th Arctic Council Ministerial in Fairbanks, Alaska](#). This is the third legally binding agreement negotiated under the auspices of the Arctic Council. The agreement facilitates access by scientists of the eight Arctic States to Arctic areas that each State has identified, including entry and exit of persons, equipment, and materials; access to research infrastructure and facilities; and access to research areas. The agreement also calls for the parties to promote education and training of scientists working on Arctic matters.

The geographic area, as defined by the [Arctic Research and Policy Act of 1984](#), covered by this agreement in the United States includes territory north of the Arctic Circle and north and west of the boundary formed by the Porcupine, Yukon, and Kuskokwim Rivers; the Aleutian chain; and adjacent marine areas in the Arctic Ocean and the Beaufort, Bering, and Chukchi Seas.

The point of contact for this agreement for the United States is the [U.S. Arctic Research Commission](#), which can be reached at (703) 525-0113 or info@arctic.gov.

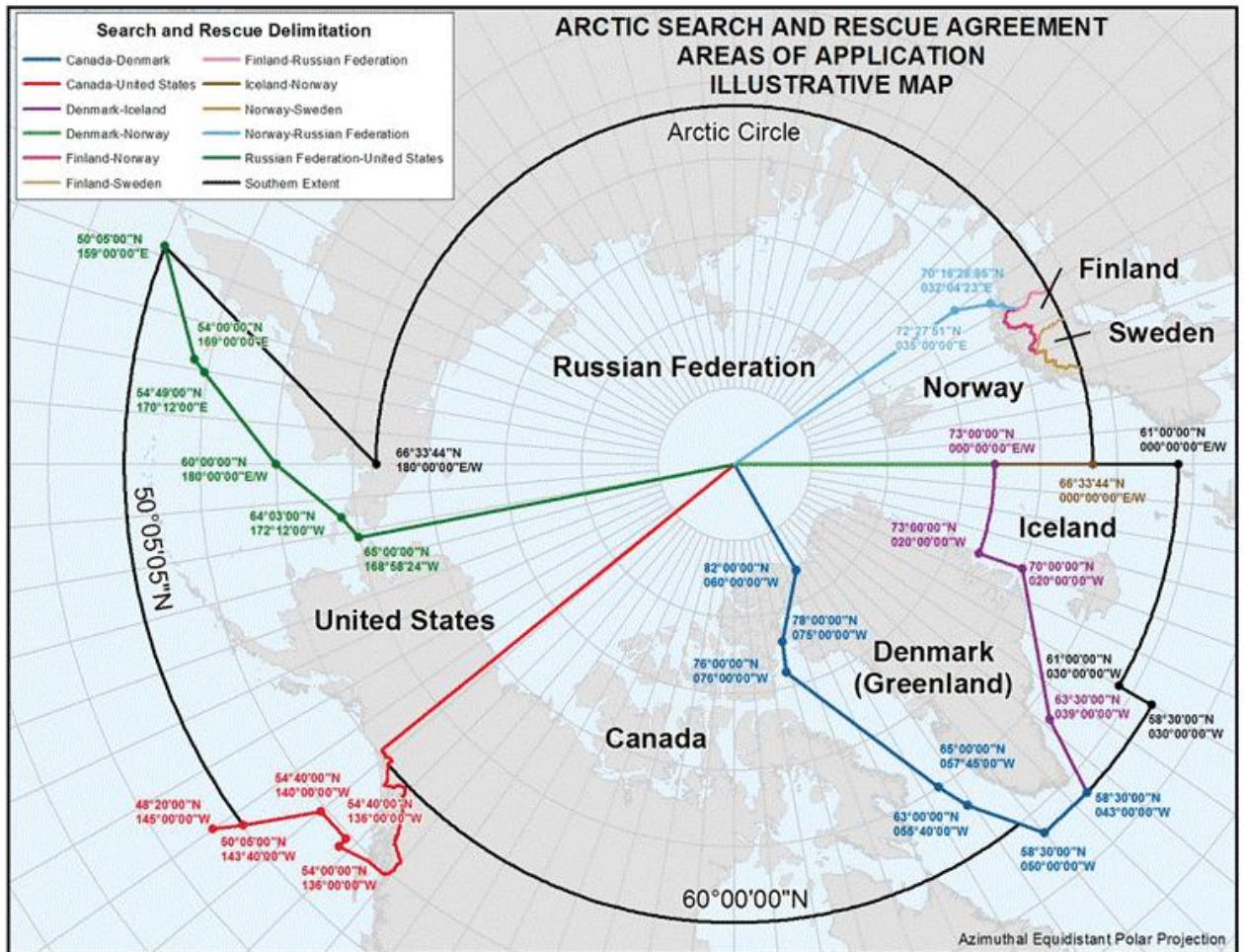
Arctic Marine Oil Pollution Preparedness and Response Agreement (2013)

In May 2013, the eight Arctic States signed the [Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic](#) during the 9th Arctic Council Ministerial in Kiruna, Sweden. This is the second legally binding agreement negotiated under the auspices of the Arctic Council. The agreement strengthens cooperation, coordination, and mutual assistance among Arctic nations on oil pollution preparedness and response in the region to protect the marine environment. The agreement is helping to forge strong partnerships in advance of an oil spill so that Arctic countries can quickly and cooperatively respond before it endangers lives and threatens fragile ecosystems.

Arctic Search and Rescue (SAR) Agreement (2011)

In May 2011, the eight Arctic States signed the [Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic](#) during the 8th Arctic Council Ministerial in Nuuk, Greenland (Denmark). This is the first legally binding agreement negotiated under the auspices of the Arctic Council. It coordinates life-saving international maritime and aeronautical SAR coverage and response among the Arctic States across an area of about 13 million square miles in the Arctic. The SAR Agreement will improve search and rescue response in the Arctic by committing all Parties to coordinate appropriate assistance to those in distress and to cooperate with each other in undertaking SAR operations. For each Party, the Agreement defines an area of the Arctic in which it will have lead responsibility in

organizing responses to SAR incidents, both large and small. Parties to the Agreement commit to provide SAR assistance regardless of the nationality or status of persons who may need it.



“Arctic Council,” Drishti IAS, 17 September 2019 [31]

<https://www.drishtiiias.com/important-institutions/drishti-specials-important-institutions-international-institution/arctic-council>

Overview:

The Arctic Council is the leading 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 in the Arctic.

The Arctic Council works as a consensus-based body to deal with issues such as the change in biodiversity, melting sea ice, plastic pollution and black carbon.

Current & Relevant Information:

Accomplishment of Council:

- The Arctic Council regularly produces comprehensive, cutting-edge environmental, ecological and social assessments through its Working Groups.
- The Council has also provided a forum for the negotiation of three important legally binding agreements among the eight Arctic States.
 - The first, the Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic, was signed in Nuuk, Greenland, at the 2011 Ministerial Meeting.
 - The second, the Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic, was signed in Kiruna, Sweden, at the 2013 Ministerial meeting.
 - Third, the Agreement on Enhancing International Arctic Scientific Cooperation, was signed in Fairbanks, Alaska at the 2017 Ministerial meeting.

“The Arctic Council Produces a New Arctic Science Cooperation Agreement,”
Evan Bloom, Arctic Yearbook, 2016 [32] <https://arcticyearbook.com/arctic-yearbook/2016/2016-commentaries/187-the-arctic-council-produces-a-new-arctic-science-cooperation-agreement>

Abstract:

After more than three years of work, on July 8, 2016 in Ottawa, a Task Force under the Arctic Council reached ad referendum agreement on a new legally-binding agreement among the eight Arctic States that will help reduce obstacles to scientific cooperation in the Arctic. This is an important milestone for the Council, in part because fostering science is one of the most important practical objectives of the Council and this agreement is a major step forward for the Arctic States in that respect. But it is also quite significant because it is the third legally-binding agreement achieved under Arctic Council auspices. The signing of the agreement by each of the foreign ministers of the Arctic States will be one of the key events associated with the next Arctic Council Ministerial meeting.

The Arctic Council is a high-level forum established among Canada, Denmark, Finland, Iceland, Norway, the Russian Federation, Sweden and the United States in 1996 to focus on environmental protection and sustainable development. As the importance of the Arctic in international policy and diplomacy has grown over the past twenty years, the Council has taken on new challenges. The prior legally-binding instruments negotiated under the Council were the Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic

(2011) and the Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic (2009). The latest one, related to science cooperation, will take the Council another step in the direction of being more than a body that facilitates discussion and towards involvement in establishment of legal norms and activities of a regulatory character.

Current & Relevant Information:

The ad referendum Agreement on Enhancing International Arctic Scientific Cooperation was reached based on discussions and negotiations at nine meetings of the Task Force on Scientific Cooperation (SCTF) involving the participation of the eight Arctic States and the indigenous groups known in the Council as Permanent Participants, as well as a number of States and organizations that are permanent observers to the Council.

The Arctic Council Ministers established the Task Force on Scientific Cooperation (SCTF) at the Kiruna Ministerial in 2013. They asked the Task Force to “work towards an arrangement on improved scientific research cooperation among the eight Arctic States.” The Ministers in 2015 in Iqaluit decided to extend the Task Force mandate, including to work towards a legally-binding agreement. The Task Force was co-chaired at the end by the United States and the Russian Federation, and earlier on Sweden was a co-chair as well. The first meeting was held in Stockholm, which was followed by meetings in Helsinki, Reykjavik, Tromsø, Oslo, Copenhagen, Reykjavik again, Arlington, Virginia, and finally Ottawa.

The aim of the agreement is to enhance cooperation in scientific activities in order to increase effectiveness and efficiency in the development of scientific knowledge about the Arctic. It will facilitate access by scientists of the eight States to Arctic areas that each State has identified for purposes of the agreement, including entry and exit of persons, equipment and materials; access to research infrastructure and facilities; and access to research areas. It covers terrestrial, coastal, atmospheric and marine areas, as well as Arctic Ocean areas beyond national jurisdiction. It calls specifically for facilitation of processing of marine scientific research applications under the Law of the Sea Convention, as well as scientific activities that require airborne scientific data collection and that are subject to implementing agreements pertaining to those activities.

The agreement calls for the Parties to promote education, career development and training opportunities for early career scientists to foster future generations of Arctic researchers. The agreement contains provisions regarding the use of traditional and local knowledge that were sought by indigenous groups that are Permanent Participants in the Arctic Council. The agreement supports enhancing and facilitating cooperation on Arctic science with non-Parties and assists the scientists of non-Parties (including Arctic Council Observer States) by providing benefits under the

agreement when they work as partners with Arctic State scientists. The agreement also addresses intellectual property rights.

The agreement calls for designation of competent authorities within each Party to act as points of contact. The Depository Government will be the Kingdom of Denmark.

At this time, the agreement is undergoing final domestic review within the eight Arctic States, with the goal of signature and entry into force at the U.S.-hosted Arctic Council Ministerial Meeting in May, 2017 in Fairbanks, Alaska.

“The Arctic Council's search and rescue agreement: a milestone,” Robert Wilkins, Team North Newsletter, 2011 [33]

<https://www.lexology.com/library/detail.aspx?g=7f38a8a9-b0ad-459c-9312-501906d26899>

Overview:

The Arctic Council (consisting of Canada, Denmark, Finland, Iceland, Norway, the Russian Federation, Sweden and the U.S.A.) achieved a milestone in its short history on May 12, 2011 by concluding, in Nuuk, Greenland, the “Agreement on cooperation on Aeronautical and Maritime Search and Rescue in the Arctic”. This “SAR Agreement” is the Council’s first legally binding international agreement, and resulted from years of effort by the Council’s staff and the governments of the Arctic Council’s Member States (the “Parties”).

Current & Relevant Information:

The Agreement aims to strengthen cooperation and coordination in the Arctic in aeronautical and maritime search and rescue operations carried out on the “territory” of the Parties (meaning their respective land areas, internal waters and territorial seas, together with the superjacent airspace). Such operations are to be carried out on the basis of the International Convention on Maritime Search and Rescue 1979 (the “SAR Convention”) and the Convention on International Civil Aviation 1944 (the “Chicago Convention”), with additional guidelines provided by the International Aeronautical and Maritime Search and Rescue Manual (the “IAMSAR Manual”).

Search and rescue regions are defined for each Party, which are required to establish, operate and maintain an “adequate and effective search and rescue capability” within precisely defined areas of their territory. The “Competent Authority” of each Party is also identified, Canada’s being the Minister of National Defence. The agencies responsible for search and rescue are also identified for each Party, which in Canada’s case are the Canadian Forces and the Canadian Coast Guard. The aeronautical and maritime “rescue coordination center” (“RCC”) of each Party is identified. In Canada, the RCC is the Joint Rescue Coordination Centre in Trenton, Ontario.

Parties may request permission to enter the territory of other Parties for search and rescue purposes (including refueling), and must be advised as soon as possible whether such entry has been permitted and, if so, under what conditions, if any, the mission may be undertaken. The most expeditious border crossing procedure possible, according to law and international obligations, shall apply in such cases.

The Parties are required by the Agreement to exchange information that improves the effectiveness of search and rescue operations (e.g. re communications; search and rescue, fueling, supply and medical facilities; airfields and ports and their refueling and resupply capabilities). They must also promote cooperation, giving consideration to collaboration on many matters (e.g. exchanges of experience and visits, sharing of observations, ship reporting systems, information systems, support services, joint research and development initiatives and exercises). The Parties must meet regularly to consider and resolve issues of practical cooperation. Joint reviews of major joint search and rescue operations are encouraged after such operations have been conducted.

It is to be hoped that the Arctic Council States will implement this Agreement quickly and that it will contribute significantly to enhancing the safety of both shipping and aviation in the far northern regions of our planet. The adoption of the Agreement suggests that in future, the Arctic Council will play a more significant role in creating a new, cooperative and constructive legal regime for the Arctic. In this regard, it is significant that the Council, in its Nuuk Declaration, announced its intention to establish a Task Force to report to Senior Arctic Officials on the development of an international instrument on Arctic marine oil pollution preparedness and response. It also urges the IMO to complete its work on the long-awaited mandatory polar code.

“Agreements,” Arctic Council Working Group: EPPR [34]
<https://eppr.org/resources/agreements/>

Current & Relevant Information:

Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic

The objective of the MOSPA Agreement is to strengthen cooperation, coordination and mutual assistance among the Parties on oil pollution preparedness and response in the Arctic in order to protect the marine environment from pollution by oil.

Signed in Kiruna 15 May 2013 by all eight Arctic States.

[MOSPA Agreement in Arctic Council Open Access Archive](#)

EPPR promotes and ensures the implementation of the Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic (MOSPA Agreement) and Appendix IV: Operational Guidelines that address procedures for

notification and request for assistance, command and control in response operations, joint training and exercises, administrative issues and other recommended measures to facilitate an effective cooperative oil pollution incident response.

Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic

The objective of the SAR Agreement is to strengthen aeronautical and maritime search and rescue cooperation and coordination in the Arctic.

Signed in Nuuk 12 May 2011 by all eight Arctic States.

[SAR Agreement in Arctic Council Open Access Archive](#)

EPPR facilitates the implementation of the Agreement on Cooperation in Aeronautical and Maritime Search and Rescue in the Arctic (SAR Agreement) by focusing on enhancing cooperation, highlighting best practices, exchanging information, analyzing results of exercises, and sharing lessons learned.

“Governments to Sign Unprecedented Deal to Protect Arctic Ocean: How the science-based accord benefits ecosystems, and what comes next,” Steve Ganey, The Pew Charitable Trusts, 1 October 2018 [\[35\]](#)

<https://www.pewtrusts.org/en/research-and-analysis/articles/2018/10/01/governments-to-sign-unprecedented-deal-to-protect-arctic-ocean>

Overview:

Delegations from nine countries and the European Union will gather in Greenland this week to sign an accord to help protect Arctic marine ecosystems that have only recently become accessible because of the melting ice cap. The Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean marks the first time that nations have worked together so proactively to protect an ocean environment before the start of commercial fishing.

This agreement would bar unregulated fishing in the high seas of the central Arctic Ocean for 16 years—or longer, if the parties so agree. During that period, they will implement a Joint Program of Scientific Research and Monitoring to learn more about the changing Arctic marine ecosystem.

Former U.S. ambassador for oceans and fisheries David Balton led the negotiations that produced the agreement and will address the delegations at the signing in Greenland. He is now a senior fellow at the Woodrow Wilson International Center for Scholars in Washington.

Steve Ganey, senior director of The Pew Charitable Trusts' lands and oceans programs, spoke with Ambassador Balton about the importance of the agreement and its implementation.

Current & Relevant Information:

Q: The Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean is a landmark step in marine conservation. Can you explain what it does and why it matters?

A: The agreement embodies two basic commitments by nine nations and the European Union. The first is not to authorize their vessels to engage in commercial fishing in the high seas of the Arctic Ocean until there is enough scientific information with which to manage those fisheries properly. The agreement covers 2.8 million square kilometers, an area roughly the size of the Mediterranean Sea. And while there never has been commercial fishing in this area, the melting of the Arctic ice cap has opened a part of this area to potential fishing for the first time. So that's a major commitment.

The second commitment is to establish and operate a Joint Program of Scientific Research and Monitoring ... to determine when commercial fishing might be viable and how best to manage such a fishery in the future.

Q: An important part of the agreement is that it's not just countries within the Arctic region that signed. Why did this diverse group of countries—from inside and outside the region—feel that this agreement was necessary?

A: As is often the case with international agreements, the underlying interests of the various players were not identical. For the five nations that border this high sea area—the United States, Canada, Greenland/Denmark, Norway, and Russia—a principal interest was to ensure that no high seas fishing would undermine the security of natural resources under their jurisdiction.

And for the countries outside the Arctic region, I think they are looking into the future and anticipating that there will someday, at least potentially, be a commercial fishery. By signing on to this agreement now, it guarantees them a seat at the table when a new agreement may be negotiated that could authorize commercial fishing on a sustainable basis.

I'd add one other thing: For some of the non-Arctic States, particularly the three Asian States and the European Union, they welcomed the opportunity to participate in an international agreement about the Arctic on an equal footing with Arctic countries. The other Arctic-specific agreements that have been negotiated to date have excluded them. This one included them.

Q: For many of us, the Arctic seems like a faraway place, but it's a very special region. Can you describe why it's unique and why this area deserves protection?

A: The Arctic is special because it is warming faster than probably any other part of the planet, more than twice as fast as the global average. And this is bringing about profound change.

The fisheries agreement is, of course, driven by this underlying change. But there are other changes afoot that already are causing serious problems for the people who live and work in the Arctic. The Arctic region is fascinating for a lot of reasons, but I would say the primary reason that it is receiving so much attention has to do with climate change.

Q: This agreement asked that the commercial fishing industry wait for 16 years before starting to fish. What do you expect will happen during that time span?

A: I would first note that the 16-year period will begin only once the agreement enters into force, and that may actually take a little while. And another clarification is that that 16-year period can be extended in five-year increments, if the parties so agree. What will happen in the interim, primarily, is the establishment and operation of this Joint Program of Scientific Research and Monitoring. That's the mission during this period.

Q: Tell us more about that program and what kinds of things it will explore as part of the process to set up the scientific baselines.

A: Some of that has not yet been determined. But I can say that, in parallel with the negotiations, there were a series of meetings of scientists to begin laying the groundwork for what will become the joint program. The agreement creates a firmer platform on which to actually build this program and get everyone participating.

Some of the Arctic states, particularly Russia and the U.S., have had their own national science programs in the Arctic. The joint program will also work in coordination with these national programs that have been underway for some time.

A principal objective of the joint program is to determine how the ecosystems—and I use that word in plural, because there are probably more than one—in the central Arctic Ocean are changing. And those changes in the range and migration of fish stocks and other fauna moving up into the Arctic could affect the decision about when and how to launch commercial fisheries in the future.

Q: What do you consider the most important things to get right in coordinating the science over the next 16 years?

A: There are a lot of things that we do need to get right. One reality is that there are limited resources for scientific research, generally, in the Arctic. And some of these governments, including the United States, have a difficult time in their own capitals putting aside or reserving money for Arctic fisheries research. There are other compelling needs. Particularly from a fishery science point of view, a lot of these

governments, perhaps reasonably, may prefer to spend money studying ocean areas where there are already active fisheries.

Nevertheless, creating this joint program and housing it under the agreement will allow scientists from each of these countries to make a stronger case to fulfill the commitment to create and operate this program for the Arctic. So that's one of the things to get right: making sure there are enough resources and attention devoted to doing the marine science work necessary to fulfill this commitment.

Q: How much do you think countries are willing to invest to ensure that the necessary scientific research is conducted and followed?

A: In my experience, the signing and bringing into force of such an agreement helps to propel such investment forward. It focuses government's attention at a higher level. And usually that means more resources will actually flow.

Q: You've been around a lot of fishery negotiations over your career. How important are agreements like this? And how well do they work over the long term?

A: These deals are a little bit like snowflakes: No two are exactly alike. And this one is not typical. This is an agreement not to fish ... in an area where there never has been commercial fishing. It's unusual in that way. And so, it's a little difficult to predict, even based on the precedents, how effective it will be.

Nevertheless, my sense is that this one should work pretty well and probably better than some of the others because, as we sit here today, there's no countervailing pressure to initiate commercial fisheries right away. There is space and time that have allowed the governments to agree to this pause and to actually undertake the scientific research necessary.

Q: Do you think all parties will honor the agreement for its duration?

A: I do. The two commitments that I described embedded in this agreement are not all that hard to fulfill. Yes, countries need to come up with the resources necessary to conduct the joint program in a robust way. I think that will happen. I think this agreement will be honored and will succeed in the ways that negotiators hoped it would.

Q: Is there anything else that you would like to mention about this?

A: This fisheries agreement for the central Arctic Ocean was not negotiated in a vacuum. There has been a lot of work in the last decade to try to strengthen various regimes of governance and to improve international cooperation about the Arctic. Through the Arctic Council process, there was an agreement to cooperate on search and rescue in the Arctic. That was in 2011.

Two years later, again in the council, members negotiated another treaty to cooperate on potential oil pollution in the Arctic. And then the third council agreement was to promote scientific research more generally in the region, not focused on the Arctic Ocean or fisheries in particular. Through the International Maritime Organization, governments have also established stronger rules relating to shipping in the Arctic and the Antarctic, the so-called Polar Shipping Code.

And it's a really interesting question to me how, if at all, should these various efforts be coordinated. We don't have an answer to that yet. But with all this activity underway, at least that is a reasonable question to ask. Is there more that we need to do to improve Arctic governance to create governance of the Arctic Ocean heading into the future? That will be a key question.

“Will the Task Force on Arctic Marine Cooperation Deliver?” David Balton, Wilson Center, 2 October 2018 [36] <https://www.wilsoncenter.org/article/will-the-task-force-arctic-marine-cooperation-deliver>

Overview:

The profound changes that have already come to the Arctic—and the prospect of even more significant changes in the future—have prompted Arctic nations and peoples to reassess the international arrangements they created to help them respond and adapt to such changes. In just a few short years, a number of initiatives to strengthen the governance of the Arctic region have emerged. But as David Balton writes, more needs to be done.

Current & Relevant Information:

Over the past decade, the Arctic Council (AC) has evolved into the pre-eminent international forum for addressing Arctic issues. Among other things, it now boasts a permanent Secretariat and an Indigenous Peoples Secretariat. It has also helped establish a number of other entities, including the Arctic Economic Council, the Arctic Coast Guard Forum and the Arctic Offshore Regulators' Forum.

The AC has also served as the forum for negotiating and concluding three new binding agreements since just 2011: The Arctic Search and Rescue Agreement, the Arctic Marine Oil Pollution Agreement, and the Arctic Science Cooperation Agreement. Two other agreements—the Polar (Shipping) Code and the Arctic Fisheries Agreement—involved additional states and were developed outside the Arctic Council process.

But another notable and potentially consequential effort to strengthen the governance of the Arctic—the Task Force on Arctic Marine Cooperation—appears to have become sidetracked.

In 2015, the Arctic Council created the task force with a mandate “to assess future needs for a regional seas program or other mechanism” for the Arctic. The task force

worked actively for two years and delivered a well-crafted report with recommendations in 2017. Highlighting that the Arctic Ocean is experiencing unprecedented change, the task force concluded that Arctic nations would likely need “additional new institutional capacity” to tackle the challenges that would result.

Terms of Reference Needed

In May 2017, the Arctic Council Ministers “recognize[d] the increasing need for regional cooperation to promote the conservation and sustainable use of the Arctic marine environment” and gave the task force a new mandate: to present “terms of reference for a possible new subsidiary body, and recommendations for complementary enhancements to existing Arctic Council mechanisms, for consideration by Ministers in 2019.”

The task force has met twice during the Finnish chairmanship of the AC. At this point, it appears unlikely to fulfill the key part of its current mandate—namely, to present the requested terms of reference. Senior Arctic Officials (SAO’s) have instead suggested that consideration of any new subsidiary body should await the completion of the AC’s first-ever strategic plan, currently under development.

Looking ahead, those involved will need to consider further steps in improving Arctic governance to meet the region’s needs, including conserving Arctic biodiversity. The Arctic Council has room to grow in this regard without losing its flexibility or inclusiveness. Its members should provide financial and other resources to the AC in a more transparent and predictable manner, a necessary predicate to any call for an increase in such resources. The AC should also streamline and consolidate its dispersed secretariat structures.

With respect to the five new binding agreements, the parties to each of them must ensure they are implemented effectively—a process that has already begun in the case of the Search and Rescue and the Marine Oil Pollution agreements. Another challenge will be to figure out how these instruments—along with the Arctic Council and the other international bodies that address Arctic issues—should interact with one another to form a well-integrated Arctic governance system.

A final thought: If the Task Force on Arctic Marine Cooperation does not present terms of reference for a new Arctic Council subsidiary body that would help Arctic states and peoples to cooperate on Arctic Ocean issues, a new initiative—such as a regional seas program—should be launched to create such a mechanism outside the Arctic Council framework. This mechanism could draw inspiration from similar mechanisms elsewhere, but should be tailored to meet the specific needs of the Arctic region and developed in a transparent manner with the involvement of Arctic stakeholders.

2. Foreign Government/Nation Interests and Influences:

“Arctic Governance: Synthesis and assessment of Arctic governance mechanisms and recent policy actions,” Flavius Mihaies, The Aspen Institute: Energy and Environment Program [37]

<https://assets.aspeninstitute.org/content/uploads/files/content/upload/23%20Arctic%20Governance%20Synthesis%20COLOR.pdf>

Summary:

Summary of existing architecture for the governance and management of the Arctic

Regional forums:

While several institutions are involved in the governance of the Arctic marine area, the most prominent among them is the Arctic Council. The Arctic Council was established as a high level inter-governmental forum in 1996 to “provide a means for promoting cooperation, coordination and interaction [...] on common arctic issues, in particular issues of sustainable development and environmental protection in the Arctic”.

The Arctic Council was established by non-legally binding declaration and is a consensus-based organization. Decisions of the Council do not have any binding effect on individuals.

The eight Arctic states are Members of the Arctic Council and eight Non-Arctic States are Official Observers. A variety of governmental organizations and NGO’s also hold observer status. Of particular interest, the Arctic Council establishes significant participation by the indigenous peoples of the Arctic, whom the Council Members must consult prior to any consensus decision-making.

The Council’s current responsibilities pertain to research, advising on policy, and disseminating voluntary guidelines on the main topical areas that it is concerned with, including climate change, sustainable development, Arctic monitoring and assessment, persistent organic pollutants and other contaminants in the Arctic and other issues covered by its six Working Groups.

According to Arctic expert Brooks Yeager, the Arctic Council has made major contributions to the Arctic region, by “identifying issues of importance to the conservation of the Arctic environment and the well-being of Arctic people, and in developing assessments that have become the basis for cooperative action by the Arctic governments.” The Council has also issued guidelines and manuals of good practices, particularly related to the Arctic marine area.

Regional Governance:

The Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR) is the legal instrument guiding international cooperation on the protection of the marine environment of the North-East Atlantic.

The OSPAR Convention “covers the regulation of all human activities which can have an adverse effect on the ecosystems and the biodiversity in the North East Atlantic, with the explicit exception of fisheries management and with certain limitations for the regulation of shipping”. The OSPAR Commission was tasked to implement and monitor the Convention and can adopt measures and programs in the form of both legally binding decisions and non-legally binding recommendations.

There are currently fifteen contracting parties to the OSPAR Convention, all from Europe. The European Commission also participates on behalf of the European Union.

OSPAR has been cited as an example of the successful implementation of ecosystem-based management at the international level, even though the OSPAR Convention does not explicitly refer to the ecosystem approach.

Global governance:

The United Nations Convention on the Law of the Sea (UNCLOS) establishes a comprehensive binding framework for the rights and responsibilities of nations in their use of the world's oceans.

To date 156 countries and the European Community have joined in the Convention. The United States is not a member. However, the Convention is accepted as a codification of the customary international law.

Certain UNCLOS articles are directly relevant to the Arctic, such as Article 118 234 (Ice-covered areas) that extend environmental protection powers to Arctic coastal States within the limits of their exclusive economic zones (EEZ) if ice is present in an area for most of the year, and Annex II (Commission on the Limits of the Continental Shelf) and Article 76 (Definition of the continental shelf), which led to the current submissions of “outer continental shelf” sovereignty claims (extending beyond the 200 nautical miles EEZ limit) by some Arctic states to the Commission established by the UNCLOS. In addition, Article 123 calls on the states bordering semi-enclosed seas to cooperate through an “appropriate regional organization”. If the Arctic maritime area were so classified, the littoral States would have greater obligations to cooperate in regard to environmental protection.

The UNCLOS has two implementation agreements, the Part XI Deep-Sea Mining Agreement and the Fish Stock Agreement.

The International Maritime Organization (IMO) is the United Nations' specialized agency that was tasked with developing and maintaining a comprehensive regulatory framework for shipping with a focus on ship safety. The jurisdiction of the

IMO includes safety, environmental concerns, legal matters, technical co-operation, maritime security and the efficiency of shipping.

As a United Nations agency, the IMO is composed of 168 Member States and three Associate Members (Hong Kong, China; Macao, China; and Faroe Islands, Denmark).

Regarding the Arctic, IMO Guidelines for Ships Operating in Arctic Ice-covered Waters, also known as the Polar Code, created a unified set of voluntary classification standards for ships navigating in both Polar regions. According to Arctic governance expert Lynda Nowlan, the Polar Code “buil[t] upon existing treaties administered by the IMO, such as the International Convention for the Prevention of Pollution from Ships (MARPOL), and associated safety and training treaties. Protocols under the LRTAP Convention also contain specific references to the Arctic environment”.

Current & Relevant Information:

Opportunities under existing policy directives and initiatives

Both Arctic and non-Arctic nations are sharpening their focus on Arctic-related policy, as expressed in recent declarations by the largest Arctic states and the European Union. These expressions have in common (1) an affirmation of the growing strategic interest in the region, in terms of resource exploitation and transport, (2) endorsement of the UNCLOS but rejection of an Antarctic-like treaty, (3) allowance of the need for new cooperative arrangements to address complex environmental stewardship responsibilities, and (3) de-facto defense and military forces build-up (while the EU emphasizes a priority on environmental protection and the well-being of indigenous populations).

The Ilulissat declaration:

The US, Canada, Russia, Denmark and Norway issued the Ilulissat Declaration on May 29, 2008.

While the Declaration dismisses calls for a new international treaty, similar in nature to the Antarctic Treaty (“We [...] see no need to develop a new comprehensive international legal regime to govern the Arctic Ocean”) it reflects a minimum consensus of the Arctic coastal states, particularly in their support of the UNCLOS as the legal regime for the Arctic, and states a commitment for the Arctic states to “tak[e] steps in accordance with international law both nationally and in cooperation among the five states and other interested parties to ensure the protection and preservation of the fragile marine environment of the Arctic Ocean.”

EU Communication on the Arctic:

On November 20, 2008, the European Union published a “Communication on the Arctic”. This position paper is a comprehensive review of the EU interests in the Arctic.

The Communication states the need to develop a holistic ecosystem-based management approach for the Arctic and emphasizes that the involvement and active participation of Arctic indigenous people is essential to supporting measures in the region.

The document prioritizes indigenous population well-being and environmental stewardship over the use of strategic resources and transport line communications. To achieve its goals it “Press[es] for the introduction of binding international standards, building inter alia on the guidelines of the Arctic Council and relevant international conventions.” Yet, similar to the US position it states “The full implementation of already existing obligations, rather than proposing new legal instruments should be advocated. This however should not preclude work on further developing some of the frameworks, adapting them to new conditions or Arctic specificities.” It instructs the EU to “Explore the possibility of establishing new, multi-sector frameworks for integrated ecosystem management.” Finally, it recalls that the “The European Parliament has recently highlighted the importance of Arctic governance and called for a standalone EU Arctic policy urging the Commission to take a proactive role in the Arctic”.

In a subsequent speech, Joe Borg, Member of the European Commission, Responsible for Fisheries and Maritime Affairs, re-stated the EU position that that there is a need to allow for greater international involvement in Arctic. The Commissioner proposed that the IMO Polar Code be changed and become binding and that part of the Arctic could be designated as “particularly sensitive sea area” under the PSSA IMO regime.

“Arctic Region,” Michael Byers, byers.typepad.com, March 2010 [38]
https://byers.typepad.com/files/96_arctic_region_revaut_byers_20100302-1.pdf

Overview:

The Arctic is variously defined as the area to the north of the tree-line, north of the 10° isotherm in July, or north of the Arctic Circle (66.5° latitude). In addition to territories belonging to the five Arctic Ocean coastal States—Canada, Denmark (→ Greenland), Norway, Russia and the United States—parts of Sweden and Finland lie north of the Arctic Circle, as do parts of Iceland’s → continental shelf.

Unlike the → Antarctica, a continent surrounded by oceans, the Arctic is an ocean surrounded by continents. For this reason, it is governed in large part by the → law of the sea, a body of unwritten but nevertheless binding rules of → customary international law which were codified into the 1982 United Nations Convention on the Law of the Sea.

With the exception of Hans Island, a tiny 1.3 km² islet between Greenland and Canada's Ellesmere Island, there are no disputes over territory in the Arctic. However, there are several existing or potential disputes over maritime boundaries and possible international straits (→ Straits, International) that will likely become more important due to environmental changes, rising prices for natural resources and new security concerns.

Climate change is more apparent in the Arctic than anywhere else on earth. In addition to rising temperatures caused by greenhouse gas emissions, change is being driven by 'feedback loops' arising out of the precarious balance between water and ice. An increase in average annual temperature of just a fraction of one degree can transform a large expanse of highly reflective sea-ice into dark, heat-absorbing open water. In 2004, the Arctic Climate Impact Assessment reported that the average extent of sea-ice cover in summer had declined by 15–20% over the previous 30 years. The rate of ice-melt has accelerated since then, with a loss of one million km² in 2007 alone.

When a complete, late summer melt-out of the sea-ice occurs, Arctic waters will become navigable 12 months a year. This is because a complete melt-out will spell the end of the 'multi-year' ice that, after surviving the summer, becomes thicker and harder as a result of the accretion of new ice and the leaching out of sea-salt during the warming-and-cooling cycle. From that point onward, the Arctic Ocean will resemble the → Baltic Sea where ice-strengthened ships and icebreaker-escorted convoys can safely operate in winter.

Persistent organic pollutants ('POPs') also have a disproportionate effect upon the Arctic. These toxic chemicals are carried north by a process of global distillation involving volatilization at low latitudes and condensation at high latitudes, also known as the 'grasshopper effect'. The Stockholm Convention on Persistent Organic Pollutants ('Stockholm Convention') was adopted in 2001 and has since been ratified by more than three quarters of the world's countries. It requires specific steps to reduce or eliminate the production of these chemicals and to dispose safely of existing stocks (→ Environment, International Protection). In May 2009, the Stockholm Convention was amended to include nine new chemicals, some of which are still widely used and will now be phased out.

Other Arctic-related environmental instruments include the 1916 Convention between the United Kingdom and the United States of America for the Protection of Migratory Birds in Canada and the US; the 1973 Polar Bear Treaty between Canada, Denmark, Norway, Russia and the US (Agreement on the Conservation of Polar Bears); the 1987 Agreement on the Conservation of the Porcupine Caribou Herd between Canada and the US; and the widely ratified—though not yet by Russia or the US—1991 Espoo Convention on Environmental Impact Assessment in a Transboundary Context. The Polar Bear Treaty requires that its parties take 'appropriate action to protect the ecosystems of which polar bears are a part' (Art. 2

Polar Bear Treaty). It prohibits the killing of bears except for scientific or conservation purposes or hunting 'by local people using traditional methods in the exercise of their traditional rights' (Art. 3 Polar Bear Treaty). The Espoo Convention requires that its parties conduct environmental impact assessments early in the planning process and notify and consult on projects likely to have a significant adverse impact across boundaries.

The Arctic is rich in hydrocarbons, with the US Geological Survey estimating in 2009 that the region contains 83 billion barrels of oil and 44 trillion cubic metres of natural gas (Gautier). Most of the projected reserves are located in waters less than 500 metres deep and will likely fall within the uncontested jurisdiction of one or another Arctic Ocean coastal State.

As the ice melts, ships will increasingly be used to transport oil and gas from and through the Arctic. Oil tankers entail particular risks, since Arctic ecosystems are exceedingly fragile, oil degrades and dissipates slowly at cold temperatures, and long distances would render cleanup efforts expensive and time-consuming (→ Marine Pollution from Ships, Prevention of and Responses to). Other forms of shipping will be drawn to the Northwest Passage which offers a 7000 km shortcut between East Asia and the Atlantic Seaboard of the US, as compared with the usual route through the → Panama Canal. On the Russian side of the Arctic Ocean, the Northern Sea Route is already being used by cargo vessels.

The → International Maritime Organization (IMO) spent years negotiating an Arctic Code for shipping, but the document was downgraded to a set of guidelines before it was adopted in 2002. The Guidelines for Ships Operating in Arctic Ice-covered Waters ('IMO Guidelines') establish seven 'polar classes' for vessels—with PC1 applying to the most robust vessels capable of year-round operation in all Arctic ice-covered waters—and include recommendations aimed at the protection of crew and passengers (eg 'All lifeboats carried by Polar Class ships should be of the fully enclosed type to provide adequate shelter from the environment' [Art. 11.5.1 IMO Guidelines]) and the marine environment (eg 'No pollutants should be carried directly against the shell [of a vessel] in areas at significant risk of ice impact' [Art. G-2.2 IMO Guidelines]).

In 2009, the Arctic Council released the Arctic Marine Shipping Assessment Report which highlighted the environmental risks, especially from oil spills, but also from 'ship strikes on marine mammals, the introduction of alien species, disruption of migratory patterns of marine mammals and anthropogenic noise produced from marine shipping activity' (at 5; → Environmental Impact Assessment; → Marine Mammals). The Assessment urged Arctic Council Member States to liaise with international organizations, promote the development and mandatory application of the IMO Guidelines, and harmonize domestic safety regimes.

Current & Relevant Information:

Current International Legal Situation

Denmark and Canada only learned of their dispute over Hans Island in 1973 when they were delimiting the continental shelf boundary between Greenland and Canada. Instead of delaying the negotiations, they simply drew the boundary line up to the low-water mark on one side of the island and continued it from the low-water mark on the other. In 2005, Canada and Denmark affirmed that the dispute concerned the land only, and not the surrounding seabed or water column, and that they were working cooperatively to reach a solution.

The → Spitsbergen/Svalbard archipelago was recognized as Norwegian territory in the 1920 Treaty concerning the Archipelago of Spitsbergen ('Spitsbergen Treaty'), subject to the right of the other parties to engage in commercial activities there. In 1930, the Norwegian Government sought to obtain commercial rights in the Sverdrup Islands, but recognized Canadian sovereignty in an exchange of notes before making that request, which Canada subsequently denied.

In the Beaufort Sea, Canada and the US both claim a 21,436 km² pie-shaped sector located directly northeast of the land border between Alaska and the Yukon Territory. The dispute, which did not become apparent until Washington protested the boundary line that Ottawa was using when issuing oil and gas concessions in 1976, turns on the application of a 1825 treaty between Russia and Great Britain (Convention between Great Britain and Russia concerning the Limits of their Respective Possessions on the North-West Coast of America and the Navigation of the Pacific Ocean ['Convention between Great Britain and Russia']), the two countries which, at the time, held title over Alaska and Canada. The treaty sets the eastern border of Alaska at the 'meridian line of the 141st degree, in its prolongation as far as the frozen ocean' (Art. III Convention between Great Britain and Russia). Canada claims that the maritime boundary, like the land border, follows the 141° W meridian straight north. The US position is that 'as far as the frozen ocean' means the boundary follows the 141st meridian only as far as the coast. Offshore, Washington argues that a general principle of equity requires that every point on the boundary be an equal distance from each of the two adjacent coasts (→ Equity in International Law). Since the coast of Alaska, the Yukon and Northwest Territories slants east-southeast, such an 'equidistance' line would give more of the ocean and seabed to the US. For more than three decades now, the two countries have treated the matter with restraint. In 1977, they even considered the possibility of a joint development zone for hydrocarbons.

The negotiators who delimited the boundary between Greenland and Canada in 1973 stopped when they reached the Lincoln Sea, which lies directly north of Greenland and Ellesmere Island. As a result, the 200 nautical miles of continental shelf boundary to the north was left unresolved. In 1977, Canada claimed a fisheries zone in the Arctic Ocean (→ Fishery Zones and Limits). The zone was bounded in the east by a Lincoln Sea boundary that was based on the equidistance principle,

using the low-water line of the coasts and several fringing islands as reference marks. Three years later, Denmark drew → baselines around Greenland. But unlike Canada's claim, the Danish baselines use tiny (10 km²) Beaumont Island as a reference point. This had the effect of pushing the equidistance line slightly westward, adding two isolated, lens-shaped areas of 105 km² and 115 km² to the Greenland side. The Lincoln Sea dispute has been treated with restraint by both countries and could be left unresolved. It does not affect the delimitation of the extended continental shelf boundary between Denmark and Canada more than 200 nautical miles from shore.

In the → Barents Sea, Norway and Russia disagree on the boundary between their respective continental shelves, from the Varangerfjord on the mainland coast to the Arctic Ocean north of Spitsbergen/Svalbard. Within 200 nautical miles from shore, they also disagree on the boundary between their → exclusive economic zone[s]. The entire area in dispute amounts to 155,000 km², or roughly 11% of the Barents Sea.

Russia's position is that a common maritime boundary should be drawn along a sector line at longitude 32° 04' 35" E. It relies on Arts 74 and 83 United Nations Convention on the Law of the Sea, as well as the decision in the → North Sea Continental Shelf Cases, to argue that the 'relevant circumstances' (North Sea Continental Shelf Cases (Federal Republic of Germany/Denmark; Federal Republic of Germany/Netherlands) [1969] ICJ Rep 3, para. 101). involved in an 'equitable solution' (ibid at para. 92) include the shape and length of the Russian coast, the relatively large population living there, Russia's fishing, shipping and other economic interests, and the fact that the Treaty concerning the Archipelago of Spitsbergen ('Svalbard Treaty') precludes points on Spitsbergen/Svalbard being used to influence a delimitation.

Norway argues that equity requires the drawing of a median line from Varangerfjord—where the agreed land border meets the sea—to the easternmost edge of the Spitsbergen/Svalbard archipelago. But Oslo has also expressed a willingness to negotiate the consideration of additional geographic features. In the meantime, Norway and Russia have imposed a moratorium on hydrocarbon-related activities in the disputed zone. In July 2007, they agreed on the delimitation of their maritime boundaries in the Varangerfjord out to approximately 20 nautical miles from shore.

In the → Bering Sea and Chukchi Sea, a 1600 nautical mile single maritime boundary between the US and Russia has been provisionally settled through a 1990 treaty signed by the US and the Soviet Union (Agreement between the Government of the United States of America and the Government of the Union of Soviet Socialist Republics on the Maritime Boundary). North of 65° 30' N the boundary follows the 168° 58' 37" W meridian into the Arctic Ocean 'as far as permitted under international law' (Art. 2 (1) Agreement between the US and Soviet Union). South of

65° 30' N, the boundary is defined by 87 turning points. Although the treaty has not yet entered into force because of political sensitivities within Russia, both countries are abiding by its provisions.

Disputed maritime boundaries around → Jan Mayen have been resolved through → conciliation or adjudication. In 1980, Norway and Iceland established a conciliation commission that recommended a common maritime boundary and joint development regime in a 45,470 km² zone between the Norwegian island and Iceland. The commission's recommendations led to a 1981 treaty which delimited a common maritime boundary and accorded Norway a right to 25% participation in hydrocarbon activities in the identified zone. In 2008, the two countries adopted a follow-up treaty setting out the framework for cooperative oil and gas exploration.

In 1988, Denmark instituted proceedings against Norway in the → International Court of Justice (ICJ) over the boundary between Jan Mayen and Greenland (→ Maritime Delimitation between Greenland and Jan Mayen Case [Denmark v Norway]). The Court took the median line as its point of departure before examining possible factors justifying adjustments. Two such factors were identified: an absence of proportionality in the length of the relevant coastlines; and the need to ensure access to fisheries. Norway and Denmark were attributed 57% and 43%, respectively, of the 64,600 km² disputed zone.

Special Problems of International Law

The Northwest Passage is a web of several possible shipping routes through Canada's High Arctic, a vast archipelago made up of about 19,000 islands. The US argues that the Northwest Passage is an international strait, which would bring it under the regime of → transit passage, while Canada argues that it constitutes → internal waters subject to full coastal State control (see also → Northwest Passage [Canadian-American Controversy]). An intermediate possibility is that the Northwest Passage could be → territorial sea subject to the right of → innocent passage.

The US argues that the existence of an international strait is determined by geography only. According to JC Kraska of the US Navy, 'if the water connects one part of the high seas or EEZ to another part of the high seas or EEZ, it is a strait... [T]here is no authority for the idea that a strait is only a strait if it meets a certain minimum threshold of shipping traffic' (Kraska 274).

Canada's position is based on the 1949 → Corfu Channel Case which set forth two criteria for an international strait, namely its geographical situation and the fact of its being used for international navigation. As of 2006, only 69 voyages had occurred through the Northwest Passage, with all but two of the foreign vessels requesting and receiving permission from Canada.

Canada sought to buttress its position in 1986 by drawing straight baselines around the archipelago. In doing so, Canada relied on customary international law as

articulated in the 1951 → Fisheries Case (United Kingdom v Norway), rather than the 1958 Convention on the Territorial Sea and the Contiguous Zone or the United Nations Convention on the Law of the Sea, neither of which it had ratified. It further argues that the baselines are consolidated by the historic use and occupation of the Inuit who have hunted, fished, travelled and lived on the ice of the Northwest Passage for millennia, and who explicitly support Canada's claim. The baselines, however, attracted diplomatic protests from the US and the European Union, with the latter focusing on the unusual length of some of the baselines rather than their adoption as such. Apart from the US, no country has ever explicitly opposed Canada's Northwest Passage claim.

In January 1988, the US and Canada concluded an Agreement on Arctic Cooperation and the Exchange of Notes concerning Transit of the Northwest Passage which provides that US Coastguard icebreakers will seek Canada's permission before using the Northwest Passage, and that Canada will consent. The Agreement is explicitly an agreement-to disagree which specifies that it does not affect the two countries' respective positions 'on the Law of the Sea in this or other maritime areas' (at 143).

The Northwest Passage dispute has given rise to one advancement in international law, namely Art. 234 United Nations Convention on the Law of the Sea, which allows coastal States to enact laws against maritime pollution out to 200 nautical miles when almost year-round ice creates exceptional navigational hazards. Art. 234 United Nations Convention on the Law of the Sea is sometimes referred to as the 'Canadian exception' because it was prompted by the adoption of the 1970 Arctic Waters Pollution Prevention Act (Canadian Legislation on Arctic Pollution and Territorial Sea and Fishing Zones), which imposed strict safety and environmental requirements—including a prohibition on the dumping of waste—on all shipping within 100 nautical miles of Canada's Arctic coast. The US initially issued a protest, expressing concern that the Act could constitute a precedent for other assertions of jurisdiction on the → high seas, but later accepted the Act as legal. In 2009, Canada amended the Arctic Waters Pollution Prevention Act to extend its application to the full 200 nautical miles permitted under the United Nations Convention on the Law of the Sea.

Elsewhere, the Bering Strait is an international strait connecting the Pacific and Arctic Oceans. Russia and the US cooperate closely on the provision of navigation aids and search-and-rescue there. The US claims that the Northern Sea Route along the Russian coast is an international strait but no vessels have ever challenged Russia's position that the waterway constitutes internal waters.

No country will ever 'own' the geographic North Pole, which is located roughly 400 nautical miles to the north of any land, including Greenland, Ellesmere Island and the Russian archipelago of Franz Josef Land. This is because coastal States do not possess full → sovereignty beyond the 12 nautical mile territorial sea. Instead, they

have certain sovereign rights out to 200 nautical miles and sometimes farther, depending on the shape and sediments of the seabed and according to the criteria set out in the United Nations Convention on the Law of the Sea. Art. 76 United Nations Convention on the Law of the Sea specifies that coastal States may have rights over an 'extended continental shelf' if the depth and shape of the seabed and the thickness of underlying sediments indicate a 'natural prolongation' of the shelf closer inshore. If Russia, Denmark or Canada can scientifically demonstrate that the seabed at the North Pole is a 'natural prolongation' of its continental shelf, the country in question will have the exclusive right to exploit the resources of that particular area of seabed—and nothing more. The water column and sea ice will remain part of the high seas.

The sheer size of the Arctic Ocean and the lengths of uncontested coastlines mean that Russia might hold sovereign rights over an expanse of seabed larger than Western Europe. Canada, with the world's longest coastline, will also have a sizable extended continental shelf. Countries that do not border on the Arctic Ocean might feel left out, but because the United Nations Convention on the Law of the Sea applies globally, many have the opportunity to assert similar rights along their coastlines.

Apart from the technical exercise of collecting and assessing the scientific evidence, the only significant issue concerns possible overlaps between the areas over which rights are asserted. Overlaps can occur where there are disputed maritime boundaries closer inshore, since the dividing line beyond 200 nautical miles is usually simply an extension from the starting point. The disputes between Canada and the US in the Beaufort Sea and Norway and Russia in the Barents Sea are of this character. A mid-ocean overlap is also possible between Russian, Canadian, and Danish assertions of rights along the Lomonosov Ridge, an undersea mountain range that bisects the Arctic Ocean near, but not at, the geographic North Pole.

Art. 76 United Nations Convention on the Law of the Sea requires that scientific evidence of a natural prolongation be submitted to the United Nations Commission on the Limits of the Continental Shelf for review and recommendations. Russia made an initial submission in 2001 and, after a request from the Commission for more data, is preparing a further submission. Canada is due to make its submission in 2013; Denmark in 2014. However, the Commission will not make recommendations concerning overlaps in the rights asserted by different countries. It is up to the countries themselves to negotiate a solution, refer the matter to an international court or tribunal, or simply agree to disagree and not issue exploration licenses for the contested area.

In response to widespread misreporting about possible conflicts over Arctic oil and gas, Denmark hosted a summit of the Arctic Ocean coastal States at Ilulissat, Greenland, in May 2008 (Arctic Ocean Conference 'Ilulissat Declaration'). The summit culminated in the Ilulissat Declaration in which all five States reaffirmed their

commitment to resolving disputes peacefully within the existing framework of the law of the sea. It now appears that Russia, Denmark and Canada might agree to make joint or coordinated submissions to the UN Commission on the Limits of the Continental Shelf, or even to delimit the boundaries between their extended continental shelves in advance of submitting. However, any such steps will require a much better scientific picture of the seabed, which the three countries are now working to achieve.

New Instruments and Actors

Established in 1976, the Arctic Council is an intergovernmental forum for promoting cooperation, coordination and interaction among the Arctic States. In addition to its eight Member States (Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden, and US), the Arctic Council includes organizations of Arctic → indigenous peoples as 'permanent participants'. The Arctic Council focuses on issues of sustainable development and environmental protection and, by agreement of its Member States, does not deal with matters related to military security. The Arctic Council has commissioned a number of influential reports, including the Arctic Climate Impact Assessment 2004 and the Arctic Marine Shipping Assessment Report 2009.

In May 2008, some proponents of the Arctic Council were disappointed when Denmark invited the four other Arctic Ocean coastal States to Ilulissat, Greenland, without also inviting Finland, Iceland and Sweden. Similar disappointment was felt when consideration of an application for observer status from the European Union ('EU') was postponed in April 2009, though EU members France, Germany, Poland, Spain, the Netherlands and Great Britain already have such status. The postponement may have been related to EU efforts to assert rights and interests in the Arctic, based on climate change impacts elsewhere, that go beyond the rules set out in the United Nations Convention on the Law of the Sea.

The inclusion of indigenous groups within the Arctic Council is reflective of the important role played by these → non-governmental organizations in diplomacy and international law-making with respect to the Arctic (→ Environment and Indigenous Peoples). Indigenous peoples have lived in the Arctic for millennia. Today, their traditional way of life is threatened by rapid cultural and technological change, climate change, shipping and resource exploitation. In some Arctic States, such as Canada and Denmark, the traditional use and occupancy of indigenous peoples constitutes an element of sovereignty claims. Indigenous peoples have concluded a number of agreements with national governments, such as the 1971 Alaska Native Claims Settlement Act and the 1993 Nunavut Land Claims Agreement (→ Indigenous Peoples, Treaties with). Nunavut, with an 85% indigenous population, has a majoritarian government system that effectively gives the Inuit self-government. Greenland, which was accorded home rule in 1979, is 88% Inuit. In 1985, Greenlanders voted to leave the European Economic Community and, in

2008, to take on additional governing powers. As a result, Denmark is now responsible only for Greenland's defence, foreign affairs, financial policy, and an annual transfer of 3.4 billion Danish krone.

Some Arctic indigenous groups are transnational in character, with the Inuit Circumpolar Council representing the Inuit of Greenland, Canada, Alaska and Russia. In 2009, the Inuit Circumpolar Council issued 'A Circumpolar Inuit Declaration on Sovereignty in the Arctic.' The document makes a strong political and moral case for Inuit involvement in any inter-State negotiations concerning sovereignty disputes and indicates specific concern about the exclusion of the Inuit from the 2008 summit in Ilulissat, Greenland. The Declaration also goes further, arguing that the Inuit have a right to be involved that is derived from international legal instruments such as the 2007 United Nations Declaration on the Rights of Indigenous Peoples (UNGA Res 61/295 'United Nations Declaration on the Rights of Indigenous Peoples' [13 September 2007] GAOR 61st Session Supp 49 vol 3, 15).

Evaluation

The Arctic is in crisis. The ice and the permafrost—the foundations of its highly specialized ecosystems—are literally melting away, and with them the traditional way of life of Arctic indigenous peoples. A vast, ice-bound, impenetrable ocean is being transformed into a new Mediterranean Sea, a 'middle sea' over which the world's powers will trade. Easier access and rising oil and gas prices could spark twenty-first-century gold rushes, challenging the political will and governance capabilities of national governments who, for decades, have largely ignored the Arctic.

Proposals have been made to develop an environment-oriented international regime for the Arctic that is modelled on the Antarctic Treaty (See eg A Grimaldi 'Governance of Both Poles' [2009] 326 Science 1042), as well as a Nuclear Weapons Free Zone. Achieving multilateral treaties on these matters will not be easy, given the strategic importance of the Arctic for the US and Russia; the significant populations that live there, especially in Alaska and Russia; and the considerable powers already vested in the Arctic Ocean coastal States under the United Nations Convention on the Law of the Sea.

Fortunately, sovereignty and international cooperation are not incompatible. Sovereign rights can sometimes facilitate cooperation by providing clear jurisdiction for regulating shipping and the extraction of natural resources, and for guarding against non-state security threats. International law results from centuries of inter-State cooperation, as countries have defined the boundaries between their respective jurisdictions and worked together in pursuit of common goals. The Arctic, much like the high seas globally, creates opportunities for the coordinated deployment of existing national rights on the model of the → Proliferation Security Initiative (PSI).

International law will always play a central role in the Arctic: preventing inter-State conflict, guarding against non-State security threats, protecting the environment and promoting economic development. But the most important, long-term function of agreed rules in the region may well concern the root cause of climate change. We must never lose sight of the fact that the very opportunity to access Arctic oil and gas has arisen because we have burned so much oil and gas already. Ultimately, establishing clear maritime boundaries may enable responsible governments to ensure that the carbon stays locked in the seabed, where it cannot contribute to even more, ever more dangerous climate change.

“Countries of Scandinavia and the Nordic Region,” Terri Mapes, tripsavvy, 26 June 2019 [39] <https://www.tripsavvy.com/countries-of-scandinavia-1626694>

Overview:

Scandinavia and the Nordic region are a historical and geographical region covering much of Northern Europe. Extending from above the Arctic Circle to the North and Baltic Seas, the Scandinavian Peninsula is the largest peninsula in Europe. Nordic countries consistently rank in the top ten happiest countries on the United Nations' World Happiness Report. In 2019, four Nordic countries took the top four spots. But which countries are actually apart of Scandinavia and the Nordic region?

Today, most define Scandinavia and the Nordic region to include the following countries: Denmark, Norway, Sweden, Finland, Iceland. Rarely, Greenland is included among the Scandinavian or Nordic countries.

Current & Relevant Information:



What Is the Difference Between Scandinavia and Nordic Countries?

Scandinavia historically encompassed the kingdoms of Sweden, Norway, and Denmark. Formerly, Finland was part of Sweden, and Iceland had belonged to Denmark and Norway. There has been a long-standing disagreement as to whether Finland and Iceland should be considered Scandinavian countries or not.

Geographically speaking, Finland and Iceland are not a part of the Scandinavian peninsula, and therefore not truly Scandinavian countries. To fix the divide, the French stepped in to diplomatically smooth out the terminology by dubbing Finland, Iceland, Sweden, Norway, and Denmark, Nordic countries.

All of the countries, with the exception of Finland, share a common language branch—Scandinavian languages that stem from the Germanic family. What makes Finland unique is that its language aligns more with the Finn-Uralic family of languages. Finnish is more closely related to Estonian and lesser-known languages spoken around the Baltic Sea.

Because of Nordic countries' location, they have rather long daylight hours in the summer and very short ones in the winter. Northern Norway and Finland experience almost no darkness during June and July. Several Nordic countries are also great for seeing the Northern Lights because of the location and lack of light pollution.

Denmark:

The southernmost Scandinavian country, Denmark, consists of the Jutland peninsula and over 400 islands, some of which are linked to the mainland by bridges. Almost all of Denmark is low and flat, but there are many low hills as well. Windmills and traditional thatched cottages can be seen everywhere. The Faroe Islands and Greenland both belong to the Kingdom of Denmark. Bicycling is an integral part of Danish culture and most of the country is cyclist friendly. The official language is Danish, and the capital city is Copenhagen.

Norway:

Norway is also called "The Land of Vikings" or "The Land of the Midnight Sun," The northernmost country in Europe, Norway has a jagged expanse of islands and fjords. The maritime industry sustains the economy. The official language is Norwegian, and the capital city is Oslo.

Sweden:

Sweden, a land of numerous lakes, is the largest of the Scandinavian countries both in land size and population. The car companies Volvo and Saab both originated there and are a big part of the Swedish industry. Swedish citizens are independently minded and highly regard their people-oriented social programs, especially women's rights. The official language is Swedish, and the capital city is Stockholm.

Iceland:

With a surprisingly mild climate, Iceland is Europe's westernmost country and the second largest island in the North Atlantic Ocean (Greenland is the largest). Flight time to Iceland is 3 hours, 30 minutes from the European mainland. Iceland has a strong economy, low unemployment, low inflation, and its per capita income is among the highest in the world. The official language is Icelandic, and the capital city is Reykjavik.

Finland:

Another country where the weather is better than many tourists expect, Finland has one of the lowest immigration rates in the world. It also has the highest per capita consumption of coffee in the world (consuming an average of 26 pounds of coffee each year). Finland was a part of Sweden for around 700 years and as a result the two countries have similar legal, economic, and social systems. The official language is Finnish, which is also called Suomi. Swedish is also recognized as an official language. The capital city is Helsinki.

“Changes in the Arctic: Background and Issues for Congress,” Congressional Research Service, 22 May 2020 [40] <https://fas.org/sgp/crs/misc/R41153.pdf>

Summary:

The diminishment of Arctic sea ice has led to increased human activities in the Arctic, and has heightened interest in, and concerns about, the region's future. The United States, by virtue of Alaska, is an Arctic country and has substantial interests in the region. The seven other Arctic states are Canada, Iceland, Norway, Sweden, Finland, Denmark (by virtue of Greenland), and Russia.

The geopolitical environment for the Arctic has been substantially affected by the renewal of great power competition. Although there continues to be significant international cooperation on Arctic issues, the Arctic is increasingly viewed as an arena for geopolitical competition among the United States, Russia, and China. Russia in recent years has enhanced its military presence and operations in the Arctic. China's growing activities in the Arctic have become a matter of increasing curiosity or concern among observers.

The diminishment of Arctic ice could lead in coming years to increased commercial shipping on two trans-Arctic sea routes—the Northern Sea Route close to Russia, and the Northwest Passage close to Alaska and through the Canadian archipelago—though the rate of increase in the use of these routes might not be as great as sometimes anticipated in press accounts. International guidelines for ships operating in Arctic waters have been recently updated.

Changes to the Arctic brought about by warming temperatures will likely allow more exploration for oil, gas, and minerals. Warming that causes permafrost to melt could pose challenges to onshore exploration activities. Increased oil and gas exploration and tourism (cruise ships) in the Arctic increase the risk of pollution in the region.

Cleaning up oil spills in ice-covered waters will be more difficult than in other areas, primarily because effective strategies for cleaning up oil spills in ice-covered waters have yet to be developed.

Current & Relevant Information:

Geopolitical Environment

Shift to Era of Renewed Great Power Competition:

Overview

A principal factor affecting the geopolitical environment for the Arctic is the shift that has occurred in recent years from the post-Cold War era that began in the late 1980s and early 1990s, also sometimes known as the unipolar moment (with the United States as the unipolar power), to a new international security environment that features, among other things, renewed great power competition with China and Russia and challenges by these two countries and others to elements of the U.S.-led international order that has operated since World War II. This shift in the international security environment, combined with the diminishment of Arctic ice and the resulting increase in human activities in the Arctic, has several potential implications for the geopolitical environment for the Arctic, which are discussed in the following sections.

Arctic Tradition of Cooperation and Low Tensions

The renewal of great power competition has raised a basic question as to whether the Arctic in coming years will continue to be a region generally characterized by cooperation and low tensions, as it was during the post-Cold War era, or instead become a region characterized at least in part by competition and increased tensions, as it was during the Cold War. Although there continues to be significant international cooperation on Arctic issues, the Arctic is increasingly viewed as an arena for geopolitical competition among the United States, Russia, and China. In this regard, the renewal of great power competition poses a potential challenge to the tradition of cooperation, low tensions, peaceful resolution of disputes, and respect for international law—sometimes referred to as the “Arctic spirit”—that has characterized the approach used by the Arctic states, particularly since the founding of the Arctic Council in 1996, for managing Arctic issues.

Some observers argue that the Arctic states and other Arctic stakeholders should attempt to maintain the region’s tradition of cooperation and low tensions, and work to prevent the competition and tensions that have emerged in Europe, Asia, and elsewhere in recent years from crossing over into the Arctic. These observers argue that the Arctic tradition of cooperation and low tensions has proven successful in promoting the interests of the Arctic states and other Arctic stakeholders on a range of issues, that it has served as a useful model for other parts of the world to follow,

and that in light of tensions and competition elsewhere in the world, this model is needed more now than ever.

Other observers could argue that, notwithstanding the efforts of Arctic states and other Arctic stakeholders to maintain the Arctic as a region of cooperation and low tensions, it is unreasonable to expect that the Arctic can be kept fully isolated from the competition and tensions that have arisen in other parts of the world. As a consequence, these observers could argue, the Arctic states and other Arctic stakeholders should begin taking steps to prepare for increased competition and higher tensions in the Arctic, precisely so that Arctic issues can continue to be resolved as successfully as conditions may permit, even in a situation of competition and increased tensions.

Still other observers might argue that a policy of attempting to maintain the Arctic as a region of cooperation and low tensions, though well-intentioned, could actually help encourage aggressive behavior by Russia or China in other parts of the world by giving those two countries confidence that their aggressive behavior in other parts of the world would not result in punitive costs being imposed on them in the Arctic. These observers might argue that maintaining the Arctic as a region of cooperation and low tensions in spite of aggressive Russian or Chinese actions elsewhere could help legitimize those aggressive actions and provide little support to peaceful countries elsewhere that might be attempting to resist them. This, they could argue, could facilitate a divide-and-conquer strategy by Russia or China in their relations with other countries, which in the long run could leave Arctic states with fewer allies and partners in other parts of the world for resisting unwanted Russian or Chinese actions in the Arctic.

Still others might argue that there is merit in some or all of the above perspectives, and that the challenge is to devise an approach that best mixes the potential strengths of each perspective.

Arctic and World Order

Another potential implication for the Arctic of renewal of great power competition concerns associated challenges to elements of the U.S.-led international order that has operated since World War II. One element of the U.S.-led international order that has come under challenge is the principle that force or threat of force should not be used as a routine or first-resort measure for settling disputes between countries. Another is the principle of freedom of the seas (i.e., that the world's oceans are to be treated as an international commons). If either of these elements of the U.S.-led international order is weakened or overturned, it could have potentially major implications for the future of the Arctic, given the Arctic's tradition of peaceful resolution of disputes and respect for international law and the nature of the Arctic as a region with an ocean at its center that washes up against most of the Arctic states.

More broadly, some observers assess that the U.S.-led international order in general may be eroding or collapsing, and that the nature of the successor international order that could emerge in its wake is uncertain. An erosion or collapse of the U.S.-led international order, and its replacement by a new international order of some kind, could have significant implications for the Arctic, since the Arctic's tradition of cooperation and low tensions, and the Arctic Council itself, can be viewed as outgrowths of the U.S.-led order.

Arctic Governance:

Spotlight on Arctic Governance and Limits of Arctic Council

The renewal of great power competition has put more of a spotlight on the issue of Arctic governance and the limits of the Arctic Council as a governing body. As noted earlier in this report, regarding the limits of the Arctic Council as a governing body, the council states that “The Arctic Council does not and cannot implement or enforce its guidelines, assessments or recommendations. That responsibility belongs to each individual Arctic State. The Arctic Council’s mandate, as articulated in the Ottawa Declaration, explicitly excludes military security.”

During the post-Cold War era—the period when the Arctic Council was established and began operating—the limits of the Arctic Council as a governing body may have been less evident or problematic, due to the post-Cold War era’s general situation of lower tensions and reduced overt competition between the great powers. In the new situation of renewed great power competition, however, it is possible that these limits could become more evident or problematic, particularly with regard to addressing Arctic-related security issues.

If the limits of the Arctic Council as a governing body are judged as having become more evident or problematic, one option might be to amend the rules of the council to provide for some mechanism for enforcing its guidelines, assessments, or recommendations. Another option might be to expand the council’s mandate to include an ability to address military security issues.

Supporters of such options might argue that they could help the council adapt to the major change in the Arctic’s geopolitical environment brought about the shift in the international security environment, and thereby help maintain the council’s continued relevance in coming years. They might also argue that continuing to exclude military security from the council’s mandate risks either leaving Arctic military security issues unaddressed, or shifting them to a different forum that might have traditions weaker than those of the Arctic Council for resolving disputes peacefully and with respect for international law.

Opponents of such options might argue that they could put at risk council’s ability to continue addressing successfully nonmilitary security issues pertaining to the Arctic. They might argue that there is little evidence to date that the council’s limits as a

governing body have become problematic, and that in light of the council's successes since its founding, the council should be viewed as an example of the admonition, "if it isn't broke, don't fix it."

China and Arctic Governance

China—which is not one of the eight Arctic states and consequently does not have a decision-making role in the Arctic Council—has begun to raise questions as to whether the Arctic Council as currently constituted and the current broader legal framework for the Arctic should continue to be the principal means for addressing issues relating to the Arctic, and has begun to use other approaches for influencing Arctic governance. In May 2019, a U.S. official stated that the United States "reject[s] attempts by non-Arctic states to claim a role" in Arctic governance.

U.S., Canadian, and Nordic Relations with Russia in Arctic:

Overview

The renewal of great power competition raises a question for U.S., Canadian, and Nordic policymakers regarding the mix of cooperation and competition to pursue (or expect to experience) with Russia in the Arctic. In considering this question, points that can be noted include the following:

- Geographically, Russia is the most prominent of the eight Arctic states. According to one assessment, Russia "has at least half of the Arctic in terms of area, coastline, population and probably mineral wealth." About 20% of Russia's land mass is north of the Arctic Circle. Russia has numerous cities and towns in its Arctic, uses its coastal Arctic waters as a maritime highway for supporting its Arctic communities, is promoting the Northern Sea Route that runs along Russia's Arctic coast for use by others, and is keen to capitalize on natural resource development in the region, both onshore and offshore. A substantial fraction of Russia's oil and gas production and reserves are in the Arctic. In this sense, of all the Arctic states, Russia might have the most at stake in the Arctic in absolute terms.
- The Arctic is a top strategic priority for Russia. In 2008, 2013, 2014, 2017, and most recently in March 2020, the Russian government adopted strategy documents outlining plans to bolster the country's Arctic military capabilities, strengthen territorial sovereignty, and develop the region's resources and infrastructure. Over the past several years, Russia has invested in the construction of ports and search-and-rescue facilities, some of which are referred to as dual use (civilian-military) facilities. Russia also has reactivated and modernized military bases that fell into disuse with the end of the Cold War.
- Arctic ice is diminishing more rapidly or fully on the Russian side of the Arctic than it is on the Canadian side. Consequently, the Northern Sea Route along

Russia's coast is opening up more quickly for trans-Arctic shipping than is the Northwest Passage through the Canadian archipelago.

On the one hand, the United States, Canada, and the Nordic countries continue to cooperate with Russia on a range of issues in the Arctic, including, to cite just one example, search and rescue (SAR) under the May 2011 Arctic Council agreement on Arctic SAR (see "Search and Rescue (SAR)"). More recently, the United States and Russia cooperated in creating a scheme for managing two-way shipping traffic through the Bering Strait and Bering Sea. Observers see possibilities for further U.S.-Russian cooperation in the Arctic. On the other hand, as discussed later in this report, a significant increase in Russian military capabilities and operations in the Arctic in recent years has prompted growing concerns among U.S., Canadian, and Nordic observers that the Arctic might once again become a region of military tension and competition, as well as concerns about whether the United States, Canada, and the Nordic countries are adequately prepared militarily to defend their interests in the region.

In February 2020, a disagreement between Norway and Russia arose regarding Russia's access to Svalbard, a Norwegian archipelago, under the Svalbard Treaty of 1920.

Russian actions outside the Arctic could affect relations between Russia and the other Arctic states. For example, in protest of Russia's forcible occupation and annexation of Crimea and its actions elsewhere in Ukraine, Canada announced that it would not participate in an April 2014 working-level-group Arctic Council meeting in Moscow. In addition, former Secretary of State Hillary Clinton reportedly stated that Arctic cooperation may be jeopardized if Russia pursues expansionist policies in the high north. Economic sanctions that the United States imposed on Russia in response to Russian actions in Ukraine could affect Russian Arctic offshore oil exploration.

Northern Sea Route

Another concern for U.S. policymakers in connection with Russia in the Arctic relates to the Northern Sea Route (NSR)—the Arctic shipping route linking Europe and Asia via waters running along Russia's Arctic coast. Russia considers certain parts of the NSR to be internal Russian waters and has asserted a right to regulate commercial shipping passing through these waters—a position that creates a source of tension with the United States, which considers those waters to be international waters. The U.S.-Russian dispute over this issue could have implications not only for U.S.-Russian relations and the Arctic, but for other countries and other parts of the world as well, since international law is universal in its application, and a successful challenge to international waters in one part of the world can serve as a precedent for challenging it in other parts of the world.

The issue of the U.S.-Russian dispute over the international legal status of the NSR was largely dormant for many years. In March 2019, however, Russia announced that

The Russian government has elaborated a set of rules for foreign naval vessels' sailing on the Northern Sea Route, [the Russian newspaper] Izvestia informs. The newspaper has obtained a copy of the document that states that all vessels are obliged to comply.

The foreign state must send a notification about the voyage at least 45 days ahead of its start. Included will have to be the name of the ship, its objective, route and period of sailing, as well as ship characteristics such as length, width, deadweight, draft and type of engine power. Also, the name of the ship captain must be listed.

The ships must also have on board a Russian maritime pilot.

In case the voyage is not conducted in line with the regulations, Russia will have the right to take extraordinary measures including its forced halt, arrest and in extreme cases elimination, Izvestia writes.

In September 2019, it was reported that Russia had used military commandos to board a Russian-flag commercial ship operating in the NSR that Russian authorities suspected of violating certain regulations.

NATO and European Union in Arctic:

NATO

Five of the eight Arctic states—the United States, Canada, Denmark, Iceland, and Norway—are members of NATO. The renewal of great power competition has led to a renewal of NATO interest in NATO's more northerly areas. During the Cold War, NATO member Norway and its adjacent sea areas were considered to be the northern flank of NATO's defensive line against potential aggression by the Soviet-led Warsaw Pact alliance. With the end of the Cold War and the shift to the post-Cold War era, NATO planning efforts shifted away from defending against potential aggression by Russia, which was considered highly unlikely, and toward other concerns, such as the question of how NATO countries might be able to contribute to their own security and that of other countries by participating in out-of-area operations, meaning operations in areas outside Europe.

With the renewal of great power competition, NATO is now once again focusing more on the question of how to deter potential Russian aggression against NATO countries, including in the Arctic. As one consequence of that, Norway and its adjacent sea areas are once again receiving more attention in NATO planning. For example, a NATO exercise called Trident Juncture 18 that was held from October 25 to November 7, 2018, in Norway and adjacent waters of the Baltic and the

Norwegian Sea, with participation by all 29 NATO members plus Sweden and Finland, was described as NATO's largest exercise since the Cold War, and featured a strong Arctic element, including the first deployment of a U.S. Navy aircraft carrier above the Arctic Circle since 1991. The question of NATO's overall involvement in the Arctic, however, has been a matter of debate within NATO.

European Union

Three of the eight Arctic states—Denmark, Finland, and Sweden—are members of the European Union (EU), and two other Arctic states—Iceland and Norway—have close ties to the EU as members of the European Economic Area. The EU is showing increased interest in the Arctic, and the European Parliament (EP) supports an active EU role in the Arctic. The EU is considered an “observer in principle” to the Arctic Council, but to date has been denied full observer status at the council, alternately by Canada (because of Canadian Inuit objections to the EU's ban on the import of seal products) and Russia (following heightened EU-Russian tensions since Russia's 2014 invasion of Ukraine).

In 2016, the European Commission (the EU's executive) and the EU's High Representative for Foreign Affairs and Security Policy issued a joint communication (or policy paper), *An Integrated European Union Policy for the Arctic*, that states that a “safe, stable, sustainable, and prosperous Arctic” is important for the region, the EU, and the world, and that “the EU has a strategic interest in playing a key role in the Arctic region.” The policy outlined in the document seeks to boost the EU's profile in the region and focuses on three broad themes—climate change and safeguarding the environment, sustainable development in the Arctic, and international cooperation on Arctic issues.

In 2017, the EU appointed its first Ambassador-at-Large for the Arctic, and in October 2019, the EU held its first-ever Arctic Forum, a high-level conference in northern Sweden focused on promoting EU efforts in the Arctic. The EU is also a major financial contributor to Arctic research, providing around €200 million in the past decade under the Horizon 2020 Research and Innovation Program. Some analysts contend, however, that the EU's policy statements on the Arctic have yet to coalesce into a clearly defined narrative with concrete goals; the European Commission's in-house think tank argues that the EU must develop a more comprehensive strategy that balances protecting the Arctic environment with facilitating the sustainable economic and social development of the region.

China in Arctic:

China's Growing Activities in Arctic

China's activities in the Arctic have grown steadily in recent years, and have emerged as a major topic of focus for the Arctic in a context of renewed great power competition. As noted earlier in this report, China was one of six non-Arctic states

that were approved for observer status by the Arctic Council in 2013. China in recent years has engaged in growing diplomatic activities with the Nordic countries, and has increased the size of its diplomatic presences in some of them. China has also engaged in growing economic discussions with Iceland and with Greenland, a territory of Denmark that might be moving toward eventual independence.

China has a polar-capable icebreaker, Xue Long (Snow Dragon), that in recent years has made several transits of Arctic waters—operations that China describes as research expeditions. A second polar-capable icebreaker (the first that China has built domestically), named Xue Long 2, entered service in 2019. China in 2018 announced an intention to build a 30,000-ton (or possibly 40,000-ton) nuclear-powered icebreaker, which would make China only the second country (following Russia) to operate a nuclear-powered icebreaker. In December 2019, however, it was reported that China's third polar-capable icebreaker might instead be built as a 26,000-ton, conventionally powered ship. (By way of comparison, the new polar icebreakers being built for the U.S. Coast Guard are to displace 22,900 tons each.) Like several other nations, China has established a research station in the Svalbard archipelago.

China in January 2018 released a white paper on China's Arctic policy that refers to China as a "near-Arctic state." (China's northernmost territory, northeast of Mongolia, is at about the same latitude as the Aleutian Islands in Alaska, which, as noted earlier in this report, the United States includes in its definition of the Arctic for purposes of U.S. law.) The white paper refers to trans-Arctic shipping routes as the Polar Silk Road, and identifies these routes as a third major transportation corridor for the Belt and Road Initiative (BRI), China's major geopolitical initiative, first announced by China in 2013, to knit Eurasia and other regions together in a Chinese-anchored or Chinese-led infrastructure and economic network.

China appears to be interested in using the NSR to shorten commercial shipping times between Europe and China and perhaps also to reduce China's dependence on southern sea routes (including those going to the Persian Gulf) that pass through the Strait of Malacca—a maritime choke point that China appears to regard as vulnerable to being closed off by other parties (such as the United States) in time of crisis or conflict. China reportedly reached an agreement with Russia on July 4, 2017, to create an "Ice Silk Road," and in June 2018, China and Russia agreed to a credit agreement between Russia's Vnesheconombank (VEB) and the China Development Bank that could provide up to \$9.5 billion in Chinese funds for the construction of select infrastructure projects, including in particular projects along the NSR. In September 2013, the Yong Shen, a Chinese cargo ship, became the first commercial vessel to complete the voyage from Asia to Rotterdam via the NSR.

China is interested in oil and gas exploration in the Arctic, and has made significant investments in Russia's Arctic oil and gas industry, including the Yamal natural gas megaproject located on Russia's Yamal Peninsula in the Arctic. China is also

interested in mining opportunities in the Arctic seabed and in Greenland. Given Greenland's very small population, China may view Greenland as an entity that China can seek to engage using an approach similar to ones that China has used for engaging with small Pacific and Indian Ocean island states. China may also be interested in Arctic fishing grounds.

China's growing activities in the Arctic may also reflect a view that as a major world power, China should, like other major world powers, be active in the polar regions for conducting research and other purposes. (Along with its growing activities in the Arctic, China has recently increased the number of research stations it maintains in the Antarctic.)

Particularly since China published its Arctic white paper in January 2018, observers have expressed curiosity or concern about China's exact mix of motivations for its growing activities in the Arctic, and about what China's ultimate goals for the Arctic might be.

Arctic States' Response

The renewal of great power competition underscores a question for the Arctic states regarding whether and how to respond to China's growing activities in the Arctic. China's growing activities in the Arctic could create new opportunities for cooperation between China and the Arctic states. They also, however, have the potential for posing challenges to the Arctic states in terms of defending their own interests in the Arctic.

For U.S. policymakers, a general question is how to integrate China's activities in the Arctic into the overall equation of U.S.-China relations, and whether and how, in U.S. policymaking, to link China's activities in the Arctic to its activities in other parts of the world. Some observers see potential areas for U.S.-Chinese cooperation in the Arctic. Other observers view the Arctic as emerging arena of U.S.-China strategic competition. A specific question could be whether to impose punitive costs on China in the Arctic for unwanted actions that China takes elsewhere. As one potential example of such a cost-imposing action, U.S. policymakers could consider moving to suspend China's observer status on the Arctic Council as a punitive cost-imposing measure for unwanted Chinese actions in the South China Sea. As mentioned earlier, in a May 6, 2019, speech in Finland, Secretary of State Pompeo stated (emphasis added)

The United States is a believer in free markets. We know from experience that free and fair competition, open, by the rule of law, produces the best outcomes.

But all the parties in the marketplace have to play by those same rules. Those who violate those rules should lose their rights to participate in that marketplace. Respect and transparency are the price of admission.

And let's talk about China for a moment. China has observer status in the Arctic Council, but that status is contingent upon its respect for the sovereign rights of Arctic states. The U.S. wants China to meet that condition and contribute responsibly in the region. But China's words and actions raise doubts about its intentions.

In February 2019, it was reported that the United States in 2018 had urged Denmark to finance the construction of airports that China had offered to build in Greenland, so as to counter China's attempts to increase its presence and influence there. In May 2019, the State Department announced plan for establishing a permanent diplomatic presence in Greenland. In April 2020, the U.S. government announced \$12.1 million economic aid package for Greenland that the Trump Administration presented as a U.S. action done in a context of Chinese and Russian actions aimed at increasing their presence and influence in Greenland. Some observers argue that a desire to preclude China (or Russia) from increasing its presence and influence in Greenland may have been one of the reasons why President Trump in August 2019 expressed an interest in the idea of buying Greenland from Denmark.

For Russia, the question of whether and how to respond to China's activities in the Arctic may pose particular complexities. On the one hand, Russia is promoting the NSR for use by others, in part because Russia sees significant economic opportunities in offering icebreaker escorts, refueling posts, and supplies to the commercial ships that will ply the waterway. In that regard, Russia presumably would welcome increased use of the route by ships moving between Europe and China. More broadly, Russia and China have increased their cooperation on security and other issues in recent years, in no small part as a means of balancing or countering the United States in international affairs, and Russian-Chinese cooperation in the Arctic can both reflect and contribute to that cooperation.

On the other hand, Russian officials are said to be wary of China's continued growth in wealth and power, and of how that might eventually lead to China becoming the dominant power in Eurasia, and to Russia being relegated to a secondary or subordinate status in Eurasian affairs relative to China. Increased use by China of the NSR could accelerate the realization of that scenario: As noted above, the NSR forms part of China's geopolitical Belt and Road Initiative (BRI). Some observers argue that actual levels of Sino-Russian cooperation in the Arctic are not as great as Chinese or Russian announcements about such cooperation might suggest.

Linkages Between Arctic and South China Sea

Another potential implication of the renewal of great power competition is a linkage that is sometimes made between the Arctic and the South China Sea relating to international law of the sea or the general issue of international cooperation and competition. One aspect of this linkage relates to whether China's degree of compliance with international law of the sea in the South China Sea has any

implications for understanding potential Chinese behavior regarding its compliance with international law of the sea (and international law generally) in the Arctic.

A second aspect of this linkage, mentioned earlier, is whether the United States should consider the option of moving to suspend China's observer status on the Arctic Council as a punitive cost-imposing measure for unwanted Chinese actions in the South China Sea.

A third aspect of this linkage concerns the question of whether the United States should become a party to UNCLOS: Discussions of that issue sometimes mention both the situation in the South China Sea and the extended continental shelf issue in the Arctic.

A. Canada:

“The Arctic Council: About: Arctic States: Canada,” Arctic Council, 2020 [41]

<https://arctic-council.org/en/about/states/canada/>

Overview:

Quick Facts

Arctic and North Territory: Northwest Territories, Nunavut, Yukon, and Northern parts of numerous provinces, including Manitoba, Newfoundland and Labrador, and Québec

Arctic and Northern Population: Approximately 150,000

Permanent Participants with Canadian constituents: Arctic Athabaskan Council, Inuit Circumpolar Council, and Gwich'in Council International

Current & Relevant Information:

Canada and the Arctic region:

Nearly 40 percent of Canada's land mass is considered Arctic and Northern, consisting of the Northwest Territories, Nunavut, Yukon, and the northern parts of several provinces. Canada's Arctic is home to approximately 150,000 inhabitants, of which more than half are Indigenous. Although Canada's Arctic region is vast, less than one percent of Canada's population lives there.

Indigenous Peoples:

Indigenous Permanent Participants who live in Canada include the Athabaskan, Inuit and Gwich'in. The Athabaskan and Gwich'in peoples in Canada live primarily in the Northwest Territories and Yukon. Inuit in Canada live in 53 communities across Inuit Nunangat – the northern regions of Canada. Canadian Arctic Indigenous peoples are represented in the Arctic Council through three Permanent Participants organizations: Arctic Athabaskan Council, Inuit Circumpolar Council and Gwich'in Council International.

Canada in the Arctic Council:

Canada held the first Chair of the Arctic Council from 1996 to 1998, and again from 2013-2015. Canada's primary priorities related to the Arctic include addressing socio-economic and cultural development, environmental protection and climate change, and strengthening relations with Indigenous peoples. Specifically, during its first Arctic Council Chairmanship, Canada's priorities included:

- Youth development in the Arctic, including social, environmental and economic issues affecting children
- Developing closer partnerships with Indigenous peoples and Arctic States to address common challenges and opportunities
- Cooperation between Indigenous Peoples and Arctic States

Throughout its most recent Arctic Council Chairmanship, Canada's priorities included:

- Development for the people of the North
- Mental wellness in Arctic communities
- Integrating Indigenous knowledge of Arctic peoples into the work of the Council
- Environmental protection, including the reduction of black carbon and methane

Key accomplishments include:

- Canada aided in the establishment of the Arctic Economic Council, an independent forum for business-to-business cooperation
- Canada heavily aided in the development of an action plan to prevent oil pollution in the Arctic
- An Arctic Council Framework for enhanced black carbon and methane emissions reductions
- Assisted in the establishment of the open-access archive project to enhance the public's accessibility to the Arctic Council's work

The Arctic Council was established in Canada in 1996 with the signing of the Ottawa Declaration.

“Arctic Governance: Synthesis and assessment of Arctic governance mechanisms and recent policy actions,” Flavius Mihaies, The Aspen Institute: Energy and Environment Program [42]

<https://assets.aspeninstitute.org/content/uploads/files/content/upload/23%20Arctic%20Governance%20Synthesis%20COLOR.pdf>

Summary:

Summary of existing architecture for the governance and management of the Arctic

Regional forums:

While several institutions are involved in the governance of the Arctic marine area, the most prominent among them is the Arctic Council. The Arctic Council was established as a high level inter-governmental forum in 1996 to “provide a means for promoting cooperation, coordination and interaction [...] on common arctic issues, in particular issues of sustainable development and environmental protection in the Arctic”.

The Arctic Council was established by non-legally binding declaration and is a consensus-based organization. Decisions of the Council do not have any binding effect on individuals.

The eight Arctic states are Members of the Arctic Council and eight Non-Arctic States are Official Observers. A variety of governmental organizations and NGO's also hold observer status. Of particular interest, the Arctic Council establishes significant participation by the indigenous peoples of the Arctic, whom the Council Members must consult prior to any consensus decision-making.

The Council's current responsibilities pertain to research, advising on policy, and disseminating voluntary guidelines on the main topical areas that it is concerned with, including climate change, sustainable development, Arctic monitoring and assessment, persistent organic pollutants and other contaminants in the Arctic and other issues covered by its six Working Groups.

According to Arctic expert Brooks Yeager, the Arctic Council has made major contributions to the Arctic region, by “identifying issues of importance to the conservation of the Arctic environment and the well-being of Arctic people, and in developing assessments that have become the basis for cooperative action by the Arctic governments.” The Council has also issued guidelines and manuals of good practices, particularly related to the Arctic marine area.

Regional Governance:

The Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR) is the legal instrument guiding international cooperation on the protection of the marine environment of the North-East Atlantic.

The OSPAR Convention “covers the regulation of all human activities which can have an adverse effect on the ecosystems and the biodiversity in the North East Atlantic, with the explicit exception of fisheries management and with certain limitations for the regulation of shipping”. The OSPAR Commission was tasked to implement and monitor the Convention and can adopt measures and programs in the form of both legally binding decisions and non-legally binding recommendations.

There are currently fifteen contracting parties to the OSPAR Convention, all from Europe. The European Commission also participates on behalf of the European Union.

OSPAR has been cited as an example of the successful implementation of ecosystem-based management at the international level, even though the OSPAR Convention does not explicitly refer to the ecosystem approach.

Global governance:

The United Nations Convention on the Law of the Sea (UNCLOS) establishes a comprehensive binding framework for the rights and responsibilities of nations in their use of the world's oceans.

To date 156 countries and the European Community have joined in the Convention. The United States is not a member. However, the Convention is accepted as a codification of the customary international law.

Certain UNCLOS articles are directly relevant to the Arctic, such as Article 118 234 (Ice-covered areas) that extend environmental protection powers to Arctic coastal States within the limits of their exclusive economic zones (EEZ) if ice is present in an area for most of the year, and Annex II (Commission on the Limits of the Continental Shelf) and Article 76 (Definition of the continental shelf), which led to the current submissions of "outer continental shelf" sovereignty claims (extending beyond the 200 nautical miles EEZ limit) by some Arctic states to the Commission established by the UNCLOS. In addition, Article 123 calls on the states bordering semi-enclosed seas to cooperate through an "appropriate regional organization". If the Arctic maritime area were so classified, the littoral States would have greater obligations to cooperate in regard to environmental protection.

The UNCLOS has two implementation agreements, the Part XI Deep-Sea Mining Agreement and the Fish Stock Agreement.

The International Maritime Organization (IMO) is the United Nations' specialized agency that was tasked with developing and maintaining a comprehensive regulatory framework for shipping with a focus on ship safety. The jurisdiction of the IMO includes safety, environmental concerns, legal matters, technical co-operation, maritime security and the efficiency of shipping.

As a United Nations agency, the IMO is composed of 168 Member States and three Associate Members (Hong Kong, China; Macao, China; and Faroe Islands, Denmark).

Regarding the Arctic, IMO Guidelines for Ships Operating in Arctic Ice-covered Waters, also known as the Polar Code, created a unified set of voluntary classification standards for ships navigating in both Polar regions. According to Arctic governance expert Lynda Nowlan, the Polar Code "buil[t] upon existing

treaties administered by the IMO, such as the International Convention for the Prevention of Pollution from Ships (MARPOL), and associated safety and training treaties. Protocols under the LRTAP Convention also contain specific references to the Arctic environment”.

Current & Relevant Information:

Canada and the Arctic:

As recently stated in an address on Canada’s Arctic Foreign Policy by Canada Minister of Foreign Affairs, Lawrence Cannon, each existing governance mechanism leaves room for enhancement of governance in the Arctic. Yet, Canada will not seek the creation of a new treaty, but rather seek to enhance existing tools. “We have an extensive, existing international legal framework that applies to the Arctic Ocean, notably the law of the sea, which covers continental shelf delimitation, marine environment protection and other uses of the sea. [...] In the 2008 Ilulissat Declaration, all five Arctic Ocean coastal states reaffirmed their commitment to the framework established by the law of the sea, including peaceful resolution of any competing interests.”

The Government of Canada also committed to enhance surveillance and military presence in the Canadian Arctic waters and to assert its “outer continental shelf” sovereignty claims in the Arctic. “It is also important to determine where Canada can exercise its sovereign rights. That is the point behind the work being done to delineate the outer limits of Canada’s extended continental shelf. [...] The United Nations Convention Law of the Sea explicitly recognizes Canada’s sovereign rights over its continental shelf and sets out a process for a coastal state like Canada to secure international recognition for the precise limits of its continental shelf. [...] My government has invested significantly—\$40 million over four years for a total expenditure of \$109 million over the course of the project—to ensure that Canada secures recognition for the maximum extent of its continental shelf in both the Arctic and the Atlantic.

“Regions of Canada: The Arctic Region: Life in the North,” mrpolsky [43]

<http://gradefive.mrpolsky.com/regionsofcanada/arctic-region.html>

Overview:

This region is located north of the Arctic Circle and the tree line. Short, cool summers and long, cold winters help to maintain permafrost on the land. The southern part of this area has small hills; the northern part has mountains, glaciers, plains, and islands. Very little vegetation grows in this area. Oil, gas, lead, zinc, and silver can be found in this region.

Current & Relevant Information:

LOCATION:

The Arctic Region contains the Yukon, Northwest Territories, Nunavut, parts of Northern Quebec and the most northern parts of Labrador and Newfoundland. Many people think that the Arctic Region is only Nunavut, the Yukon and Northwest Territories when really, the Arctic is everything that is north of the 60 N parallel (latitude). This is a very unique and beautiful region.

CLIMATE AND LANDFORMS:

First of all, the Northern Landscape is a combination (mix) of the Cordillera, Plains and the Great Canadian Shield. Remember when you are studying the North to include the main features found in these 3 regions and apply them to this region.

Secondly, this is the only landscape where there is permafrost (the ground is frozen all year). In the summer the top layer of the landscape (a few centimeters) may thaw and this often forms lakes or swamps. The permafrost directly effects the types of housing or shelter and transportation.

Thirdly icecaps or glaciers, fjords, barren tundra, pingos (huge mounds of solid ice) tree line, northern lights (aurora borealis) and the polar ice pack (permanently frozen sea ice) are just a few of the unique features found in this landscape.

Fourthly, the unique tilt of our Earth's axis gives this region 6 months of constant sunlight and then 6 months of continual darkness. It would be very confusing to look at clock during the summer months. It would read midnight but the sun would still be shining. How would this climate affect people in the North? How would it affect the structure of their shelters??

LIFESTYLE:

And lastly, because of the unique landscape and climate conditions (extremely cold in the winter months) this area of Canada has the lowest human population in Canada. As in the Interior Plains and the Cordillera, the majority of the people will live where the land is level and /or where there is a water source nearby.

Water is a source of food, communication, recreation as well as transportation. Other sources of transportations will include the use of trains, trucks, boats, snowmobiles, small airplanes and even dog sleds!

INDUSTRY | JOBS | NATURAL RESOURCES:

As more and more people move up to this beautiful region of Canada the more varied its economy becomes. More people moving in means more jobs. The strong influences of the oil and gas industry is evident in the surroundings on land and in the water (Huge off shore drilling rigs may be found off our coastal regions). Hunting, trapping and fishing are also crucial to the Northern population as well as other Canadians.

Since the Cordillera and the Canadian Shield are also 2 regions found in the North, remember these are rocks and we always mine our rocks to produce useful minerals which we use in our everyday life. In the north, zinc, lead, diamonds and gold are some of the minerals that we find.

This region of Canada celebrates the beauty of our aboriginal cultures (Past and Present). The Aboriginal people show us the elegance and extreme harshness of this northern landscape in their celebration of the arts.

This regions diversity, uniqueness and water formations strengthen our Canadian economy.

“Canada's Arctic Foreign Policy,” Government of Canada, 12 May 2017 [44]
https://www.international.gc.ca/world-monde/international_relations-relations_internationales/arctic-arctique/arctic_policy-canada-politique_arctique.aspx?lang=eng

Overview:

Canada’s vision for the Arctic is a stable, rules-based region with clearly defined boundaries, dynamic economic growth and trade, vibrant Northern communities, and healthy and productive ecosystems.

The statement articulates Canada's priorities with respect to sovereignty, economic and social development, environmental protection, and governance in the Arctic region. It details the ways Canada will show leadership and work with others to demonstrate responsible stewardship and to build a region that is responsive to Canadian interests and values.

Current & Relevant Information:

Introduction:

The Arctic is fundamental to Canada’s national identity. It is home to many Canadians, including indigenous peoples, across the Yukon, the Northwest Territories and Nunavut, and the northern parts of many Canadian provinces. The Arctic is embedded in Canadian history and culture, and in the Canadian soul. The Arctic also represents tremendous potential for Canada’s future. Exercising sovereignty over Canada’s North, as over the rest of Canada, is our number one Arctic foreign policy priority.

Our vision for the Arctic is a stable, rules-based region with clearly defined boundaries, dynamic economic growth and trade, vibrant Northern communities, and healthy and productive ecosystems. This Arctic foreign policy statement articulates how the Government of Canada will promote this vision, using leadership and stewardship. It elaborates on Canadian interests in the Arctic and how Canada is pursuing these.

New opportunities and challenges are emerging across the Arctic and North, in part as a result of climate change and the search for new resources. The geopolitical significance of the region and the implications for Canada have never been greater. As global commerce charts a path to the region, Northern resources development will grow ever more critical to Northern economies, to the peoples of the North and to our country as a whole. The potential of the North is of growing interest to Canada, to other Arctic states and, increasingly, to others far from the region itself.

While the opportunities are great, there are also important social, economic and environmental challenges. Some of these have important international dimensions. Over time, increased access to the Arctic will bring more traffic and people to the region. While mostly positive, this access may also contribute to an increase in environmental threats, search and rescue incidents, civil emergencies and potential illegal activities. How the region as a whole evolves will have major implications for Canada and our role as an Arctic power.

The Government of Canada has launched an ambitious Northern Strategy to respond to these opportunities and challenges. Our Northern Strategy lays out four areas where Canada is taking action to advance its interests both domestically and internationally and to help unlock the North's true potential: exercising sovereignty; promoting economic and social development; protecting our environmental heritage; and improving and devolving Northern governance. In pursuing each of these pillars in our Arctic foreign policy, Canada is committed to exercising the full extent of its sovereignty, sovereign rights and jurisdiction in the region.

Given our extensive Arctic coastline, our Northern energy and natural resource potential, and the 40 percent of our land mass situated in the North, Canada is an Arctic power. We are taking a robust leadership role in shaping the stewardship, sustainable development and environmental protection of this strategic Arctic region, and engaging with others to advance our interests.

As we advance the four pillars of our Northern Strategy, our international efforts will focus on the following areas:

- engaging with neighbors to seek to resolve boundary issues;
- securing international recognition for the full extent of our extended continental shelf;
- addressing Arctic governance and related emerging issues, such as public safety;
- creating the appropriate international conditions for sustainable development;
- seeking trade and investment opportunities that benefit Northerners and all Canadians;
- encouraging a greater understanding of the human dimension of the Arctic;

- promoting an ecosystem-based management approach with Arctic neighbors and others;
- contributing to and supporting international efforts to address climate change in the Arctic;
- enhancing our efforts on other pressing environmental issues;
- strengthening Arctic science and the legacy of International Polar Year;
- engaging Northerners on Canada's Arctic foreign policy;
- supporting Indigenous Permanent Participant organizations; and
- providing Canadian youth with opportunities to participate in the circumpolar dialogue.

Exercising Sovereignty:

In our Arctic foreign policy, the first and most important pillar towards recognizing the potential of Canada's Arctic is the exercise of our sovereignty over the Far North. Canada has a rich history in the North, and Canada's sovereignty is the foundation for realizing the full potential of Canada's North, including its human dimension. This foundation is solid: Canada's Arctic sovereignty is long-standing, well established and based on historic title, founded in part on the presence of Inuit and other indigenous peoples since time immemorial.

Canada exercises its sovereignty daily through good governance and responsible stewardship. It does so through the broad range of actions it undertakes as a government—whether related to social and economic development, Arctic science and research, environmental protection, the operations of the Canadian Forces or the activities of the Canadian Coast Guard and Royal Canadian Mounted Police. We exercise our sovereignty in the Arctic through our laws and regulations, as we do throughout Canada.

We are putting the full resources of the Government of Canada behind the exercise of our sovereignty, sovereign rights and jurisdiction in the Arctic. We are taking a whole-of-government approach. Since taking office, the Prime Minister and many federal cabinet ministers have made regular visits to Canada's North. Further evidence of the priority the Government of Canada is placing on the North was the meeting of G-7 finance ministers in Nunavut in February 2010.

Since 2007, the Government of Canada has announced a number of initiatives to enhance our capacity in the North and to exercise, responsibly, our sovereignty there. These include significant new commitments to allow Canada to better monitor, protect and patrol its Arctic land, sea and sky and to keep pace with changes in the region.

Within the next decade, Canada will launch a new polar icebreaker. This will be the largest and most powerful icebreaker ever in the Canadian Coast Guard fleet.

The Canada First Defence Strategy will give the Canadian Forces the tools it needs to provide an increased presence in the Arctic. Through this strategy, Canada is investing in new patrol ships that will be capable of sustained operation in first-year ice to ensure we can closely monitor our waters as they gradually open up and maritime activity increases. In order to support these and other Government of Canada vessels operating in the North, Canada is investing in a berthing and refueling facility in Nanisivik.

Canada is also expanding the size and capabilities of the Canadian Rangers, drawn primarily from indigenous communities, that provide a military presence and Canada's "eyes and ears" in remote parts of Canada. A new Canadian Forces Arctic Training Centre is also being established in Resolute Bay.

Canada and the United States work together to better monitor and control Northern airspace through our cooperation in NORAD, the North American Aerospace Defence Command. Canadian Forces will also take advantage of new technologies to enhance surveillance capacity of our territory and its approaches.

Canadian Forces Operation Nanook, an annual sovereignty operation that takes place in Canada's Arctic, shows the government's commitment to protecting and demonstrating control over the air, land and sea within our jurisdiction. In 2010, Operation Nanook will include collaboration with the United States and Denmark in order to increase interoperability and exercise a collective response to emerging cross-border challenges.

This increased Canadian capacity demonstrates Canada's presence in the region and will also ensure that we are better prepared to respond to unforeseen events.

Moving forward, our international agenda will complement these efforts further. Three priority areas that Canada will pursue in the Arctic are: seeking to resolve boundary issues; securing international recognition for the full extent of our extended continental shelf wherein we can exercise our sovereign rights over the resources of the seabed and subsoil; and addressing Arctic governance and related emerging issues, such as public safety.

On the first priority, Canada will seek to resolve boundary issues in the Arctic region, in accordance with international law. Our sovereignty over Canadian Arctic lands, including islands, is undisputed—with the single exception of Hans Island, a 1.3-square-kilometre Canadian island which Denmark claims.

With regard to Arctic waters, Canada controls all maritime navigation in its waters. Nevertheless, disagreements exist between the United States and Canada regarding the maritime boundary in the Beaufort Sea (approximately 6,250 square nautical miles) and between Canada and Denmark over a small part of the maritime

boundary in the Lincoln Sea. All disagreements are well managed, neither posing defence challenges for Canada nor diminishing Canada's ability to collaborate and cooperate with its Arctic neighbors. Canada will continue to manage these discrete boundary issues and will also, as a priority, seek to work with our neighbors to explore the possibility of resolving them in accordance with international law.

On the second priority, Canada will secure international recognition for the full extent of our extended continental shelf wherein we can exercise our sovereign rights over the resources of the seabed and subsoil. Most known Arctic natural resources lie within the exclusive economic zones of Arctic states—200 nautical miles extending from the coastal baselines. States have sovereign rights to explore and exploit living and non-living marine resources in their respective exclusive economic zones. Arctic coastal states also have existing rights to resources on their extended continental shelves beyond their exclusive economic zones.

The United Nations Convention on the Law of the Sea (UNCLOS) explicitly recognizes the rights of coastal states such as Canada over the natural resources of the seabed and subsoil beyond 200 nautical miles from their coastal baselines and sets out a process by which a state may determine the limits within which it may exercise those rights. Canada will make its submission to the United Nations Commission on the Limits of the Continental Shelf in December 2013 and is currently engaged in the scientific, technical and legal work needed to delineate the outer limits of its continental shelf. Autonomous underwater vehicles—with Canadian technology at their heart—are being used to collect some of the needed data. Canada is investing significantly to ensure that Canada secures international recognition for the full extent of its continental shelf in both the Arctic and Atlantic oceans.

The other Arctic coastal states also have extended continental shelves and are involved in a similar process. To maximize data collection in a challenging physical environment, encourage exchange of information and minimize future differences, Canada has been working closely with neighboring Arctic Ocean coastal states. We will act on a priority basis to ensure Canada has a sound submission by the 2013 deadline. Any overlaps with the submissions of neighboring states will be resolved through peaceful means in accordance with international law.

Beyond concrete steps on boundaries, Canada's sovereignty agenda will also address Arctic governance and related emerging issues, such as public safety. Increasingly, the world is turning its attention northward, with many players far removed from the region itself seeking a role and in some cases calling into question the governance of the Arctic. While many of these players could have a contribution to make in the development of the North, Canada does not accept the premise that the Arctic requires a fundamentally new governance structure or legal framework. Nor does Canada accept that the Arctic nation states are unable to appropriately manage the North as it undergoes fundamental change.

Canada, like other Arctic nations, stands by the extensive international legal framework that applies to the Arctic Ocean. Notably, UNCLOS, as referred to earlier, provides the legal basis for delineation of continental shelves and goes well beyond this to address the protection of the marine environment, freedom of navigation, marine scientific research, conservation and utilization of marine living resources, and other uses of the sea.

However, within this broad legal framework, new challenges are emerging. Until now, the Arctic Ocean's inaccessibility has meant that the region was largely insulated from the sort of safety and law enforcement challenges present in regions further south. However, decreasing ice cover will lead, over time, to increases in shipping, tourism and economic development in the Arctic Ocean region. While the full extent of the changes will take many decades to realize, Canada and other Arctic Ocean coastal states must begin to prepare for greater traffic into the region, with sometimes negative effects.

Regional solutions, supported by robust domestic legislation in Arctic states, will be critical. Canada will work in concert with other Arctic nations through the Arctic Council (the primary forum for collaboration among the eight Arctic states), with the five Arctic Ocean coastal states on issues of particular relevance to the Arctic Ocean, and bilaterally with key Arctic partners, particularly the United States.

We will need to consider how to respond to issues such as emergency response and search and rescue capability and potential future problems related to emergencies (including environmental), organized crime, and illegal trafficking in drugs and people. One very important initiative is the current effort within the Arctic Council to negotiate a search and rescue agreement for the Arctic. Information sharing, coordination of efforts, and pooling resources are all concrete ways in which partnership may be beneficial.

The recently held Arctic Ocean Foreign Ministers meeting was an important step not only in advancing our collaboration on continental shelf delineation but also in encouraging forward thinking on the emerging issues in the region. The meeting publicly demonstrated leadership and partnership by Canada and other coastal states on responsible management of the Arctic Ocean.

Protecting national sovereignty, and the integrity of our borders, is the first and foremost responsibility of a national government. We are resolved to protect Canadian sovereignty throughout our Arctic.

Promoting Economic and Social Development:

Creating a dynamic, sustainable Northern economy and improving the social well-being of Northerners is essential to unleashing the true potential of Canada's North and is an important means of exercising our sovereignty.

The potential for wealth and job creation through resource development, both living and non-living, is great. Canada is the world's third largest diamond producer. It is estimated that one-fifth of the world's petroleum reserves lie in the Arctic. That is why the Government of Canada is investing significantly in mapping the energy and mineral potential of the North. Managed in a sustainable manner, Canada's incredible endowment, including living marine resources such as fisheries, will contribute to the prosperity of Northerners and all Canadians for generations. These resources can and will be a cornerstone of sustained economic activity in the North and a key to building prosperous indigenous and Northern communities.

In addition to investments in mapping in the North, the Government of Canada has made a wide variety of recent commitments related to promoting Northern social and economic development. These include measures to improve regulatory systems across the North, to address infrastructure needs including housing, to create the Canadian Northern Economic Development Agency, and to support improvement in indigenous skills and employment.

Ensuring sustainable development in the Arctic involves working closely with territorial governments and Northerners and through key international institutions like the Arctic Council to build self-sufficient, vibrant and healthy communities. The well-being of the people of the North—its inhabitants and communities—is fundamental.

Canada will actively promote Northern economic and social development internationally on three key fronts: take steps to create the appropriate international conditions for sustainable development, seek trade and investment opportunities that benefit Northerners and all Canadians, and encourage a greater understanding of the human dimension of the Arctic to improve the lives of Northerners.

First, Canada will take steps to create the appropriate international conditions for sustainable development in the Arctic, complementing domestic measures to support economic development. This involves understanding the opportunities and challenges of Arctic energy and resource development and developing regulations, guidelines and standards that are informed by Arctic science and research, including traditional knowledge. In no area is this more critical than in oil and gas development.

As an emerging clean energy superpower, Canada will continue to support the responsible and sustainable development of oil and gas in the North. Along with the rest of the international community, we have witnessed the terrible environmental, social and economic impacts of the oil spill in the Gulf of Mexico.

Canada recognizes and values the importance of working closely with other Arctic states and will take every step possible to prevent such an event in Canadian waters. Canada is showing leadership at home in Arctic safety and environmental requirements for offshore drilling through the review undertaken by the National

Energy Board. Moreover, Canadians and our Arctic neighbors can be assured that no drilling will occur in Canada's deep Beaufort Sea until at least 2014.

Canada is a party to a number of bilateral and multilateral agreements and is actively engaged in various international forums, including the Arctic Council, on matters relating to the protection of the marine environment. In the wake of the oil spill in the Gulf of Mexico, we are furthering our collaboration at the appropriate levels, in particular with the United States and Denmark/Greenland in light of our common interests in the Arctic marine environment.

The 2007 Arctic Council Oil and Gas Assessment examined the impacts of current oil and gas activities in the Arctic and potential impacts related to possible future activities. The Oil and Gas Assessment found that while extensive oil and gas exploration activity and production have occurred in parts of the Arctic, much potential exists for future oil and gas development. Related risks need to be managed carefully. Canada made significant contributions to the Assessment.

The Arctic Council, with significant Canadian participation, updated its Arctic Offshore Oil and Gas Guidelines in 2009. These guidelines recommend standards, technical and environmental best practices, management policy and regulatory controls for Arctic offshore oil and gas operations. Canada will act on the request from the Arctic Council that all states apply these guidelines as minimum standards throughout the Arctic and will encourage others to do so as well.

Arctic shipping is another key area of focus. The 2009 Arctic Marine Shipping Assessment is the first comprehensive review of circumpolar shipping activities and provides important information about possible future shipping activities and their potential impacts. Among its findings, the Assessment noted that Arctic shipping has increased significantly, with more voyages to the Arctic and between Arctic destinations. However, the various Canadian internal waterways known as Canada's "Northwest Passage" are not predicted to become a viable, large-scale transit route in the near term, in part because mobile and unpredictable ice in the Passage poses significant navigational challenges and other routes are likely to be more commercially viable.

The Arctic Marine Shipping Assessment also provides guidance on enhancing Arctic marine safety, protecting Arctic peoples and environment, and building Arctic marine infrastructure. Based on these recommendations, the 2009 Arctic Council Ministerial supported the development of a mandatory polar code for shipping by the International Maritime Organization (IMO). As an IMO member, Canada will continue to play a leading role in the development of this code. We, along with other Arctic Council states, have also agreed to work together towards an international agreement on search and rescue operations for the Arctic by 2011.

Within the IMO context, Canada has also assumed responsibility for providing navigational warning and meteorological services to facilitate the safe management

of marine traffic in two Arctic areas. These cover substantial areas of Arctic waters, including the Northwest Passage. Through this initiative, Canada will deliver services that help mitigate the risks associated with increased Arctic shipping. These services will also enhance environmental protection of the Arctic marine environment, support Northern residents in their maritime activities, and provide necessary services for coastal and marine-based resource development.

Canada is playing a key role in the creation of the Arctic Regional Hydrographic Commission to improve our understanding of the features of the Arctic Ocean and its coastal areas, essential knowledge for safe navigation. Canada has offered to host the Commission's inaugural meeting in fall 2010.

Second, Canada will continue to seek trade and investment opportunities that benefit Northerners and all Canadians.

Canada will enhance its trading ties with other Arctic states. We have recently implemented a free trade agreement with the European Free Trade Association (EFTA) member countries, which include Iceland and Norway. This agreement has the potential to enhance trade and investment between Northern regions of our respective countries. We are also seeking to build new trade ties with other Arctic states to create these same links between our respective Northern regions. These Northern commercial relationships can serve as conduits to expand trade and investment relations not only with our immediate Northern neighbours but also with other states such as those in central Asia and Eastern Europe.

Improving air and sea transportation links to create enhanced access across the polar region can help encourage Arctic trade and investment opportunities. For instance, investments have been made to upgrade the Port of Churchill, Manitoba, to facilitate increased export options and the flow of two-way trade with other Northern ports.

Third, Canada will continue to encourage a greater understanding of the human dimension of the Arctic to improve the lives of Northerners, particularly through the Arctic Council. The Arctic Council's Arctic Human Development Report was the first comprehensive assessment of human well-being to address the entire Arctic region. Canada will continue to play a leadership role in Arctic Council initiatives in this area and to host the Secretariat for the Council's Sustainable Development Working Group. For example, the 2008 Arctic Indigenous Languages Symposium, organized by the Inuit Circumpolar Council with support from the Government of Canada, underlined the importance of preserving and strengthening indigenous languages.

Addressing human health issues in Northern communities is also critically important. Canada has been supporting efforts through the Arctic Council and International Polar Year research to better understand the issues and then develop and implement appropriate health policies. The results of international collaboration are all aimed at improving the health conditions of residents in the Arctic. Canada will

play a lead role in the Arctic Council on a range of new health-related projects, including the development of a circumpolar health observatory, a comparative review of circumpolar health systems, and a comparative review of circumpolar nutritional guidelines.

Canada's commitment to Northern economic and social development includes a deep respect for indigenous traditional knowledge, work and cultural activities. Going forward, Canada will promote a better understanding of the interests, concerns, culture and practices of Northerners, including with regard to seals and polar bears. In this context, Canada is committed to defend sealing on the international stage. Seals are a valuable natural resource, and the seal hunt is an economic mainstay for numerous rural communities in many parts of Canada including the North.

Protecting the Arctic Environment:

The Arctic environment is being affected by events taking place far outside the region. Perhaps the most well-known example is climate change, a phenomenon which originates outside the Arctic but is having a significant impact on the region's unique and fragile environment. The resulting rapid reduction in Arctic multi-year sea ice has had, and will continue to have, profound consequences for the peoples and communities of the Arctic. What happens in the Arctic will have global repercussions on accelerating climate change elsewhere.

Strong environmental protection, an essential component of sustainable development, starts at home and is another important way in which Canada exercises its sovereignty in the North. Canada has long been at the forefront in protecting the Arctic environment. As far back as the 1970s, Canada enacted the Arctic Waters Pollution Prevention Act (AWPPA) to protect its marine environment, taking responsibility for enacting and enforcing anti-pollution and shipping safety laws applicable to a larger area of Arctic waters. In August 2009, the application of the AWPPA was extended from 100 to 200 nautical miles. In addition, regulations requiring vessels to report when entering and operating within Canadian Arctic waters have been finalized and are in force from July 1, 2010.

These measures and others such as plan to establish a national marine conservation area in Lancaster Sound send a clear message to the world. Canada takes responsibility for environmental protection and enforcement in our Arctic waters. We are demonstrating stewardship in this magnificent ecological region.

Canada is committed to planning and managing Arctic Ocean and land-based activities domestically and internationally in an integrated and comprehensive manner that balances conservation, sustainable use and economic development—ensuring benefits for users and the ecosystem as a whole. We are acting domestically while cooperating internationally. Internationally, we will act in the following four ways: promote an ecosystem-based management approach with our Arctic neighbors and others; contribute to and support international efforts to

address climate change in the Arctic; enhance efforts on other pressing international issues, including pursuing and strengthening international standards; and strengthen Arctic science and the legacy of International Polar Year.

First, Canada will continue to promote an ecosystem-based management approach with its Arctic neighbors and others.

In accordance with Canada's Oceans Act, Canada is working with land claim authorities, governments, industry and communities to implement an ecosystem approach in the Beaufort Sea and has identified ecologically significant marine species and places. This is part of a broader ecosystem approach in the Arctic by the Government of Canada that also includes activities related to the international co-management of species in the Arctic whose habitat crosses national borders (e.g. caribou, polar bears and Arctic birds). These activities fall under international conventions and agreements such as the United Nations Convention on Biological Diversity, the Migratory Bird Treaty, and the Agreement on the Conservation of Polar Bears. International collaborative Arctic science and research is a fundamental aspect of the Government of Canada's participation in such agreements.

Canada and its Arctic neighbors are the stewards of unique wildlife such as polar bears. The Government of Canada recognizes the importance of indigenous knowledge and the need to use it in tandem with Western science in our efforts to better understand polar bears and their habitat.

Canada has signed a Memorandum of Understanding with the United States for the conservation and management of a shared polar bear population. In addition, Canada has developed agreements with other Arctic nations to jointly manage polar bears, narwhals and belugas. This work must continue in order to manage other shared species.

As part of its mandate, the Arctic Council has been playing a lead role in identifying large marine ecosystems in the region and determining best practices in ocean management. Canada will play a leadership role in the Arctic Council's Arctic Ocean Review which aims to strengthen and ensure the sustainable development of the Arctic Ocean. In pursuing strengthened Arctic Ocean stewardship, we will work with other interested partners and users of the Arctic Ocean as well as through regional and international organizations, including the Arctic Council and the IMO.

2010 is the International Year of Biodiversity and the Arctic is the focus of considerable attention. Canada will continue to lead the Arctic Council's Circumpolar Biodiversity Monitoring Program to ensure information on population status and trends for Arctic species and ecosystems is available and supports initiatives such as the Arctic Biodiversity Assessment. The Council has recently developed the Arctic Species Trend Index, which provides decision-makers with a valuable tool for managing and predicting Arctic wildlife populations. Tracking the index over time will

facilitate this prediction of trends and identify species and groups experiencing rapid change.

Canada will continue to establish terrestrial and marine protected areas in the Arctic and monitor biodiversity and ecological integrity. Canada recognizes that ecologically sensitive areas are essential for the conservation of Arctic species including polar bears, caribous, migratory birds, and marine mammals and other aquatic species. These sensitive areas play a key role in the survival and recovery of species at risk. They also provide significant ecotourism opportunities to an expanding market of Canadians and international visitors.

Canada has made significant progress in establishing protected areas in over 10 percent of our North, designating 80 protected areas covering nearly 400,000 square kilometers. These areas include 11 national parks, six national wildlife areas and 16 migratory bird sanctuaries and will protect habitat for a wide variety of species.

Canada continues to plan for additional protected areas in the North and has an ambitious program to expand the national park system, including the creation of three new national parks. The Government of Canada is moving forward in consultation with communities and industry to add nearly 70,000 square kilometers to Canada's Northern protected areas network. Canada will be finalizing a Policy Framework for Canada's National Network of Marine Protected Areas that will guide marine protected area establishment, including the five marine ecoregions found in the Arctic. The creation of the majority of existing national parks in the Arctic proceeded hand-in-hand with land claim negotiations, as are all of the new national park proposals.

Second, Canada will continue to actively contribute to and support international efforts to address climate change in the Arctic, including both mitigation and adaptation in the Arctic. Climate change is having a disproportionate impact on the Arctic, and the Arctic Council's 2004 Arctic Climate Impact Assessment heightened global awareness of the problem.

Canada recognizes that climate change is a global challenge requiring a global solution. To that end, the government is committed to contributing to the global effort by taking action to reduce Canada's greenhouse gas emissions through sustained action domestically to build a low-carbon economy, working with our North American partners and constructively engaging with our international partners to negotiate a fair, environmentally effective and comprehensive international climate change regime based on the Copenhagen Accord. Canada has been, and continues to be, very active in these international negotiations, and will seek to ensure that consideration is given to the Arctic's unique set of climate change-related challenges in every relevant forum.

New evidence suggests that certain short-term factors are having an impact on the rate of climate change. The 2009 Arctic Council Ministerial approved the formation of

a task force on “short-lived climate forcers” in the Arctic. While climate agents or forcers, such as black carbon, contribute significantly to climate change, they can potentially be brought under control much more quickly than long-term contributors such as carbon dioxide. The task force will identify existing and new measures to reduce emissions of these forcers and will recommend further immediate action.

Canada has been, and will continue to be, active in climate change adaptation initiatives. Canada played an important role in the Arctic Council’s recent Vulnerability and Adaptation to Climate Change in the Arctic project. Underlining the importance of community involvement in planning for and responding to climate change adaptation is one of Canada’s key contributions. Canada recognizes that enhanced action on adaptation will be a significant component of the post-2012 climate change negotiations under the United Nations Framework Convention on Climate Change. Canada plays an active and constructive role in those discussions.

In support of these objectives, the Government of Canada has been working in close partnership with Northern communities and governments to assess risks, vulnerabilities and opportunities related to a changing climate. Over the last two years, over 60 projects have been funded in the Canadian Arctic that have led to the development of community and regional adaptation plans, increasing knowledge and understanding of climate-related implications and the development of strong partnerships essential to implementing adaptation action.

Third, Canada will enhance its efforts on other pressing environmental issues, including pursuing and strengthening international standards, where appropriate. Canada will continue to engage in the negotiation of an international regime on access to genetic resources and the sharing of their benefits, under the Convention on Biological Diversity. Researchers around the world are interested in genetic resources found in extreme environments like the Arctic. We recognize the importance of these issues to Northerners and Northern communities.

Persistent organic pollutants and mercury, released far from the Arctic, have had serious impacts on Arctic peoples. Canada and the Inuit Circumpolar Council played an important role in the negotiation of the Stockholm Convention on Persistent Organic Pollutants. Canada will continue to address the problems arising from these contaminants, including waste management practices in the North, and will engage actively in global negotiations to reduce mercury emissions.

Canada is setting an international example with the Federal Contaminated Sites Action Plan. The government is providing \$3.5 billion over 15 years to address federal contaminated sites, with the majority of resources directed to contaminated sites in the North. Canada is contributing to the global effort to address mercury emissions with a plan to implement new environmental performance standards that will reduce greenhouse gas emissions and pollutants such as mercury from coal-fired electricity generating plants. An international agreement on the reduction of

mercury emissions will help reduce the impact of mercury on the health and the environment of Canadians, particularly in the North.

Fourth, Canada will contribute to strengthening Arctic science and the legacy of International Polar Year. Arctic science forms an important foundation for Canada's Northern Strategy, providing the knowledge necessary for sound policy and decision-making both on domestic and international issues. To ensure that Canada remains a global leader in Arctic science, the Government of Canada has committed to establishing a new world-class research station in the High Arctic that will serve Canada and the world, and work is proceeding on its development. The station will anchor a strong research presence in Canada's Arctic and to complement these efforts, Canada has also invested in upgrading existing research facilities in over 30 sites across the Arctic.

Canada made one of the largest single contributions of any country to International Polar Year and will be hosting its final wrap-up event in Montreal in April 2012. Canada is also taking a lead role in the Arctic Council's Sustaining Arctic Observing Networks project. Its purpose is to further international engagement in developing sustained and coordinated pan-Arctic observing and data-sharing systems, particularly related to environmental, social, economic and cultural issues.

Improving and Devolving Governance: Empowering the Peoples of the North:

The Government of Canada is committed to providing Canadian Northerners with more control over their economic and political destiny. Canada is taking steps to endorse the United Nations Declaration on the Rights of Indigenous Peoples in a manner fully consistent with Canada's Constitution and laws. In recent decades, Canada's Northern governments have taken on greater responsibility for many aspects of their region's affairs. Progress is continuing in this area and represents another way in which Canada is exercising its sovereignty in the Arctic. Canada's North is also home to some of the most innovative, consultative approaches to government in Canada and the world. Through land claim and self-government agreements, indigenous communities are developing made-in-the-North policies and strategies to address their unique economic and social challenges and opportunities.

Canada recognizes and values the important role Northern governments, Arctic Indigenous organizations at the Arctic Council (known as Permanent Participant organizations) and other Northerners have played, and will continue to play, in shaping Canada's international actions. Canada's Arctic foreign policy bolsters our domestic efforts for strong governance in the North in the following three ways.

First, Canada will engage with Northerners on Canada's Arctic foreign policy. Through the Canadian Arctic Council Advisory Committee, Northern governments and Indigenous Permanent Participant organizations in CanadaFootnote 4 will have the opportunity to actively participate in shaping Canadian policy on Arctic issues.

We will continue to meet regularly in Canada's North to find common ground and work towards common objectives.

Second, the Government of Canada will continue to support Indigenous Permanent Participant organizations in Canada, including financially, to contribute to strengthening their capacity to fully participate in the activities of the Arctic Council. Furthermore, Canada will encourage other Arctic Council states to support the participation of their Permanent Participant organizations. Canada will also support the continued unique status of Permanent Participant organizations at the Arctic Council, which was created to provide for their active participation and full consultation. As interest by non-Arctic players in the work of the Council grows, Canada will work to ensure that the central role of the Permanent Participants is not diminished or diluted.

Third, Canada will provide Canadian youth with opportunities to participate in the circumpolar dialogue. The Canadian Arctic Council Advisory Committee chose three young Canadians to attend the 2009 Arctic Council Ministerial meeting. Their participation enhanced the contribution of the Canadian delegation at this meeting, and this successful initiative is one that Canada will continue to support.

The Way Forward:

The rapid pace of change and growing importance of the Arctic requires that we enhance our capacity to deliver on Canada's priorities on the international scene. Facing the challenges and seizing the opportunities that we face often require finding ways to work with others: through bilateral relations with our neighbors in the Arctic, through regional mechanisms like the Arctic Council, and through other multilateral institutions.

The United States is our premier partner in the Arctic and our goal is a more strategic engagement on Arctic issues. This includes working together on issues related to the Beaufort Sea, on Arctic science, on Aboriginal and Northern issues, and on a common agenda that we might pursue when first Canada and then the United States chairs the Arctic Council starting in 2013. We are also working with Russia, Norway, Denmark, Sweden, Finland and Iceland to advance shared interests such as trade and transportation, environmental protection, natural resource development, the role of indigenous peoples, oceans management, climate change adaptation and scientific cooperation.

However, the key foundation for any collaboration will be acceptance of and respect for the perspectives and knowledge of Northerners and Arctic states' sovereignty. As well, there must be recognition that the Arctic states remain best placed to exercise leadership in the management of the region.

Canada was the first chair of the Arctic Council (1996-98) and will be chairing the Council again starting in 2013. The Arctic Council is the leading multilateral forum

through which we advance our Arctic foreign policy and promote Canadian Northern interests. It is a consensus-based, high-level intergovernmental forum that promotes the environmental, social and economic aspects of sustainable development and environmental protection in the Arctic region. The unique structure of the Council brings both the eight Arctic states and the six Arctic Indigenous Permanent Participants together around a common agenda—enhancing the strength and effectiveness of this unique multilateral forum.

Canada will engage with Northern governments and Permanent Participants to ensure that the Arctic Council continues to respond to the region’s challenges and opportunities, thus furthering our national interests.

From Canada’s perspective, the Council needs to be strengthened to ensure that it is equipped to address tomorrow’s challenges. Canada will act on several fronts.

First, we will pursue a greater policy dialogue within the Council. The Council has traditionally played a strong role in science, research, monitoring and assessments, and the development of guidelines (e.g. for oil and gas) in some select areas. Canada will play a proactive role as the Council moves forward to encourage the implementation of guidelines, the development of “best practices” and, where appropriate, the negotiation of policy instruments. The current negotiation of a regional search and rescue agreement (the first ever attempt at a binding instrument under the rubric of the Arctic Council) will serve as an important test case and will inform the scope for future policy endeavors. Canada will also work to ensure that the research activities of the Council continue to focus on key emerging issues to ensure that solid knowledge underpins the policy work of the Council.

Second, Canada will lead efforts to develop a more strategic communications role for the Arctic Council. As the profile of the Arctic increases, the image of the Council and information about the broad range of cutting-edge work that it is doing need to be bolstered. In this vein, a greater outreach role for the Council will increase both the understanding of the interests of Arctic states and people, and of the Council and its mandate.

Third, Canada will work with other member states to address the structural needs of the organization. While the current informal nature of the body has served Canada well for many years, the growing demands on the organization may require changes to make it more robust. Canada will work with other Arctic states to develop options, including with respect to the role of the Council, related “secretariat” functions, and funding issues.

Beyond the Arctic Council, Canada will work through other multilateral institutions such as the International Maritime Organization and the United Nations Framework Convention on Climate Change towards global solutions to issues like polar shipping regulations and climate change. Arctic-specific organizations such as the Standing

Committee of Parliamentarians for the Arctic Region, the Northern Forum, and the University of the Arctic are important partners on a variety of issues.

The increasing accessibility of the Arctic has led to a widespread perception that the region could become a source of conflict. This has led to heightened interest in the Arctic in a number of international organizations including NATO and the Organization for Security and Co-operation in Europe. Canada does not anticipate any military challenges in the Arctic and believes that the region is well managed through existing institutions, particularly the Arctic Council. We will continue to monitor discussion of Arctic issues in other international forums and intervene when necessary to protect Canada's interests.

Canada is taking other steps to demonstrate leadership, such as the 2010 Arctic Ocean Foreign Ministers meeting. In addition, a new Arctic regional policy and program center at Canada's Embassy in Norway has been established, strengthening our on-the-ground interaction and influence in the region. This Canadian International Centre for the Arctic Region is part of a broader concerted effort to support Canada's foreign policy goals and commercial linkages through analysis, advocacy and outreach—further enhancing Canada's presence on Arctic issues abroad.

Conclusion:

Through our Arctic foreign policy, we will deliver on the international dimension of our Northern Strategy. We will show leadership in demonstrating responsible stewardship while we build a region responsive to Canadian interests and values, secure in the knowledge that the North is our home and our destiny.

Through our Arctic foreign policy, we are also sending a clear message: Canada is in control of its Arctic lands and waters and takes its stewardship role and responsibilities seriously. Canada continues to stand up for its interests in the Arctic. When positions or actions are taken by others that affect our national interests, undermine the cooperative relationships we have built, or demonstrate a lack of sensitivity to the interests or perspectives of Arctic peoples or states, we respond.

Cooperation, diplomacy and respect for international law have always been Canada's preferred approach in the Arctic. At the same time, we will never waver in our commitment to protect our North.

“Canada and the Circumpolar Arctic,” Government of Canada, 10 September 2019

[45] https://www.international.gc.ca/world-monde/international_relations-relations_internationales/arctic-arctique/index.aspx?lang=eng

Overview:

The Arctic is central to Canada's national identity, prosperity, security, values and interests. The Canadian Arctic covers 40% of Canada's territory and is home to more than 200,000 inhabitants, more than half of whom are Indigenous.

Advancing Canada's Arctic priorities involve many departments across the Government of Canada, both at home and internationally.

Canada is committed to addressing:

- The causes and impacts of climate change;
- Renewing the nation-to-nation relationship with Indigenous peoples;
- Supporting sustainable Northern economic development;
- Promoting Canada as a leader in Arctic science and research; and
- Working with domestic and international partners to reach Canada's goals in the region.

Current & Relevant Information:

Global Affairs Canada and the Arctic:

Global Affairs Canada is responsible for coordinating and leading the international aspects of Canada's Arctic engagement. This work is mainly carried out by the Nordic and Polar Relations Division in Ottawa, and the Canadian International Arctic Centre (CIAC), located in Oslo, Norway, as well as by Canadian embassies around the world. Canada is an active member of the Arctic Council, the main international forum for Arctic cooperation.

Global Affairs Canada's main objectives in the circumpolar Arctic include:

- Lead in implementing the International Arctic Policy contained in Canada's Arctic and Northern Policy Framework;
- Support the identification of targeted, innovative trade and commercial opportunities for the North, benefiting Northerners;
- Help position Canada as a global leader in Arctic science and research; and
- Assert Canadian positions and contribute to raising Canada's profile on Northern issues, through an active advocacy strategy involving Northern participation.

The Arctic and Northern Policy Framework:

In September 2019, Canada released the Arctic and Northern Policy Framework which provides overarching direction to the Government of Canada's priorities, activities, and investments in the Arctic to 2030 and beyond. Co-developed with Northerners, territorial and provincial governments, First Nations, Inuit, and Métis

People, it replaces Canada's 2009 Northern Strategy and 2010 Statement on Canada's Arctic Foreign Policy. To address specific international outcomes, Global Affairs Canada will implement an International Arctic Policy, that sets out priority areas for Canada's international Arctic engagement including: to strengthen the rules-based international order; to increase engagement with Arctic and non-Arctic states; and to more clearly define Canada's Arctic boundaries.

Canada's submission to the Commission on the limits of the Continental Shelf:

On May 23, 2019 Canada filed a [2,100 page submission to the Commission on the Limits of the Continental Shelf](#) at United Nations. This follows a decade of scientific and legal work to determine the limits of Canada's undersea landmass in the Arctic. This marks the first step in the process set out in the United Nations Convention on the Law of the Sea to obtain international recognition for the outer limits of the continental shelf in the Arctic Ocean.

““The Arctic Is Ours”: Canada's Arctic Policy - Between Sovereignty and Climate Change,” Petra Dolata-Kreutzkamp, Fokus Kanada, 26 June 2009 [46]
<https://library.fes.de/pdf-files/bueros/usa/06874.pdf>

Overview:

- Arctic policy is not new to the political landscape of Canada. However, an increased level of public and international interest has been observed in the past few years.
- Canadian Arctic policy is found to span national debate from regional, social, and environmental policy on one side to foreign policy on the other.
- Contemporary Canadian Arctic policy can be found to stand squarely under the motto “Arctic Sovereignty” – which lends legal, military, and security policy overtones to the changes currently taking place. This discourse has developed over time and is an important part of Canadian national identity. The discourse also addresses Canada's most significant economic and security partner: the U.S.
- Ottawa's most recent Arctic policy has been based on non-federal stakeholders. This strengthens the position of the Provinces, which have taken the lead on coordination in the Arctic region.
- The Canadian government is emphasizing the cooperative motif of their contemporary Arctic policy. As evidence, one can look at their cooperative relationship with the Arctic-abutting states. In addition, Ottawa supports related international and Arctic Circle institutions.

Current & Relevant Information:

International Developments: The Arctic, Re-Discovered:

Climate change has changed the Canadian Arctic, and above all, it has made it more accessible. Studies predict a sizeable rise in temperature and an ice-free Arctic in the next decade, a navigable Northwest Passage could shorten the shipping route from Europe to Asia by 30-40% in comparison to the current route through the Panama Canal. Nations including China, Japan, and South Korea have therefore begun their own ambitious programs to build icebreakers, Arctic-ready container ships and tankers. Additionally, the Arctic holds vast natural resources, including oil, gas, minerals, and valuable metals. According to a study by the U.S. Geological Survey, the entire Arctic region could hold up to a quarter of the world's undiscovered oil and gas resources. Finally, because of melting ice, the ocean currents as well as the water temperature could change – meaning that in the future, fish stocks in the Canadian arctic could increase.

Canadian Arctic Policy Is Nothing New:

The Canadian government is anxious to react to these international developments. However, it would be erroneous to assume that Canada has only recently developed an Arctic policy. Since Canada's former colonial power, Great Britain, ceded the Arctic islands to the young Canada in 1880, the government has had to re-affirm their territorial claims over those of the Arctic neighbors (sovereignty). During the Second World War, military considerations led to closer cooperation between Canada and the United States in the Arctic region. This continental security cooperation was intensified during the Cold War era, in order to be prepared for a potential Soviet attack through the North Pole (security). Security and sovereignty stand in the foreground of Arctic policy; however, the primacy of security during the Cold War meant that Canadian sovereignty interests have been de-prioritized in favor of issues of North American security. Economic interests in the Arctic region were sporadic, and never as meaningful as the worries over security and sovereignty. Although in the course of the first oil crisis in the 1970s, oil and gas sources were discovered in the Canadian East and West Arctic, oil and gas have been developed commercially only in the West Arctic region until very recently. Many of those sources lie under the ocean, mostly in the Sverdrup basin - until today, these regions have been barely accessible.

Arctic Sovereignty: The Arctic Belongs to Canada:

The conservative Canadian government, under Prime Minister Harper, is pushing for an Arctic policy that places the threat to Canadian sovereignty in the foreground. He is combining programs to militarize the Arctic along with a push for legal claims – and is building up this agenda with a considerable rhetoric that seems to emphasize the threat to Canadian territorial integrity. Under the motto “Arctic Sovereignty”, this policy relinquishes cooperative and multilateral perspectives to the background. In the summer of 2007, for example, the Prime minister gave the following speech: “Canada has a choice when it comes to defending our sovereignty over the Arctic. We either use it or lose it. And make no mistake: this Government intends to use it.

Because Canada's Arctic is central to our national identity as a northern nation. It is part of our history. And it represents the tremendous potential of our future.”

The Rise of the Government:

Arctic policy under Harper has been not only characterized by militarization and confrontational rhetoric, but also by a changing constellation of stakeholders. The indigenous and transnational non-state actors of the late 1990s have lost some of their importance to the political process. This was particularly important in May 2008, when the five Arctic-abutting states (Canada, the U.S., Russia, Denmark and Norway) met in Greenland and approved “The Ilulissat Declaration” They came together to work against public perceptions of a contentious race to the north, and referred to the pre-existing cooperative mechanisms for dealing with the Arctic. They tried to accentuate the fact that the existing structures of the Arctic Council and the Law of the Sea were adequate. Nevertheless, the other members of the Arctic Council were not invited to the meeting, and neither were Arctic nations that had no geopolitical claim on the region around the North Pole (Iceland, Sweden, and Finland), nor the indigenous representatives (the Circumpolar Inuit Council).

It was thought that circumpolar, multilateral cooperation such as the Arctic Council (founded in 1996) between Arctic-abutting nations and the indigenous organizations had a promising future, but this has been overshadowed by state action. Therefore, representatives of the Inuit, primarily the Circumpolar Inuit Council, responded with their own declaration of Arctic sovereignty in early 2009. The declaration explicitly criticized the fact that the Inuit were not invited to the Ilulissat talks, and were generally not made a part of discussion over Arctic sovereignty. Therefore, they exhorted the Arctic states to “accept the existence and role of the Inuit as a partner in Arctic international relations”. Such an active partnership should strengthen cooperative efforts in the circumpolar relationship, and ensure that political decisions consider the potential consequences and benefits for the indigenous populations of those areas. Conflict resolution in the Arctic should not only be a concern of the Arctic states. Indigenous peoples must also have the right to voice their concerns, as well as the international community, especially when it involves matters of global environmental security.

Similarly, important is the support for continuing self-determination. Part of this includes the right to natural resources. In the Arctic, the ultimate question is who can claim the raw materials on the mainland and under the ice. It is not only the Arctic states that are in conflict over this question, but also the national government in conflict with indigenous groups. Despite successful negotiations, the Canadian government still faces difficulties combining indigenous rights to land and resources with national policies regarding energy security, territorial integrity, and sovereignty. This may also explain why Ottawa did not sign the “Declaration of the United Nations on the Rights of Indigenous Peoples” in September 2007 and why, furthermore, the Canadian federal government is responsible for the oil and gas activities in a large

portion of the Arctic – for example, in the Northwest Territories, Nunavut and the Arctic Ocean.

However, it must be emphasized that the Canadian government has accepted the Inuit concerns as more legitimate than the European calls for a sweeping Arctic treaty. In particular, the Resolution of the European Parliament from October 2008 and the EU paper on Arctic policy from November 2008, which calls for a EU observer status in the Arctic Council, could be interpreted as meddling in circumpolar affairs.

The Canadians argue that they are not demanding to get involved in Mediterranean politics. Furthermore, the existing international institutions should be adequate in terms of solving the issues of the Arctic-abutting states. Admittedly, this argument is not completely persuasive. The Arctic Council, as well as the Law of the Sea Treaty, are both relatively weak when it comes to implementing and monitoring decisions, since they operate by consensus (Council) or by regulatory mechanisms which only provide for conflict reconciliation (Law of the Sea). In any case, according to Article 298, states can refuse conflict resolution. Nevertheless, Arctic policy remains an open political process, and offers a future in which cooperation can still outweigh conflict. Much hangs in the balance of Canada's decision to follow territorial and national interests (Arctic Sovereignty) or, instead, to place more emphasis on social and environmental concerns. The Arctic might be Canadian, but a healthy planet is in the interest of everyone.

“The Canadian Arctic: Canadian High Commission in London focuses on Canada's Arctic,” Government of Canada, 18 March 2013 [47]

https://www.canadainternational.gc.ca/united_kingdom-royaume_uni/bilateral_relations_bilaterales/arctic-arctique.aspx?lang=eng

Overview:

Canada's Arctic makes up over 40% of our landmass and is home to more than 100,000 Canadians. It is an essential part of our national identity and an area of growing importance internationally.

The Government of Canada is dedicated to ensuring that the international spotlight stays focused on the challenges and opportunities facing the Arctic.

It is a vast treasure that we inhabit and hold in trust for future generations. Northerners, including indigenous peoples who comprise 80 percent of the population in some regions, have brought a number of issues to the world's attention:

- the dangers and challenges posed by climate change;
- the need for sustainable economic development;

- and the importance of sharing experiences and knowledge with our circumpolar neighbors and the world.

Canada's Arctic foreign policy is based on four pillars - protecting Canada's environmental heritage, promoting economic and social development, improving and devolving northern governance and exercising Canada's sovereignty in the Arctic.

Current & Relevant Information:

The Environment:

Canada has focused global efforts on the impact of climate change in the region. It has been a major player in the negotiation of international environmental instruments that address critical issues such as pollution and the need to protect and preserve our unique Arctic environment.

Economic and Social Development:

Ensuring that economic and social development is sustainable and benefits Arctic inhabitants, particularly indigenous peoples, is a key objective for Canada. But it's not just a domestic issue, long standing bilateral relationships with our Arctic neighbors, are benefiting the region and its inhabitants and helping to build vibrant communities.

Sovereignty:

Canada's sovereignty over the lands and waters of the Canadian Arctic is long standing, well established and based on historic title and we exercise our sovereign rights responsibly in the region.

Improving and Devolving Governance:

Real efforts have been made to ensure that decisions affecting Northerners are brought closer to the communities themselves. We recognize and value the important role that the leadership of indigenous groups and Northerners have played in shaping our international actions.

“Three Takeaways from Canada’s Arctic and Northern Policy,” Andrew Chater, The Polar Connection: Home of Polar Research and Policy Initiative, 12 September 2019 [48] <http://polarconnection.org/canada-arctic-northern-policy/>

Overview:

The Canadian government has released [Canada’s Arctic and Northern Policy](#), promised four years ago, and delivered after three years of work as well as consultations with northerners. It was dropped on September 10, the day before Justin Trudeau’s Liberal government triggered a new election (to take place October 21, 2019). The policy came with surprisingly little fanfare – no big announcement, no flashy press conference, no major photo ops.

What can we make of the document? There is a lot to parse through and much to review. Here are three initial takeaways from the new policy.

Current & Relevant Information:

1) The new policy is broad, yet promising

The new policy is very much preliminary, and Trudeau government officials have said as much. Canadian Arctic experts have criticized it for being light on details or binding commitments, as well as lacking an “overarching vision.” Certainly, it was reasonable to expect a more substantial policy based on the amount of work that has gone into it.

Yet, we have reason to be optimistic. An implementation plan is coming. If implementation happens (that is, Trudeau’s government wins re-election), the policy is another step in an unfolding process to build a stronger Canadian Northern region driven by its residents. In any case, action, relationship building and new programs will be an ongoing part of Canada’s Arctic discourse.

The new policy lacks details in many areas and does not reveal new spending or programs; yet, the same was largely true of Canada’s previous 2009 Arctic policy released under the Stephen Harper government, Canada’s Northern Strategy: Our North, Our Heritage, Our Future. First and foremost, the new policy lays out government priorities and goals.

Why did the document arrive with such little pomp? One possibility is the timing of Canada’s election. If the government had put nothing forward before the Fall 2019 election, it would represent another promise broken by the ruling Liberals. If the policy had arrived with a splash, it likely would be taken as an election ploy, which clearly the Liberals do not particularly desire.

2) The new policy focuses on people

Canada’s new policy emphasizes eight pillars, with northerners front and centre throughout (directly mentioned in three pillars):

- “Strong, sustainable, diversified and inclusive local and regional economies”
- “Canadian Arctic and northern Indigenous peoples are resilient and healthy”
- “The Canadian Arctic and North and its people are safe, secure and well-defended”
- “Strengthened infrastructure that closes gaps with other regions of Canada”
- “The rules-based international order in the Arctic responds effectively to new challenges and opportunities”
- “Knowledge and understanding guides decision-making”

- “Canadian Arctic and northern ecosystems are healthy and resilient”
- “Reconciliation supports self-determination and nurtures mutually-respectful relationships between Indigenous and non-Indigenous peoples”

In contrast, Canada’s previous 2009 Arctic policy had four pillars that mentioned northerners less directly:

- “Exercising Our Arctic Sovereignty”
- “Promoting Social and Economic Development”
- “Protecting our Environmental Heritage”
- “Improving and Devolving Northern Governance”

A critique of the 2009 policy was its under-emphasis of the impact of climate change on people in the Arctic region. The link between people and the environment is clear in the new policy: “the framework will help address the massive implications of climate change for individuals, communities, businesses and governments alike, and ensure a more sustainable future for northerners.”

Yet, the two policies have a lot in common. Both note the Arctic Council as a key actor in the region; both paint a picture of an emerging Arctic economy; both acknowledge governance deficiencies; both state the important role that northerners must play in solving Arctic challenges.

One big difference between the old policy and the new policy is the amount of collaboration that is evident. The new policy comes after 16 rounds of consultations across Canada and ongoing ways to contribute. The Trudeau government invited sub-national actors to contribute their own Arctic visions, which have resulted in documents from the government of Nunavut and Northwest Territories, as well as a co-written chapter from the three territorial governments and a chapter from Canada’s major Inuit organization, Inuit Tapiriit Kanatami. More chapters from sub-national actors are forthcoming.

3) Conflict is not a major theme of the new policy

The Harper government policy emphasized the importance of protecting and asserting Canada’s Arctic sovereignty. The Trudeau government policy mentions Arctic sovereignty, but much less prominently than in the previous policy. It asserts the importance of the “rules based international order in the Arctic” and calls on renewed leadership from Canada as well as “the representation and participation of Arctic and northern Canadians in relevant international forums and negotiations.” It calls for enhancing Canada’s military capabilities in the Arctic, but only after discussing the security threats that climate change creates for Northerners.

A criticism of Arctic discourse is the frequent mention of Arctic conflict. The Trudeau policy clearly downplays this narrative. It, for example, calls for dialogue with Russia

in the region, despite its worsening relationship with the West: “We will take steps to restart a regular bilateral dialogue on Arctic issues with Russia in key areas related to Indigenous issues, scientific cooperation, environmental protection, shipping and search and rescue.”

In conclusion

More analysis of Canada’s Arctic and Northern Policy is surely forthcoming from many corners of the policy world. If Justin Trudeau and his Liberal Party fail to win re-election, this new policy will likely become a footnote in Arctic politics. If the new policy translates into action, it represents an important step in building the resilience of Canada’s Arctic region.

B. Denmark (Greenland):

“The Arctic Council: About: Arctic States: The Kingdom of Denmark,” Arctic Council, 2020 [49] <https://arctic-council.org/en/about/states/denmark/>

Overview:

Quick Facts

Population:

Greenland: 55,992 (January 2019)

The Faroe Islands: 52,124 (January 2020)

Denmark: 5,822,763 (January 2020)

Arctic Indigenous Peoples: Inuit

Current & Relevant Information:

The Kingdom of Denmark in the Arctic region

The Kingdom consists of three parts – Denmark, Greenland and the Faroe Islands – and, by virtue of Greenland is centrally located as a coastal state in the Arctic. This involves specific rights and obligations in the region. Today, both Greenland and the Faroe Islands have extensive self-government.

Greenland and the Faroe Islands have had home rule since 1948 and 1979, respectively. Home rule arrangements have been continuously modernized, most recently by the Takeover Act on Power of Matters and Fields of Responsibility and the Act on Faroes Foreign Policy Powers of 2005 in the Faroe Islands, and the Greenland Self-Government Act of 2009.

The three parts of the Realm share a number of values and interests and all have a responsibility in and for the Arctic region.

In an equal partnership between the three parts of the Danish Realm, the Kingdom of Denmark speaks with one voice in the Arctic Council.

About Greenland

Greenland is the world's largest non-continental island and is geographically located on the North American continent. However, in terms of geopolitics, it is a part of Europe. Greenland's icecap covers 81 percent of its area, leaving 15 percent of the coastline inhabitable. There are 17 towns and 58 villages located throughout the country. The population density is the lowest in the world. Counting the ice-free areas only, the population is a mere 0.3 persons per square kilometer.

Greenlanders are descendants from the Inuit Thule Culture. The Thule people were strong hunters, so traditionally hunting had been the most important source for survival of the Greenlandic people. Today, approximately 10 percent of the workforce is involved in the hunting industry. Fishing is Greenland's primary industry, with major exports including shrimps, Greenland halibut and cod. Greenland is home to many mineral resources, including gold, rubies, diamonds, coppers, Rare Earth Elements and oil. The Tourism sector is also increasing, with tourist numbers rising. Greenland places an emphasis on developing sustainable tourism.

About the Faroe Islands

The Faroe Islands comprises a cluster of 18 mountainous islands situated halfway between Iceland and Scotland in the North Atlantic Ocean. Over 50,000 people live in the Faroe Islands. The inhabitants are made up almost exclusively of native Faroese people, who are originally of Scandinavian and Gaelic descent. While 17 of the 18 islands are currently inhabited, nearly 40 percent of the population lives in the capital city, Tórshavn.

Though the Faroe Islands are remote, they are well-positioned in the middle of the shipping route between Europe and North America, and a short flight away from major cities in Northern Europe. The Faroe Island's relative isolation has contributed to the preservation of ancient traditions that shape the culture and livelihood.

The Faroe Islands' main industry is fishing. The temperate waters off the coasts make an ideal environment for salmon, Faroese cod and langoustines, which have been an important global export for the Faroe Islands since the late 19th century. The Faroes also have a strong education system, with the number of students attending the University of Faroe Islands increasing significantly. Tourism is also a relatively new but growing industry, with many people interested in visiting its so-called unspoiled and unexplored land.

Denmark

Denmark is the southernmost of the Scandinavian countries, and consists of a peninsula, Jutland and an archipelago of 443 named islands, with the largest being

Zealand, Funen and the North Jutlandic Island. Over 5.8 million people lives in Denmark. Denmark, Greenland and the Faroe Islands are equal entities within the Kingdom of Denmark. The Self-Government Arrangements transfer political competence and responsibility from the Danish political authorities to the Greenlandic and Faroese authorities. The Danish Government constitutionally conducts Foreign and Security policy of the Kingdom of Denmark in close cooperation with the Governments of Greenland and the Faroe Islands. The Danish Armed Forces undertake important tasks in the Arctic including the enforcement of sovereignty.

The Kingdom of Denmark in the Arctic Council

The Kingdom of Denmark's Chairmanship of the Arctic Council in 2009 – 2011 was an important priority for Denmark, Greenland and the Faroe Islands. At the Ministerial Meeting in Nuuk in 2011, the Nuuk Declaration was adopted, which among other things determined the role and criteria for admission of new observers, established a permanent secretariat for the Arctic Council in Tromsø, Norway, set up a task force to develop an instrument for preventing and managing potential oil spills in the Arctic and mandated an enhanced communication effort of the Arctic Council. Furthermore, the Ministers signed an agreement on search and rescue in the Arctic (SAR), which as the first legally binding agreement under the auspice of the Arctic Council added a new dimension to the Council's work.

“Denmark’s strategic interests in the Arctic: It’s the Greenlandic connection, stupid!” Marc Jacobsen, The Arctic Institute: Center for Circumpolar Security Studies, 4 May 2016 [50] <https://www.thearcticinstitute.org/denmark-interests-arctic-greenland-connection/?cn-reloaded=1>

Overview:

The only reason why Denmark is an Arctic state is because Greenland is part of the Danish Realm. Without Greenland, Denmark would lose the opportunity of sitting at the table with great powers such as Canada, Russia, and the United States; something which is quite unique for a small state like Denmark. It is of primary importance that Denmark take utmost care of the relationship with Greenland and treat any possible disagreements between Nuuk and Copenhagen with great mutual respect. Through this perspective, it was no surprise that one of Kristian Jensen's first travels as newly appointed foreign minister was to Greenland. During his visit in August 2015 Jensen said: “I am happy that I could come to Greenland this soon. Cooperation with Greenland, the Danish Realm and the whole question of the Arctic is strategically important for me and the government. I am therefore pleased to get well acquainted with the Government of Greenland and expand our close cooperation with Greenland. This cooperation makes us greater in the world”.

Two weeks after the visit, Jensen travelled with his Greenlandic counterpart, Vittus Qujaukitsoq, to Anchorage, Alaska, where John Kerry hosted the GLACIER

Conference. To the sound of flashing cameras and deafening applause Barack Obama also dropped by. Everyone wanted to exchange words and shake hands with Obama, who became the first sitting US president to visit the Arctic. Jensen's and Qujaukitsoq's speaking time was, thus, very limited. But, when the opportunity finally arose, Jensen seized the chance to invite Obama to Greenland to experience the visible consequences of climate change firsthand. As far as is known, Obama has not yet accepted the invitation, but if he does it would be a scoop for the Kingdom of Denmark. Previously, Hillary Clinton, Sergei Lavrov, and Ban Ki-Moon, among others, have accepted similar invitations to visit Greenland. Visits that not only have offered golden Kodak moments in front of icebergs in the Disko Bay and on top of the inland ice sheet, but also offered incomparable opportunities to strengthen bilateral relations with some of the world's most influential people. Relations, that are of utmost importance for Denmark's strategic interests in the Arctic and beyond.

Current & Relevant Information:

Denmark's entrance to the Arctic stage:

During the Cold War, the global Arctic interest was characterized by the bipolar world order where nuclear submarines and significant military installations dominated the Arctic political reality. In this reality, Greenland was located strategically between North America and the Soviet Union. With permission from Denmark, the United States established Thule Air Base and, not far from it, Camp Century, located inside the Greenland ice sheet. The plan was to develop a top-secret mobile missile defense system known as 'Project Ice Worm', but due to instability of the ice the project did not materialize. In return for this defense agreement, Denmark has for many years got a discount on its NATO membership, paying significantly less than two percent of GDP, which is the alliance's official defense spending goal. This discount has become known as Denmark playing the 'Greenland Card'. After the end of the Cold War, the primary focus changed to protection of the Arctic environment where threats towards local species and Indigenous peoples' livelihoods were the primary concern. This was mirrored in the establishment of Arctic Environmental Protection Strategy in 1991 that changed name to the Arctic Council in 1996.

When the Russian tricolor was planted on the geographic North Pole on August 2, 2007, the old East-West rhetoric briefly surfaced. Denmark's Foreign Minister at that time, Per Stig Møller, took this event very seriously. In his own words, he woke up one morning "soaked in perspiration with the head full of Russian submarines". Something had to be done and Møller, thus, took the initiative to bring together representatives from the five littoral states – Canada, USA, Norway, Russia and the Kingdom of Denmark – with the aim of finding a peaceful solution to territorial conflicts in the enormous area on the top of the world. On May 28, 2008, the representatives signed the Ilulissat Declaration which states that scientific,

geological data, and international law shall form the basis for the future distribution of territory. The declaration was also an important signal to foreign actors that this is an internal matter for the Arctic Five, and that a treaty such as the Antarctic Treaty (1959) is not a relevant solution. The declaration was a feather in Møller's cap and an important event marking Denmark's entrance onto the stage as a major player in the Arctic.

What is won externally has been lost internally:

The renewed Arctic interest in the mid 00's was reflected in the Arctic states' mutual positioning and foreign policy prioritization. Strategies for the Arctic became the 'new black'. First came Norway (2006), followed by Russia (2008), Canada (2009), Finland (2010), Iceland (March 2011) and Sweden (May 2011) before the Kingdom of Denmark Strategy for the Arctic 2011-2020 saw the light in August 2011. Only the United States was slower with their strategy, which first appeared in 2013. The Danish strategy of 2011 was one of the first tangible signs of a broader Danish Arctic perspective. Until then, Denmark's views of the Arctic had been more narrowly focused on Greenland. During the period 1941-1992, the Danish Foreign Ministry's Arctic focus was limited to the relationship with the United States via Thule Air Base. The relationship with Greenland was taken care of by the Prime Minister's Office and the Greenland Ministry (1960-1987). As a prelude to the Ilulissat Meeting in May 2008, the document Arctic in a Time of Change: Proposed Strategy for Activities in the Arctic Area was published. Contrary to its successor, the document mainly dealt with Indigenous people's rights, relations with the United States, Greenland's natural resources, and home rule. Denmark's role dimmed, and the Faroe Islands were largely omitted. This was probably due to the then ongoing process towards the establishment of Greenland Self-Rule in June 2009, while Denmark's foreign policy was then more oriented towards fighting terrorism and so-called rogue states in concerted action with the US.

The widened perspective on a broader range of Arctic challenges and opportunities is reflected in the establishment of the Danish Foreign Ministry's 'Office for the Arctic and North America' and in the decision to give the Senior Arctic Official the title of 'Arctic Ambassador' in 2012. The current ambassador – and the second in the series – Erik Vilstrup Lorenzen, came from a position as ambassador to Canada. That is very consistent with the development of a more widened Danish Arctic perspective where good relations with the seven other Arctic states are extremely important in finding answers to significant questions such as delineation, sovereignty enforcement, climate change and maritime safety. In August, Lorenzen will hand over the reins to Hanne Fugl Eskjær who is currently Denmark's ambassador to Bangladesh. This move does, to the contrary, not seem to be very consistent with the development.

The greater prioritization of the High North is also reflected in the higher – though still small number – of employees in the Arctic office throughout the years.

Unfortunately, the number of employees with in-depth knowledge of Greenland affairs has decreased simultaneously. What is won externally has, to some degree, been lost internally. That may prove to be a setback for the close relationship with Greenland, which is Denmark's only claim to the higher circles of Arctic decision making.

The court case regarding the contract to provide facilities-management services at Thule Air Base is an example of a conflict that possibly could have been avoided if Denmark's Ministry of Foreign Affairs had had more employees with a thorough knowledge of Greenland affairs. What happened, in short, was that the Danish-Greenlandic owned company Greenland Contractors in the autumn of 2014 lost the contract to Exelis Services, owned by the American Vectrus. This meant that Greenland's provincial treasury faced a loss of about ten percent of the total tax revenues if Exelis Services were to employ cheaper, American labor that was not obliged to pay tax in Greenland cf. the defense agreement from 1951. The case therefore caused a stir in Greenland. However, in May 2015, the contract was overruled by the United States Court of Federal Claims (USCFC) because Exelis Services is a shell company. Instead, the agreement with Greenland Contractors has been extended until September 2016, providing more time to find a solution with less negative impact on the already beleaguered Greenland economy.

If good relations are to be maintained and possibly improved, it is essential to avoid similar cases. That said, a legal investigation ordered by the Government of Greenland has concluded that the main responsibility for the case lies with Greenland's then Deputy Minister of Foreign Affairs, Kai Holst Andersen. The case therefore also indicates that there is room for sharing knowledge about the triangular relationship between the US, Greenland and Denmark within Greenland's Ministry of Foreign Affairs. It would therefore be in everyone's interest if the knowledge sharing between Copenhagen and Nuuk were improved and possibly supplemented by an agreement on employee exchanges of perhaps half year periods. Such exchanges could enhance mutual trust, nuance employees' knowledge and help avoid misunderstandings that could jeopardize the Danish-Greenlandic relationship.

Greenland's sense of self-determination:

Legally, the stage is set for Greenland to sever links with Denmark, whenever Greenland's population wish to do so. That is nailed down in the Act on Greenland Self-Government, §21. Economic realities do, however, make such a decision unlikely in the foreseeable future since the block grant of 3.64 billion Danish kroner account for more than 25 percent of Greenland's total public budget. Full independence from Denmark at this stage would therefore result in indecent deteriorations of the general living standards in Greenland, unless significant mineral finds are made, simultaneously with substantial rises in global commodity prices. At this writing, Greenland's mineral activities are limited to a smaller ruby mine under construction in Aappaluttoq, near Qeqertarsuatsiaat. In the overall picture, that does

not have a significant effect. According to the report *To the Benefit of Greenland* it would require 24 large-scale mines operating simultaneously in order to zero out the block grant. If oil is found it is a completely different matter, but continuing explorations since the 1970s has not yet resulted in any kind of oil production whatsoever, so at present it does not seem to be the shortest path to increased economic independence.

When Aleqa Hammond was at the helm (April 5, 2013 – September 30, 2014) the independence rhetoric reached heights unprecedented since the introduction of Self Rule. It was particularly evident in the Arctic Council where representation is unequal as Denmark speaks on behalf of the Danish Realm's delegation. In May 2013, it became too much for Hammond who drew major media attention when she boycotted the Arctic Council meeting in Kiruna, Sweden. Hammond's conspicuous absence set the tone for her stormy reign. That specific episode was met with great criticism in Inatsisartut (the Parliament of Greenland) in which, nevertheless, the widespread dissatisfaction with Greenland's limited say in its own international relations is often articulated. Less ostentatious, yet equally strong views have been expressed by the whole palette of Greenlandic politicians on the issues of whaling quotas and the EU import ban on seal products; cases in which Greenland feels it has inadequate representation in the International Whaling Commission and the World Trade Organization respectively. Together with the dispute about whether export of uranium is a Danish or Greenlandic area of responsibility, these two cases have caused widespread dissatisfaction with the unequal levels of representation within the Danish Realm. Recently, the uranium dispute has, for the time being, been solved leaving a positive impression of improved relations between Nuuk and Copenhagen.

In an international relations perspective there is also another particularly good reason why Greenland should maintain good relations with Denmark; and not just the other way around: On 15 December, 2014, the Kingdom of Denmark submitted data to the UN Commission on the Limits of the Continental Shelf (CLCS) claiming a territory of 895,000 km² seabed in the Arctic Ocean. This corresponds to approximately 19 times the present area of Denmark and nearly half of Greenland. The claim includes the North Pole and has significant overlaps with Russia's claim barentsobserver.com/en/arctic/2015/08/russia-submits-claim-north-pole-04-08, accessed 2 May 2016 and probably also Canada's. In spite of that, and thanks to the Ilulissat Declaration, the process proceeds as agreed. So far. Ahead lie years of uncertainty for the Danish Realm before CLCS comes to a conclusion that may well prove several claims to the same area. If that happens, the Danish Realm will need all of its diplomatic and legal capacities in order not to be bullied by two major powers such as Russia and Canada. With this common interest in mind Greenland is heavily dependent on continued close cooperation with Denmark. This is particularly interesting because the area granted ultimately accrues to Greenland.

Denmark's way North?

Openness and honesty are the way forward if Denmark wants to improve relations with Greenland. And it must. To achieve this, clear agendas and unequivocal statements are the way forward to creating a more equal relationship. In December 2015, Prime Minister Lars Løkke Rasmussen made it clear that the existence of the Danish Realm is fully dependent on active participation from all parts: "It's like a marriage. You cannot hold on, if one part wants to be separated". It may seem like a daring announcement, but it does nevertheless signal a perception of a more equal relationship. Denmark should not hide the fact that the block grant is not only given for the sake of Greenlanders' brown eyes.

One thing is politics and official relations, another thing is feelings, family ties and shared traditions. Ultimately, it is the personal relationship and the common heritage that hold together the different parts of the Danish Realm. In strategic terms it is worth emphasizing the soft values and the more mundane relationships. In this context, the media could play a more active role by paying more attention to the Danish Realm, so Greenlanders, Faroese and Danes get a better understanding of the common history and current developments in the different parts of the kingdom. Primary schools could also spend more time focusing on the Danish Realm and, for instance, organize school camps in Greenland and the Faroe Islands. Such experiences help create curiosity, and nuanced understanding, break down prejudices and build personal relationships, which is the glue that binds the Danish Realm together.

Denmark's business establishment and pension funds should also enter the fray and invest in Greenlandic infrastructure and mining projects. For Greenland it would be a much-needed boost towards a more positive direction, while the expansion of professional relationships in both quantity and quality will strengthen relations within the Danish Realm. This may happen on a large or in a smaller scale. Every little helps. What counts is that someone paves the way, thus creating optimism about the economic opportunities in Greenland. Academia also plays a central role in this development and it should be a top priority to create the best possible conditions for Danish and Greenlandic research in the Arctic. Research could lead to concrete projects, contribute to the general understanding of common heritage and provide useful knowledge about the political winds blowing in the High North to the benefit of the Danish Realm's collective strategic interests in the Arctic. Later this year, a new strategy for Danish polar research will be made public, but it has already been made clear that no new money will be allocated along with the strategy. If it should have an effect, new money is needed. If not, we are back to square one. The Danish government needs to put words into action and also give higher economic priority to interests in the Arctic.

Conclusion:

The importance of having access to the exclusive company in the Arctic Council and the dynamic Arctic Five should not be underestimated by a small country like Denmark. This connection means Denmark punches above its weight in the Arctic to the benefit of Denmark's position in the international arena in general. The existence of the Danish Realm is what legitimizes Denmark's presence in the Arctic. Thus, it should be an essential part of Denmark's strategy to improve the current relationship with Greenland. This can be done through a more open, honest, and equal dialogue; more mutual knowledge exchange; emphasizing and encouraging common values and relationships; and by giving higher economic priority to the Arctic. A good place to start would be to expand the Foreign Ministry's Arctic office and to allocate more money to polar research in Denmark and Greenland, hence also improving the kingdom's research diplomacy in the Arctic. If confidence is improved and words backed up with action, the collective Danish Realm can accomplish great things in the Arctic.

“Kingdom of Denmark: Arctic Policy,” The Arctic Institute: Center for Circumpolar Security Studies [51] <https://www.thearcticinstitute.org/countries/denmark/>

Overview:

In 1953, Greenland was made an integral part of the Kingdom of Denmark. In 1979 it got Home Rule and on June 21st 2009, Self-Rule was introduced, whereby it was recognized “that the people of Greenland are a people pursuant to international law with the right of self-determination” (Self-Government Act, 2009: 1). Greenland has its own legislative assembly (Inatsisartut) and government (Naalakkersuisut) and has taken over many areas of responsibilities from Denmark; e.g. the right to any possible mineral riches in the Greenland subsoil and subsea. Within the Self-Government Act, Greenland can, however, not adopt its own Constitution; establish its own Supreme Court; or legislate on monetary, citizenship, defense, security or foreign issues. There is, however, room for negotiations in foreign policy matters, best exemplified by the bilateral relations with the European Union: after joining the European Community—as it was called back then—in 1973, Greenland withdrew in 1985 following an amendment a few years earlier. Instead, Greenland was accepted as one of the Overseas Countries and Territories (OCT) with special association with the EU. Besides this important exception, Greenland is usually part of the Danish delegation in important, international forums such as NATO, WTO and UN. In matters concerning Greenland in particular, e.g. indigenous peoples' rights, a representative from Greenland will often present the Kingdom of Denmark's collective statement. Connections to other indigenous peoples in the Arctic are also enhanced through the Inuit Circumpolar Council (ICC) founded in 1977.

Current & Relevant Information:

[The Kingdom of Denmark Strategy for the Arctic 2011-2020](#) emphasizes four areas of priority: 1) security, safety and sovereignty; 2) sustainable development of

new economic opportunities; 3) climate changes; and 4) international cooperation. Two objectives can be identified in the strategy: first, to react to the environmental and geopolitical changes occurring in the Arctic, hence responding to the growing global interest in the region. Secondly, the Kingdom of Denmark should redefine its position in the region by enhancing its status as a central Arctic player. This should first and foremost benefit the Arctic inhabitants (pp. 9-11).

International cooperation is a key word in the strategy, reflecting that it has always been at the core of the Kingdom of Denmark's approach to the Arctic. As often emphasized in Danish discussions about Arctic politics, the [Ilulissat Declaration](#) of May 2008 is an example par excellence of how to act pro-actively to ensure continuously peaceful development in the Arctic. Denmark's then Minister of Foreign Affairs, Per Stig Møller, was the initiator of this declaration, which makes it clear that the Arctic Five—the countries bordering the Arctic Ocean—remain committed to an “orderly settlement of any possible overlapping claims” (p.1).

The UN's Commission on the Limits of the Continental Shelf (CLCS) provides recommendations on what an orderly settlement should be. These recommendations are based on a thorough review of the geological data submitted by the states. The Kingdom of Denmark claims a territory of 895,000 km² in the Arctic Ocean of which significant parts overlap with Russia's claim—and probably also Canada's. As Denmark is currently number 76 in line, we will have to wait about a decade before the CLCS will come to a conclusion. When it does it is likely that several claims to the same area will be deemed valid due to the rules applying. If this happens, international cooperation will be critical. In this regard, the 2010 Barents Sea Agreement between Norway and Russia stands as a great example of how to solve any such overlapping interests.

The five Arctic littoral states are often highlighted as a dynamic group that makes things happen. This has most recently been underlined by a common moratorium on fishing in the high seas portion of the central Arctic Ocean and a polar bear action plan. Enhanced cooperation in the Arctic Council is, however, also encouraged and given high priority by the Kingdom of Denmark. The last time the Kingdom of Denmark held the Arctic Council chairmanship was from 2009-2011 and will next hold it from 2023-2025. Greenland is represented by both the ICC and the Danish delegation, while the West Nordic Council—consisting of Greenland, Iceland and the Faroe Islands—obtained observer status in 2017. The fact that Greenland is not represented directly in the Arctic Council, but has to be part of the Danish delegation, has from time to time resulted in discontent among Greenlandic politicians. The most dramatic example of this was when former Premier of Greenland, Aleqa Hammond, decided to boycott the Arctic Council ministerial gathering in Kiruna, Sweden in May 2013. Similar actions have not since been taken, but discontent is still often articulated from all sides of the Inatsisartut, thus

indicating that it is a central priority of Greenland's politicians and will likely remain present in Danish politics for some time to come.

““An Arctic Great Power”? Recent Developments in Danish Arctic Policy,” Jon Rahbek-Clemmensen, Arctic Yearbook, 2016 [52]

https://arcticyearbook.com/images/yearbook/2016/Scholarly_Papers/13.Rahbek.pdf

Abstract:

Denmark has been a firm advocate for Arctic cooperation in the recent decade, most importantly as the initiator of the 2008 Ilulissat meeting. Two new strategic publications – a foreign policy report (Danish Diplomacy and Defence in a Time of Change) and a defense report (The Ministry of Defence's Future Activities in the Arctic), which were published in May and June 2016 –highlight the Kingdom of Denmark's status as “an Arctic great power” and the importance of pursuing Danish interests, which could indicate a shift away from a cooperation-oriented policy. This article investigates whether the documents represent a break in Danish Arctic policy. It argues that the two documents represent continuation, rather than change. They show that the High North continues to become steadily more important on the Danish foreign policy agenda, although the region remains just one of several regional priorities for Denmark. They also continue the cooperation-oriented Danish Arctic policy and move this policy forward by adding more analysis of specific policy programs and initiatives that have long been on the agenda. These initiatives are meant to strengthen the Kingdom of Denmark's High North profile, further Greenlandic development, add more capabilities to the Danish Armed Forces, and build ties to other Arctic nations. However, the real challenges in Danish Arctic policy are not found in bureaucratic reports, but in how these reports become part of an ongoing discussion about identity within the Kingdom of Denmark. Greenlandic policymakers have criticized the documents for being too Denmark-centric, which indicates a nascent Greenlandic resistance to Danish centralization of authority over foreign policy within the Kingdom of Denmark.

Current & Relevant Information:

Introduction:

In January 2016, Peter Taksøe-Jensen, the diplomat who had been tasked by the Danish Prime Minister to write a strategic assessment of Danish foreign policy, gave a remarkable interview to the newspaper Politiken, in which he revealed some of the conclusions contained in his upcoming report (Danish Diplomacy and Defence in a Time of Change – DDDTC for short). One particular passage caught the attention of politicians and commentators alike:

“Denmark is, together with Greenland..., an Arctic great power. We must use our strength to ensure that the development in the Arctic corresponds with Danish

interests. That is why I will suggest that it becomes an area that we should upgrade more” (Beim, 2016).

It seemed that the Arctic would become a new focus area for Danish foreign policy, but Taksøe-Jensen’s emphasis on Danish interests in the Arctic could also indicate a shift away from its current cooperation-focused Arctic policy (a regional policy that emphasizes inter-state cooperation through formal and informal institutions). Like the other Arctic states, Denmark had thus far supported regional cooperation, but perhaps the new report entails a slight change of tack. Speculation that a shift was underway gained more traction when it became evident that Taksøe-Jensen’s report would be followed by the publication of the Ministry of Defense’s long-awaited strategic analysis of its activities in the Arctic (The Ministry of Defence’s Future Activities in the Arctic – MDFAA for short). The defense report, which was meant to map Danish defense and coast guard activities in the High North and outline potential priorities for future investments and reforms, had been planned since at least 2009 and began in 2013, but its publication had been postponed several times (Danish Ministry of Defense, 2016: 8; Defense Commission of 2008, 2009: 274 & 298).

The two reports should be seen as political interventions in the Danish foreign and security policy debate, which were meant to prepare the ground for a shift in policy that puts further emphasis on the Arctic. Putting forward these comprehensive analyses of the Danish foreign policy (DDDTC) and defense policy in the Arctic (MDFAA) helps to stream-line initiatives within the different bureaucracies and counter opposing arguments in the public debate. More importantly for a wider Arctic studies audience, they serve as weather-vanes that point to current trends in Danish Arctic policy, thus allowing analysts to take stock of the importance of the region within Danish foreign and security policy and the specific initiatives that are likely to come out in the years to come.

This article situates DDDTC and MDFAA and the public reactions to them in the larger context of Danish foreign policy and Arctic policy and examines to what extent these new initiatives represent a change of course. It argues that the documents signal continuity rather than change. The region’s importance on the Danish foreign policy agenda seems to be increasing slightly, but this change should not be exaggerated, as the Arctic remains but one of several foreign policy priorities for Denmark. The key test remains whether more funds will be allocated for Arctic initiatives in the upcoming budget or in the defense agreement, which is due in 2017. Danish Arctic policy generally continues on a cooperation-oriented track, as the reports highlight concrete initiatives that may slightly strengthen Denmark’s ability to operate in the Arctic and which opens doors for further cooperation with regional partners. The main challenge remains the viability of the Kingdom of Denmark as a constitutional entity that contains Denmark, the Faroe Islands, and Greenland and the new reports do little to address these issues. In that sense, the Kingdom’s Arctic

policy hobbles along awkwardly with Denmark in the driver's seat and the Faroe Islands and Greenland complaining about the direction but too poor to get out.

The article presents its argument in three steps. The first section locates the Arctic within Danish foreign policy and shows how the new reports may signal a slight increase in the High North's importance within Danish foreign policy. The second section examines how the new policy initiatives fit within Danish Arctic policy, while the final section looks at how the Greenlandic reactions to the new policies indicate fundamental tensions between Denmark and Greenland within the Kingdom of Denmark.

Conclusion:

The two new policy initiatives – the foreign policy report and the defense report – largely represent a continuation of existing trends in Danish Arctic policy. The High North continues to become a more important part of the Danish foreign policy agenda and it is part of a general priority shift from stability operations in the global south to regions where a resurgent Russia can hurt Danish interests. The documents continue the cooperation-oriented Danish Arctic policy and focus on strengthening the Kingdom's High North profile, increasing Greenlandic development, adding capabilities to the Danish Armed Forces in the region, and building ties to other Arctic states. They move Danish Arctic policy forward by adding details and analysis to existing ideas that can then be taken up in coming political negotiations. The reports are thus just one more incremental step in the Danish policy process – the real test is the upcoming budget and defense negotiations, where the importance of the Arctic in Danish foreign policy and the shape of Danish Arctic policy can be solidified if funds are allocated for the High North.

Perhaps the most important development in Danish Arctic policy is occurring outside of the reports themselves, as a fault line seems to be opening between how Danish and Greenlandic policymakers understand the division of labor within the Kingdom of Denmark's foreign policy process. Greenlandic politicians have begun to use different strategies to resist Denmark's insistence that the Kingdom of Denmark is a unitary actor. The current set-up can continue to function as long as Greenland remains fiscally dependent on Denmark, though tensions are likely to cause awkward episodes and clashes as Nuuk and Copenhagen struggle over final say. Reducing these tensions would entail going beyond bureaucratic reports and rethinking how the Kingdom of Denmark works – a task that requires political will, which currently seems absent in Copenhagen.

“Perspectives on Security in the Arctic Area: DIIS Report 2011,” Annika Bergman Rosamond, Danish Institute for International Studies (DIIS), September 2011 [53]
https://pure.diis.dk/ws/files/61204/RP2011_09_Arctic_security_web.pdf

Summary:

This report provides multiple perspectives on security in the Arctic area. A key objective is to demonstrate that, although the Arctic is the site of competing natural resources and land claims, which are emerging from such phenomena as melting ice and new sea routes, there are also many signs of fruitful regional cooperation and sound neighborly relations. This thesis is supported by the high level of Arctic institutionalization that has evolved since the end of the Cold War. Despite this, some media outlets have routinely portrayed the Arctic as a possible site of interstate conflict. Such accounts do not take sufficient account of the collaborative initiatives that take place within the Arctic Council, the Nordic Council of Ministers and the European Union, to mention a few. The Arctic is situated within a complex web of multilateral and bilateral networks, ranging from states to regional institutions. What is more, there is a great deal of emphasis on the involvement of indigenous and local communities in key decision-making processes. This is not to argue that there are no challenges to security and prosperity in the Arctic area, but rather that we need to investigate these against the backdrop of the ongoing institutionalization of the High North.

Part 1 of the report provides a brief historical account of the Arctic by asking whether there are any previous events that can provide insights into the current situation in the region? A relevant example here is the wish to make the Arctic a 'zone of peace' in the 1980s. The report then offers an examination of the relatively high level of institutionalization and governance in the Circumpolar North and determines what the key challenges to these are. For example, it is argued that the Arctic Council (AC) might need to rethink its position on banning the sensitive subject of military security from its policy deliberations in favor of an open, peaceful and democratic security dialogue, without this necessarily giving rise to tensions between AC members.

Part 2 of the report provides a discussion of contemporary security developments in the Arctic by placing the emphasis on the relationship between climate change and strategic interests related to sovereign claims. The report takes issue with the frequent portrayal of the Arctic as a hotspot for potential conflict by arguing that, although there are unresolved territorial disputes between the Arctic coastal states, there is also broad commitment to Arctic peace and stability through multilateral cooperation and governance.

Part 3 offers a rather brief overview of Danish Arctic policy with emphasis on both non-military and military developments. It is argued that climate change is the key to contemporary Danish security policy in relation to the Arctic.

Part 4 argues that broad dialogue between states and people plus multilevel participation in decision-making processes are central to the creation of new spheres of regional community that exist alongside other loyalties. The discussion is inspired by the political theory of Andrew Linklater and makes a case for new forms of commonality and solidarity across the Circumpolar North. It is suggested that any

new policy initiatives – unilateral and multilateral – need to be coupled with local bottom-up activities and transnational civil support, so as to give voice to those who are directly affected by the new policy decisions. The report ends with a brief conclusion that summarizes the key findings and offers the following policy recommendations:

1. The Arctic states should continue to promote global governance and international cooperation as ways of ensuring future stability, prosperity and peace in the Arctic region. Institutions such as the AC can serve to counterbalance an emergent tendency amongst the Arctic coastal states to pursue narrowly defined national interests and sovereign claims in the Circumpolar North. Key here is open and inclusive dialogue between governments, regional institutions and representatives from indigenous and local communities.
2. Arctic coastal states need to refrain from using the concept of sovereignty in a manner that hampers stability and peace in the Circumpolar North. This involves conceptualizing sovereignty in another-regarding manner that does not center on national security and defense alone. In so doing the Arctic states could promote a conception of sovereignty that promotes the rights of both people and sovereign states, rather than the latter alone. Such an approach to sovereignty is in line with the emphasis placed upon the emergent global norms of responsibility to protect and human security that underpin contemporary international society. What is more, the Arctic actors should continue to promote international law (and abide by it), since this a way of avoiding verbal and other disputes that are detrimental to global peace and cooperation. It is nonetheless important that states refrain from using international law to further their own narrowly defined interests, since this can be damaging to international governance and security.
3. Despite frequently having been placed within the framework of Realpolitik, the Arctic is a fruitful site for community-building clustered around good inter-state relations and the productive involvement of indigenous and local populations in key decision-making processes. The ‘alarmism’ that has been associated with the Arctic through media constructions, for example, is detrimental to the emergence of new spheres of community and loyalties in the Circumpolar North and should, when possible, be resisted.

Current & Relevant Information:

The draft version of the forthcoming document, ‘Denmark’s Strategy for the Arctic 2011-2020’, which was officially launched on the 24th of August 2011, states that Denmark will approach its sovereign claims in a cooperative and legal fashion (Danish Ministry of Foreign Affairs, 2011b: 13). The strategy also confirms Denmark’s intention to submit an application to the CLCS in 2012 to extend its continental shelf to include five specific areas, all situated around Greenland and the

Faroe Islands, including part of the North Pole itself (Danish Ministry of Foreign Affairs, 2011b: 14).

In 2007 a group of Danish scientists set off on an Arctic expedition to gather evidence that would support the claim that the 1,200-mile long Lomonosov Ridge is part of the Greenland territory. Hence, 'Danish scientists hope to prove through hi-tech measurements that Greenland's continental socket is attached to a huge ridge beneath the floating Arctic ice, the Associated Press reports' (BBC NEWS 5 October 2004a). The Danish Ministry of Science, Technology and Innovation has launched a continental shelf project aiming at gathering, interpreting and documenting data that will constitute the basis for Denmark's CLCS application (Danish Ministry of Foreign Affairs, 2011b: 14). In the words of the Associated Press, 'Denmark plans to lay claim to parts of the North Pole and other areas in the Arctic, where melting ice is uncovering new shipping routes, fishing grounds and drilling opportunities for oil and gas' (Associated Press, cited in New York Times, 17 May 2011). The Danish government has confirmed the accuracy of this information with Foreign Minister Lene Espersen expressing support for the forthcoming application to the UN, which is also a position shared by the former Social Democratic Foreign Minister, Mogens Lykketoft (Information 17 May 2011). In short, the majority view would seem to be that Denmark should exercise its sovereign rights in the Arctic (ibid.). However, the Greenlandic Premier, Kuupik Kleist, is reportedly more skeptical, his personal view being that the North Pole does not belong to any given state, but to humanity at large, which is a somewhat different view from the more dominant one (ibid.).

Finally, Denmark has an outstanding disagreement with Canada with regard to Hans Island, a small unpopulated island of 1.3 square meters located between Greenland and the Ellesmere Islands of Canada. Denmark has planted its national flag on Hans Island to claim this territory. The dispute remains unresolved, although relations between Denmark and Canada are solid in other respects (Danish Ministry of Foreign Affairs 2011b: 15)

Denmark's Arctic policy: climate change a priority

Denmark has held a number of conferences on the Arctic and climate change and as such actively raised its Arctic profile. Nikolaj Petersen (2009: 56) has defined Denmark's Arctic foreign policy as one of 'active climate diplomacy', which is indeed consistent with the country's pursuit of active internationalism in the 1990s (Holm, 2004). The Danish newspaper Politiken's interpretation of Denmark's Arctic policy is somewhat different in that it argues for a more active Danish stance on the Arctic by pointing out that 'unfortunately Denmark is not one of those states that have highly prioritized the Arctic', having focused on other geographical regions (Politiken, 16 May 2011). In 2011, Foreign Minister Lene Espersen expressed a wish to start a debate on the future direction of Danish foreign policy by launching a discussion paper *Kurs mod 2020: Dansk udenrigspolitik i nyt farvand*, in which the key challenges to Denmark are outlined. The Arctic is, however, not the focal point of the

document, although a brief reference to the significance of strengthening the AC is made, as well as of collaborating with the other AC states (Udenrigsministeriet 2011: 21).

Denmark's chairmanship of the AC: climate change on the agenda:

Denmark's 2009-2011 chairmanship of the AC nonetheless offered good opportunities to strengthen the country's activism in the Arctic. On 29 April 2009, Norway handed over the chairmanship of the Arctic Council to Denmark at the Sixth Ministerial Meeting of the Arctic Council in Tromsø. The overarching objective of the Danish presidency was to secure 'a forward-looking approach and a strong platform for the Arctic Council in the present dynamics of a changing Arctic' (Danish Chairmanship of the AC, 2009: 1). This work was carried out in 'close cooperation with the Governments of Greenland and the Faroe Islands' and other Arctic states.

Furthermore, the Danish chairmanship of the AC rather expectedly highlighted the importance of closely monitoring the negative effects of climate change by 'documenting, analyzing and publishing ... levels and effects of contaminants and the changes taking place in snow, water, ice and permafrost' which are key to understanding changes in the 'weather patterns' and 'sea levels' of the Arctic (ibid.). Such gathering of knowledge is central to the identification of appropriate solutions to global environmental problems and security developments, such as the emergence of new sea routes and disputes over sovereignty.

Hence, climate change-induced developments, including 'retreating ice caps' and easier 'access to hydrocarbons and other non-renewable as well as renewable resources', are at the center of Danish arctic policy (ibid.: 2). In an address to Arctic foreign ministers, the former Danish Minister of Foreign Affairs, Per Stig Møller (2009: 2), stated that 'adaptation to climate change is a core issue for this forum. But we should also use the Arctic Council to discuss what we as Arctic nations can do to ... mitigate global warming'. Denmark's overall Arctic objectives also include 'sustainable development, human health, environmental protection, conservation of flora and fauna' and the promotion of the well-being and livelihoods of indigenous peoples, which demand a 'holistic perspective' (Danish Chairmanship of the AC, 2009: 2). International cooperation was placed at the center of Denmark's chairmanship, which is in line with the country's historical support for multilateralism and its own activist internationalist tradition (Holm, 2004).

In sum, then, the ethos of the Danish chairmanship was to promote the idea of 'International outreach, research and cooperation with key actors in different policy fields' as way of 'securing the success of the Council' in promoting 'economic development and prosperity in the North, while ... respecting and safeguarding the rights and interests of the peoples and states of the Arctic' (ibid.: 2). The work was undertaken within the wider context of climate change, which is key to Denmark's Arctic policy.

Indeed, Denmark's Arctic strategy, referred to above, has been drafted against the backdrop of climate change more broadly (Danish Ministry of Foreign Affairs, 2011b: 9). It is argued that such things as rising sea levels and enhanced economic activity can impact upon the prospect of 'a stable, peaceful and secure region defined by dialogue, negotiation and cooperation', but, that climate change can also give rise to new possibilities, in particular, the extraction of natural resources, new sea routes and fish stocks in the High North (Danish Ministry of Foreign Affairs, 2011b: 9) and the obvious economic benefits attached to such developments, one might add. For example, the richness of natural resources such as gas and oil in north-east Greenland is expected to yield a substantial income for the island (Danish Ministry of Foreign Affairs, 2011b: 24).

“Denmark in the Arctic,” Jon Rahbek-Clemmensen, [atlcom.nl](https://www.atlcom.nl), 2011 [54]

https://www.atlcom.nl/upload/AP%202011%20No_%203%20Rahbek-Clemmensen.pdf

Abstract:

Unlike the other Arctic powers, Denmark's presence in the High North depends on the countries' authority over a semi-autonomous territory that strives for cultural and political independence. Why has Greenland stayed within the Danish Commonwealth, even when it entails giving up much of its independence? Surely, the cultural and historical link is so thin that it could easily break at the first north western breeze. From Copenhagen's perspective, the relationship is expensive, cumbersome, and filled with humiliations and guilty conscience – and colonialism is so 20th century anyway. What does Denmark gain from staying put? And how is it that other powers – let alone the Greenlanders – accept that a miniscule European country, roughly half the size of Belgium in terms of population, asserts sovereignty over the world's largest island? The answers are that the Danish presence in Greenland is part of Denmark's wider foreign policy strategy and that Denmark plays a complex three-way game in order to stay present in the Arctic.

Current & Relevant Information:

The Arctic in Danish foreign policy strategy:

In the Danish political imagination, Greenland is not considered a part of Denmark proper. The political union between Denmark and Greenland is not a given. Instead, the Danish presence in Greenland is part of Denmark's wider foreign policy strategy. Denmark has no economic gain from being in Greenland. Even if new industrial opportunities, such as hydrocarbons, mining, and aluminum smelting, make Greenland a hundred per cent economically self-sufficient – a prospect that is highly unlikely and, in any case, not viable on this side of 2030 – will Denmark only be able to skim a slim economic profit from its Arctic engagement. Instead, Greenland is a bargaining chip that ensures Denmark's much-needed political capital for only a minor economic investment.

Copenhagen's foreign policy strategy rests on a European and an Atlantic pillar. First, by supporting the EU, Denmark hopes to prevent a 'back to the future'-scenario between Europe's great powers. Second, Denmark concurrently strives to ensure American backing against future military threats. Copenhagen therefore follows Washington and London in most foreign policy matters. In recent years, the second pillar has overshadowed the first. Denmark was a firm member of the coalition of the willing in Iraq and has been on the front-line in Afghanistan, suffering the most casualties per capita of any Western country. The purpose of this has been to show the White House that it has a devoted ally in Copenhagen that might be worthwhile to protect, should affairs ever get tough in Europe.

Greenland is part of this second pillar. Located between Russia and North America, the island holds a central position in geostrategic terms. By using its economic, political and cultural capital to ensure the Americans an 'Okinawa-upon-the-Arctic-Circle,' Denmark hopes to strengthen its alliance with its big brother from the other side of the Atlantic.

Greenland has been a cornerstone of Danish strategy since World War II. After the German occupation of Denmark in 1940, the Danish ambassador in Washington famously struck a deal with Secretary of State Cordell Hull, permitting U.S. military presence in Greenland. In the Danish foreign policy narrative, this move is generally considered one of the few reasons Denmark was regarded an Allied power, in spite of cooperating with the Germans in the early years of the war. The U.S.-Danish deal continued during the Cold War. Thule Air Base and the adjacent radar facilities became an important part of the U.S. nuclear deterrence system. The Danish government signed a secret deal accepting that the U.S. stationed nuclear weapons in Thule, thus contradicting the official government policy which allowed no nuclear weapons on Danish territory. By giving the U.S. maneuverability in the Arctic, Denmark showed its intentions to stay within the Western camp, in spite of its somewhat accommodative policy towards the USSR in the European theatre. With U.S.-Russian relations warming up after 1991, Greenland has lost some of its geostrategic allure. However, Washington has not forgotten its northern outpost. The security dilemma between Russia and the U.S. is still alive and kicking. The radars at Thule are a core part of the current plans for a missile defense system. Copenhagen's tradition of using Greenland to buy political clout in Washington will most likely continue.

The tricky part of this strategy is to ensure that Denmark keeps control of Greenland. Copenhagen therefore plays a three-way game that is meant to show that Greenland belongs under Her Majesty's jurisdiction. The three parties in question are the Greenlandic self-rule government, outside powers, and the Danish domestic public.

External relations:

Denmark's relations to the other Arctic powers must be understood in light of its overall goal of playing as big a part as possible in accommodating the U.S. In other words, Denmark aims to have as much influence as possible in the Arctic. This influence is used to accommodate U.S. Arctic interests, thereby showing the Americans that they have an interest in keeping Denmark safe.

These goals are achieved through three policies: performing a theatre of sovereignty, establishing efficient regional security governance, and keeping the others out. First, in order to gain the right to use Greenland as a bargaining chip, Denmark must establish its sovereignty over the territory vis-à-vis outside powers. Norway disputed Denmark's sovereignty over parts of the island as late as 1933. The Danish government is therefore attentive to the fact that sovereignty depends on performing certain rituals, including military presence on land and sea. The Danish-Canadian dispute over Hans Island and the Danish claims to large swaths of underwater territory under the UN Law of the Sea are part of this performance.

Second, as all Arctic states, Denmark is worried that the sea ice retraction that follows from global warming will exacerbate existing tasks. A busier and economically more lucrative Arctic will raise the costs of running an administration and asserting sovereignty. The risk of a resurgent Russia throwing its still-impressive Northern Fleet around in an ice-free Arctic is one of the key worries. The planning for a busier region has already begun. Partly, these new challenges are met through investments in the existing administration. For instance, the military is upgrading its capabilities in the North Atlantic, replacing its small and out dated patrol cutters with more formidable Knud Rasmussen-class patrol vessels carrying a light canon. These ships will be better suited to assert Denmark's sovereignty and fulfil civilian administrative tasks, such as surveillance, registration, and search-and-rescue in the newly opened waters.

However, investments alone do not do the trick. Many of the potential challenges in the Arctic are best handled through bi- and multilateral cooperation. Existing international institutions must therefore be bolstered. For instance: more traffic in the Arctic requires better surveillance techniques. Such initiatives are best handled through organizations like the International Maritime Organization (IMO) and the Arctic Council. Furthermore, institutional build-ups diminish the risk of a great-power conflict. For example, by making sure that the undistributed territory is carved up according to the rules set up in the UN Law of the Sea, a potential scramble for the North Pole involving Russia and the U.S. can be avoided.

In spite of following a realist strategy in the Arctic, Denmark recognizes that its ability to withhold sovereignty over Greenland – the very basis of the strategy – requires a full dedication to regional cooperation. Copenhagen knows that in a politically unstable Arctic, the risk of an external power taking possession of Greenland is a real possibility. Unlike the great powers – who are still hesitant to build up regional institutions – Denmark is therefore dedicated to most types of regional cooperation,

as long as they do not directly counteract American interests or Danish sovereignty over Greenland. Denmark is one of the key proponents of common shipping rules and surveillance systems in the IMO. The country is a strong advocate for regional cooperation through the Arctic Council. The aforementioned 2008 Ilulissat Declaration was a wholehearted attempt to spark a new institutional development. Finally, Denmark is devoted to finding a peaceful solution to the undrawn borders of the region through the UN Law of the Sea. In the Ministry of Foreign Affairs, fingers are crossed that Washington will finally ratify the UN Convention on the Law of the Sea and that Canada and the U.S. are able to solve their on-going dispute about the status of the Northwest Passage.

In the midst of this global governance love-fest, one should not forget that these new institutions are developed as part of a larger realist strategy. This leads to the third policy in the Arctic: if possible, Denmark aims to keep outside powers out of the regional bodies. This policy has two underlying rationales. First, it is a basic lesson from the international regime literature that the more participants an international institution has, the more cooperation problems and political friction will hamper effective governance. By keeping outside powers out, the chances of actually handling regional challenges are much higher. Second, by limiting the number of participants, Denmark increases its own importance in the region. This gives Denmark a chance to help facilitate American interests in the region, thus buying political goodwill that can be used for future purposes.

This exclusion policy entails managing three complicated relationships. First, Denmark aims to diminish the presence of other Arctic small-states. This was perhaps most visible at the Ilulissat summit, where Iceland, Finland, and Sweden – all members of the Arctic Council – were not invited to participate, resulting in loud protests from these countries. Denmark strives to organize Arctic governance in concentric circles, with the Arctic five making up the axis around which wider institutional bodies revolve.

Second, Denmark strives to avoid involving the EU in the region. As the only EU member in the 'Arctic five,' Denmark could easily find itself in a pickle. Being the champion for Portuguese fishery rights, German environmental considerations, and general EU great power assertiveness in the High North is Copenhagen's worst nightmare. This would make managing the three-way game nearly impossible. The presence in the Arctic would also lose some of its value, as it would become more difficult to serve U.S. interests. Denmark therefore has to strike a balance, where it avoids fully excluding Brussels, while concurrently making sure that it can pursue its own interests. This is done by highlighting that Greenland voted itself out of the European Community back in 1985, that Denmark has opted out of the EU's Common Security and Defence Policy, and by focusing on the Arctic Council and the 'Arctic five' as the most important regional bodies.

Third, NATO's presence in the Arctic is a somewhat complicated matter. On the one hand, Denmark is aware that NATO probably is the best body for handling an assertive Russia. On the other hand, Denmark is hesitant about letting outside organizations into the region. Partly, this is because a NATO presence is feared to fuel a security dilemma vis-à-vis Russia. In this regard, the Danish mentality is much more ambivalent than, for example, the Norwegian approach. From a Danish perspective, NATO should quietly develop contingency plans for future activities in the Arctic without scaring the Russians.

Denmark sees an institutionalization of the Arctic as part of its state interests. However, the country wants to tailor this process in a way that maximizes its own influence in the future bodies and which suits American interests. There are two possible threats to this balancing act. First, a resurgent and aggressive Russia might cause a situation where Danish sovereignty over Greenland is questioned. Second, if Denmark is forced to subsume its own interests under those of the EU, staying in the Arctic would become more difficult and less valuable.

Future developments: towards an institutionalized region:

Like all Arctic nations, Denmark's goals in the High North are largely defensive. Being present in Greenland is not a strategic goal in itself. It is a tool that Denmark can use to achieve political muscle elsewhere. Greenland is a bargaining chip that Copenhagen can use to tie itself closer to Washington.

In order to keep a presence in Greenland, Denmark plays a complex three-way game to keep the Greenlandic local government, the other Arctic states, and the domestic public satisfied with the status quo. So far, Denmark has had a steady hand in playing this game. Looking towards the twenty-year horizon, two potential sources of conflict are present in the Danish foreign policy narrative. First, if Greenland becomes less dependent on Denmark, the Commonwealth between the two nations may weaken. Second, if the EU or Russia tries to gain more political power in the Arctic, Denmark may be unable to keep playing the game.

The fact that Denmark's Arctic policy focuses on realizing narrow state interests does not mean that Copenhagen dismisses regional institutions. On the contrary: central policy-makers have already realized that their own military means will never be enough to hold on to Greenland. Denmark's military behavior is purely reactive. When Denmark bulks up militarily, it is most certainly a result of either a perceived challenge from global warming, a reaction to military build-ups of other states, or a treat for the political fringes back home. The status quo can only be kept by strengthening regional organizations. In this way, regional militarization can be avoided and the local administration can become more efficient in producing the outputs necessary to keep the self-rule government satisfied. Copenhagen knows that it needs to be all warm and cuddly in order to gain hard power advantages.

“Danes see Greenland security risk amid Arctic tensions,” Laurence Peter, BBC News, 29 November 2019 [55] <https://www.bbc.com/news/world-europe-50598898>

Overview:

Denmark has for the first time put mineral-rich Greenland top of its national security agenda, ahead of terrorism and cybercrime.

Current & Relevant Information:

The Defence Intelligence Service (FE) linked its change in priorities to US interest in Greenland, expressed in President Donald Trump's desire to buy the vast Arctic territory.

Greenland is part of Denmark, but has significant autonomy, including freedom to sign major business deals.

China has mining deals with Greenland.

The FE's head Lars Findsen said Greenland was now a top security issue for Denmark because a "power game is unfolding" between the US and other global powers in the Arctic.

In August the Danish government dismissed as "absurd" President Trump's suggestion of a US-Denmark land deal over Greenland.

Mr. Trump then cancelled a state visit to Denmark and [called Danish Prime Minister Mette Frederiksen "nasty"](#).

The US interest in Greenland goes back decades. The US has a key Cold War-era air base at Thule, used for surveillance of space using a massive radar. It is the US military's northernmost base, there to provide early warning of a missile attack on North America.

Why the new focus on Greenland?

Greenland's strategic importance has grown amid increased Arctic shipping and international competition for rare minerals. Arctic waters are becoming more navigable because of melting ice, linked to global warming.

The vast island is strategically located between North America and Europe, easing deliveries to many markets.



In a statement to the BBC, the FE's Lars Findsen said: "We have decided to start this year's Intelligence Risk Assessment with a chapter on the Arctic, as the interests of the great powers in the Arctic have direct impact on and growing significance for the Kingdom of Denmark.

"Despite the Arctic nations' shared ambition to keep the region free of security policy disagreements, the military focus on the Arctic is growing. A power game is unfolding between great powers Russia, the United States and China that deepens tensions in the region."

Russia has stepped up its economic and military activities in the Arctic. There are competing territorial claims at the UN from Denmark, Russia, the US and Canada in the North Pole region, where energy and mineral resources are becoming more accessible.

Kasper Wester, a defense journalist with Danish news website OLF1, says Denmark's military routinely patrols Greenland's airspace and waters.

However, in August Denmark sent a large support ship to Greenlandic waters for the first time. The Absalon, and sister ship Esbern Snare, are the biggest Danish naval vessels.

What about Greenland's precious minerals?

Mining is expanding because Greenland's vast ice sheet has been retreating significantly in recent years.

- The stark photo highlighting Greenland's ice loss

A joint venture between Greenland Minerals Ltd and Shenghe Resources Holding will enable China to import rare earth minerals containing radioactive uranium and thorium.

The rare earths surveyed in the Kvanefjeld project, in southern Greenland, are estimated at 270,000 tons of uranium and 11m tons of rare earth oxide, Australia-based Greenland Minerals Ltd says.

The China National Nuclear Corporation (CNNC) is participating in the project.

The business website export.gov, run by the US government, says "mining industry experts anticipate the retreating ice will make the island's rich stores of raw materials more easily accessible".

Elsewhere in Greenland there are valuable deposits of ruby and sapphires, as well as gold, platinum, zinc, lead and molybdenum.

London-based Bluejay Mining is developing a mine to extract ilmenite at Dundas near Thule Air Base. Ilmenite is the main ore for producing titanium. Danish and Greenlandic firms have bought stakes in the ilmenite mine.

Bluejay says it is developing two other mines in Greenland: a huge nickel-copper-platinum project at Disko-Nuussuaq, and the Kangerluarsuk zinc-lead-silver project. More than half of Bluejay's workforce is Greenlandic or Danish.

What are Danish-Greenland relations like now?

Greenland's population is about 56,000 and for decades the territory has been economically dependent on Denmark.

The Self-Rule Act of 2009 granted Greenland far-reaching autonomy, though Denmark retains control over foreign affairs, defense, security and immigration.

Fisheries account for more than 90% of Greenland's exports, most of which go to Denmark, and prawn is the main species caught.

Denmark is helping Greenland to build three big international airports, one of them in the capital Nuuk. A Chinese bid for the airport project was rejected.

The government in Copenhagen gives Greenland an annual block grant of 3.9bn Danish kroner (£445m; \$574m).

Speaking to the BBC, journalist Kasper Wester said "for Greenland's people there is huge potential income in exporting minerals, and the whole independence discussion relates to that".

Some Greenlandic politicians were pushing for independence, he said, but most of them "know they would be much worse off without the Danish subsidy".

But he said there was still discussion about whether Danes were too colonial in their approach to Greenland.

"Danish politicians are very cautious about what's going on. Not many will say it's a good idea to do too much business with the Chinese," he added.

“China’s Central Role in Denmark’s Arctic Security Policies,” Mingming Shi and Marc Lanteigne, *The Diplomat*, 8 December 2019 [56]

<https://thediplomat.com/2019/12/chinas-central-role-in-denmarks-arctic-security-policies/>

Overview:

China’s developing strategies in the Arctic, and recent American responses, have presented a significant challenge to Denmark of late, especially in the case of Greenland. Reports that U.S. President Donald Trump was actively seeking to purchase the nation of Greenland from the Danish government, despite Greenland’s self-rule status since 2009, generated much international mockery (and memes). Yet, the underlying causes of U.S. interests in Greenland, including Chinese influence there, have not gone away.

Current & Relevant Information:

American jitters about a growing Chinese economic presence in Greenland was said to be one major impetus for discussions about acquiring the country. These events have placed the Danish government of Prime Minister Mette Frederiksen in a difficult position, given that Copenhagen oversees Greenland’s foreign and defense policies, and has itself also been concerned about a potential Chinese challenge to Greenland’s economic sovereignty. This past week, the Danish Defense Intelligence Service (Forsvarets Efterretningstjeneste, or DDIS) further elucidated these concerns in its most recent risk assessment report, which included much discussion of China’s emerging Arctic strategies, including those with a direct impact on Greenland.

As explained by Lars Findsen, head of the DDIS, challenges to the security of the Arctic, including because of China’s growing presence there, prompted the decision to begin this year’s risk assessment with that region. In Copenhagen’s view, China has become the third player, along with Russia and the United States, in what is shaping up to be an emerging great power competition in the Arctic. The DDIS paper explained that with the linking of the Arctic to Beijing’s Belt and Road Initiative since 2017, including the country’s first Arctic White Paper published in January last year, the Arctic Ocean had been formally confirmed as a component of China’s overall strategic interests. Beijing was described in the DDIS document as seeking greater legitimacy in the region, including via bilateral partnerships and the expansion of scientific diplomacy.

Chinese interests have been engaged in five separate economic projects in Greenland, including an unsuccessful bid on an airport expansion plan initiated by the Greenlandic government, a potential zinc mine at Citronen Fjord in cooperation with Australian company Ironbark, a planned copper mining project at Wegener Halvø, an iron deposit at Isua overseen by Hong Kong firm General Nice. The fifth project, and the one farthest along in development, is the Kvanefjeld rare earth mining site overseen by Australia's Greenland Minerals, in partnership with Shenghe Resources. So far, the most promising project is Kvanefjeld, which appears to be progressing steadily, and according to Greenland's KNR news service, operations are expected to commence in 2021.

However, due to the relatively low prices of commodities, as well as pushback from Denmark and possibly the United States, not all of these projects have borne fruit. For instance, the Isua site remains on hold due to high start-up costs, and a Chinese firm withdrew from the bidding for the airport projects after Denmark, prompted by the U.S. government, intervened and promised to provide financial support. On the horizon, two Chinese companies specializing in oil and gas, namely China National Petroleum Corporation (CNPC) and the China National Offshore Oil Corporation (CNOOC) are reported to have expressed interest in these natural resources in Greenland once the bidding for onshore blocks is opened in the near future.

The Danish intelligence report stated that in addition to viewing the Arctic as a significant economic region, especially in relation to the Arctic's, energy, raw material and shipping potential, Beijing was becoming less wary of viewing the circumpolar north in hard military terms. The paper made note of closer China-Russia cooperation in the Arctic, including in the development of the Northern Sea Route (NSR) as an Arctic shipping corridor. However, the DDIS' findings suggested this partnership was fragile at best, given wariness in Moscow of allowing China to eventually dominate the NSR and other regional economic endeavors at Russian expense. It remains to be seen to what degree Sino-Russian relations will continue to deepen, but bilateral interests in regional economic development reached another milestone this month with the activation of the "Power of Siberia" (Сила Сибири) gas line connecting the two great powers.

Greenland is very much included in China's Arctic partnership policies, and the DDIS paper expressed anxieties about current and future Chinese investment there, given the small size of the Greenlandic population and the close relationship between Chinese firms and the country's central government. Moreover, the paper stated that ongoing U.S. interests in Greenland demonstrates that Washington views the island as an emerging front in the Sino-American strategic rivalry.

In Greenland, both the previous government led by Aleqa Hammond and the current administration under Prime Minister Kim Kielsen, have been welcoming of foreign economic interests, such as in the sectors of raw material exploration and extraction, including from China. Greenlandic politicians have been aware of natural resources

on the island being of great interest for external partners and potential large scales of extraction projects would generate substantial incomes once operational. However, within Greenland, citizens and some local politicians have tended to be more reserved in terms of embracing mining operations, due to concerns about environmental risks as well as possible damage to Inuit traditions.

As for Denmark, its views toward the presence of China in Greenland appear to be undergoing a transition. Beijing and Copenhagen have enjoyed a smooth relationship since their diplomatic ties were established in the 1950s. Additionally, Copenhagen, along with its Nordic neighbors, was in favor of China's application to be an observer in the Arctic Council, which was accepted in 2013. However, Greenland appears to be emerging as a potential sore point between the two governments, as the DDIS report illustrates.

For China, the short- and long-term challenges in the Arctic, including Greenland economic diplomacy, are multifaceted if the country wishes to maintain and strengthen its regional presence, especially in light of increased American attention and vigilance over the past year. First, Beijing would have to continue to demonstrate a commitment to Arctic development, including via new investments, while endeavoring to ease tensions from other regional stakeholders, including Denmark and the United States. Second, it may be necessary for Beijing to adjust to the evolving political and military dynamic between Arctic states, including Greenland, especially given the sour relationship between Russia and the United States, and closer Sino-Russian ties in the far north. Finally, China may have to face greater headwinds in Greenland due to increased U.S.-Denmark strategic cooperation, which was a main topic during meetings between the two governments at the recently-concluded NATO summit in London. This does not mean, however, that Beijing will be dissuaded from widening its economic footprint in Greenland in the near-term.

C. Iceland:

“The Arctic Council: About: Arctic States: Iceland,” Arctic Council, 2020 [57]
<https://arctic-council.org/en/about/states/iceland/>

Overview:

Quick Facts

Arctic Territory: All of Iceland

Arctic Population: 365,000

[Iceland is currently the chair of the Arctic Council.](#)

Current & Relevant Information:

Iceland and the Arctic Region:

Iceland is an Arctic State where the Arctic Circle passes through its northernmost community, Grimsey Island, 40 kilometers off the north coast of Iceland. Iceland has approximately 365,000 inhabitants.

Iceland's key industries have been largely based on the sustainable utilization of natural marine and energy resources. The country has the highest share of renewable energy in any national total energy budget, with about 85 percent of the total primary energy supply derived from domestically produced renewable energy sources and geothermal water is used to heat around 90 percent of Icelandic homes. In recent years, tourism has become a key pillar of the Icelandic economy and growing emphasis has been placed on innovation and the creative sector.

Indigenous Peoples:

Iceland is the only Arctic State that does not have an Indigenous population. From the start of settlements in the ninth century AD to today, Iceland inhabitants have mostly come from Northern Europe.

Iceland in the Arctic Council:

Iceland held its first Chairmanship from 2002-2004. Throughout its first Chairmanship, Iceland's priorities included:

- Arctic human development
- The use of information and telecommunication technology in the Arctic
- Strengthening cooperation on Arctic research

Throughout its current chairmanship, Iceland's priorities include:

- The Arctic marine environment, including plastics, micro-plastics and marine litter, the blue bioeconomy and sustainable shipping
- Climate and green energy solutions to reduce emissions and improve air quality
- People and communities of the Arctic, including economic opportunities, telecommunications and gender equality
- Strengthening the Arctic Council through constructive cooperation

Key accomplishments include:

- Under Iceland's lead, the Arctic Human Development Report (AHDR) was approved by Ministers at the Inari-meeting in 2002 as a priority project, forming an integral part of its Chairmanship program. The report was an effort to strengthen the cultural, social and economic dimensions of the work of the Arctic Council. The report represents the first comprehensive attempt to document and compare systematically the welfare of Arctic residents on a circumpolar basis.

- In order to make better use of financial and other resources allocated to Arctic research, the Icelandic Chairmanship emphasized the strengthened relationship and cooperation among parties involved in Arctic research. The increased involvement of science and education authorities, as well as Arctic residents, in such cooperation was considered instrumental to its success.
- Resulting from the work of the Arctic Council Project Support Fund Expert Group, Arctic Ministers requested at the Reykjavik Ministerial meeting in 2004 that Senior Arctic Officials establish an Arctic Council Project Support Instrument (PSI) that should focus on funding activities aimed at preventing and mitigating pollution in the Arctic, and develop a set of guidelines for the Instrument in close cooperation with the Nordic Environment Finance Corporation (NEFCO) and the Arctic Council's Arctic Contaminants Action Program (ACAP) Working Group.

Iceland is committed to the principle of sustainable development and recognizes the necessity of close cooperation between the States and peoples of the region and beyond. Iceland will hold its third Chairmanship in 2035-2037.

“The Arctic Region,” Government of Iceland [58]
<https://www.government.is/topics/foreign-affairs/arctic-region/>

Overview:

Arctic issues have in recent years become ever more prominent internationally as well as domestically. The discussion on the changing Arctic and its relationship with climatic change, discussions on the utilization and protection of natural resources, continental shelf and sovereignty demands, societal changes and the opening of new seaways is and will be of interest today and in the future.

Current & Relevant Information:

It is clear that few states have a greater interest in the sustainable development of the area than Iceland, since all of the country and a large part of its territorial waters lie within the boundaries of the Arctic region. This is unique among the member states of the Arctic Council. Arctic issues touch nearly every aspect of Icelandic society and are a key foreign policy priority in Iceland.

Iceland's policy in Arctic issues is anchored in a parliamentary resolution adopted unanimously by Althingi in the spring of 2011 which outlines 12 priority areas. They cover e.g. Iceland's position in the region, the importance of the Arctic Council and the United Nations Convention on the Law of the Sea, climate change, sustainable use of natural resources and security and commercial interests. Emphasis is furthermore placed on neighbor-state collaboration with the Faroe Islands and Greenland as well as the rights of indigenous peoples.

The Arctic Council, since its establishment in 1996, has become the most important multinational forum for Arctic issues. In addition to the eight founding members, six

organizations of indigenous peoples have permanent seats on the Council and 39 parties have observer status: 13 states, 13 intergovernmental organizations and 13 Non-governmental organizations. Decisions are made unanimously in the Council.

Three legally binding agreements have been negotiated under the auspices of the Council, on search and rescue, on prevention of oil pollution and the third one on enhancing scientific cooperation in the Arctic.

The large majority of the work of the Arctic Council takes place in six working groups whose contributions to the increased knowledge of the environment, biota and societies of the Arctic region have proven invaluable.

Two of those working groups, the Conservation of Arctic Flora and Fauna (CAFF) and the Protection of the Arctic Marine Environment (PAME) are located in Akureyri but in conformity with Iceland's Arctic policy an emphasis is placed on hosting a part of the operations of the Arctic Council in Iceland.

Iceland will assume chairmanship of the Arctic Council in 2019 and hold it until 2021. The chairmanship will clearly be among the biggest projects Iceland has undertaken internationally and will require careful and elaborate preparations. Iceland's position as one of eight member states of the Arctic Council is strong, and gives Icelanders the opportunity of having their voices heard and influence felt.

“In Focus: Iceland and the Arctic,” Gréta Sigríður Einarsdóttir, Iceland Review Magazine, 27 September 2019 [59] <https://www.icelandreview.com/politics/in-focus-iceland-and-the-arctic/>

Overview:

There are a few different definitions of what constitutes the Arctic, but it can essentially be defined as the area surrounding the North Pole. This northernmost part of the planet is home to about 4 million people, about 10% of whom are indigenous. It is the most sparsely populated area of the earth. The territories of eight countries lie within the region: Norway, Sweden, Finland, Denmark, Russia, Canada, the US, and Iceland. The Arctic Ocean and surrounding waters cover about one third of the region's area, making fishing and waterways some of its most important resources.

Climate change and changes in international relations have put a spotlight on the Arctic in recent years. In the spring of 2019, Iceland started its two-year chairmanship of the Arctic Council, emphasizing the importance of stability, sustainability, and co-operation in the area, and the intention to find ways to tackle its challenges, most notably climate change. A few months later, US President Donald Trump had a different kind of co-operation in mind when he tweeted about purchasing Greenland. The diplomatic kerfuffle that ensued proves relations in the Arctic are anything but simple.

Iceland in particular has also seen increased interest from foreign powers. Russian bombers were spotted entering NATO airspace near Iceland twice this March. While Icelandic-Russian diplomatic ties are stiffer than they have been for a long time (due not only to the military activity but also sanctions over Russia's annexation of Crimea), just this year, Iceland has received a visit from both US Secretary of State Mike Pompeo and US Vice President Mike Pence. Iceland has also gauged increased interest from China, not just as a tourism destination but also as an investment possibility. In light of US, Russian, and even Chinese interest in the Arctic, we'll be taking a closer look at how international politics might affect the future of Arctic communities.

Current & Relevant Information:

Climate change:

For centuries, the Arctic has been of little international consequence. As climate change continues to ravage the planet, however, the region is warming up. Three hundred billion tons of ice melted off the Greenland glacier this summer. The continuous melting of this freshwater is changing the makeup of the Arctic Ocean. Ocean acidification is wreaking havoc on underwater ecosystems. Aside from the effect this has on the global ecosystem, melting ice and receding glaciers are revealing hitherto unreachable land and waters, making the ears of investors, entrepreneurs, and politicians all over the world perk up.

Climate change is one of Iceland's stated focuses in its leadership of the Arctic Council, but it's difficult to find a local solution to a global problem. As Ólafur Ragnar Grímsson, former president of Iceland, put it, "The future of the Arctic is decided in other parts of the world, on other continents. The way we use energy; pollution; increased carbon dioxide release; will have uncontrollable consequences for the future of the Arctic."

While Iceland's intentions may be to prioritize action on climate change, international politics are once again interfering. Last spring, the Council didn't release a joint statement as is usual, because the US Secretary of State wouldn't sign a statement which mentioned climate change.

Opportunities and interest:

Recently, a vessel owned by Russian gas company Novatek sailed the northeast route from Russia to China in record time. The voyage took 16 days, and no icebreakers were needed to clear the way. According to Novatek, the northeast route takes less than half the time it takes to sail west through the Suez Canal. Indeed, Iceland's Minister for Foreign Affairs Guðlaugur Þór Þórðarsson has stated that the effects of the opening of sailing routes through the Arctic are comparable to those of the Suez and Panama Canals when they first went into operation.

In light of that comparison, it's obvious that control of Arctic waterways could become extremely lucrative. In Iceland, some investors are already thinking to the future. A planned container port in remote Finnafjörður fjord is expected to connect Asia, Europe, and the US. The project has been heavily criticized by environmentalists.

In addition to new trading routes, Arctic resources such as fish stocks are changing with the climate. For some stocks this means less fish, but in other cases, fish species that tend to live further south are migrating north as the water heats up. As the Greenland glacier and sea ice in the Arctic melt, access to oil drilling and mining opportunities becomes easier and therefore more profitable. While it might seem callous to consider business opportunities as climate change ravages the area, this is an important issue for the people of the Arctic, the least populated area in the world. Iceland doesn't have an army, instead relying on defense co-operation and diplomatic negotiations for safety. If the global superpowers' struggle for economic influence in the area intensifies, that could spell trouble for a small nation that relies on soft power.

National security:

Minister for Foreign Affairs Guðlaugur Þór has stated that "It's evident that there's increased interest and emphasis on the Arctic and the Arctic Ocean from the superpowers, as well as others. [...] There hasn't been much military development in the area. And we want to make sure it stays that way."

But that might prove more difficult than anticipated. Iceland is a founding member of NATO, and the US military has long had a base on the Reykjanes peninsula. Recently, increased US spending in the base's renovation have caused a stir, and Vice President Pence emphasized the importance of the defense agreement during his visit to Iceland recently. Iceland's continued defense cooperation with the US and NATO has always muddied the waters and increased defense costs and military exercises in Iceland has roused strong opposition. Increased military activity by Russia in the area might be one of the reasons why the US are fortifying their position, as ever since the Cold War, Iceland has been in a strategically important spot between the two countries.

Historian Sumarliði Ísleifsson has stated that increased interest is not necessarily in the best interest of the people of the Arctic. According to Sumarliði, the Icelandic government should speak clearly of their intent to keep the Arctic peaceful. Military exercises should have no place here, and Iceland should do its best to avoid getting dragged into an arms race. He told Iceland's national broadcaster RÚV, "The more low-key the politics in the area are, the better." Eiríkur Bergmann, professor of political science, considers it a matter of worry how the US approaches the countries in the Arctic. President Trump's attempt to purchase Greenland shows his attitude

towards the people of the Arctic and might portray the lack of respect and knowledge international political leaders have for the people of the Arctic.

Do we even have a say in the matter?

International cooperation and bureaucratic regulations and negotiations might not make the best headlines but it's the best bet Iceland and the other Arctic regions have to keep the power over their resources and land in their own hands. As the Arctic keeps getting hotter, both literally and as a topic, both industry and political leaders are going to want to jump on the opportunities that present themselves. While the soft power of diplomacy might feel like David facing the Goliath of brute military force, let's not forget who won that one.

“A Parliamentary Resolution on Iceland's Arctic Policy,” arcticportal.org, 28 March 2011 [60] <http://library.arcticportal.org/1889/1/A-Parliamentary-Resolution-on-ICE-Arctic-Policy-approved-by-Althingi.pdf>

Overview:

Althingi [Note: Althingi is the parliament of Iceland] resolves to entrust the Government, after consultations with Althingi, with carrying out the following overarching policy on Arctic issues aimed at securing Icelandic interests with regard to the effects of climate change, environmental issues, natural resources, navigation and social development as well as strengthening relations and cooperation with other States and stakeholders on the issues facing the region.

Current & Relevant Information:

The Arctic policy is to encompass the following twelve principles:

1. Promoting and strengthening the Arctic Council as the most important consultative forum on Arctic issues and working towards having international decisions on Arctic issues made there.
2. Securing Iceland's position as a coastal State within the Arctic region as regards influencing its development as well as international decisions on regional issues on the basis of legal, economic, ecological and geographical arguments. This will among other things be based on the fact that since the northern part of the Icelandic Exclusive Economic Zone falls within the Arctic and extends to the Greenland Sea adjoining the Arctic Ocean, Iceland has both territory and rights to sea areas north of the Arctic Circle. The Government shall in parallel develop the arguments which support this objective, in cooperation with relevant institutions.
3. Promoting understanding of the fact that the Arctic region extends both to the North Pole area proper and the part of the North Atlantic Ocean which is closely connected to it. The Arctic should not be limited to a narrow geographical definition but rather be viewed as an extensive area when it comes to ecological, economic, political and security matters.

4. Resolving differences that relate to the Arctic on the basis of the United Nations Convention on the Law of the Sea. The Convention establishes a legal framework for ocean affairs and contains, inter alia, provisions on navigation, fisheries, exploitation of oil, gas and other natural resources on the continental shelf, maritime delimitation, ocean pollution prevention, marine scientific research and dispute settlement applicable to all sea areas, including the Arctic region.
5. Strengthening and increasing cooperation with the Faroe Islands and Greenland with the aim of promoting the interests and political position of the three countries.
6. Supporting the rights of indigenous peoples in the Arctic in close cooperation with indigenous organizations and supporting their direct involvement in decisions on regional issues.
7. Building on agreements and promoting cooperation with other States and stakeholders on issues relating to Icelandic interests in the Arctic region.
8. To use all available means to prevent human-induced climate change and its effects in order to improve the wellbeing of Arctic residents and their communities. Iceland will concentrate its efforts fully on ensuring that increased economic activity in the Arctic region will contribute to sustainable utilization of resources and observe responsible handling of the fragile ecosystem and the conservation of biota. Furthermore, to contribute to the preservation of the unique culture and way of life of indigenous peoples which has developed in the Arctic region.
9. Safeguarding broadly defined security interests in the Arctic region through civilian means and working against any kind of militarization of the Arctic. Iceland's cooperation with other States should be strengthened on the protection of biota, research, observation capabilities, search and rescue, as well as pollution prevention in the Arctic region, inter alia to protect Icelandic interests in the areas of environmental protection, social wellbeing and sustainable use of natural resources.
10. Developing further trade relations between States in the Arctic region and thereby laying the groundwork for Icelanders to compete for the opportunities created as a result of increased economic activity in the Arctic region.
11. Advancing Icelanders' knowledge of Arctic issues and promoting Iceland abroad as a venue for meetings, conferences and discussions on the Arctic region. Institutions, research centers and educational establishments in Iceland working on Arctic issues should be promoted and strengthened in cooperation with other States and international organizations.
12. Increasing consultations and cooperation at the domestic level on Arctic issues to ensure increased knowledge of the importance of the Arctic region, democratic discussion and solidarity on the implementation of the Government's Arctic policy.

Althingi entrusts the Minister for Foreign Affairs with the implementation and development of the policy in cooperation with other relevant ministries, as well institutions and organization working on Arctic Affairs, and in consultation with the Foreign Affairs Committee and the Environment Committee of Althingi on the policy design as necessary.

“Iceland: A State within the Arctic,” Alyson JK Bailes and Margrét Cela, ams.hi.is [61] https://ams.hi.is/wp-content/uploads/old/iceland_-_a_state_within_the_arctic_bailes_a_and_cela_m.pdf

Overview:

When Iceland describes itself as the only state to lie entirely within the Arctic region (broadly defined!), the political utility of the claim for asserting the country's legitimacy and right to a voice in Arctic affairs is obvious. Foreign observers may find it harder to grasp how Iceland's policy stance, in turn, is shaped by real and distinctive factors of location, long-term history and economic and social structure. These features of the country's High Northern identity can be compared in importance only with the awareness of being a 'small state' in determining Iceland's concerns, norms, goals and working methods in external affairs generally, and on the emerging Arctic agenda in particular.

This chapter starts by offering some factual background to support these contentions. It continues with a brief account of the nation's post-independence history and international ties, then discusses how different dimensions of the current Arctic agenda and expected developments relate to Icelandic interests. Finally, it presents the Icelandic policy response, including the nation's preferred partners and its stance on relevant institutions and governance issues. The forward-looking conclusions speculate on the interplay between Iceland's domestic development and its evolving relations with the European Union and NATO.

Iceland was settled from the 9th century onwards by emigrants from the other Nordic territories – mostly from western Norway – with an admixture of Celtic genes and cultural influence from Irish and Hebridean slaves. It was first established as a free commonwealth governed by a proto-parliamentary assembly (the Althingi – a name still carried by the Icelandic parliament today), but fell under Norwegian control in 1262 after a period of anarchic civil conflict. Norway's rights passed to Denmark in 1380 and Denmark remained the sovereign power until Iceland claimed its full independence in 1944. Substantial gains of self-government were made in 1874, 1904 and again in 1918 when a 'Union' of Denmark and a separate Iceland was created, but did not include the separate management of diplomatic and defense affairs. Thus, Iceland never had a significant political attachment to any other than a fellow Nordic state, even if the Danes at some points dreamed of selling it to Germany, and Hanseatic and British merchants sometimes played a crucial part in its trade. The exception proving the rule was the 20th-century role of the United

States as the tutelary defense power for an independent Iceland that decided never to have military forces of its own. In de facto control from the end of World War II, the stationed US forces' position was formalized with Iceland's entry into NATO in 1949 and the bilateral US-Iceland Defense Agreement of 1951. The US presence was however always opposed by many Icelanders and after Washington chose to unilaterally end it in 2006, some would view it as a finite historical deviation.

Geographically, Iceland consists of a land mass of 103,000 square kilometers plus territorial waters (as defined for fisheries purposes) of 758,000 sq. km. This makes it the second smallest Nordic state in physical terms, as Denmark has 43,094 sq. km: but the Danish population numbers 5.5 million to Iceland's 319,700. With barely three persons per sq. km, Iceland is in fact the fourth least populous sovereign state in the world (Greenland has just 0.026 people per sq. km but is still part of the realm of Denmark.) Less than one per cent of the national territory is cultivable, and trees are sparse: grain, potatoes and other root crops are sown afresh each year and must struggle with violent, salt-bearing winds. Other foods like fruit (other than wild berries) and salad greens are produced in artificial conditions using low-cost geothermal power. The most productive branches of farming are sheep, horse and cattle rearing, though the cattle – and smaller numbers of pigs and poultry – are kept indoors for part of the year.

Most famous of all is the dependence of the Icelandic economy and lifestyle on fish, the quintessential natural resource. Though the contribution of fisheries to the Gross Domestic Product has halved since 1990 and the numbers employed have also reduced, in 2008 marine products still accounted for 36.7% by value of all Icelandic exports, compared with just 1.4% for agricultural products. The largest category of exports in that year were manufactures (52.1%), but as much as 39% consisted of aluminum from foreign-owned factories processing imported ore with low-cost hydroelectric and geothermal energy. To the extent that this energy can also be considered a primary natural resource, it is safe to say that the larger part of Iceland's exports and thus a dominant share of its national income relies on the gifts of nature.

Together with substantial and growing profits from tourism, this adds up to an economic and occupational profile clearly fitting a High Northern rather than mainstream European model. It helps explain why the Icelanders, though not themselves defined as indigenous peoples, feel kinship with the Greenlanders as well as the Faroese and maintain a structured cooperation with those territories in the 'West Nordic' framework. It also illuminates Iceland's insistence on continuing commercial whaling, more now as a cultural tradition than profit-making venture. Some would say that Iceland's dalliance with international high finance in the 2000s, when its overseas debts soared to around 12 times GDP, did not so much belie this 'wild frontier' strand in the Icelandic identity as confirm its peculiarities: both in the reckless scale of the banking bubble, and the chaos produced by its bursting in

2008. The notion that Iceland must now draw in its horns and retrieve its close-to-nature roots has since become a popular theme both of the nationalist Right and radical Left.

Current & Relevant Information:

Arctic Prospects and Icelandic Interests

Territorial claims:

Below the peaceful and stable surface of the High North in past decades, there are underlying disputes that must be kept from surfacing and escalating. All five littoral states – Canada, Denmark (Greenland), Norway, the Russian Federation and the USA – have made partly overlapping claims that would extend their ocean boundaries over areas where rich resources are suspected. The coastal states have full sovereignty for up to twelve nautical miles from shore and certain sovereign rights out to two hundred miles, or even more, depending on the shape and sediments of the seabed. Though not recognized as a coastal state in this sense, Iceland has nevertheless had some disputes over ocean boundaries. In 1981 Iceland and Norway agreed on a joint continental shelf zone near Jan Mayen, letting them share possible profits from hydrocarbon exploration which has reached the stage of offer of licenses. In 1997 a dispute between Iceland and Denmark (Greenland) on continental shelf and fisheries boundaries was settled and the same year Iceland, Denmark (Greenland) and Norway (Jan Mayen) reached a tripoint agreement. Iceland claims continental shelf rights beyond 200 miles in the southern Síldarsmugan zone (literally 'herring lair') but in 2006 agreed with Norway and Denmark (on behalf of the Faroe Islands) on a basic demarcation. Furthermore, under the Svalbard Treaty Iceland enjoys rights to exploit natural resources, including fishing and continental shelf rights, within Svalbard's 200 nautical mile jurisdiction.

Military aspects:

As it has no tools, let alone intent, to impose such claims by force, Iceland can honestly claim to be the most opposed of all regional states to the 'militarization' of the Arctic. Not only has it no armed forces – just a modest coastguard to patrol its fisheries – but its profile as a basing site has been reduced in recent years both by others' actions and the present government's wish. The departed US forces have been replaced by paper guarantees of reinforcement in the revised US-Iceland Defense Agreement. NATO force exercises are held just a few times a year, with a focus on air policing, including the annual or biennial 'Northern Viking' deployment which involves US forces. While the air traffic radars at Keflavik remain linked to NATO's air defense system, their placing under Ministry of Interior operational control from 2011 underscores Iceland's 'civilian' approach.

For some time after the US withdrawal, thinkers on the Right in Iceland cherished a lingering hope that the Arctic competition itself might re-awake US interest in Iceland's strategic setting. But there has been no sign of that so far – it is Greenland that plays the key role in Washington's missile defense plans – and with shifts in the Icelandic public mood, it is now uncertain if the majority would want it. Rather, Iceland would prefer all players to keep military plans and actions to a minimum, not just to minimize its own exposure in any open fight, but because of the sharp rise in accident and pollution risks that heavy military patrolling would bring. Dependency on fisheries has particularly sharpened Icelandic awareness of nuclear contamination risks, where concerns were especially high in the 1980s and early 1990s but are constantly re-awakened, for instance by news of submarine accidents. Iceland's best bet is thus to maintain the same regional security model that preserved peace and stability even in Cold War times, thanks to the physical separation of the largest US and Russian forces and the interposition of structures for neighborly cooperation. While Iceland itself has not so far tabled proposals for arms control and restraint measures in the Arctic space, it would be among the first to embrace any such ideas that did surface.

It may seem a contradiction that Iceland chose to co-host the first – and maybe last – special conference ever held by NATO on Arctic matters, at Reykjavik in January 2009. Falling in the last days of the last Independence Party-led government, it reflected that Party's traditional pro-NATO stance, but also an effort to build more complex links with NATO to offset the US withdrawal. More generally, Iceland saw and would still see a restrained and balanced collective NATO posture as better than leaving Arctic strategy to the individual judgement of its (sometimes over-nationalistic) members. At the 2009 event, accordingly, Icelandic speakers urged the Alliance to work with Russia on using military assets primarily for multi-purpose surveillance and data collection, and cooperating in search and rescue. While that approach drew wide support at the conference, Icelandic suggestions to include similar conclusions in NATO's new Strategic Concept fell flat because at least one nation preferred not to see a binding Alliance line developed on the subject.

Economic aspects:

While state sovereignty defines the Arctic to a far greater degree than the Antarctic, it has been mitigated by the huge barren spaces involved and the harsh climate that has made them hard to penetrate and control, allowing old ways of life to survive. Intensive economic activity entered the region from outside in the age of whaling, only to retreat again when stocks were exhausted. Oil and gas exploration in the Norwegian and west Siberian zones has, however, been creeping steadily northwards, and life in the occupied parts of the Far North was showing many signs of exposure to globalization even before the forecasts of rapid ice melting gained currency. The prospect of easier access for oil, gas and mineral exploitation, long-distance transit shipping, and tourism has attracted a fast-growing interest from a

widening range of states and non-state actors – apparently little deterred by the global recession. It is arguable that judgments taken in the business sphere, including by private business, and above all the calculations of financial and technical feasibility will do more to shape what actually happens in the Arctic than any exercise of top-down strategy or military power.

Iceland has long taken Arctic economics seriously and has been interested to exploit its position not just by encouraging new investments and facilities on its land, but by active commercial engagement. For instance, Icelandic companies are already profiting from oil exploration in Greenland by providing services such as flights. While such opportunities are welcome in thin times, the economic crash has also brutally underlined the risks facing the small Icelandic administration and companies that are not best known for professional planning and prudence. With the rising number of actors showing interest in the region, Icelandic actors, state and non-state, must get ready to compete with the best – or be left behind. To do so a clear strategy is needed.

Icelandic companies have a good reputation in High Northern tourism and construction, as seen for instance in Greenland. Iceland is, further, in an ideal position to site any new facilities for monitoring sea and air traffic and for search and rescue. It may or may not attract support and transshipment facilities for the new Arctic oil, gas and shipping trade depending on what seabed areas are exploited and which shipping routes prove most economical. There may be new opportunities to apply Iceland's large reserves of green energy in the process. Different fish stocks are likely to appear in Icelandic territorial waters as the climate becomes warmer, though others currently fished by Icelandic vessels may also migrate further north – and as noted earlier, the net outcome has massive relevance for Iceland's economy. However, the very fact of Iceland's intense reliance on its natural resources gives it a compelling interest in ensuring that all new economic activities in the Arctic – oil and gas, shipping, tourism, and all aspects of marine harvesting - are properly regulated for the protection of the environment, safety and civil security. Regulators will need to keep pace with and even ahead of private sector thinking, to defend the common interest in sustainable development against the risk of aggressive 'plundering' by either large powers or large firms.

The scope for clashes of interest has already been illustrated by the movement of fish stocks. In 2010 Iceland disagreed with Norway and the EU over its right to harvest migrating stocks of mackerel, and the EU's protests were "welcomed" by the anti-EU school in Iceland as an example of how Brussels would usurp the island's natural resources for its own benefit if allowed. Seen more objectively, however, the EU's and Iceland's current approaches to Arctic development are highly compatible, and should allow close cooperation even if Iceland's entry bid fails. The policy guidelines on Arctic issues adopted by the EU Council of Ministers in 2009 start with environment protection and advocate cooperative, prudent, development within a

framework of regulation. They do not speak of a sealing and whaling ban or a long-term fishing ban, as called for inter alia by the European Parliament, but only a temporary fishing ban in new waters. Pro-EU Icelanders would in fact argue that Union membership offers the best protection available, both for Iceland's civil security, and for its hopes of safely navigating the competitive new Arctic market.

Environmental aspects:

Even though climate change is now a familiar and, for most, incontestable prospect, its speed and local consequences are far less predictable. This uncertainty makes it hard to be prepared, not least for a small state with a more reactive than proactive security culture. Climate change may in fact have some positive impacts for Iceland, at least in the short run, on three main counts. First, as already noted, larger stocks of some fish including species new to this part of the northern North Atlantic may be found in Icelandic waters. The second category is agriculture: mild winters with less ice mean longer summers, and in the past two decades growing grain has become popular and profitable for Icelandic farmers. Forestry is also more productive with warmer summers. The third factor is the energy sector: the output of hydroelectric plants is very sensitive to climate and water level, and in the near term can be boosted (so long as it is not swamped) by faster-melting glaciers.

Long term effects may not be as positive. Studies have shown that ocean acidification in the waters around Iceland is near twice the global average, and is likely to become one of the most disturbing aspects of climate change for Iceland, along with changes in ocean currents. New societal risks can also be expected, such as unfamiliar diseases and new infection carriers, heat-waves, storms, floods, and drought. The more intense and complex society's patterns of economic activity become, the greater the risk of major disruption through pollution, disease, accidents or financial/economic difficulties, and the harder the challenge of ensuring true sustainability. For instance, while trout farming has boomed in recent years, research now shows the conditions for trout in Iceland worsening because of rising water temperatures.

Environmental risks linked to the growth of shipping also deserve further comment. In 2007 over 200 oil ships sailed from Murmansk in Russia: one in ten of them weighing 100,000 tons, and one in five cruising near Iceland. Thus in 2007, forty-seven oil ships from Murmansk heading to North America sailed past Iceland, carrying 2.2 million tons of oil. Many 80-100,000-ton ships transporting gas from Hammerfest also transit Icelandic waters. When gas extraction from the Norwegian Shtokman field begins, these transports will multiply. The oil disaster in the Gulf of Mexico further underlines how offshore activity heightens environmental risks. For Iceland, any such accident would be a triple blow: the immediate pollution, the longer-term effect on quality and marketability of Iceland's own critical marine resources, and perhaps also a human tragedy as local rescue capacities are so limited. As things stand, Iceland lacks information on the sailing routes of gas

tankers even when they transit fishing waters, lacks vessels large enough to tow the largest ships, and has very limited ability for oil cleansing. All this helps explain the Icelandic government's relief and pleasure when a workshop of all eight Arctic Council states at Reykjavik in December 2010 reached preliminary agreement on a cooperative scheme for search and rescue.

Iceland's Policy Response

For much of the past decade, the Icelandic government focused largely on the economic side of High North development, measuring everything in terms of financial gain and loss. Official reports published in 2005-2007 shared a strong focus on the hope of new commercial bases in Iceland; for instance the 2007 report "Breaking the Ice" depicted Iceland as the ideal site for a transshipment port connecting different routes. More recently a new attitude can be detected, not least in a Foreign Ministry report of 2009 which presents Iceland's interests in the region far more broadly, including international cooperation, security and defense, natural resources and conservation, transport, culture and human welfare, and science and monitoring. The official Icelandic Arctic strategy now in preparation, as discussed further below, maintains this broader, more values-driven than value-driven approach.

The High North today can be considered a regional sub-system characterized by cross border interactions between states, Indigenous Peoples Organizations, International Governmental Organizations (IGOs), International Non-Governmental Organizations (INGOs), sub-national governments (autonomous territories, provinces) and transnational corporations. Typically for a small state finding itself in such a nexus - with much both to gain and to lose - Iceland sees its interest as avoiding primitive power-play between nations, and using the rule of law and institutions both to guide resource management and to resolve disputes. Thus, Icelandic politicians have emphasized the need for international cooperation to protect the fragile ecosystem of the Arctic.

At the same time, Iceland tends to favor institutions that do not require heavy integration and substantial surrenders of sovereignty. The emphasis it places on the Arctic Council – a body that takes non-legally binding decisions for the most part - suggests this, while its strong opposition to separate meetings of the five 'littoral states' reflects its preference for working in a large forum where small members have a nominally equal voice. For similar reasons, Iceland welcomes the growing interest in the region from larger multilateral institutions such as the EU, NATO and UN agencies. It hopes to avoid permanently "ganging up" with or opposing any particular player, instead aiming for business-like relations with all Arctic states to maximize its chance of joining any profitable economic schemes. However, Iceland works particularly closely with the other four states in the Nordic Council of Ministers, where Arctic issues have been included in a special cooperation program for the years 2012-2014. The goals include research, development, the improvement of

quality of life, culture promotion in the face of globalization, and the preservation of Arctic nature, biological diversity and sustainable resource use.

On March 28 2011, a proposal on Iceland's new strategy for the High North was adopted by the Althingi. Building on recommendations by the Foreign Minister, it listed twelve key principles that should guide the government's production of a detailed strategy document:

- 1) Strengthen the Arctic Council.
- 2) Secure Iceland's position as a coastal state. The claim will be based on legal, economical, ecological and geographical argumentation. Priority will be given to working with institutions that support this claim.
- 3) Increase the understanding that 'the Arctic' for policy purposes includes both the area above the Arctic Circle and adjoining areas of the North Atlantic.
- 4) Promote the UN Convention on the Law of the Sea as the tool to resolve overlapping claims.
- 5) Strengthen cooperation with Greenland and the Faroese in order to increase the political leverage of all three states.
- 6) Support the rights of indigenous peoples.
- 7) Build on the institutional and legal framework of cooperation relevant to Iceland's interests in the High North.
- 8) Fight against global warming caused by human activity and at the same time to promote sustainability and local culture.
- 9) Promote security in the broad sense and oppose any militarization of the region; increase cooperation in search and rescue.
- 10) Promote business opportunities in the region.
- 11) Increase Icelandic research and knowledge on the High North in cooperation with others
- 12) Increase domestic consultation and coordination on High North issues.

Most of these points reflect the logic of Icelandic interests and traditions of Icelandic policy as already analyzed, but some need further comment. First, the linkage of Iceland's vital interests with recognition as a coastal state relates to Iceland's resentment at being left out of the 'inner' meetings of five littoral powers, and is meant to shift attention back to the need to work with and build the joint influence of all eight Arctic Council states. The third point about defining the Arctic region also reflects Iceland's insistence on its Arctic identity, which is further served by its close cooperation and fostering of common economic interests with Greenland as well as the Faroes. As explained earlier in this chapter, Icelandic support for the rights of

indigenous peoples and for shared traditions such as whaling runs in the same direction. Finally, Iceland is joining the common line of other Arctic states in promoting UNCLOS as the right and only legal framework for resolving overlapping claims at sea, and in the process implicitly rejecting any need for a comprehensive 'Arctic Treaty' on the lines of the Antarctic Treaty.

Also noteworthy is the last item in the policy manifesto about the need for improved internal coordination. Never an Icelandic strong point, this should be relatively easy on a topic like the Arctic where Party and sectoral interests concur, and if successful could provide a model for other policy areas. However, the ambitious program raises the question of what resources the Foreign Ministry, as lead player, can muster to pursue it at home and abroad. As part of post-crash public expenditure cuts, in 2009 the Icelandic Foreign Service's budget was slashed by 26%, followed by 16.6% in 2010 and 9.2% in 2011. In 2010 it received only 2.12% of the total state budget, the lowest proportion among Nordic states. Foreign Service resources have also been at least temporarily diverted to the massive task of conducting and coordinating the EU accession talks. There is thus still a question-mark over how actively Iceland can pursue its Arctic interests, as distinct from encouraging others to see its location's advantages.

**“This is Why Finland and Iceland Want Security Politics in the Arctic Council,”
Siri Gulliksen Tømmerbakke, High North News, 25 October 2019 [62]**

<https://www.highborthnews.com/en/why-finland-and-iceland-want-security-politics-arctic-council>

Overview:

The question is regularly raised off-the-record, though at this year's Arctic Circle, it rose to the main stage. Many now argue that the Arctic Council should start addressing security policy issues, while others strongly warn against it.

Current & Relevant Information:

“We need to and should discuss whether the Arctic Council should also address security issues”, said Iceland's PM Katrin Jakobsdottir during her opening speech at the world's largest Arctic conference earlier this month.

Antti Rinne, Finland's PM, agreed with Jakobsdottir and also argued that this kind of major issues should be discussed during times of peace, and he wants the EU onboard.

“And the best way in which we can do that, is to handle it with as many as possible at the table”, he added.

Finland has tried to initiate an Arctic leadership meeting about this, an initiative to which Jakobsdottir lends Iceland's full support.

“Iceland has been in favor of keeping geo and security politics off the table in the Arctic Council because we have believed it to be important to have a forum in which we can all sit at the same table and have constructive discussions without major conflict issues taking over. However, now that we see geopolitical tensions rise, I believe we need to discuss whether the Arctic Council should also be a forum for so-called ‘hard security’. Or if we should have a separate forum for this.”

“We do not currently have an Arctic forum that addresses such issues, or one that can handle disputes about territories or exploitation of natural resources, she continued and said, in summary:

“Securing peace and stability in the North Atlantic and Arctic and preventing the area to become victim of a geopolitical power struggle is our responsibility.” –Katrin Jakobsdottir

No faith in an Arctic security forum:

Even though security politics most certainly will be addressed in the updated EU strategy for the Arctic, Marie-Anne Coninx, the EU’s Ambassador at Large for the Arctic, is not so sure that a separate Arctic security policy forum is the way forward.

“Some of the discussions here in Reykjavik have spun around opening up for discussing security politics at the Arctic Council or creating a separate council to address this. However, I do not believe we need to create new organizations. I believe those that already exist will suffice, she says to High North News. Though she warns against putting up a “do-not-disturb” sign:

“If a security risk emerges, the responsibility for that cannot be limited to the Arctic states exclusively. Many argue that the EU should be more engaged than what it is today. The German strategy, for instance, encourages the EU and NATO to intensify their security policy role in the region.

Focusing on avoiding tension:

Norway’s Senior Arctic Official, Bård Ivar Svendsen, was also present during the opening session of the Arctic Circle in Reykjavik.

He is not surprised by what he heard from the Icelandic and Finnish prime ministers; however, he stresses:

“We are facing major changes in the Arctic. The climate and the environment are changing, and the ecosystems change. In a longer-term perspective, that will lead to changes in the Arctic reality, for instance when it comes to new transport routes. We know we have to be prepared for that and it is thus both natural and logical for some to ask what this will mean to geopolitics and security politics in the Arctic”, Svendsen says and continues:

“What we are focused on at the [Norwegian] Ministry of Foreign Affairs is to not cause unnecessary tension. The current situation is that the Arctic is a peaceful and stable region. We will do what we can to contribute to continued peace and stability, and we do not see anything that goes to indicate that that will change significantly. Maintaining the stability and peace we have today is in the interest of all Arctic states.”

Svendsen acknowledges that ideas about finding new ways to formalize talks about security in the Arctic have been presented from various parties recently.

“There have been several proposals, neither of which have been formalized so far. The issue has not been raised by any government bodies, but rather presented as ideas by individuals in this kind of debates in this kind of forums. So as per today, we do not have any concrete proposals on the table about how this might possibly be done”, he says to High North News.

Good reasons to keep the issue off the table:

He argues that there are good reasons why the Arctic Council should not address security policy issues.

“If one were to change the mandate of the Arctic Council, that would be a long-term process that would have to be supported by all, and I do not consider that realistic. Norway will continue working under the current circumstances. We take note of the increased number of ideas about how we should discuss security politics, though we will wait and see if any of these ideas come to fruition before we potentially take a stand on it”.

During the opening of the Arctic Circle, both Finland’s and Iceland’s prime ministers raised the issue of finding ways in which to discuss major security policy issues. Nevertheless, Svendsen’s impression is that the member states are satisfied with the current situation at the Arctic Council.

“This is so because the Arctic Council has focused on environment, and on economic and social development, areas in which it has been possible to reach consensus. We should keep in mind that the Arctic Council is one out of very few international forums in which the dialogue between Russia and the West has been good throughout. And that is so exactly because security policy is kept off the table.”

He also refers to how Iceland’s Foreign Minister, Gudlaugur Thor Thordarsson, spoke about the Arctic Council in an “admirable, fact-based and correct way” in his speech.

“We relate to that. It is important to remember that we actually have a solid legal framework for the Arctic in public international law as well as the UN Convention on Law of the Seas.”

Too differentiated to discuss security:

Whitney Lackenbauer, professor at Trent University in Canada, is also not a fan of bringing security politics into the Arctic Council.

“Mike Pompeo really did Canada a favor with his Rovaniemi speech last May. He saved us from ourselves, because Canada was also a country trying to bring security politics on to the Arctic Council table back in the 1990s. Back then, the Americans were the ones holding back.”

The professor argues that the Arctic is too differentiated to discuss security politics on a regional level, and he argues that security policy challenges should be solved on a different level.

“As for ‘soft security’, which is about search and rescue, that is a different matter. But we cannot speak about the Arctic as one uniform region; it should be regarded as a series of different security regions, regions that of course have an ongoing dialogue and cooperate.”

“The European Arctic and the Canadian Arctic are vastly different from each other in many ways, including in where we look for allies. There are demographic realities we have to take into account. And the fact is that no-one is threatening Canada’s sovereignty in the High North”, he says and stresses:

“What threatens us as well as the rest of the Arctic, is a different thing altogether: Climate changes. And that will turn into a far more serious threat than security.”

“Yes, there are conflicts between Russia and NATO. Yes, there are conflicts with China and insecurity about its real motives. Economic insecurity, energy security, climate changes. But are these Arctic challenges? Or global?” he asks.

In closing, Lackenbauer says Canada is skeptical of NATO getting more involved with the region.

“We fear that it may provoke the Russians without reason, and that it will add wood to the fire for Putin’s propaganda table. Canada has changed its rhetoric. Today, we see ourselves as a security supplier for Europe, not as a security receiver. We have other security alliances that preserve us in the case of conflict. We are happy to participate in NATO exercises, but we do so with careful considerations and ask ourselves ‘what strategic message are we sending out by this’ and ‘what are the consequences’.”

“U.S. and Iceland boost trade ties, discuss Arctic security,” Lesley Wroughton, Reuters, 15 February 2019 [63] <https://www.reuters.com/article/us-usa-iceland-pompeo/us-and-iceland-boost-trade-ties-discuss-arctic-security-idUSKCN1Q41RT>

Overview:

The United States and Iceland have agreed to set up formal economic channels to boost trade and business investment, the countries’ top diplomats said on Friday.

U.S. Secretary of State Mike Pompeo visited the NATO ally in the north Atlantic on Friday, also to discuss security relations and China and Russia's growing presence in the Arctic.

"We have now established an economic dialogue between our two nations which I think will bear fruit quickly," Pompeo said at a press conference.

His visit comes amid increased interest in the Arctic, which has big reserves of oil, gas, gold, diamonds, zinc and iron.

With global warming melting polar ice, it may offer world powers new shipping routes - and naval interests - for trade between Asia, Europe and America's east coast.

He said it was still unclear whether boosting economic ties could be done through a formal trade agreement "which if accomplished would be a really good outcome," or whether they would come from a set of common understandings to cut costs or reduce barriers.

"There is still unrealized potential in trade and our commercial relationship," Icelandic Foreign Minister Gudlaugur Thor Thordarson said at the common press meeting.

"We are very excited to take this important step ... and we should try and do it as quickly as possible," he added.

Current & Relevant Information:

Iceland sits in a "strategic place in the world", Pompeo said during his visit. Asked how the United States planned to counter China and Russia's increased presence in the Arctic region, he said:

"You find friends and allies in the region and you work alongside them, and you show up and you have serious discussions with them about how to approach it."

Pompeo said that the United States "deeply understands the geo-strategic challenges" that exist in the Arctic and the risks that are there.

"We have watched America's adversaries begin to deploy assets in a way that they believe will strategically disadvantage not only the United States, but Iceland and the European countries as well," he said.

"We know that when America retreats nations such as China and Russia will fill the vacuum. It's inevitable when we're not there," he said.

Pompeo said he was very confident the cooperation between the United States and Iceland would achieve outcomes.

"I look forward to being part of this as Iceland takes over the Arctic Council, determining how and where to best deploy assets, not just military, but all of the assets," he said.

Iceland assumes the two-year rotating chairmanship of the Arctic Council in May. It comprises Canada, Finland, Iceland, Norway, Russia, Sweden, the United States and Denmark, all of which have territory inside the Arctic Circle.

Referring to increased competition in the Arctic region, foreign minister Thordarson said it was important that the Arctic remain a “peaceful, low tension area”.

The organization, which coordinates Arctic policy, is gaining clout as sea ice thaws to open up new trade routes and intensify competition for its as yet undiscovered oil and gas reserves.

“Iceland: Small but Central,” Alyson Bailes, et al., kas.de, 2014 [64]
https://www.kas.de/c/document_library/get_file?uuid=e861e1f4-bc1f-0c38-efdd-be81f6aeda16&groupId=252038

Abstract:

If asked whether Iceland should be considered an Arctic or sub-Arctic state, the best answer would be ‘both’ – depending on the context. Geographically, Iceland lies outside the North polar zone proper, with its Northernmost island of Grimsey just grazing the Arctic Circle. Settled around 1000 years ago, it has no ‘indigenous people’. Its vegetation is mostly sub-Arctic, although 11 percent of the land is covered by ice sheets. However, in the work of the Arctic Council, such as the preparation of Arctic Human Development Reports (ADHR), Iceland and other territories even further South have been included as they are seen as part of a single environmental and economic complex. Iceland’s economy is still heavily dependent on fishing and more generally on natural resources, which it exploits both for hydroelectric and geothermal power generation and to attract tourists; this gives it more in common with North Norway, Greenland and the Faroes than, say, mainland Denmark. In terms of conscious identity-framing and policy positioning, Iceland has stressed its Arctic credentials not only by becoming a founding member of the Barents Euro-Arctic Council (1993) and the Arctic Council (1996), but by asserting that it is just as much a High Northern ‘littoral’ (coastal) state as are the ‘Big Five’ who actually own land above the Arctic Circle. Overall, Iceland’s attitude is well summed up by its claim to be the only sovereign state lying entirely within the Arctic zone.

This chapter starts by identifying some basics of Iceland’s external orientation as a ‘small state’, then traces the development of its official Arctic policies, and the external relationships and institutional frameworks in which the nation pursues its interests. The full range of Icelandic stakeholders and shapers of Arctic strategy is then reviewed, from ministries and academia, to private corporations from major economic branches with additional details about the issues at stake. Finally, we stand back from day-to-day politics to consider the nature of Arctic discourse(s) in Iceland, and the (sub) Arctic as a factor in Icelandic identity. A short conclusion speculates on the way ahead.

Current & Relevant Information:

Stakeholders and shapers

As Arctic issues have grown in importance for Icelandic foreign policy, participation has stretched far beyond the diplomatic establishment. While the Foreign Ministry remains in the lead, Arctic challenges and possibilities have become a focus point for different policy agencies in Iceland, including most other ministries, as well as the agencies and services dealing with emergency management and environment protection. In October 2013, the Prime Minister announced that to improve consultation and coordination, a ministerial committee had been established with himself in the chair and otherwise consisting of the four ministers of foreign affairs; the interior; industry and innovation; and environment and natural resources, respectively. Further, Iceland's President Ólafur Ragnar Grímsson (in office since 1996) has long campaigned for more international attention to Arctic issues and, as an example, promoted the first large-scale 'Arctic Circle' meeting at Reykjavik in autumn 2013.

Academia

When identifying key actors within Iceland's Arctic initiatives one cannot exclude academia. Iceland has had a strong presence in the EU's and other international organizations' scientific and educational networks. During Iceland's successful chairmanship of the Arctic Council, from 2002-2004, Iceland saw the launch of two important reports: The Arctic Climate Impact Assessment (ACIA) and the Arctic Human Development Report (AHDR). Akureyri in North Iceland hosts the offices of two working groups of the Arctic Council, CAFF (Conservation of Arctic Flora and Fauna) and PAME (Protection of Arctic Marine Environment), as well as the Northern Research Forum secretariat. Akureyri University also runs an International Polar Law LLM and MA programs, and regularly hosts international Arctic conferences.

Ranging across such disciplines as Environment and Natural Resources, Geology, Engineering, Geography, Humanities and the Social Sciences, the University of Iceland hosts a dynamic group of researchers focused on Arctic issues. In 2013 it established a new Centre for Arctic Policy Studies providing a forum for interdisciplinary collaboration in the field of Arctic research, with emphasis on governance and society. Iceland's universities also cooperate with its West Nordic counterparts through exchange and course development. Recently a joint West Nordic Master's program has been developed, focusing on sustainable management and governance. It encourages and facilitates the mobility of students and staff within the region.

State owned enterprises and the private sector

Just as the Arctic has been growing in importance for the public sector, so it has for the private sector. Much has happened in the last few years. In 2013 the Icelandic Arctic Chamber of Commerce (IACC) was established with nine companies represented on its board: Arctic Services, Eykon Energy, Eimskip (shipping company), Icelandair, ÍAV (construction company), Íslandsbanki bank, Mannvit (engineering company), Norðurflugs (airline), and Samskip (shipping company). The IACC's main purpose is to create a business environment in the Arctic where Icelandic companies can compete for the emerging commercial opportunities. All the companies mentioned above have taken a leading position within Iceland's private sector as regards actual and potential Arctic business and have shown willingness to act upon actual and potential opportunities. That is not to say they are the only companies looking for Arctic openings: on the contrary, a rapidly growing number of private companies in different sectors are starting to show interest, ranging, for example, from Efla (an engineering consultancy firm) to the fast-growing tourism industry as outlined below.

Aware of their relatively small size, Icelandic enterprises have created specialized platforms to advertise their Arctic offerings such as, the Akureyri-based Arctic Services group who combine industrial and technical service providers, research facilities, engineering companies, aviation services and public utilities to offer high-quality services and infrastructure for those involved in exploration, oil search and mining in the Arctic. The Icelandic Arctic Cooperation Network was established in 2013 to facilitate cooperation amongst Icelandic public and private organizations, institutions, businesses and other actors involved in Arctic issues.

Shipping

Private sector roles can be more fully appreciated by looking at the Icelandic angle on some specific Arctic opportunities. In the shipping sector, Fáfñir Offshore has invested more than 4.6 million Euro in a vessel specially equipped to service the offshore oil industry to the North and East of Iceland. Maritime service-related opportunities have been discussed in Iceland since early 2000, notably the idea of building a transshipment port, which private sector and local municipalities are exploring in cooperation with Icelandic and foreign investors. In 2012 the Parliament adopted a resolution tasking ministers of foreign affairs and the interior, in cooperation with the rest of government, to explore the viability of the idea. However, there are also sceptics who question whether the new ice-free sea routes likely to open in the foreseeable future will actually include Iceland. Service harbors seem more feasible, especially in the context of plans for rapid extractive development in Greenland, where Iceland can offer the nearest ice-free locations. One such project became reality in 2013 when several private companies signed an agreement to invest some 51 million Euro in building a service harbor in the North-East of Iceland, at Dysnes in Eyjafjörður.

Oil exploration

The chances of Iceland becoming an oil producer are gaining increased attention. The Icelandic government have issued three licenses for explorations in the Dreki area of the seabed to the North-east of Iceland. Interestingly, one license was issued to a team of companies from Iceland (Eykon Energy), Norway (Petero), and China (China National Offshore Oil Corporation, CNOOC) - making Iceland the first state to open the door to a CNOOC stake in the Arctic. The Icelandic government has shown great interest in the development of this field, and the establishment of a state-owned oil company has been up for discussion, together with the idea of a Norwegian-style, oil-powered ethical investment fund.

Tourism

The geopolitical relevance of Arctic tourism rivals even resource extraction and may prove crucial for the self-sufficiency and economic security of smaller nations there. Tourism is a fast-growing industry in Iceland and a major pillar of its economy. The promotion of Iceland as an Arctic destination and gateway is expressed unambiguously in terms of celebrating its wilderness, cold climate and northern landscapes. The increased use of the adjective 'Arctic' in tourism companies' names (e.g. Arctic Sea Tours, Arctic Comfort Hotel, Arctic Experience etc.) attests to Icelanders' adaptation to the outer world's Arctic appetite. However, tourism also rivals oil extraction in its double-sided nature, given the dynamic interplay between producers and consumers, not to mention its environmental impact. The capacity to receive growing numbers of tourists and yet preserve the very thing drawing them - Iceland's pristine nature – has become increasingly a point of contestation. Also contested are concessions to foreign-controlled tourism development. A case in point was the proposed purchase of a farmstead in a peripheral region in Iceland, Grímstaðir á Fjöllum, later reduced to a leasing request, by Chinese investment group Zhongkun. The company's tourism concept, a golf resort, was met with skepticism that some might see as linked simply with the ethnicity of its owners (the notion of 'polar orientalism'). Others saw reason for legitimate concern over China's growing worldwide power and its widely attested, dubious environmental/societal practices. The former government may have eventually rejected the Chinese proposal, but the current government has signaled a more positive inclination.

D. Norway:

“The Arctic Council: About: Arctic States: Norway,” Arctic Council, 2020 [65]
<https://arctic-council.org/en/about/states/norway/>

Overview:

Quick Facts

Arctic Territory: Nordland, Troms and Finnmark, Svalbard and Jan Mayen

Arctic Maritime Area: 1,500,000 square kilometers

Arctic Population: 490,000

Arctic Indigenous Peoples: Saami

Current & Relevant Information:

Norway and the Arctic Region:

Nearly half of Norway's land mass is Arctic territory, consisting of the two counties Nordland and the combined county of Troms and Finnmark on the mainland, the Svalbard archipelago and the island of Jan Mayen. Norway's Arctic territory is home to around 490,000 people – one tenth of the Norwegian population. The country's Arctic maritime area is approximately 1,500,000 square kilometers, corresponding to the combined land area of France, Germany and Spain.

The Arctic Archipelago of Svalbard is located halfway between mainland Norway and the North Pole. About half the land is ice-covered. The largest island of the archipelago is called Spitsbergen, and until 1925 this name was used for the whole archipelago. The administrative center of Longyearbyen and the other inhabited areas of the archipelago are located on this island. Svalbard's main industries today are coal mining, tourism and research.

Norway houses the world's northernmost university, the Arctic University of Norway, in Tromsø. It is also home to NORD university in Bodø and the FRAM High North Research Centre for Climate and the Environment, where 500 scientists from 20 different institutions are engaged in research in the fields of natural science, technology and social sciences.

Fishing and marine resources, in addition to livestock husbandry, has for centuries been the cornerstone of the economy in Northern Norway. Today's economy is much more diversified. Today's key industries include:

- Fisheries and aquaculture: This remain the largest export-sector in Norwegian Arctic region. Nordland county is Norway's third largest exporter of marine fisheries and aquaculture.
- Tourism: Norway's broad Arctic region attracts a growing number of tourists, who come to experience dramatic scenery and largely untouched wilderness.
- Sustainable energy: Norway is Europe's biggest producer of hydropower, and one of the country's largest hydroelectric power station in terms of annual production is located in Meløy. Raggovidda wind farm located on the Barents Sea coast in Berlevåg municipality is one of the world's most efficient producers of wind power.
- Power: In Hammerfest, Equinor operates a processing plant for liquefied natural gas from the Snøhvit field in the Barents Sea.

- Mining and transit: Narvik is an important port for the export of iron ore from Swedish mines. One of Svalbard's main industries today also includes coal mining.

Indigenous Peoples:

The Saami are an Indigenous people who live in Sápmi, an area that stretches across the northern parts of Norway, Sweden, Finland and Russia. Estimates of the Saami population vary between 50,000 and 80,000, with the most concentrated settlements in North Norway. Since 1989, the Saami in Norway have had their own elected assembly – the Sámediggi – which acts as a consultative body for the Norwegian government authorities.

Norway in the Arctic Council:

Norway held the country's first Arctic Council chairmanship from 2007-2009. Throughout the chairmanship, Norway's priorities included:

- Integrated resource management in sectors including fisheries, mining, maritime transport, petroleum and economies
- Climate change monitoring and assessment
- Reviewing the structure of the Arctic Council to ensure effectiveness and efficiency
- Monitoring the long-range transportation of pollution
- Preventing pollution and reducing releases of hazardous substances
- Protection of the marine environment
- Conservation of biological diversity
- Social, human health and economic development with due regard for the interests of Arctic Indigenous Peoples

In the third decade of Arctic cooperation, Norway is – in addition to dealing with pollution and climate change – turning its attention to adaptation. In May 2011, the member states signed the first legally binding agreement negotiated under the auspices of the Arctic Council. The agreement establishes a binding framework for search and rescue cooperation between the member States of the Arctic Council.

Key accomplishments:

- Norway, Russia and the United States as co-chairs, took a leading role in the work towards a legally binding agreement, signed in 2013, on cooperation on Marine Oil Pollution Preparedness and Response in the Arctic.

- The Council has also undertaken comprehensive environmental and scientific studies on shipping in the Arctic and oil and gas activities and on ocean management. In 2017, the Arctic States signed a third legally binding agreement on Enhancing International Arctic Scientific Cooperation.

Norway serves as the host country for the standing secretariat of the Council, located in Tromsø, which includes the Indigenous Peoples' Secretariat since 2016. The secretariat of the Arctic Monitoring and Assessment Program is co-located with the Council.

“Perspectives on Security in the Arctic Area: DIIS Report 2011,” Annika Bergman Rosamond, Danish Institute for International Studies (DIIS), September 2011 [66]
https://pure.diis.dk/ws/files/61204/RP2011_09_Arctic_security_web.pdf

Summary:

This report provides multiple perspectives on security in the Arctic area. A key objective is to demonstrate that, although the Arctic is the site of competing natural resources and land claims, which are emerging from such phenomena as melting ice and new sea routes, there are also many signs of fruitful regional cooperation and sound neighborly relations. This thesis is supported by the high level of Arctic institutionalization that has evolved since the end of the Cold War. Despite this, some media outlets have routinely portrayed the Arctic as a possible site of interstate conflict. Such accounts do not take sufficient account of the collaborative initiatives that take place within the Arctic Council, the Nordic Council of Ministers and the European Union, to mention a few. The Arctic is situated within a complex web of multilateral and bilateral networks, ranging from states to regional institutions. What is more, there is a great deal of emphasis on the involvement of indigenous and local communities in key decision-making processes. This is not to argue that there are no challenges to security and prosperity in the Arctic area, but rather that we need to investigate these against the backdrop of the ongoing institutionalization of the High North.

Part 1 of the report provides a brief historical account of the Arctic by asking whether there are any previous events that can provide insights into the current situation in the region? A relevant example here is the wish to make the Arctic a ‘zone of peace’ in the 1980s. The report then offers an examination of the relatively high level of institutionalization and governance in the Circumpolar North and determines what the key challenges to these are. For example, it is argued that the Arctic Council (AC) might need to rethink its position on banning the sensitive subject of military security from its policy deliberations in favor of an open, peaceful and democratic security dialogue, without this necessarily giving rise to tensions between AC members.

Part 2 of the report provides a discussion of contemporary security developments in the Arctic by placing the emphasis on the relationship between climate change and

strategic interests related to sovereign claims. The report takes issue with the frequent portrayal of the Arctic as a hotspot for potential conflict by arguing that, although there are unresolved territorial disputes between the Arctic coastal states, there is also broad commitment to Arctic peace and stability through multilateral cooperation and governance.

Part 3 offers a rather brief overview of Danish Arctic policy with emphasis on both non-military and military developments. It is argued that climate change is the key to contemporary Danish security policy in relation to the Arctic.

Part 4 argues that broad dialogue between states and people plus multilevel participation in decision-making processes are central to the creation of new spheres of regional community that exist alongside other loyalties. The discussion is inspired by the political theory of Andrew Linklater and makes a case for new forms of commonality and solidarity across the Circumpolar North. It is suggested that any new policy initiatives – unilateral and multilateral – need to be coupled with local bottom-up activities and transnational civil support, so as to give voice to those who are directly affected by the new policy decisions. The report ends with a brief conclusion that summarizes the key findings and offers the following policy recommendations:

1. The Arctic states should continue to promote global governance and international cooperation as ways of ensuring future stability, prosperity and peace in the Arctic region. Institutions such as the AC can serve to counterbalance an emergent tendency amongst the Arctic coastal states to pursue narrowly defined national interests and sovereign claims in the Circumpolar North. Key here is open and inclusive dialogue between governments, regional institutions and representatives from indigenous and local communities.
2. Arctic coastal states need to refrain from using the concept of sovereignty in a manner that hampers stability and peace in the Circumpolar North. This involves conceptualizing sovereignty in another-regarding manner that does not center on national security and defense alone. In so doing the Arctic states could promote a conception of sovereignty that promotes the rights of both people and sovereign states, rather than the latter alone. Such an approach to sovereignty is in line with the emphasis placed upon the emergent global norms of responsibility to protect and human security that underpin contemporary international society. What is more, the Arctic actors should continue to promote international law (and abide by it), since this a way of avoiding verbal and other disputes that are detrimental to global peace and cooperation. It is nonetheless important that states refrain from using international law to further their own narrowly defined interests, since this can be damaging to international governance and security.
3. Despite frequently having been placed within the framework of Realpolitik, the Arctic is a fruitful site for community-building clustered around good inter-state

relations and the productive involvement of indigenous and local populations in key decision-making processes. The 'alarmism' that has been associated with the Arctic through media constructions, for example, is detrimental to the emergence of new spheres of community and loyalties in the Circumpolar North and should, when possible, be resisted.

Current & Relevant Information:

'The High North' is one of the key priorities of Norway's security policy, which is hardly surprising considering the country's geographical position and vast oil and natural gas reserves. The Norwegian government has identified a strong link between climate change and 'opportunities to exploit formerly inaccessible resources' but warns against extracting such reserves without caution and scientific expertise (Gahr Støre, 2009: 2). The former Norwegian Minister of Defence, Anne-Grete Strøm-Erichsen (2009: 4-5), has argued that these can only be resolved through 'solid international cooperation and commitment'. She identified a set of key challenges to security in the High North, including 'conflicts of interest' that could lead to instability in that region, Russian strategic developments, 'the Northern Fleet's continued role in the Russian nuclear triad and the sheer weight of the Kola military infrastructure', all of which 'are of vital strategic importance to Russia' (ibid.). Furthermore, she shed light on the fact that 'the Barents Sea continues to be a training ground for military forces and a test bed for new weapon systems' (ibid.). However, as we have seen above and will note again below, Norway and Russia have managed to reach agreement on their differences over the Barents Sea, which may make some of Norway's concerns regarding Russian behavior abroad redundant.

From a Norwegian perspective, it is crucial that NATO be used as provider of stability in the Arctic area and that there is a good relationship between the former and other 'organizations like the Arctic Council, the UN, the International Maritime Organization (IMO) and the EU' (ibid.). Furthermore, the official government position is that specific challenges facing the Arctic should be dealt with through extensive multilateral cooperation and dialogue across borders, as well as a recognition that the Arctic is a 'multicultural and multiethnic mosaic' (Gahr Støre, 2009: 4).

In 2007 the UN approved Norway's application to the UN Commission for the Limits of the Continental Shelf (CLCS) to extend its continental shelf by 235,000 square kilometers from its coast and more importantly giving it a right to claim the natural resources within that area. This was a ground-breaking victory for Norway, and has been noted above, in 2010 Russia and Norway found a solution to their disagreement over the Barents Sea by deciding to divide the Sea into 'clear economic zones extending to the edge of Europe's northern continental shelf', thus opening up for new forms of oil and natural gas exploration (New York Times 27 April 2010). In the words of the Norwegian Prime Minister, Jens Stoltenberg, 'this is a confirmation that Norway and Russia, two large polar nations, do not have a policy

about racing, but a policy about cooperation' (New York Times 27 April 2010), which sustains the argument developed here that the Arctic is in the main a story about cooperation rather than conflict. The decision by the Norwegian and Russian foreign ministers to publish a joint article sustains this claim further. They argue that 'the Arctic can be used to demonstrate just how much peace and collective interests can be served through the implementation of the international rule of law' (cited in The Independent, 23 September 2010).

“Norway,” The Arctic Institute: Center for Circumpolar Security Studies [67]
<https://www.thearcticinstitute.org/countries/norway/>

Overview:

When discussing Norway and the Arctic, it is important to distinguish between the mainland (the three northern counties) and the Svalbard archipelago, while at the same time recognizing that the latter is a part of the Kingdom of Norway. Norway was granted sovereignty over the Svalbard archipelago with the Svalbard Treaty, signed in 1920 in Paris. The Treaty gives nationals from the signatories the right to live and work on the islands, and places some limitations on Norway's ability to tax and use Svalbard for military purposes. There are diverging views with regards to the Treaty's applicability to the 200 nautical mile maritime zone surrounding the archipelago, which is currently a Fisheries Protection Zone.

Current & Relevant Information:

Norway's renewed engagement in Arctic affairs can be traced back to the then foreign minister Jonas Gahr Støre's choice to emphasize the High North (in a Norwegian context) and the Arctic (internationally) in 2005 when the new “red-green” government took office. The elevation of the Arctic to the number one strategic foreign policy priority in 2005 also coincided with the failed arrest of the Russian trawler *Elektron*. This incident helped focus attention on maritime cooperation with Russia in the Barents Sea.

When Russia planted a flag on the seabed at the North Pole in 2006, the eyes of the world turned north. Støre made use of the opportunity to prioritize regional development domestically, and multilateral cooperation (Arctic Council and Barents Euro Arctic Council) internationally. The government coalition he belonged to has since been criticized for failing to deliver on their grand Arctic policy statements, although regional northern development has taken priority and Norway maintains that the High North is the 'number one' foreign policy priority.

Under the new “blue-blue” coalition government from 2013, a recalibration of Arctic expectations occurred. The new Conservative government that took office in 2013 has arguably changed little, although focus in the north has slightly shifted towards the North-Atlantic and border zone with Russia given events in 2014. The drop in the

price of oil and natural gas, combined with the dramatic events in Ukraine in spring 2014, were key reasons.

As one third of Norway's territory and 80 percent of its maritime exclusive economic zone are found within the region, the Arctic is not isolated from larger national security and defense policies. Instead, the High North is central to security considerations in Norway.

In terms of security and national defense, the Arctic is not necessarily framed in a security context in Norway. The Arctic has connotations of ice and wilderness, whereas the Norwegian Arctic—at least the part that belongs to the Norwegian mainland—is ice-free and relatively populated. This ties into a general Norwegian perspective that the Arctic entails circumpolar cooperation on softer issues such as environmental challenges, human security affairs, and economic opportunities.

This is in contrast to Norwegian security policy, predominantly focused on the relationship with Russia, which takes place in the Arctic, but is not framed as an Arctic endeavor. It is therefore important to distinguish between the Arctic and the “High North.” The latter entails the border with Russia and the security concerns derived from having a resurgent neighbor. In what is generally termed an asymmetric relationship, Norway has endeavored to balance its military inferiority to Russia through membership of NATO and a bilateral relationship with the United States.

There is, at the same time, a realization that the relationship with Russia needs to be built on pragmatism, as everything from joint fish stocks to border crossings and trade need to be managed between the two states. Norway has taken pride in this bilateral relationship, concentrated around environmental management and people-to-people cooperation on a local and regional level. This has created a situation where, on the one hand, Norway has sought an active presence and engagement from the United States and its European allies, with the aim of deterring Russia. On the other hand, Norway has pursued multilateral cooperation with Russia in both international and regional organizations, ranging from the UN to the Arctic Council to regional cooperation in the Barents area.

Yet, this does not diminish the overarching security concerns related to a resurgent Russia under Vladimir Putin. With a neighbor that increases its military posturing through naval and airborne activity along the Norwegian border, the importance of NATO has by no means diminished for Norway.

“Arctic Council: Norway and the Arctic: The importance of knowledge for sustainable development,” Mona Elisabeth Brøther, Northern Public Affairs, 2018
[68] <https://www.northernpublicaffairs.ca/index/volume-2-issue-1-september-2013/arctic-council-norway-and-the-arctic-the-importance-of-knowledge-for-sustainable-development/>

Abstract:

Like Canada, Norway is a country with a strong Northern identity. A significant part of our population lives north of the Arctic Circle. As the name of our country indicates, the Norwegian coast has been the gateway to the High North of Europe since time immemorial. For centuries, the rich fisheries outside Lofoten and in the Barents Sea were the main basis for prosperity under otherwise hard climatic conditions. However, the climate change and increased activity are changing the image of the region. Diminishing sea ice makes possible increased maritime activity around the Arctic, putting Norway strategically on a new sea route between Asia and Europe.

The dynamic developments in the Arctic are not only opening up new opportunities, but are at the same time creating challenges for the environment and for the safety and security of the people living there. We can only tackle these challenges by having access to current, high quality information that can help us predict and respond to development trends. This is the reason why 'knowledge' is one of the pillars of Norwegian policy for the High North. Since the first High North strategy paper in 2006, the Norwegian government has systematically promoted the development of knowledge on the North by funding research and strengthening infrastructure at universities, university colleges, and other knowledge institutions.

Current & Relevant Information:

Norway's High North Strategy

The overall objective of the High North strategy is to provide a framework for increased value creation in the High North. Its focus is on the people living in the High North, and on maintaining modern and prosperous communities far from the mainstay of Europe. The Northernmost regions of Norway are still threatened by emigration, an aging population, and lower education levels than the rest of the country.

Norway has systematically built a network of universities and university colleges in Northern Norway, which has filled a crucial role in developing the region. The University of Tromsø, established in 1968, is the largest educational institution in the North. It is also the Northernmost university in the world. In 2011, Northern Norway acquired its second university, the University of Nordland. In addition, there are university colleges in Finnmark and Narvik, and a Saami University College in Kautokeino. To ensure quality and critical mass in education and research at these institutions, the Norwegian government has steadily increased the number of students, and has earmarked research funding for institutions in the North.

A region rich in resources

Harvesting the riches of the sea is still of crucial importance for the communities along the coast. Norway has built up a fisheries management system based on

scientific advice, and, through a successful cooperation with Russia, has put an end to pirate fishing.

Oil and gas are changing the North. The industry has provided new types of employment and has had significant ripple effects on the communities in the region. The petroleum activity is now at its highest level ever, and, thanks to the agreement with Russia on the delimitation line in the Barents Sea, new fields are currently being studied. However, before any licenses are issued, an environmental assessment has to be completed and subjected to political scrutiny. Norway wants to be in the forefront of developing strong environmental standards for the oil and gas industry. The government has recently decided to establish a research center for petroleum activities in the North.

Increased maritime activity poses both challenges and opportunities. Recently, a government-appointed working group presented their recommendations on how Norway should work nationally and internationally to ensure effective, safe, and secure handling of increased maritime traffic. The work by the International Maritime Organization (IMO) on Arctic shipping standards is key, but Norway also needs to build up its own infrastructure to regulate and monitor traffic. Competence building and education is also an integral part of Norway's policies in this sector.

Onshore, there are also possibilities that need to be explored. The government has recently completed a strategy to develop the mining and mineral extraction sector. In addition, there are also several ongoing initiatives to stimulate the tourism sector and to promote innovation in general. Cross-border cooperation and development of regional infrastructure is important to develop the private sector.

Indigenous peoples

Norway is home to the largest population of the Saami speaking peoples of Scandinavia and the Kola Peninsula. The preservation and development of Saami culture and society is a priority in Norway's Arctic policies. Important milestones in Norway- Saami relations include: the establishment of the Saami Parliament and establishment of Saami language educational institutions up to the university college level. The government consults regularly with the Saami Parliament on High North policies and supports Saami participation in the Arctic Council and the Euro-Barents cooperation, as well as in the international cooperation between reindeer herders. Indigenous issues are an important part of Norway's bilateral cooperation with Russia.

It is important to ensure that economic development in areas with Indigenous populations are undertaken in a balanced and environmentally sustainable way through consultations between all parties, and that new employment opportunities can also be accessible for Indigenous persons.

Climate and environment

The work to resolve global climate and environmental challenges is an important aspect of Norway's foreign policy. The High North is a particularly high priority and Norway wants to be a leader in environmental sustainability in the North. Economic development in the North must be achieved in a way that brings into account the environment and the changing climate.

One of the Norwegian government's most important initiatives to increase our knowledge about the changing climate in the North is the Fram Centre in Tromsø. The center opened in 2010 and is already an internationally renowned research center for climate and environmental research. It comprises nineteen different institutions, cooperating on five focus areas (Arctic Ocean, Terrestrial, Hazardous substances, Ocean acidification, Fjord and coast). At the heart of the Centre is the Norwegian Polar Institute, with its research center for Ice, Climate and Ecosystems (ICE). ICE is important for mapping and monitoring the melting ice in the Arctic. The Ministry of Environment recently announced the opening of a new research center on the Arctic environment as part of the Fram Centre.

Norway's Northernmost territory, Svalbard, has become an important arena for international cooperation on research and education on the High North. Its geographic location offers excellent opportunities for research on Arctic conditions. Norway has made significant investments in the research infrastructure on the Archipelago. Every year the capacity to host students has increased at the University Centre on Svalbard (UNIS).

Svalbard has become an important international science hub. Ten nations have established research stations in Ny-Ålesund, including emerging powers such as China and India. In addition to this, half of the students at UNIS are foreign nationals. Norway has also initiated the establishment of SIOS – Svalbard Integrated Arctic Earth Observing System, which is now in its preparatory phase. Twenty countries are cooperating to establish a system that will combine data from all other observation systems for marine, ice, atmospheric and terrestrial conditions.

Scientific cooperation between Norway and Canada

A report by Science-Metrix Inc. in Montréal shows that Norway and Canada's research profiles have much in common, with mutually strong specializations in Arctic research, aquaculture and fisheries, and climate research. The report notes that Norway and Canada can benefit from collaborating in the fields of energy, health and information and communications technology (ICT). Aboriginal studies are also an area of mutual interest. Overall, we do see that there is extensive ongoing collaboration between Norwegian and Canadian researchers. Measured by co-publication, collaboration has more than doubled between 2003 and 2010.

The Norwegian Ministry of Education and Research has a specific North America Strategy that aims to further stimulate cooperation between Norway and Canada/USA. The strategy is supported by a financial contribution of approximately

\$1.7 million CAD per year for four years. The fund is administrated by the Norwegian Centre for International Cooperation in Education (SIU).

SIU also administers a program on behalf of the Ministry of Foreign Affairs known as the Fellowship Program for Studies in the High North. This program offers scholarships to students from the US, Canada, and Russia who are enrolled in an institution in Northern Norway as part of their higher education. The goal of the Fellowship Program is to contribute to increased academic collaboration and student mobility in the High North.

Norway, a predictable and active partner in the Arctic

Norway is a resourceful Arctic nation that aims to maintain its sovereignty in the North in a reliable and consistent. UNCLOS, United Nation Convention on the Law of the Sea, is the basis for our policies, and Norway will continue working for its implementation and for the development and implementation of new international standards for the shipping industry in the IMO Polar Code. Norway places high priority on cooperation with the other Arctic nations in the Arctic Council and the Euro- Barents Cooperation. For us, cooperation with Russia is of particular interest. We share borders both at land and at sea, and have common interests in developing the region in a sustainable manner for the benefit of our population in the North.

Canada and Norway share the same objective: to develop the Northern parts of our countries in a sustainable manner for the benefit of the people who live there, and to protect the rights and culture of our Indigenous populations. As Ambassador to Canada, I hope to further develop and strengthen Norway's cooperation with Canada on all issues related to the Arctic. As Canada takes over the Chair of the Arctic Council, Norway will stand ready to provide its support and contribute in the constructive exchange of ideas and best practices for managing one of the most fragile parts of our planet.

“State of the Arctic Strategies and Policies – A Summary,” Lassi Heininen, Arctic Yearbook, 2012 [69]

https://arcticyearbook.com/images/yearbook/2012/Scholarly_Papers/1.Heininen.pdf

Abstract:

In the past five years, the eight Arctic states have each published comprehensive Arctic strategies, a manifestation of the growing political interest in the region. This article examines the Arctic strategies of each Arctic state in turn. It goes on to identify common themes found in the strategies: security and sovereignty; economic and business development; sustainable and regional development; environmental protection and climate change; safety, search and rescue; human dimension and peoples; research and knowledge; and international cooperation. Similarities and differences between the Arctic states on these key themes are examined, providing an insightful illustration of current regional values and interests.

Current & Relevant Information:

Background

The recent launch of national strategies and state policies on the Arctic and Northern affairs by the governments of all eight of the Arctic states clearly show, even manifest, the growing interest of these states toward their own northernmost regions, as well as the entire Arctic region. The same level of interest towards the Arctic has also recently been demonstrated by several powers from outside the region, including China, Japan and South Korea in Asia, and France, Germany and UK as well as the European Union in Europe. Comparing this to the situation in the 1990s as regards internal and foreign policies of the Arctic states demonstrates a clear shift in interest towards the North, since in the early 1990s there were only two countries - Canada and Norway – with “an explicit Arctic policy” (Heininen, 1992).

The Arctic strategies and state policies of the Arctic states, as well as agendas and emerging policies on Arctic/Northern issues by non-Arctic states, can be seen as reflections of the changing conditions in the entire Arctic region on one hand. On the other hand, they show the growing international and global interest toward the Arctic region, and the entire North, and the emerging kinds of interrelations between the region and the rest of the globe (Heininen, 2004). Consequently, they can be interpreted as responses to the significant, multi-functional and global change(s) of the early-21st century in the Arctic environment, geopolitics and economies as well as Northern security. This is rather obvious in the cases of Canada, Finland, Iceland, Sweden and the USA, though the reasons for this range from the broad to the narrow: security risks and threats to sovereignty as a result of the potential impacts of climate change are large factors in Canada’s Northern Strategy. The growing global interests toward the Arctic region and its rich natural resources lie at the core of the strategies of Finland and Iceland. The Swedish strategy’s response to the challenge is to emphasize biodiversity and the human dimension. And the US policy emphasizes national and homeland security.

In the cases of the Kingdom of Denmark, Norway and the Russian Federation there are other motivations which are as, or even more, important: the new self-governing status of Greenland as well as the first ministerial meeting of the five littoral states of the Arctic Ocean provides a central focus in the Kingdom of Denmark’s Strategy. The Norwegian High North strategy is very independent and reflects the new Norwegian-Russian relationship in the Barents Sea region, emphasizing closer bilateral cooperation between the two countries. The Russian State Policy first and foremost is a response to and reflection of the domestic politics of the Federation.

Finally, a common feature in all of the Arctic strategies and state policies is that each of the Arctic states would like to become a natural/real, even leading, actor/player in the Arctic, or in some field of northern affairs, or would like to maintain a leading role there.

This article discusses and compares the recent strategies, or state policies, for the Arctic region of the Arctic states (here Arctic strategies), and their priorities and main objectives with an aim to emphasize their outlining differences and similarities. It is neither an inventory nor analysis on the content of the strategies, but is based on the author's inventory and comparative study on the Arctic strategies and policies (Heininen, 2011). There are also a few other comparative studies on Arctic strategies, though mostly on those of the five littoral states of the Arctic Ocean - Canada, Denmark or Greenland/Denmark, Norway, Russian Federation and the USA. For example, Brosnan et al. (2011) looks at and discusses how cooperation and conflict appear in the Arctic strategies of these five states. Correspondingly, Summers (2010) studies the littoral states and their relations with a focus on energy and the environment, and also looks at China and the European Union as new players in the Arctic.

I will begin by briefly introducing how each Arctic state has (re)positioned itself in the Arctic region, and then by providing an overview of the Arctic strategies and their priorities. It briefly describes how the states (re)position and (re)define themselves as Arctic states/nations, and how the Arctic is (re)mapped. Finally, the paper proceeds to a comparative study between the Arctic strategies based on the explicit priorities or priority areas through nine inwards – and outwards-oriented indicators, emphasizing outlying differences and similarities between them.

Norway's High North Strategy

Norway's policy in the Arctic region and Northern affairs has been defined by "The Norwegian Government's High North Strategy". Its latest version "New Building Blocks in the North" was launched in March 2009 (Norwegian Ministry of Foreign Affairs, 2009).

Norway was the first country in the 21st century to release its Arctic strategy and policy, since in the early 2000s there was an expert report on Norway's strategic interests and new policy in the High North, "Mot nord! Utfordringer og muligheter i nordområdene" (Statens forvaltningstjeneste informasjonsforvaltning, 2003). "The Norwegian Government's High North Strategy", launched for the first time in December 2006, explicitly sets out a directive for the High North to become the Norwegian Government's main area of focus. The 2009 Strategy was updated and concretized with figures of allocated budget money through annual status reports.

The Norwegian Government's High North Strategy itself is robust, with attention being placed on topics related to the environment and climate, sovereignty and foreign policy, development and business, monitoring and knowledge, and indigenous peoples and their cultures. Within these sections are a number of policies, promises and intentions for the Government of Norway to follow. It is clear that the intention of making the High North the focal area of interest for the Government in the years to come requires a commitment from all levels and sectors

of government, and is thus an embracement from the country as a whole. Particularly so, when its main focus is on (North-West) Russia.

An interesting notion is how the Norwegian Strategy uses, consistently and stubbornly, the term 'High North': in the 2006 Strategy the High North is described as a "broad concept both geographically and politically" (Norwegian Ministry of Foreign Affairs, 2006: 13), though it really refers to the Barents Sea and the surrounding areas, including Svalbard, and has a particular focus on Russia. Although the 2009 Strategy claims that the High North is without a precise definition in the Norwegian political debate, the horizon of the term is "broader than Northern Norway and Svalbard since Norway has major interests to safeguard in a greater region" which is claimed to be "really a Norwegian perspective (Norwegian Ministry of Foreign Affairs, 2009: 50).

The 2009 High North Strategy largely continues the chosen Norwegian policy features but with a focus on business development, and on knowledge and the environment. It includes seven advanced strategic priority areas: first, to develop knowledge about climate change and the environment in the High North; second, to improve monitoring, emergency response and maritime safety systems in northern waters; third, to promote sustainable use of off-shore petroleum and renewable marine resources; fourth, to promote on-shore business development in the North; fifth, to further develop the infrastructure in the North; sixth, to continue to exercise sovereignty firmly and strengthen cross-border cooperation (with Russia) in the North; and finally, to safeguard the cultures and livelihoods of indigenous peoples.

This document is comprehensive and includes many fields of politics, issues and strategic areas with concrete goals of both internal and external affairs. Actually, it does this more so than is usual in foreign policy; an advanced strategy with a follow-up system to further long-term Norwegian policy in the North, particularly by the (current) government coalition. Furthermore, the High North is given a place 'at the top' as the most important strategic priority area of Norway with a growing recognition of the importance of the North for Norway as a whole. Consequently, the High North Strategy with its main political priorities plays an important role.

The Norwegian Government has built its High North Strategy on the general perception that the main feature of the geopolitics of the Arctic region in the early 21st century is stability and peaceful cooperation; not a 'race' for energy resources nor emerging conflicts, or the return to a cold war, although Russia has increased its military activities in the Arctic. Therefore, it makes great sense to emphasize the development of knowledge, to promote sustainable use of natural resources and business, and to maintain state sovereignty by strengthening cross-border cooperation (with Russia) in the North.

Based on and following from this, it is not surprising that perhaps the most progressive part of the High North Strategy, particularly in the 2006 version, is

Norway's focus on Russia and cooperation with Russia. Indeed, objectives in that regard are numerous, ambitious and concrete. In several places, for example, references are made to how Norway plans on building and engaging its Russian partners. The text is progressive, almost aggressive, at times in the way it calls on an active Russian participation in cooperation. This indicates the significant shift in the Norwegian foreign policy in the early 1990s – after the end of the Cold War period and the collapse of the Soviet Union – towards decreasing military tension and increasing stability in the European North. These objectives have led to establishing the BEAR between the Nordic countries and Russia, and enhancing bilateral functional cooperation with Russia and its neighbors. As a consequence, this ultimate aim gained some ground, when in September 2010 Norway and Russia managed to reach an official agreement by their Treaty of Maritime Delimitation and Cooperation in the Barents Sea and the Arctic Ocean.

The Norwegian Government also aims to develop marine industries and business activities, particularly petroleum-based business activities, and therefore defines “the High North as a (new) petroleum province”, in cooperation with Russia, as a part of promoting sustainable use of off-shore petroleum and renewable marine resources (Norwegian Ministry of Foreign Affairs, 2009: 18). Furthermore, it describes its determination to be “the best steward of resources in the High North” (ibid: 13, 55). The premise for this is energy security on which the Strategy states that globally “energy is becoming more clearly defined as a part of security policy”, and further that “it is clear that climate change will have an impact on the security of countries and people all over the world” (ibid: 14).

All in all, the High North Strategy is primarily, on one hand, an advanced continuation to long-term Norwegian policy in the High North, meaning the Barents Sea region. The most strategic element is Norway's focus on Russia and an active engagement of Russia's participation in bilateral cooperation. On the other hand, it seeks the strengthening of Norwegian state sovereignty in the High North, as is evident from statements, such as “large parts of the Norwegian Sea and the Barents Sea are under Norwegian fisheries jurisdiction”, or that Norway will maintain its “presence on the islands of Jan Mayen, Björnöya and Hopen” as well as its influence in Svalbard (ibid, 31, 32).

Finally, by focusing on (North-West) Russia, Norway is clearly defining the importance of regional cooperation and region-building as well as business development in foreign and security policy in terms of comprehensive security. Here the Strategy can be seen as an important means to achieving such a goal.

“National Interests and Security Policies in the Arctic Region Among Arctic States,” Hilde-Gunn Bye, University of Denver, June 2018 [70]

<https://digitalcommons.du.edu/cgi/viewcontent.cgi?article=2444&context=etd>

Abstract:

The United States, Canada, Russia, and Norway are all Arctic states. However, they prioritize the Arctic region to different degrees in terms of investments of security assets and military presence. What explains why some Arctic countries prioritize the Arctic more than others? This thesis explores this question through using an issue-based approach, which looks at the salience of issues as having implications for foreign policy tools and measures. This thesis finds that having interests and stakes in the region of high overall salience contribute to an explanation of why some countries prioritize the region more, while low overall salience is linked to less prioritization of the region. By having assessed how national interests in the region drives security policies towards the Arctic, this thesis also provides an understanding of why the U.S. is not prioritizing the Arctic in a time when others are increasingly directing their attention to the region.

Current & Relevant Information:

Norway retains a significant military presence in the High North, an area termed as having “great importance to Norway” (Norwegian Armed Forces 2017a). As will be assessed later in the thesis, the Norwegian government has put more emphasis on the high north as a key strategic area. Following from this, Norwegian defense posture is also to a large degree geared to the north. In light of this, it may be argued that for a global power like the United States, its actual capabilities and prioritization of the Arctic region is lacking and subordinate, especially when compared to other regional actors.

Air, Land and Naval Military Presence and Assets in Northern Norway

Norway’s focus towards the High North can be traced back to the red-green coalition government from 2005. The Government policy documents, The Soria Moria Declarations of 2005 and 2009, as well as the Norwegian Government’s High North Strategy from 2006, outline the challenges and opportunities in the High North, and the growing importance of the region for Norway in the years ahead (Rottem 2013, 245, Norwegian Ministry of Foreign Affairs 2006). The 2007 Soria Moria Declaration on International Policy still guides Norwegian defense policy and gives priority to the High North (Wezeman 2016, 10). Moreover, in 2012, the Government issued a long-term plan for the Armed Forces, which focuses on the High North as “Norway’s most important strategic focus” (Rottem 2013, 244). According to the Norwegian Armed Forces annual report, presence and surveillance in the High North is crucial, and this presence is continued with through naval vessels, land forces and maritime patrolling aircraft as well as fighter aircrafts (Norwegian Armed Forces 2017b, 30). Indeed, the Norwegian Armed Forces presence in the North is relatively high.

Norway restructured its land forces in 2009, resulting in Brigade North, a winter trained force located mostly in Troms county becoming the largest unit of the Norwegian Army (Wezeman 2016, 12). With regards to this brigade, a mechanized battalion, medical battalion, artillery battalion and intelligence battalion are located at

Setermoen in Troms county (Norwegian Ministry of Defence 2013). Moreover, the Army Staff, Brigade North Staff, MP company, signal battalion and logistics battalion are located at Bardufoss also in Troms county (ibid.). An engineer battalion and a light armored battalion are also located in Troms county at Skjold (ibid.). The Border Guard is located at Hoybuktmoen in Finnmark county, close to the border with Russia. In general, the Norwegian Army has a continual presence in Finnmark county (Norwegian Armed Forces 2017b, 6).

Moreover, the Joint Headquarters for the Norwegian Armed Forces changed location in 2009 from a commando center in southern Norway to being established outside Bodo, in Nordland county, north of the Arctic Circle. While Norway emphasizes military presence in the region as politically important, locating the headquarters in Northern Norway is not intended as a militarization of the region (Rottem 2013, 245-246). Furthermore, with the arrival of over 50 new F-35 Joint Strike Fighter Aircrafts, the main air force base is in the process of being changed from its location in Bodo to a more southern location at Orland outside Trondheim, however Evenes air base in Nordland county will operate as a forward base (Wezeman 2016, 11, Forsvarsdepartementet 2017). Given the speed that these aircrafts can attain, one may assume that the change to a more southern location will have little impact on air power in the north. Indeed, the range for these jets is 2200 km; corresponding to the distance between Oslo and the south of Italy (Forsvarsdepartementet 2017). The Norwegian air force still retains several bases north of the Arctic circle. The 333 squadron is located at Andoya air station where Orion air crafts have responsibilities of surveilling maritime activity and uphold Norwegian sovereignty in Norwegian maritime areas (Norwegian Armed Forces n.d.). Search and rescue forces also operates from air stations in Northern Norway. The Norwegian air force is also in the process of phasing in new weapon systems such as the Coast Guard helicopter NH90 (Norwegian Armed Forces n.d.). The activity of maritime patrol aircrafts in the High North has been high throughout 2017 (Norwegian Armed Forces 2017b, 6).

Having a naval military presence in the north is also important for Norway. The Coast Guard base is located at Sortland in Nordland county, while the Coastal Rangers Commando is located at Trondenes in Troms county. There is also a naval base at Ramsund in Nordland county. That Norway is an active player on the north is indicated by the presence of the Navy and Coast Guard. Indeed, both the Coast Guard and the Navy's general presence has increased in the high north and activity will continue to increase (Norwegian Armed Forces 2017b, 20). 48 % of the Norwegian Navy's activity were conducted in the High North and through 2017, there was a continual presence at all times of at least one submarine (ibid., 6). Norway has moreover been modernizing its armed forces over the past years, which is shown through its naval capabilities. Norway has a highly modern navy with Fridtjof Nansen class frigates, Ula-class submarines and Skjold-class corvettes (Norwegian Armed Forces 2017a). Five high-tech frigates in the Fridtjof Nansen class were built during the 2000s, which are the main "surface combatant units" (Åtland 2014, 156).

The Nansen frigates and the Ula Submarines are particularly capable of operating in the Arctic environment, however, none of Norway's warships or patrol ships can break ice except the Coast Guard icebreaker Svalbard which is lightly armed (Wezeman 2016, 12-13). Three large Barentshav OPV's are however capable of operating in icy conditions (ibid., 13).

With regards to icebreakers, the Coast Guard, part of the Norwegian Navy, has one icebreaker among the 15 coast guard vessels it operates, which is the Svalbard icebreaker (Norwegian Armed Forces 2017a, Wezeman 2016, 13). As such, it is clear that both the U.S. and Norway has the same number of icebreakers. However, it is relevant to note that the environment in the Norwegian Arctic is different from the North American Arctic region. As will be noted later in the thesis, it has less ice and has a milder climate due to the gulf stream. Arguably, the requirement for icebreaking capacity should thus be seen in light of these operating conditions. As suggested, Norway also has several other surface vessels that have abilities to operate in its Arctic maritime area. Moreover, while the Polar Star began its service life in the 1970s, Svalbard was built in the early 2000 (Norwegian Armed Forces 2016). This indicates that the investment into capacity to operate in the Arctic is much more recent in Norway. Lastly, with regards to power politics in this environment, Norway and Russia are the two major actors in this sub region of the Arctic. However, while Russian military activity has increased of late, this activity is not seen as an "expression of pressure on Norway's interests" (Rottem 2013, 246). In relation to its big neighbor in the north, Russia, Norway has "sought to pursue a policy of "reassurance" vis-à-vis Russia in the north, emphasizing the non-offensive nature of its defense posture and the need for bilateral cooperation" (Åtland 2014, 157). Indeed, in the Arctic region more broadly, Canada and Russia are often the two countries said to be "head-to-head", accusing each other of being militarily aggressive in the region (ibid., 155-156).

Population and Population Centers in the Arctic Region

Norway:

According to the Arctic Institute, Norway refers to the Arctic as everything above the Arctic Circle (The Arctic Institute 2018d). However, it is also relevant to point out that Norwegian foreign policy distinguishes between different parts of the Arctic area. The High North refers to Northern Norway and Svalbard which are more hospitable and populated, while the extreme Arctic is the more uninhabited areas such as the North Pole in the High Arctic (The Arctic Institute 2018d). With regards to the land areas, the High North refers to the counties of Nordland, Troms and Finnmark. Moreover, Norway also has sovereignty over the Svalbard archipelago midway between Norway and the North Pole. The three mainland counties account for about one third of the total landmass of Norway with approximately 100,000 km², however, 85,000 km² are added with the land area of Svalbard and Jan Mayen, thus making the Arctic land area of Norway approximately 48 % of its total landmass as the total

land area of Norway is 385,000 km² (The Arctic Institute 2018d). Yet, it should also be mentioned here that this number would be a little lower if one would strictly apply the Arctic Circle definition due to how the Arctic Circle crosses through Nordland county.

Population and Population Centers:

Norway has approximately 480,000 people living in its Arctic area (The Arctic Institute 2018d). Out of a population of approximately 5,000,000 people, this is a large number and this accounts for almost 10 % of the total population in Norway. As such, the number of people living in the Norwegian Arctic territory as a percentage of total population is larger than in any of the other three countries.

With regards to its Arctic areas, Finnmark is the northernmost as well as easternmost county in Norway, where Vadsø is the regional capital. It borders the Russian Murmansk region in the east as well as the Lapland of Finland in the south east. Karasjok in Finnmark is also the location of the Sámi parliament of Norway (The Arctic Institute 2018d). Kirkenes is one of the major towns in Finnmark. It has an ice-free deep-water port (Reuters Staff 2018), where activity is expected to grow due to increased shipping in the region. Northern Norway lies on the edge of the Northern Sea Route, and with the fifth “most valuable shipping fleet in the world” there is significant interests in the potential for increased traffic via this maritime route (The Arctic Institute 2018d). In this regard, Kirkenes, which is located close to the Russian border in Finnmark county, may become a crucial port in Northern Norway.

To the southwest of Finnmark lies the county of Troms, Tromsø is the regional capital and the largest city in northern Norway with a population of approximately 70 000 people (The Arctic Institute 2018d, SSB 2017a). Compared to many other Arctic cities, Tromsø is a large city, and also relatively large compared to other Norwegian cities. The city is also the main location of the University of Tromsø – The Arctic University of Norway. South of Troms lies Nordland county where Bodø is the regional capital and the largest urban and administrative center, with a population of approximately 50,000 respectively (The Arctic Institute 2018d, SSB 2017a). The Lofoten and Vesterålen islands in Nordland county are some of the top tourist attractions in Northern Norway, and the adjacent waters are also spawning grounds for the northeast Arctic cod stock, an important cod stock for Norway which will be further explored below.

Moreover, with regards to climate and environment, it is relevant to note that the Arctic land areas of Norway differ from the other three Arctic areas addressed above. According to Stromquist and Johnston (2014, 18), a large portion of Norwegian Arctic waters do actually not meet true Arctic criteria, for instance in terms of the ice regime. The climate of northern Norway is characterized by cool summers and relatively mild winters due to the temperate sea and the Gulf Stream.

As such, the land area also has minimal differences compared to the south. In contrast to some of the countries addressed above, communications in the northern areas can be considered relatively good. Roads connect more or less all minor and major villages and towns in the region. Additionally, ferries and regional flights are also readily available. There are also direct flights to the capital, Oslo, from many of the northern cities such as Evenes (Harstad/Narvik), Tromsø and Bodø. The coastal ferry, Hurtigruten, also travels the coast of Northern Norway from Bergen in the southwest to Kirkenes in the northeast, close to Russia. Additionally, there are also regional railway connections from Bodø to Trondheim, and further south to Oslo, as well as railway from Narvik to Sweden. There is also plans for an additional Arctic railway link from Finland's northern city Rovaniemi to Kirkenes in Norway (Reuters Staff 2018). In this regard, the Norwegian Arctic territories stands out as being much less remote than its counterparts in Canada and the United States.

As such, it is clear that of the four countries, Norway has the largest percentage out of its total population living in its Arctic territory and has almost 50 % of its landmass located in the Arctic region, including the Arctic Archipelago Svalbard. Additionally, it has two large cities above the Arctic circle, Tromsø and Bodo, both of which have excellent communications and infrastructure, universities, and do not necessarily stand out compared to other Norwegian cities further south. As such, we see that most of the people living in the Arctic live in either Russian or Norwegian territories. These areas, including Canada's Arctic areas, are geographically larger than the U.S. counterpart.

In terms of looking at population and population centers, the salience of the Norwegian Arctic territory can be termed as relatively high. The territory is claimed as homeland territory, it has a permanent population spread along the whole of Northern Norway partly due to the good communications and infrastructure. Norway exercises sovereignty in this territory, and many of the areas have a militarily, economically, and strategic location. In light of this, the high presence of military assets in the region can be seen as a function of these tangible interests in the region.

In sum, the higher presence of population, as well as industrial, political, and economic centers suggests that military presence is higher in these areas, both in Russia and Norway. Compared the North American states, factors such as higher numbers of population, large territory, and several large cities, can explain the relatively high salience that the Arctic has for Russia and Norway and furthermore contribute to explain the higher military presence and engagement in these areas. In other words, the higher military presence, engagement and capabilities in the Russian and Norwegian Arctic areas may partly be explained by the relatively higher salience of the territory and following from strategic calculations in this territory.

Navigation and Trading Routes

Norway:

Norway, while considered a minor player in international politics, can be regarded as an important and engaged actor in the Arctic (Rottem 2013, 235). The northern areas are identified as the top foreign policy priority of Norway (Åtland 2014, 156-157, Norwegian Ministries 2017, 2). Due to developments in the Law of the Sea, Norway is a significant maritime state with jurisdiction over large maritime areas. “Norway’s maritime areas in the Arctic come to approximately 1 500 000 km², which corresponds to the combined area of France, Germany and Spain” (Arctic Council 2015). In 2006, Norway submitted its documentation to support the claim “that its continental shelf extended beyond 200 nm in three distinct areas: The Banana Hole in the Norwegian and Greenland Seas, the Loophole in the Barents Sea, and the Western Nansen Basin in the Arctic Ocean” (Jensen 2015, 235). In 2009, the Commission on the Limits of the Continental Shelf (CLCS) issued its final recommendation and announced that Norway has “substantial rights and responsibilities in maritime areas of some 235 000 square kilometers” (Norwegian Ministry of Foreign Affairs 2009). As such, Norway holds a maritime area six times the size of Norway’s land mass (Rottem 2013, 244). Norway has significant economic interests in these maritime areas; which may be termed as highly salient to the country. Its Arctic maritime areas are the location of important fish stocks and oil and gas resources; as will be seen below. The maritime areas north of Norway may also gain particularly strategic relevance as beginning and/or end areas for the Northern Sea Route. Indicating the importance of these maritime areas for Norway is for instance the interest that the country had in solving a delimitation dispute with Russia in the Barents Sea. The successful delimitation treaty signed by Russia and Norway in 2010, gives the two countries equal halves of a disputed area in the Barents Sea. The process had been ongoing for around 40 years, and the delimitation agreement can be seen as one of the highlights of Norwegian foreign policy in recent times. Both Russia and Norway needed to sort out their differences to meet new challenges from the ongoing loss of sea-ice and the opening of the region to increased economic and maritime activity and “to ensure consolidation of their sovereign rights over natural resources and jurisdiction over international shipping” (Henriksen and Ulfstein 2011, 10). The treaty is an example of orderly governance of the region and was signed in a period with increased attention to the Arctic. The agreement notably received particular attention from the U.S. and is seen a positive example for the rest of the region underscoring Canada and the United States’ failure to reach an agreement over the Northwest Passage and the Beaufort Sea which “may undermine their ability to pursue their interests in the region” and also undermine their abilities to “exercise international leadership in the region” (Bergh 2012, 19).

Another relevant issue worth mentioning with regards to maritime issues in the Norwegian Arctic is the legal status of the Svalbard waters, a Norwegian Archipelago in the Arctic Ocean, located half-way between the North Pole and

Norway (see figure 5.2). The dispute surrounding these maritime areas has again come to the surface after a tense dispute between EU countries and Norway regarding countries' fishing rights to snow crab in these waters. According to the Svalbard Treaty of 1920, Norway has sovereignty over the Svalbard archipelago and its territorial waters. However, the Treaty also stipulates some limitations to this sovereignty, namely that nationals of all contracting parties should have "equal rights of fishing and hunting; equal freedom of access and entry; and equal exercise and practice of all maritime, industrial, mining or commercial enterprises" (Sobrido 2017, 76). Since the Treaty was put in place before developments in the Law of the Sea, it is a matter of contention whether this principle also applies to the waters beyond the 12 nm territorial waters of Svalbard. Norway's position has been one that claims that the equal treatment provisions do not apply to these waters, holding that the continental shelf around Svalbard is a prolongation of Norwegian mainland (Henriksen and Ulfstein 2011, 9).

Due to conflicting views on the issue and particular opposition from Russia and EU countries, Norway has created a Fisheries Protection Zone in the area, where the Norwegian Coast Guard is patrolling and managing with regards to fisheries resources; undertaking enforcement measures according to Norwegian fisheries regulations and laws (Inderberg 2007, 32, Pedersen 2008:243). However, coercive and punitive enforcement measures against foreign fishing vessels in the zone, such as arrests, stir diplomatic responses and opposition to the Norwegian regime (Pedersen 2008, 249-250,255). The attempted arrest of a Russian trawler, the *Elektron* in 2005 ended with the Russian fishing vessel taking off towards Russian waters with Norwegian Coast Guard inspectors still onboard (Pedersen 2009, 151).

The Svalbard archipelago has a geostrategic location and its waters are rich of fish and possibly petroleum resources (Jensen and Rottem 2010, 79). The importance of the fish stocks in the Barents Sea, including the Svalbard area, to Norway should not be understated. Norway has a keen interest in the protection of sustainable fisheries in the area and in the Barents Sea generally, exemplified through its Coast Guard activities and the establishment of a joint Norwegian-Russian fisheries commission which manages the Barents Sea fishing resources.

As such it is relevant to point out that the salience of the Norwegian maritime areas in the Arctic can be termed as being high to Norway. Moreover, this may further explain the security presence in the region, as in order to assert sovereignty in the areas. Norway is committed to protect the economic and security interests in the region (Åtland 2014, 156-157). Exercising sovereignty over these large maritime areas is one of the key responsibilities for the Norwegian Coast Guard, and military presence in these waters may thus also be a signal of presence to other actors in the region. As mentioned, Norway has a strong emphasis on the High North in its defense policy, shown in the fact that Norway possesses one of the most modern navies in Europe (Åtland 2014, 156). The further expansion of its military presence

in the Arctic is also a function of the expected increase in maritime traffic on Norway's Arctic Coast which has security implications for this region and the country (ISAB 2016, 9). The Arctic Strategy points out that "Norway has a special responsibility to help to ensure that activities in Norwegian waters are safe and environmentally sound. We will maintain a presence and will provide effective surveillance, and emergency preparedness and response in our large sea areas" (Norwegian Ministries 2017, 36).

In terms of security policy in the north it is also worth noting that Norway's relations with Russia in the north is a constant feature of the Norwegian policy in the Arctic, and while cooperation, dialogue and good relations with Russia is emphasized, Norway is also aware of the increased Russian military activity, and while this activity is not considered to be aimed at Norway, it remains an important factor in the security and defense policy of Norway (Norwegian Ministries 2017, 18).

Economic Resources

Norway:

Norway is Western Europe's largest oil producer and exporter, and the largest petroleum liquids producer in Europe (US Energy Information Administration 2016, 1-2). Moreover, on a world basis, the country was in 2015 the third-largest exporter of natural gas, following Qatar and Russia (ibid., 1). Domestically, the petroleum industry is Norway's largest industry, and the export of oil and gas accounts for almost half the value of total exports (SSB 2017b). Over 90 % of the oil and gas that is produced in Norway is exported (Keil 2014, 175). The discovery of oil and gas on the Norwegian continental shelf has contributed significantly to growth and transformed Norway into being one of the world's wealthiest countries. Revenues from the petroleum industry make up the Government Pension Fund Global which is a 1 Trillion USD sovereign wealth fund in which transfers finance the non-oil fiscal budget deficit (Ministry of Finance 2016). During its operations over 40 years, the industry has created values for over NOK 12 000 billion (Ministry of Petroleum and Energy 2013).

Arctic Oil and Gas Exploration and Activity:

Being one of the world's largest natural gas exporters as well as a big oil producer, Norway has significant interests in the production of Arctic oil and gas (Harsem et al. 2011, 8043). The North Sea and the Norwegian Sea have traditionally been the locations of production since the 70s, with respectively 66 and 17 fields in production in 2017 (Norwegian Petroleum 2018). However, as with Russia, there are challenges of matured oil fields, and petroleum production has gradually declined since 2001, with most of Norway's North Sea fields in decline (U.S. Energy Information Administration 2016, 3-4). As such, similar to its neighbor in the north, increased attention is being given to the north as output has declined elsewhere (Harsem et al. 2011, 8043). Due to being a country heavily dependent on oil and gas, Norwegian

decision-makers are concerned with maintaining and increasing production, arguably; “if Norway wants to continue its current output level, Arctic oil and gas activity must increase” (Harsem et al. 2011, 8043). The Norwegian Government has in recent years pushed oil exploration further north on the Norwegian continental shelf. The government is among other things, investing in mapping potential resources as well as granting exploration licenses in the Barents Sea (Keil 2014, 175). In addition to the North Sea and the Norwegian Sea, the Barents Sea is the third section of the Norwegian continental shelf (NCS) (U.S. Energy Information Administration 2016, 2). The Barents Sea, while inside the Arctic area, has different climatic conditions to other sub regions in the Arctic, with less icy conditions due to the high temperatures created by the Gulf Stream. As mentioned by Stromquist and Johnston (2014, 18), “it is important to note that although a good deal of Norway’s future hydrocarbon potential lies in areas north of the Arctic Circle, the conditions do not meet true Arctic criteria, particularly in terms of the ice regime.” In any case, Norwegian Arctic waters are expected to hold significant potential (Keil 2014, 176). According to the Arctic Strategy from 2017, “Nearly half of Norway’s estimated undiscovered oil and gas resources are to be found in the Barents Sea” (Norwegian Ministries 2017, 2). There are high estimates of undiscovered resources in the Barents Sea, which is the only of the three sections located above the Arctic Circle. In 2017, the Barents Sea contained 71 production licenses, however Snøhvit and Goliat are the two fields currently in production (Norwegian Petroleum Directorate 2017, Norwegian Petroleum 2018). Norway’s first offshore gas development in the Barents Sea is the Snøhvit field, which is also the first facility of liquified natural gas (LNG) in Norway (Norwegian Ministries 2017, 24). The Goliat field is an oil producing field located south east of Snøhvit. Some of the main conditioning factors with regards to offshore oil and gas development in the Norwegian Arctic has been lack of infrastructure, for instance due to the remoteness of these areas (Stromquist and Johnston 2014, 19). While ice conditions are different in this part of the Arctic, there is also need for equipment made for Arctic operations. For instance, “future offshore oil production at the Goliat field in Northern Norway, or the Prirazlomnoye field in North-West Russia, depend on state-of-the-art drilling platforms able to withstand drifting sea ice throughout the year” (Østhagen 2013, 8).

However, considerable technological advances have been made, and oil companies continued push to explore oil and gas fields elsewhere has led to new equipment that can be used for Arctic operations (Østhagen 2013, 8). Most of the southern part of the Barents Sea is now opened for petroleum activity. Due to the delimitation agreement with Russia, the previously disputed area could be opened, indeed, “minutes after the agreement entered into force in July 2011, the Norwegian authorities started acquiring seismic data from the area” (Claes and Moe 2014, 115). Stromquist and Johnston (2014, 18-19) notes that the agreement with Russia contributed to significant increase in the Barents Sea resources. However, the northern parts stretching towards the Svalbard archipelago, has not been opened. This is also the case with the area further south in the Barents Sea, offshore Lofoten

and Vesterålen, for which there was heated political debate regarding opening up for petroleum activities or not. The Lofoten and Vesterålen case represents an aspect of the Norwegian debate regarding further oil and gas activity in the Norwegian High North. While environmental groups, some political parties, and other actors such as the fishing industry opposed the opening of the Lofoten offshore areas for oil activity due to vulnerable ecosystems and important fishing grounds, others, such as the oil industry pushed for exploration (Claes and Moe 2014, 115).

Moreover, the Norwegian government was recently sued by environmental organizations for having awarded licenses to oil companies in Arctic areas, the Norwegian government won the Arctic lawsuit. Regarding further oil and gas activity in the Norwegian High North, Harsem et al. (2011, 8043-8044) notes that oil and gas development in the Norwegian High North may vary from region to region, as environmental concerns triumph in some places, whereas profit maximization triumph in other such as for Hammerfest.

Economic Sustainability and Development:

On the more general note of the salience of the economic resources of the Arctic for Norway, the Norwegian Government, as indicated in previous sections, sees the High North as important for development of Norway, and especially for the Northern regions above the Arctic Circle (Norwegian Ministries 2017, 2). The Arctic Strategy from 2017 indicates that Arctic resources are salient to value creation in Northern Norway and for Norway as a whole, and the resources on land and on sea provides income for many residents in the north (Norwegian Ministries 2017, 9). It moreover notes that the government will “work to increase the positive local and regional spin-off effects of oil and gas activities in the Arctic” (ibid., 24). It is furthermore relevant to shed light on the importance of the Barents Sea for both Russia and Norway, in terms of economic activity such as fisheries. Indeed, the sea is a rich fishing ground, home to the Northeast Arctic cod, “the world’s biggest cod stock” and a commercially important stock (Hønneland 2014a, 10). The cod stock has its spawning grounds by the Lofoten archipelago, and the waters around Svalbard is also important habitat for the cod, and the fisheries in the area have been an important mainstay for people in the Northern parts of Norway and for Russian in the Northwest part of country for centuries (Hønneland 2014a, 10-11). Both countries have together managed some of the most valuable stocks in the area in the Joint Norwegian-Russian Fisheries Commission (Hønneland 2014b, 75). The Arctic Strategy notes that the region’s rich natural resources are factors that contribute significantly to the wellness of the business sector in Northern Norway, and “further growth will have to be based on an even better utilization of the region’s natural and human resources” (Norwegian Ministries 2017, 23). Among these area ocean-based industries such as the seafood industry, the maritime industry in addition to oil and gas (ibid., 23-24). It is pointed out that these, together with “new ocean-based industries such as marine

biotechnology, energy, seabed mining, and maritime transport and tourism, have considerable potential for the future” (ibid., 23-24).

In this way it is clear that the economic resources in the north, particularly oil and gas, but also other industries such as fisheries, may be characterized as highly salient to Norway, to further economic development for both the Northern regions and Norway as a whole. Oil and gas resources is central to the Norwegian economy and one of the main exports of the country, moreover, new discoveries in the north may be crucial in sustaining production, hence the increased attention. Moreover, this may also contribute to explain the investments and commitment that Norway directs to the North in terms of security assets, presence and capabilities. As mentioned, Norway is committed to protect its economic interests in the region and the country is an active military player in safeguarding sovereignty in these maritime areas for instance through daily operations and presence by the Norwegian Coast Guard. Thus, for both Norway and Russia particularly, the Arctic, through its resources may be termed as highly important to both countries’ interests. As salient strategic areas, the capabilities and engagement in the region matches these tangible interests.

The Intangible Role of the Arctic – Identity and Historical Ties to the Region

Norway:

Before and during the Napoleonic Wars, Norway was in a union with Denmark which lasted for approximately 400 years. However, as Norway-Denmark entered the Napoleonic Wars on the side of France, Norway was ceded to Sweden in 1814, into a union that lasted until 1905. While national romanticism was part of a broader trend in Europe, Norway too experienced an upsurge of national romanticism in the eighteenth century, accompanied by independence movements. Nation-building thus became a central theme in Norwegian society with a focus on “resuscitating” Norwegian culture (Neumann 2000, 243). While other themes had been part of national identity-building in Norway, such as its relations and cultural, geographical and historical ties with Europe and the rest of Scandinavia, the North has also played a role, which will be explored in this section. While not necessarily a large or the most essential component of Norwegian national identity, the Arctic has played a role as the country’s “border, periphery and frontier” (Medby 2014, 255).

Norway and Historical Ties to the Arctic: Indigenous Peoples, the Vikings and Polar Expeditions:

The Arctic matters to Norway in historic and cultural terms. The current era has seen an upsurge of tv shows about the Vikings, which may remind some of the links between Norway and Scandinavia to Arctic explorations. Norway has a long history related to various explorations and travels to the North. Indeed, in the eleventh century for instance, Vikings explored areas of the Arctic region for resources (Keil 2014, 176). Norway’s links to Iceland through Norsemen settlements, as well as

Iceland's ties with the Kingdom of Norway during the Middle Ages, also provides history, particularly through the Icelandic Sagas, that further links Norway to the Arctic. Leif Eriksson, a Norse explorer from Iceland, is for instance said to have been the first European to the North American continent. He moreover was the son of Eirik the Red, which led a group of Norse farmers said to be first European settlers in the North American Arctic (Grant 2010, 41). The intangible role of the Arctic has in various ways relations to this Arctic history and "the memory of glorious Norwegian Arctic adventures surely contributes to Norwegian's identifying with the North" (Keil 2014, 176).

In the more modern period, there are also examples from history that links Norway to the Arctic, for instance the history of the explorations of Norwegian Arctic explorers such as Roald Amundsen, Otto Sverdrup and Fridtjof Nansen. Roald Amundsen is considered to be one of the most successful polar explorers through history; he was the first to navigate throughout the Northwest Passage (Kløver 2017). Fridtjof Nansen, another great Norwegian polar explorer, skied across Greenland in the late nineteenth century at the time of the independence movement (Medby 2014, 255). Later, he also sailed across the polar sea in an expedition with the polar ship *Fram*. Otto Sverdrup is also one of Norway's famous Arctic explorers. Sverdrup participated in Nansen's expedition over Greenland.

Arguably, this history has played an important role in historically relating Norway to the Arctic, and it is also being increasingly highlighted at the political level in Norway, as explored below. Moreover, with regards to the topic of relating Norway to the Arctic, it should also be mentioned that Norway's Arctic also is home to Arctic indigenous peoples. While the Sámi people span across the Barents region and the countries of Norway, Sweden, northwest Russia, and Finland, half of the Sámi people, approximately 50,000, live in Norway (Greaves 2016, 469). The Sámi peoples' traditional lands in Norway stretch from the middle of Norway to the border with Russia in the north (The Arctic Institute 2018d). In Norway, the Sámi Parliament is located in Karasjok, Finnmark. As with many of the other Arctic indigenous peoples, the Sámi have traditional livelihoods such as hunting, fishing as well as reindeer herding (ibid.).

Interestingly, Norway's polar past is being used in Norway through various channels to emphasize the "Arcticness" of the country. Medby (2014, 256) notes that Norwegians are subject to 'banal Arcticness' in their daily lives: The Polar explorers, mentioned above are being labelled on objects such as stamps and airplanes, "thereby continuously reminding Norwegians of their Arctic past and future." Other examples of promoting the Arctic and Norway's polar past is the Norwegian Central Bank's new banknotes with the picture of a cod, as well as Viking ship museums and the *Fram* museum which has exhibitions of polar explorers and their ships. Emphasizing the link to Norway's polar past indicates an attempt to reify a view of Norwegian continuity in the region (ibid., 252,257).

The Intangible Role of the Arctic in the Current Period:

In the current period as well, the topic of the North in intangible terms is also increasing. While large parts of the population of Norway might not particularly identify as belonging to an Arctic nation, the Arctic does hold an important identity-related meaning for Norway and Norwegians and the region has played a role in relation to how Norwegians understand themselves as northerners (Keil 2014, 176). Moreover, as a common theme through this chapter, the Arctic has also been used politically in order to frame Norway as central to the Norwegian nation (Medby 2014, 252). As mentioned above, this also applies to Canada and Russia. In recent years, the Norwegian government, which as mentioned above, has prioritized the Arctic region and highlighted the strategic relevance of the North to Norway. The increased international interest towards developments in the Arctic has also contributed to the increased focus on establishing links to the region. The government has promoted the country as an Arctic state and framed the Arctic as providing prosperity for both the local population of the North, such as the Sámi people, but also how the Arctic holds promise in terms of prosperity for the whole country (ibid., 256,258). As such, political discourses play roles as it increases public knowledge and engagement and this in turn could contribute to strengthen and legitimize Norway's active role in its Arctic area (Medby 2014, 256, 262). The attempt to engage the Norwegian population in the Arctic issue may also be related to the need to justify to tax payers who are not necessarily connected to the region, that the government's investment and public spending in the region (ibid., 252).

“Norway, Russia, and a Changing Svalbard,” Marc Lanteigne, Over the Circle, 7 February 2020 [71] <https://overthecircle.com/2020/02/07/norway-russia-and-a-changing-svalbard/>

Overview:

Svalbard, a remote Arctic Archipelago, has been back in the news of late, and not only because of the islands being the subject of a nine-day, ‘slow TV’ documentary featured this month by the Norwegian state broadcaster NRK. Norway, which administers Svalbard under the terms of the Spitsbergen (Svalbard) Treaty, (a document which observes its hundredth anniversary this year), is feeling a diplomatic chill from Russia over the regulation of the islands. This comes at a time when relations between Moscow and Oslo have become more difficult as both governments are seeking to improve their security situation in the Arctic.

Current & Relevant Information:

The Svalbard Treaty confirmed Norwegian sovereignty over the islands, (population about 2700), with the caveats that neither Oslo nor any other government shall place military installations there, and that the islands' distinct environment be protected. In addition, any state which agrees to sign the treaty is granted access to Svalbard for scientific as well as commercial / economic purposes, including extractive industries

such as mining. Among the treaty signatories are great and medium powers such as Britain, China, France, Germany, India, Japan, Russia and the United States, as well as Southern Polar states including Argentina, Australia, Chile, New Zealand and South Africa. Even North Korea announced in 2016 that it was willing to sign the document in the hopes of gaining access to the islands.

As a commentary published last year by the Arctic Institute noted, the treaty offered a unique outlet for non-Arctic states to enter the region for research purposes, and today several states operate scientific stations in Svalbard, especially in the region of Ny-Ålesund. However, the piece also concluded that the venerable legal framework surrounding Svalbard needed to catch up with modern conditions and concerns.

In recent years, climate change has had both an environmental and a political effect on Svalbard. Alterations of glacial patterns, including their size and moments, are being measured on the islands. Like much of the Arctic, Svalbard is experiencing the various effects of ice erosion and warmer average temperatures, including the loss of permafrost in and around the capital of Longyearbyen, as well as floods and avalanches. A January 2019 report [pdf] by the Norwegian Centre for Climate Services (NCCS) concluded that over the next eight decades the islands would experience higher temperatures, shorter periods of snowfall but increased overall precipitation in the form of rainfall, losses of glaciers and sea ice, and a 1°C average increase in surrounding sea temperatures.



[The above map is a map of Svalbard]

Often seen as a microcosm for the study of climate change in the overall Arctic Ocean regions, Svalbard has been the subject of much scientific study from a variety of actors seeking to understand the physical transformations facing the far north.

This week, new data on glacial movements from satellite observations was presented by glaciologist Professor Adrian Luckman (Swansea University, UK) at the Norwegian Polar Institute in Tromsø. Among the points raised were how glacier speeds were increasing over time, with 'surge' behavior changing, including instances of surges in glacier movement taking place earlier in the year around the region of Tunabreen, a site popular with tourists, in central Svalbard.

The opening up of areas in and around Svalbard due to retreating ice have presented a greater challenge to the Norwegian government as it continues to carefully walk the line between maintaining its sovereignty over the archipelago and following the letter of the 1920 treaty. The islands' location in the Atlantic-Arctic region, a site of heightened military activity both by Russia and the West, including NATO, over the past few years, along with the deteriorated relations between Moscow and Washington, (as well as many European governments), have further complicated Norwegian Svalbard policy.

At the same time, the economic benefits of the region have also attracted more international attention which has led to diplomatic brushes. One of the most infamous of these rifts was the dispute, starting in 2017, between the European Union and Norway over snow crab fishing rights near the Svalbard coast. The issue was then brought to the Norwegian Supreme Court, which ruled in February last year that the EU needed to seek permission from Oslo before engaging in any future snow crab catches, a ruling which was seen as having a potential positive effect on future Norwegian rights to drill for oil and gas drilling in the region.

As a May 2019 article [paywall] by Andreas Østhagen and Andreas Raspotnik also explained, the case had potential ramifications for the integrity of the Svalbard Treaty system itself. Yet, the matter may not be over, as it was reported in October last year that the EU was again planning on awarding snow crab fishing licenses despite the ruling.

Other non-Arctic actors have also made attempts to subtly challenge Norway's paramount role within the Svalbard Treaty system, including China, which took Oslo to task over a 2014 plan to set up a radar installation in Svalbard, which the Norwegian government vetoed [in Norwegian], as well as Norwegian regulations over what constituted permissible research activities on the islands. Beijing claimed in 2019 that these rules were overly restrictive [in Norwegian], and beyond Oslo's treaty mandate.

Yet it has been Russia which has been most active at seeking to chip away at what Moscow has viewed as Oslo's inflexibility regarding the treaty. Russian business interests are active in Svalbard, especially in the Russian-majority town of Barentsburg, which has been seeking to turn itself from a mining hub to a center for Arctic tourism. Barentsburg and another Svalbard town, Pyramiden, were brought under Soviet administration for coal mining purposes in the 1920s.

This month, however, it was reported by the Russian Foreign Ministry that Foreign Minister Sergei Lavrov had written a letter to his Norwegian counterpart, Ine Eriksen Søreide, asking for a bilateral dialogue to discuss what was perceived in Moscow as discriminating restrictions on Russia's economic activities in Svalbard. Among the issues under dispute were Norwegian plans to develop a fishing interdiction zone near Svalbard, a deportation rule affecting specifically Russian citizens, and regulations regarding Russian helicopter usage within Svalbard's airspace which Moscow saw as obstructive.

It was confirmed this week that the Ms Søreide had received the letter in question, and a subsequent statement from the Norwegian MFA stated that 'the views appearing in the letter are regularly brought up by the Russian side and are well known to Norwegian authorities.' The Russian governmental news service Rossiyskaya Gazeta (Российская газета) published a stinging rebuke [in Russian] of Norway's stance on these issues earlier this week, stating that Oslo was in violation of the treaty by seeking to unfairly micromanage Russian commercial activities in and around the islands.

It was unclear whether Russia's request for a direct dialogue about Svalbard with Norway was timed for this month's centenary of the treaty signing, and whether this represented a form of diplomatic posturing on Moscow's part. However, another factor may be ongoing Russian concerns about ensuring a long-term presence in Svalbard as the Arctic region continues to open up to increased economic activity. Last year, Russia began to pay closer attention to oil drilling samples the USSR had collected in Svalbard in the mid-1970s, a move seen as an endeavor to further maintain its economic foothold on the islands.

As well, last month, it was reported [in Norwegian] by the Norwegian TV2 news service that deposits of base and precious metals, possibly worth as much as US\$100 billion and including copper, gold, silver and zinc, had been detected in the sea beds near Svalbard according to a study by the Norwegian University of Science and Technology (NTNU). Should this discovery be further validated, it could open up another jurisdictional tug of war between Oslo and other governments, including Russia.

This most recent Norway-Russia Svalbard dispute comes at a time of cooling bilateral relations between the two countries and Western concerns about growing Russian military interests in the Arctic Ocean. Norway was the main staging areas for the NATO military simulation named 'Trident Juncture', which took place in late 2018. More recently, the Norwegian military expressed unease at Moscow's announcement earlier this month that the Russian Navy was planning missile tests in Arctic international waters near Norway's Nordland county and the country's Aasta Hansten gas field.

There was also a diplomatic tussle this month over the refusal by the Norwegian government to allow visas for a Russian military singing and dancing group which was scheduled to perform at next week's Barents Spektakel, in the northern Norwegian border town of Kirkenes, which begins on 12 February. The Barents Spektakel is an annual cultural event which frequently brings together Norwegian and Russian performers and tourists, and the theme for this year's celebration is 'The Russian Connection' (Русский след).

These recent Russian protests over their rights in Svalbard may simply spark another round of (re-)negotiations, as well as discussions over how Norway can better balance its sovereignty over the islands with the interests of Russia and other treaty signatories. However, both the emerging importance of the Arctic Ocean as an area of untapped resources, and growing impatience in Russia and the West over each other's Arctic strategies, may lead to Svalbard becoming a de facto pawn in an emerging regional game over regional influence.

“Russia’s and China’s Interest in Cold Svalbard Heats Up,” Luke Coffey, The Heritage Foundation, 17 February 2020 [72]

<https://www.heritage.org/defense/commentary/russias-and-chinas-interest-cold-svalbard-heats>

Overview:

This week marks the one-hundredth anniversary of the signing of the Svalbard Treaty in 1920. Svalbard is located well above the Arctic Circle. Longyearbyen is its capital and largest city. It has a population of twenty-one hundred. Russia and China are active in Svalbard, and the United States cannot miss out.

Current & Relevant Information:

When security matters in the Arctic Ocean are discussed, especially in the context of NATO and Russia, it is normally Greenland and Iceland which get a mention. However, Svalbard, a non-militarized Norwegian archipelago some five hundred nautical miles off the northern coast of Norway, should not be ignored especially given how active Russia and China are in that remote area.

This week marks the one-hundredth anniversary of the signing of the Svalbard Treaty in 1920. As part of the various peace settlements after World War I, this treaty granted Norway sovereignty over these islands.

Svalbard is located well above the Arctic Circle. Longyearbyen is its capital and largest city. It has a population of twenty-one hundred. Svalbard is also home to Ny Ålesund, the world's northernmost permanently inhabited place (with a population of thirty-five).

Although Norway was awarded sovereignty, the terms of the Svalbard Treaty allowed any of the treaty's signatories to have non-discriminatory access to the

islands' fishing, hunting, and natural resources. These countries included major powers, such as Russia, the United States, the U.K., and China, as well as countries far from the Arctic, such as Saudi Arabia, South Africa, and even Afghanistan. In total, some forty-six countries enjoy equal access to Svalbard's natural resources.

Even with the rights offered to the treaty's signatories, the Norwegian government is crystal clear in its position on the status of the islands. As Minister of Foreign Affairs Ine Eriksen Søreide and Minister of Justice Monica Mæland recently wrote in an article published in various Norwegian newspapers to mark the centenary of the Svalbard Treaty: Today, Norwegian sovereignty is undisputed and Svalbard is Norwegian just as much as any region on the mainland.

Even so, both Russia and China have taken advantage of their access to Svalbard. At the height of the Cold War, Russians accounted for two-thirds of Svalbard's population, totaling two thousand people in the 1960s, a number that has declined to under five hundred today.

Russia has been mining coal on Svalbard since 1913, but it was not until the late 1920s that it did so in any meaningful and commercial way. During the Cold War, the Soviet Union maintained three settlements on Svalbard. One at Grumant was closed in 1961. Another at Pyramiden was closed in 1998 but still holds the record of the northernmost statue of Lenin in the world.

The last remaining settlement, located in Barentsburg, is still active today but depends on Russia for food and other provisions. Curiously, considering the remoteness of its location, Barentsburg boasts a Russian consulate. Travelers there find their mobile phone switches to a Russian carrier.

These settlements have always been more about national prestige for Russia and never produced that much coal. Even the settlement in Barentsburg today only produces enough coal to sustain itself.

As a signatory of the Svalbard Treaty, China is allowed to conduct scientific research on Svalbard and has done so since 2004 at its Arctic Yellow River Station located in Ny Ålesund. This science center is one of eight scientific research stations in the Arctic operated by China.

The military importance of Svalbard is limited in peacetime due to the restrictions placed on the region under the Svalbard Treaty, which demilitarized the islands. Article 9 of the Svalbard Treaty states:

Subject to the rights and duties resulting from the admission of Norway to the League of Nations, Norway undertakes not to create nor to allow the establishment of any naval base in the territories specified in Article 1 and not to construct any fortification in the said territories, which may never be used for warlike purposes. The non-militarized nature of the islands is under constant debate.

Russia accuses Norway of violating this clause in the treaty when Norwegian coast guard ships call into port or when the occasional Norwegian air force cargo planes land at Longbeartyan airport. Norway contests these accusations by stating that these visits are in line with the limitations outlined in Article 9 of the treaty.

During the Cold War, there was concern that the Soviets could use the settlements to preposition military hardware in violation of the terms laid out in the Svalbard Treaty.

Even in more recent times, Russia blurs the lines. In 2015, just after the Ukraine crisis got underway, Russia's Deputy Prime Minister Dmitry Rogozin conducted a surprise visit to Longyearbyen airport and then went on to Barentsburg, even though he was listed as being under sanctions and banned from entering Norway. In 2016, Chechen special forces landed at Longyearbyen airport enroute to Russia's Barneo ice-base in the Arctic. At the time, the Norwegian government protested to show its displeasure.

The geostrategic location of Svalbard, especially in terms of its proximity to the Kola Peninsula, home of Russia's Northern Fleet, is not lost on the Russians, either. In 2017, officials in the Russian defense ministry reportedly highlighted Svalbard as a potential area of future conflict for the Russian navy. During a major Russian military exercise that same year, one of the scenarios reportedly played out by the Russian military was its invasion and capture of Svalbard.

Russia and China are active in Svalbard, and the United States cannot miss out. As a recent report on Arctic Security from The Heritage Foundation suggested, U.S. military planners should better recognize the geostrategic importance of Svalbard's location and during a time of war consider Svalbard as one of three Arctic Forward Operating Bases in the defense of the North American continent (the other two being Greenland and Iceland).

Also, the report states that the United States should consider the use of Svalbard for any required scientific needs. Due to its location in the Arctic region and its particular environmental conditions, Svalbard is very attractive for scientific research. In the past, the Department of Defense has conducted research there, and it should consider doing so in the future if the need arises. This is an excellent way for the United States to "fly the flag" in a region with significant geopolitical importance.

Even though Svalbard is currently demilitarized, one cannot pretend that in the event of a major outbreak of conflict in the Arctic region that the archipelago would not be front and center in any military campaign.

U.S. military planners must always have this reality in the back of their minds. This is why the U.S.-Norwegian relationship is so important. At a time when Russia is showing so much interest in Svalbard, America can't afford to neglect that relationship.

E. Sweden:

“The Arctic Council: About: Arctic States: Sweden,” Arctic Council, 2020 [73]
<https://arctic-council.org/en/about/states/sweden/>

Overview:

Quick Facts

Arctic Territory: Västerbotten County and Norrbotten County

Area: approx. 153 400 km²

Arctic Population: approx. 520 000

Arctic Indigenous Peoples: Saami

Current & Relevant Information:

Sweden and the Arctic region:

The two northernmost counties, Västerbotten and Norrbotten, are defined as Sweden’s Arctic territory. This region represents about one-third of Sweden’s territory, but is populated with just over half of a million inhabitants – more sparsely populated than the southern parts of the country.

Sweden places a great emphasis on climate-related research in the Arctic. As a result of long measurement series, in some cases up to one hundred years, Sweden has contributed to greater global understanding of climate change. Northern Sweden is home to research stations in Abisko and Tarfala as well as the EISCAT12 scatter radar facility in Kiruna. Access to these modern logistics platforms is crucial for environmental research. The Abisko Scientific Research Station administrates, coordinates and performs experiments and tests for researchers from all over the world. An extensive environmental monitoring program on temperature, precipitation, ice-thaw, flora and fauna in the local area has been in progress there for nearly 100 years. The Tarfala Research Station, located in the Kebnekaise mountains, conducts basic research, glacier monitoring, meteorological and hydrological analyses, snow chemistry and permafrost studies.

Efficient ice-breaking operations are required to promote maritime safety and improve accessibility in frozen waters. Sweden possesses leading expertise as regards shipping in Arctic conditions. Swedish icebreakers are able to support increasing commercial shipping in the Arctic as well as help with both the monitoring of the vulnerable marine environment and also Arctic research. In 2011 Sweden adopted a strategy on the Arctic region, where it promotes economically, socially and environmentally sustainable development.

Indigenous Peoples:

The Saami are an Indigenous people who live in an area that stretches across the northern parts of Norway, Sweden, Finland and Russia. Estimates of the Saami population vary between 50,000 and 80,000, with around 20,000 to 50,000 living in Sweden. In the Arctic region, Sweden strives to ensure that Indigenous peoples have greater scope for preserving and developing their identity, culture and traditional industries and facilitate their traditional knowledge gathering and transfer.

Sweden in the Arctic Council:

Sweden held the country's first Arctic Council chairmanship from 2011-2013.

Throughout the chairmanship, Sweden's priorities included:

- The environment and climate, including pollution emissions, climate change, resilience, biodiversity and environmental protection
- Arctic people, including gender equality, economic development, language preservation and food security
- Arctic sea and land surveillance
- Strengthening the Arctic Council, including developing a strategic communications plan, establishing a standing secretariat and organizing sectoral ministers' meetings

Key accomplishments include:

- Under the Swedish Chairmanship the standing Arctic Council Secretariat was established in Tromsø, Norway
- The Swedish Chairmanship adopted the Arctic Council Communication Strategy to communicate the Council's work and progress to the public, and initiated the launch of a new website for enhanced resource sharing

Sweden works to ensure that the Arctic remains a region where security policy tensions are low, and for these objectives sees a need of a strengthened Arctic Council.

“State of the Arctic Strategies and Policies – A Summary,” Lassi Heininen, Arctic Yearbook, 2012 [74]

https://arcticyearbook.com/images/yearbook/2012/Scholarly_Papers/1.Heininen.pdf

Abstract:

In the past five years, the eight Arctic states have each published comprehensive Arctic strategies, a manifestation of the growing political interest in the region. This article examines the Arctic strategies of each Arctic state in turn. It goes on to identify common themes found in the strategies: security and sovereignty; economic and business development; sustainable and regional development; environmental protection and climate change; safety, search and rescue; human dimension and

peoples; research and knowledge; and international cooperation. Similarities and differences between the Arctic states on these key themes are examined, providing an insightful illustration of current regional values and interests.

Current & Relevant Information:

Background

The recent launch of national strategies and state policies on the Arctic and Northern affairs by the governments of all eight of the Arctic states clearly show, even manifest, the growing interest of these states toward their own northernmost regions, as well as the entire Arctic region. The same level of interest towards the Arctic has also recently been demonstrated by several powers from outside the region, including China, Japan and South Korea in Asia, and France, Germany and UK as well as the European Union in Europe. Comparing this to the situation in the 1990s as regards internal and foreign policies of the Arctic states demonstrates a clear shift in interest towards the North, since in the early 1990s there were only two countries - Canada and Norway – with “an explicit Arctic policy” (Heininen, 1992).

The Arctic strategies and state policies of the Arctic states, as well as agendas and emerging policies on Arctic/Northern issues by non-Arctic states, can be seen as reflections of the changing conditions in the entire Arctic region on one hand. On the other hand, they show the growing international and global interest toward the Arctic region, and the entire North, and the emerging kinds of interrelations between the region and the rest of the globe (Heininen, 2004). Consequently, they can be interpreted as responses to the significant, multi-functional and global change(s) of the early-21st century in the Arctic environment, geopolitics and economies as well as Northern security. This is rather obvious in the cases of Canada, Finland, Iceland, Sweden and the USA, though the reasons for this range from the broad to the narrow: security risks and threats to sovereignty as a result of the potential impacts of climate change are large factors in Canada’s Northern Strategy. The growing global interests toward the Arctic region and its rich natural resources lie at the core of the strategies of Finland and Iceland. The Swedish strategy’s response to the challenge is to emphasize biodiversity and the human dimension. And the US policy emphasizes national and homeland security.

In the cases of the Kingdom of Denmark, Norway and the Russian Federation there are other motivations which are as, or even more, important: the new self-governing status of Greenland as well as the first ministerial meeting of the five littoral states of the Arctic Ocean provides a central focus in the Kingdom of Denmark’s Strategy. The Norwegian High North strategy is very independent and reflects the new Norwegian-Russian relationship in the Barents Sea region, emphasizing closer bilateral cooperation between the two countries. The Russian State Policy first and foremost is a response to and reflection of the domestic politics of the Federation.

Finally, a common feature in all of the Arctic strategies and state policies is that each of the Arctic states would like to become a natural/real, even leading, actor/player in the Arctic, or in some field of northern affairs, or would like to maintain a leading role there.

This article discusses and compares the recent strategies, or state policies, for the Arctic region of the Arctic states (here Arctic strategies), and their priorities and main objectives with an aim to emphasize their outlining differences and similarities. It is neither an inventory nor analysis on the content of the strategies, but is based on the author's inventory and comparative study on the Arctic strategies and policies (Heininen, 2011). There are also a few other comparative studies on Arctic strategies, though mostly on those of the five littoral states of the Arctic Ocean - Canada, Denmark or Greenland/Denmark, Norway, Russian Federation and the USA. For example, Brosnan et al. (2011) looks at and discusses how cooperation and conflict appear in the Arctic strategies of these five states. Correspondingly, Summers (2010) studies the littoral states and their relations with a focus on energy and the environment, and also looks at China and the European Union as new players in the Arctic.

I will begin by briefly introducing how each Arctic state has (re)positioned itself in the Arctic region, and then by providing an overview of the Arctic strategies and their priorities. It briefly describes how the states (re)position and (re)define themselves as Arctic states/nations, and how the Arctic is (re)mapped. Finally, the paper proceeds to a comparative study between the Arctic strategies based on the explicit priorities or priority areas through nine inwards – and outwards-oriented indicators, emphasizing outlying differences and similarities between them.

Sweden's Strategy for the Arctic Region

"Sweden's strategy for the Arctic region" was adopted by the Swedish Government and published in May 2011 (Government Offices of Sweden, 2011; Swedish Ministry of Foreign Affairs, 2011).

Since Sweden was the last of the eight Arctic states to issue and approve an Arctic strategy or policy, there was growing international pressure on Sweden as well as domestic calls for the Government to do so. Indeed, it was on the very day that Sweden launched its Arctic strategy in May 2011 that the country took over the chairmanship of the AC and published its "Chairmanship Programme for the Arctic Council 2011–2013".

Though Sweden has substantially contributed to polar research efforts for more than a hundred years (SWEDARCTIC and SWEDARP, 2011-2015), there have not been many political statements or speeches by Swedish politicians on the Arctic – one of the few is the speech by Foreign Minister Carl Bildt at the AC ministerial meeting in 2009 (Bildt, 2009). Taking this into consideration, it can be taken as something of an achievement that Sweden was ultimately able to prepare, adapt and launch an Arctic

strategy by the time of its adoption of the AC Chairmanship. This might also partly explain why the document is rather traditional, without surprises or special emphasis on any particular theme. Conventionality, however, it could also be taken as a mark of strength, insofar as the Strategy is straightforward and clear on its priorities.

Sweden was, however, one of the founding states of the current international cooperative body on Arctic matters, i.e. the AC. Historically, Sweden has natural and strong ties linking it to the Arctic region, as is mentioned in the Strategy, both geographically and demographically, and a strong record of Arctic research. Sweden is also an active member in many forums and organizations, such as the AC, the EU, the Nordic Council of Ministers, BEAR/BEAC; the United Nations and its conventions (e.g. UNCLOS), agencies (e.g. Convention on Biodiversity) and bodies (e.g. WHO) which demonstrates the importance it gives to effective multilateral cooperation on the Arctic. Nonetheless, it has long been Sweden's policy to work actively with others in international organizations, though this is the first time it applies to modern international Arctic cooperation.

The second half of the document is all about the three priorities, which are neither surprising, nor that the climate and environment are the priorities to be mentioned first. The fact that there are only three priorities shows that Sweden's Arctic strategy is one of the most focused of the Arctic strategies; all the same, each strategy comes with a rather long list of objectives.

The first priority is "Climate and the Environment" and of particular interest and importance in this connection is biodiversity. In the second priority, "Economic development" Sweden is looking to pursue many business and economic interests in (the free trade area of) the Arctic and Barents Region, such as "Mining, petroleum and forestry". Rather surprisingly, the strategy emphasizes petroleum in the Barents Sea region, even more than mining which has been, and remains, the cornerstone industry of Northern Sweden. Sweden will also be seeking or planning to promote economically, socially and environmentally sustainable development. The third priority, "The human dimension" includes people (of the region) and their living conditions. Here Sweden's objectives include promoting the preservation of the Sámi and other indigenous languages and a more active participation of young people and women in political processes.

All in all, Sweden's Strategy for the Arctic covers most of the features of a modern political strategy, particularly in terms of adopting concrete objectives under each priority. Economic development seems to be a top priority of Sweden's Arctic policy, and 'Resilience' is some sort of flagship project of the Swedish Chairmanship of the AC (Lind, 2011). The policy can also be seen as a reflection of and response to the recent significant, multi-functional (global) change(s) in the Arctic as much as the growing interest of and pressure from other Arctic states and several non-Arctic states.

“Sweden’s strategy for the Arctic region,” Government Offices of Sweden, 2011
[75] <https://openaid.se/wp-content/uploads/2014/04/Swedens-Strategy-for-the-Arctic-Region.pdf>

Summary:

The purpose of the Government’s Strategy for the Arctic Region is to present Sweden’s relationship with the Arctic, together with the current priorities and future outlook for Sweden’s Arctic policy, proceeding from an international perspective. The strategy begins with a summary, followed by an introduction of Sweden as an Arctic country. Further, it specifies how, and through which international cooperation bodies and bilateral channels, the Government should seek to achieve its objectives for the Arctic. Finally, it discusses the top priorities in the strategy’s three thematic areas: climate and the environment, economic development, and the human dimension. This is the first strategy the Government of Sweden has adopted on the Arctic as a whole, and should be seen as a starting-point for further development of cooperation in the region.

The Arctic region is in a process of far-reaching change. Climate change is creating new challenges, but also opportunities, on which Sweden must take a position and exert an influence. New conditions are emerging for shipping, hunting, fishing, trade and energy extraction, and alongside these new needs are arising for an efficient infrastructure. New types of cross border flows will develop. This will lead state and commercial actors to increase their presence, which will result in new relationships. Moreover, deeper Nordic and European cooperation means that Sweden is increasingly affected by other countries’ policies and priorities in the Arctic. It is in Sweden’s interest that new emerging activities are governed by common and robust regulatory frameworks and above all that they focus on environmental sustainability.

Sweden will work to ensure that the Arctic remains a region where security policy tensions are low. In bilateral and multilateral contexts, Sweden should emphasize the importance of an approach based on a broad concept of security, and that the use of civil instruments is preferable to military means. The role of the Arctic Council as the central multilateral forum for Arctic issues should be strengthened. The Council should be more active in developing common policies and practical projects for the benefit of the region. Sweden will actively contribute to the ongoing development of an EU policy on Arctic issues. Advantage must be taken of cooperation and synergies between the Barents Euro-Arctic Council (BEAC) and the Arctic Council, as well as with the various EU cooperation programs and the means at their disposal. In the Nordic Council of Ministers, Sweden will work to give projects with an Arctic orientation increased focus. Activities and cooperation in the Arctic must be conducted in accordance with international law, including the United Nations Convention on the Law of the Sea and other relevant international agreements.

Sweden wants to promote economically, socially and environmentally sustainable development throughout the Arctic region. Sweden will work for substantially reduced global emissions of greenhouse gases and short-lived climate forcers. In cooperation with other Arctic countries, Sweden will contribute to data and proposals for action to strengthen the long-term capacity of Arctic communities and environments and their adaptation to a changed climate. This will increase resilience to climate change and create conditions for long-term sustainable development in the region. Emissions of persistent bio accumulative organic pollutants need to be reduced. Sweden will contribute to the preservation and sustainable use of biodiversity in the Arctic. Environmental impact assessments and environmental assessments should be used to a greater extent. Networks of protected areas for flora and fauna should be established in the Barents region and elsewhere. Sweden will continue to be a leading research nation in the climate and environmental fields and will focus on the human impact of climate change.

Sweden's growth and competitiveness stand to benefit from increased free trade and active efforts to counter technical barriers to trade in the Arctic region. Sweden will work to ensure that the anticipated extraction of oil, gas and other natural resources occurs in an environmentally, economically and socially sustainable manner. It is important that the development of regional cross-border cooperation in the area of sea and air rescue continues. More stringent safety requirements must be imposed for maritime transportation and, in various sectors, use must be made of Sweden's environmental technology expertise. The Swedish Trade Council offices in Denmark, Norway, Finland, Russia, the United States and Canada, and in northern Sweden, should be instructed to build up skills to promote Swedish commercial interests in the Arctic. The tourism sector should be developed, albeit with consideration for the environment and the traditional lifestyles of indigenous peoples. Communications between tourist destinations should be improved in a sustainable manner. Swedish ice-breakers are uniquely qualified to support Arctic research and monitor the vulnerable marine environment.

Sweden will work to bring the human dimension and the gender perspective to the fore in Arctic-related cooperation bodies. Measures will be needed to counteract the negative health and social impacts of climate change, pollutants and the expected increase in the exploitation of Arctic natural resources. The right of indigenous peoples to maintain and develop their identity, culture, knowledge transfer and traditional trades must be upheld. The Sámi languages and other indigenous Arctic languages must be preserved. The Sámi research program should use Arctic-related cooperation projects to amplify the impact of research activities.

Current & Relevant Information:

Historical ties

From the Middle Ages onwards, the central powers of Sweden have considered the Laplands to be part of the kingdom. But the Sámi have existed there for thousands of years, having probably migrated from the east between 5 000 and 8 000 years ago. The Sámi are considered to be the oldest ethnic people in Sweden north of the Arctic Circle. From the seventeenth century onwards, more and more land was colonized as part of an active colonist policy, which gradually led to growing conflicts between colonists, forest farmers and the Sámi industries.

Swedish research in the Arctic can be said to have symbolically started in 1732 when the biologist and plant researcher, Carl Linnaeus, went on his journey through Lapland. This journey inspired many researchers to visit northernmost Sweden for botanical studies. Research on the Swedish mountain range and the area north of the Arctic Circle is still part of polar research. Swedish research initiatives and the state's commitment otherwise constitute a separate reason for why Sweden has established itself in the part of the Arctic that lies outside Swedish territory.

Security policy ties

Sweden's security has long since been influenced by developments in the Arctic. During the Cold War, Arctic Sweden lay between the two spheres of interest of NATO and the Warsaw Pact. Nowadays, the overall security policy climate in the Arctic is very much dependent on the relationship between Russia and the United States. In recent years, dialogue and cooperation have improved as a result of the US-Russian Reset Initiative, a joint attempt to build a new agenda. The current security policy challenges in the Arctic are not of a military nature. Activities within the framework of the Arctic Council also indicate that its members have a common interest in cooperation and consensus. As a result of the Ilulissat Declaration of 28 May 2008, the five coastal states also agreed to solve outstanding issues in accordance with current international law. The 2010 border agreement in the Barents Sea between Russia and Norway is seen as a prime example of this spirit of mutual understanding. At the same time, the Arctic has considerable economic potential and fresh transport routes have opened the door for new types of strategic and security policy opportunities and challenges. As a result of climate change, security may well become more of a question of public crisis management in extreme weather situations; adaptation to changed climatic conditions in order to protect human life, health and the economy. Developing strategies for the long-term management of communities and environments in a changed climate is becoming increasingly important.

Europe is today characterized by mutual dependence. Furthermore, Sweden's security policy position based on "security in cooperation" means that the security policies of the EU Member States and Nordic countries will strongly influence Swedish security policy. The recently adopted Nordic Declaration of Solidarity, reinforcing and enhancing the solidarity declaration adopted in 2009, has led to Sweden's security policy becoming even more closely interwoven with the political

priorities of the other Nordic countries. Sweden's unilateral declaration of solidarity and a stronger Nordic declaration of solidarity may hence involve new areas of responsibility and higher expectations for action as far as Sweden is concerned. This is true not least in relation to Norway, which has been pursuing an active Arctic policy for some time, including in the area of security policy. A possible future Icelandic EU membership and hence greater geographical scope for the EU as regards the Arctic will also affect the security policy prerequisites for Sweden.

Economic ties

Swedish businesses are conducting extensive operations in the Arctic. Ore and mineral extraction are currently high on the global economic agenda, which has led to significant levels of investment in the Swedish mining industry. Base metal, iron and titanium projects are also under way in the area. Together with fish, the forest is the Arctic's most important renewable source of raw materials. Sweden has a world-leading pulp, paper and wood engineering industry, which also utilizes forest materials from the Arctic region. Hunting, fishing and reindeer herding are also key industries for employment and for the local economy in Arctic Norway, Sweden, Finland and Russia. Swedish expertise in research and development in the Arctic environment leads the world and its cooperation and efficient resource use together with the business sector are central. Internationally renowned Swedish construction research in Arctic environments can be mentioned as an example. The Swedish space industry has its base in the extreme north of Sweden. The anticipated growth in natural resource extraction in the Arctic is expected to increase the need for air, land and sea transport. Sweden possesses world-class expertise in Arctic shipping and in vehicle testing in the Arctic environment. Tourism is an important industry in Arctic Sweden and is deemed to have considerable growth potential.

Climate and environmental ties

In recent decades, an increase in average global temperatures has been noted, causing the world's glaciers and sea-ice to melt at an accelerated pace. This trend is expected to continue. Sweden's climate and environment are a part of the Arctic and as a result both affect and are affected by it. One challenge will be to deal with the increase in precipitation caused by global warming, which may lead to greater water flows and changes in soil conditions. This in turn may affect our societies and their infrastructure. The Sámi culture and industries traditionally have strong links to the surrounding natural environment and the weather conditions, leaving them particularly vulnerable.

Research ties

Swedish Arctic research is world-class and is conducted not only in the fields of engineering and natural science but also in social science and the humanities. For more than 150 years, Swedish institutions and organizations have funded and carried out countless expeditions in the Arctic and have systematically supported

polar research. Few research vessels around the world can match the Swedish ice-breaker Oden's capacity in terms of combining the class of an Arctic ice-breaker with advanced research equipment for seabed mapping and logistic platforms for climate studies.

Cultural ties

The Sámi people form the link between Sweden and the Arctic. The geographical area inhabited by the Sámi from time immemorial is usually referred to as Sápmi or Sameland and stretches over the northernmost parts of Norway, Sweden, Finland and Russia. The Sámi identity is inextricably linked to this environment, one which the Sámi have lived in and utilized for generations. The variations in Sámi culture, reindeer herding, language and handicraft do not follow national borders. The cross-border contacts that have formed the very fundament of their way of life have though been restricted as a result of decisions taken by national governments.

The Strömstad Treaty of 1751, defining the border between Sweden (which included Finland at that time) and Denmark-Norway, affected vast parts of Sameland. The need then arose to regulate the relationship to the Sámi population, as regards reindeer grazing areas and cross-border movements. These issues were addressed in the Lapp Codicil of 1751. In the late-nineteenth and twentieth century, Sweden and Norway entered into several more agreements concerning the Sámi population, especially with regard to reindeer grazing. The Lapp Codicil is still in force today.

Objectives and implementation in Arctic cooperation

- Sweden will endeavor to ensure that the Arctic remains an area of low political tension.
- Sweden will also strive to strengthen the Arctic Council in its role as the central multilateral forum for Arctic-related issues, as well as the role of Barents cooperation bodies in issues of particular relevance to the Barents region. A more common policy and concrete projects should be developed in Arctic-related cooperation forums for the benefit of the region.
- Sweden will actively contribute to the development of an EU Arctic policy. Sweden wishes to promote the EU as a relevant cooperation partner in the High North within relevant policy areas.
- Cooperation projects and synergies between the Arctic Council and the Barents Cooperation will be utilized, as will the EU's various cooperation programs and the funds they supply.
- In the Nordic Council of Ministers, Sweden will work to sharpen the focus of Arctic-related project activities that have a clear supplementary value for the Arctic Council.

- Swedish activities and cooperation projects in the Arctic will be in accordance with international law, including UN conventions and other international treaties.

Swedish priorities

The Arctic is an area of low political tension in which the changed climate presents new opportunities and challenges. Issues concerning the security of flows and resource extraction are coming more to the fore. Sweden has a natural interest in the favorable current situation being consolidated and the entire Arctic region being driven by a positive political, economic and ecological dynamic. In bilateral and multilateral contexts, Sweden should stress the importance of an approach based on security in its broadest sense and that the use of civil instruments is preferable to military means. Ever since the Arctic Council was founded in 1996, there has been strong consensus on the view that economic, environmental and social development must be seen as a single concept to create long-term sustainable development in the region. Continued Swedish research and education initiatives are essential if progress is to be made. The priorities are to be seen in this context: • Climate and the environment • Economic development • The human dimension.

“Sweden’s Arctic Strategy: An Overview,” Nima Khorrami, The Arctic Institute: Center for Circumpolar Security Studies, 16 April 2019 [76]

<https://www.thearcticinstitute.org/sweden-arctic-strategy-overview/>

Abstract:

This article provides an overview of Sweden’s Arctic strategy and is in parts based on the author’s own discussions with Swedish officials.

To Sweden, the Arctic is both a matter of domestic politics and foreign policy. Any attempt at understanding Stockholm’s approach towards its own Arctic region as well as the wider Arctic, therefore, must take into account not only its foreign policy priorities but also its domestic needs and sensitivity to various social, political, environmental, and economic developments that are taking place at an accelerating rate including, among other things, the possibility of an oil leak due to an accident on the sea or at an exploration site and its potential impact on the Arctic’s fragile environment, biodiversity, and its indigenous people. Nonetheless, Sweden’s concerns with regard to the future trajectory of the region on both fronts share a large number of important similarities including effective and inclusive governance, environmental protection, peace and security, and sustainable economic growth.

This article is the first in a series of five exploring and explaining Sweden’s Arctic policy. The objective is to provide a general overview of and/or guideline on the country’s Arctic strategy as stipulated within the larger framework of its foreign and domestic policy making. Future papers will then shed light on and delve deeper into some of the more specific issues touched upon in this article. These include a survey of Swedish businesses in the Arctic and how they are contributing to the

economic development of the region; Stockholm's approach towards a common Arctic policy at the European level; a critical analysis of Sweden's military neutrality in the High North and whether or not it can keep this position in the long run; and Stockholm's preferred role for the Nordic Cooperation and Nordic Defence Cooperation in the Scandinavian Arctic.

Current & Relevant Information:

Seeking Influence via Cooperation

Given its small population size of only 10 million, principled stance on neutrality, and meagre geopolitical weight on the global stage, Sweden's foreign policy is firmly based on the principle of multilateralism and institutional cooperation with like-minded nations. To this end, it has consistently called for close cooperation with and within the EU since this is considered the surest path towards the attainment of peace, security, and stability for itself as well as its neighbors. However the problem is that the EU itself is changing and hence influencing the direction of that change is the number one priority of the Swedish foreign policy, as outlined by Sweden's Foreign Minister: "To do this, foreign policy during this electoral period will have three priorities: the promotion of democracy, shared responsibility for peace and security, and active diplomacy".

Promoting democracy and democratic causes are deemed essential because they underpin the liberal international order on which Sweden's export-led economy is highly dependent. This has gained an added urgency since democracy is on the backseat as more and more countries retreat on their democratic progress and instead fall prey to authoritarian practices of governance more akin to what is being labelled as the "Chinese model"; that is, a closed political system combined with a state-managed market economy or authoritarian capitalism.

With regard to the second priority, three particular issues tend to stand out: climate change, nuclear proliferation, and de-radicalization and prevention of terrorism. The common denominator in all three is that none can be addressed and/or contained individually and thus a high degree of both regional and international cooperation is needed in order to be able to have a realistic chance of effectively addressing them. "They must be addressed by sharing responsibility for our collective security," the country's Minister of Foreign Affairs Margot Wallström told the Swedish Parliament.

Sweden's principle stance on foreign and security policy-making revolves around the ideals of neutrality and active cooperation in the context of a cohesive EU. "The European Union is our most important foreign policy arena. A strong and united EU is of crucial importance in a time of uncertainty around the world. We must strengthen the Common Foreign and Security Policy. We will hone the EU's instruments, including diplomacy, military and civilian crisis interventions, and development assistance and trade".

Moreover, Sweden believes that its neutrality not only serves its own security but in fact contributes to the stability of Northern Europe. With regard to its Arctic policy, however, it attaches special importance to its cooperation with Finland followed by its cooperation with the other Scandinavian and Baltic states within the Nordic Cooperation (NC) – comprising the intergovernmental Nordic Council of Ministers and the inter-parliamentary cooperation within the Nordic Council – and the Nordic Defence Cooperation (NORDEFECO). In fact, Sweden has the stated objective of encouraging more discussions and debates on Arctic-related projects and issues within the NC as stated in its 2011 and 2016 Arctic Strategy documents.

Relations with the US, both within the bilateral as well as the Nordic setting, are still viewed as paramount to the country's long-term security. The government remains intent to maintain and improve its strategic ties with the US. Relations with China are undergoing a revision, which will probably be on friendly terms since currently there seems to be no party in Sweden who would support a hardline approach towards Beijing, for example in form of securitizing its polar silk road policy. Beijing is considered as a key source of investment and a major market for Swedish businesses and the current debate is mainly focused on finding the right balance between commercial cooperation and protection of the core Swedish values such as human rights and freedom of expression. A common Nordic approach is highly desirable but there is still a long way to go before the Scandinavian states can tailor and agree on a common approach towards China because Denmark and Norway, due to their NATO membership, have different threat perceptions compared to Sweden and Finland and also have less freedom in determining their China policies on their own.

Russia is viewed as a problematic neighbor both in the Arctic and the Baltic. Nevertheless, similarly to Finland, but unlike Denmark and Norway, which follow a different strategy, Sweden has adopted a more sober approach towards Moscow. While condemning its aggressive behavior in and around the Baltic, Stockholm prefers to keep the channels of communication open realizing that, for better or worse, Russia, as a neighbor, is here to stay. "We – like the EU – have contacts and dialogue with Russia and Russian society. We need to cooperate where we have common interests. We support Russian civil society and encourage stronger people-to-people contacts. The Council of the Baltic Sea States, the Barents Euro-Arctic Council and the Arctic Council are forums in which we have concrete cooperation".

Calling for a diplomatic approach towards Russia, lastly, arises from the third pillar of Sweden's foreign policy making; that is, active diplomacy. In fact, Sweden's recent activism in promoting and facilitating dialogue between opposing sides in the Yemen conflict or between Washington and Pyongyang are both indicators for the implementation of this pillar. As such, it ought to come as no surprise that Stockholm prefers dialogue and building bridges as the key mechanisms for conflict resolution and prevention within the Arctic Council as well. Whether it is environmental

regulation or biodiversity, Sweden's principled stance is to use the Council as a viable forum to peacefully address disagreements. At the same time, Sweden supports a reform of the Council in the form of adding new policy issues to its mandate. According to its first Arctic Strategy document, "the Council could be further energized if its mandate were broadened to include other important strategic issues such as joint security, infrastructure and social and economic development. More concrete projects and clear political initiatives should supplement the Council's existing work. Sweden therefore wishes to strengthen the Council both institutionally and politically".

Climate Change

Traumatized by the last summer's fire in its Arctic region, environmentally conscious Sweden has put in place a comprehensive approach towards climate change in general and the Arctic in particular. Stockholm's approach has economic, security, scientific, and soft power aspects to it. As such, it is concerned with both the ways in which atmospheric changes could affect the region's ecosystem and the locals' lives and how to mitigate negative effects and benefit from changing conditions.

Sweden will work within the EU in order to call for and implement measures to substantially reduce global emissions of greenhouse gases. Not only do such undertakings and being seen as a leader in the fight against climate change add to its arsenal of soft power; it would also open a new market for its businesses as they take the lead on this fight at home. Envac's – a waste collecting company – rapid expansion in India is a case in point. In June 2017, therefore, Sweden introduced its most ambitious climate policy framework to date, which sets the goal to have zero greenhouse gas emissions by 2045. The overall objective is to provide a degree of order and continuity to the country's climate policy regardless of the composition of the government while turning the country and its private sector into a leading force in the fight against climate change. As an increasing number of countries are projected to face and grapple with climate-induced crises, there is a consensus in the government that early investment in green technologies and businesses will have significant financial payoffs in the long run for Swedish businesses internationally. This supports the ideal of leading by example which is, in and by itself, an immense source of soft power.

What is more, Stockholm is determined to use the NC, the Arctic Council, and the UN in order to articulate and foster proposals for knowledge-building and knowledge-sharing with regard to probable effects of climate change on Arctic communities. From this could emerge, amongst other things, a coordinated crisis management framework to guide states' responses when disaster strikes. Stockholm is equally keen to bank on the Arctic states' cooperation in order to contribute to the formulation of a common environmental policy for the entire region although its politicians and diplomats do, privately, express doubt over the possibility

of such an outcome because of the Trump administration's position on climate change.

Security and Defense

The Baltic region and its stability is the main concern for defense planners in Sweden. They prefer close cooperation between Baltic and Nordic States via settings like N5+3, which includes the five Nordic states and the three Baltic Sea states, or NORDEFECO, within which Baltic cooperation is one priority as well. They tend to coordinate with the EU but, given the EU's lack of defense and military mechanisms, such coordination is limited in nature and scope. The US and the importance of Transatlantic relations, lastly, has not lost its appeal within the country's defense and security circles, although there are concerns regarding the US' long term commitment to Nordic countries' security.

As such, it is indeed fair to say that Sweden's strategic priority clearly and unequivocally lies in the Baltic, evident in the fact that the Arctic is rarely mentioned in relevant foreign and defense or security policy statements. The Arctic, it appears, is more seen as a collective Northern or Scandinavian policy area that is best dealt with in cooperation with the EU and NORDEFECO, whereby the former should be utilized for soft foreign policy issues while the latter is best suited for hard, security issues in tandem with the United States. To this end, Sweden, which is holding the NORDEFECO chairmanship this year, has prioritized the enhancement of the Nordic-Transatlantic relationship as well as the further development of the Arctic Challenge Exercise, a joint exercise between the Air Forces of Finland, Norway, and Sweden, into a recurring high intensive Air Combat Flag Level Exercise.

More specifically, Sweden prefers to work and coordinate with Finland. The two states advocate a non-confrontational approach towards Russia and hence usually agree on the most optimal ways for both dealing with and containing Moscow's actions in both the Arctic and the Baltic regions. They are also the driving forces behind the NORDEFECO in which their bilateral cooperation on security issues is embedded in.

Initially set up with cost-effectiveness in mind, NORDEFECO has gained more importance in recent years. This is partly due to the emergence of a more aggressive, norm-defying Russia whose policies in the Baltic and the Arctic are causing unease in Stockholm and other Scandinavian capitals. Ambiguity over US commitment to European security and NATO, as well as NATO's reluctance or inability to define a clear strategy for the Arctic, give more weight to NORDEFECO and have encouraged moves towards a more meaningful coordination of security issues. However, given their NATO membership and the fact that they have both frustrated past efforts for articulation of a unified NORDEFECO strategy, Denmark and Norway's commitment to NORDEFECO cannot be taken for granted.

Given its geographical distance from Russia and the existence of Finland as a natural buffer zone, all in all, Sweden is not overly concerned with the possibility of a military attack on its Northern border. However, it considers Finland's security as its own to the extent that any threat to Finnish territorial integrity is deemed as a threat to Sweden's territory. As such, it is reasonable to suggest that Sweden's defense planning with regard to the Arctic is more geared towards assisting Finland in case of an invasion and is thus more indirect.

Finland and Sweden have been able to develop closer security ties because the two countries not only share a distaste for a full NATO membership, but also a wider common concern and interest in the security and stability of the Baltic region. They have close commercial ties since most of the goods destined for Sweden get shipped through Finland. In addition, and more relevant to the Arctic context, Finland's plan to become the logistical hub of the region through the establishment of a network of rails and tunnels has significant financial and commercial implications and benefits for Sweden. This, in and by itself, provides another incentive for Stockholm to coordinate and cooperate with Helsinki for its Arctic policy and to take an active interest in Finland's security.

Economics and Trade

It is a matter of national security and interest for Sweden to ensure the survival of the liberal international order and its accompanying free trade practices. The government is thus adamant to play a key role in securing free trade as part of its official policy via the EU. Expectedly, it has an interest in the EU remaining a free trade block. According to the government's own official document on Sweden's trade strategy, "Sweden must continue to push the EU to liberalize its trade policy, reduce its customs duties, phase out its trade barriers and make trade in services and the flow of data easier. Sweden, via the EU, must also influence rest (sic!) of the world to pursue an open trade and investment policy and avoid protectionist tendencies".

Given its large dependency on export, Sweden's economy is faced with the challenge of both maintaining and expanding its global market share. To this end, the government has set itself the objective of playing a more hands-on role in promoting small- and medium-size businesses abroad as evident in the case of InnoVentum, a start-up company that offers innovative wooden towers for renewable energy, and its entry into the Philippine market. With regard to the Arctic region, there is consensus that local businesses are better placed to come up with relevant services and products, which can create jobs and prosperity and address socio-economic challenges faced by the region and its population. Some, while not all, Arctic communities have similar climatic and, albeit to a lesser extent, cultural and societal characteristics, and thus local businesses can establish a presence in other Arctic regions and states easier and more cost-effectively.

The Swedish government is directly and indirectly, by encouraging the private sector, investing heavily in the startup scene of its own Arctic region, setting up incubators like ABI, a startup incubator that only works with local startups. These efforts are further complimented by Finnish and Norwegian policies, which pursue the same priorities when it comes to the economic development of their Arctic regions. One promising area is the environment. Given its fragile ecosystem and the need for environmentally friendly practices, the hope is that Arctic-based startups might come up with unique products relevant to the region, which can then be scaled up and sold to other countries. In other words, in order to be able to survive and prosper, local companies have no option but to come up with unique ways in sync with the reality of the environment within which they operate. As such, an Arctic based company is much more likely to fabricate an innovative and environmentally friendly method of, for example, extraction than a Stockholm based company. Once they have mastered the technology, government hopes to be able to sell it to other environmentally conscious countries.

Moreover, the government is working on a strategy for new industrialization that aims to improve the conditions for Swedish industry to become a world leader in modern industrial production. Of particular importance is the mining sector.

Sitting on the mineral-rich Fennoscandian shield, the mining industry is an important economic player in Sweden, contributing to the country's economic growth as a main source of tax, employment, and indeed innovation in green technology. As a leading mining nation with clear technological advantages in terms of mining with state-of-the-art technology with minimal environmental impacts, opening of trade routes in the Arctic in conjecture with its rich mineral resources and fragile environment provides a unique opportunity for Swedish businesses to expand their market share by either winning projects in other Arctic states or selling their services and know-how to other mining operators. The likes of Atlas Copco, Sandvik, LKAB, Boliden, and Lundin Mining have been successful in creating a world class mining technology cluster and therefore have much to gain from – and contribute to the state coffers – an expansion of Arctic mining and trade.

Given the massive urbanization process that is underway today with two thirds of the world population expected to live in urban areas within the next four decades, there is no doubt that there will be a constant demand for metals mined and extracted in an eco-friendly way. Since the vast majority of this urbanization process is going to take place in Asia, ensuring effective and uninterrupted transport and logistical systems in the Arctic is thus of key paramount to Sweden's economic growth, especially since the majority of its mines are located in its Arctic region.

“Establishment of the majority of new mines is planned in northern Sweden where there are environments of high natural and cultural value, an active outdoor life and where the Sami have a long tradition of reindeer husbandry. It is important that the

mining expansion takes place in consensus with and with respect for other industries and values so as not to weaken the region's overall attractiveness”.

Indigenous People – Sami

Sweden recognized the Sami as an indigenous people in 1977 and hence they enjoy, at least on paper, special privileges and protection under Swedish law. However, prejudices are still prevalent in both the Swedish popular culture and day-to-day practices to the point that the Swedish Ombudsman against Ethnic Discrimination has admitted the persistence of racist characteristics of the Swedish Sami policy. As a result, Sweden has been the subject of frequent “international criticism for its handling of Sami questions”.

Swedish authorities' interaction with the Sami dates back to the 14th century when the Crown began colonizing Norrland. A process of taxation was subsequently introduced and intensified in the following centuries, as the Crown began to eye the riches of Lappmark. When the first silver deposit was discovered in Nasafjäll in the 1630s, the Swedish state tightened its hold over Sami affairs even further and embarked upon a forced assimilation process by encouraging mass migration from the south to Sami lands in the north of the country. By the 18th century, the settlers had gradually forced the Sami out and the state had begun to build churches as yet another means of forced integration, promoting its own religion at the expense of the Sami's. Given the economic importance of the region as a main source of income for the state, the Crown favored the settlers in terms of land ownership.

Current Swedish Sami policy has its roots in the outdated Reindeer Grazing Act of 1928, which “created a basis and a kind of truth for its description of who are to be considered genuine Sami”, assigning the reindeer herding Sami “a special entitlement to that industry and the right to hunt, fish and use the forest on crown land.” However, this classification institutionalized a very narrow and limited definition of who is Sami and therefore paved the ground for further discrimination by giving the state the right to define who is and who is not considered Sami and thus eligible to certain privileges. This discriminatory act is still in practice today, albeit not with the same intensity and force. In conclusion, “[T]he Sami in Sweden have hence been denied the rights that international law grants them as an indigenous people”.

Today, the Sami Parliament, established in 1993, lacks real political power, has no financial teeth, and thus is a weak institution compared to its counterparts in other Scandinavian countries. In fact, prominent scholars of the subject, such as Ulf Mörkenstam from Stockholm University, claim that giving the Sami of Sweden real political power has never been seriously considered by Swedish authorities and that its Parliament is a lame duck institution incapable of doing anything meaningful to ensure the political, economic, and cultural rights of the Sami. Given the current state of affairs as well as the long history of discrimination, it is no surprise that there is a lack of goodwill towards the Stockholm amongst the Sami, who are an integral

part of Sweden's Arctic region. As such, it seems that the Sami constitute the weakest link in Sweden's domestic Arctic policy. The good news for Sweden is that the largest Sami population outside Sweden lives in Norway, a close ally, and that its own Sami population is immune from foreign meddling. Had Russia had a sizable Sami population of its own, it is not far-fetched to assume that Stockholm might have felt the need to address, and indeed compensate for, its past mistakes much more urgently. Still, it is in Stockholm's best interest to strive for devising policies aimed at addressing past injustices, especially if it is to realize the full potential of its Arctic mineral resources, which will not be possible with intense opposition from the Sami.

“An Arctic strategy for northern Sweden,” Atle Staalesen, The Barents Observer, 7 November 2016 [77] <https://thebarentsobserver.com/en/arctic/2016/11/arctic-strategy-northern-sweden>

Overview:

The region of Norrbotten intends to take on a stronger role in Arctic affairs.

So far, we have missed a regional anchoring in Arctic affairs, Sweden's Ambassador to the Arctic Council, Andres Jato, said as he paid a visit to the city of Luleå last week.

That is about to change now, the diplomat underlines to newspaper Affärer I Nord.

Norrbotten is becoming a good example for all regions in the Arctic.

Jato argues that regional efforts being made to combine economic development with environmental sustainability are unique. He especially refers to the ongoing moving of the mining town of Kiruna and plans by companies SSAB, LKAB and Vattenfall to produce steel without use of coal.

Let's make Norrbotten to an Arctic role model. Norrbotten will become a leading Arctic region and show the world that the climate challenge can be combined with economic growth, the ambassador says to ArcticNow.se

Current & Relevant Information:

Regional authorities in Norrbotten wants the new document to serve as a political platform for Arctic development. It is elaborated by the Norrbotten regional council along with several of the municipalities in the region.

There is a need for a stronger consciousness among us all about the fact that Norrbotten is part of the Arctic and that we can use our location as a springboard for regional growth, regional politician Kent Ögren says in a press note from the Norrbotten administration.

According to Ögren and the strategy elaborators, there is major interest also among national authorities about the regional Arctic strategy, which they believe ultimately could set a footprint on the level of the EU.

The Arctic region is undergoing major change with regard to climate issues, as well as extraction of natural resources such as oil, gas and minerals. New preconditions for shipping, trade and energy production are in the making. This all provides opportunities for Norrbotten to take part and influence, the Norrbotten regional government says.

“Sweden’s Arctic Strategy,” Vladimir Koptelov, RIAC, 4 September 2012 [78]
<https://russiancouncil.ru/en/analytics-and-comments/analytics/sweden-s-arctic-strategy/>

Overview:

Sweden does not have direct access to the Arctic Ocean. However, due to its geographical location, it shows significant activity in Arctic affairs. Sweden announced its first Arctic strategy in early 2011. This strategy is, on a number of aspects, in line with Russia’s vision of the situation in the Arctic, which may serve as a favorable political background to increase bilateral cooperation between the two countries. At the same time, some provisions of the document show difference between Russia and Sweden in approaches to specific problems in the Arctic.

Current & Relevant Information:

Sweden’s Arctic Strategy

On the eve of its chairmanship of the Arctic Council (May 2011), Sweden announced its first Arctic strategy, which is regarded as a “starting point” for further cooperation in the Arctic. The document entitled “Sweden’s Strategy for the Arctic Region 2011-2013” outlines the key national priorities, objectives and ways to achieve them.

The document specified the following as the main objectives of cooperation in the Arctic:

- ensuring that the Arctic remains an area of low political tension;
- strengthening the Arctic Council (AC) in its role as the central multilateral forum for Arctic-related issues and the Barents Euro-Arctic Region cooperation body;
- promoting the development of an EU Arctic policy and promoting the EU as a relevant cooperation partner in Arctic issues;
- strengthening interaction between the AC and the Barents Euro-Arctic Council (BEAC), as well as EU’s cooperation programs and funds;
- sharpening the attention of the Nordic Council of Ministers (NCM) to Arctic-related project activities that supplement the activities of the AC;
- implementing cooperation projects in the Arctic in accordance with the rules of international law, including the United Nations Convention on the Law of the Sea and other international treaties.

Climate and the environment, economic development, and human dimension were named as Sweden's priorities in the Arctic.

The proposed set of mechanisms for achieving the objectives, which are traditional for northern European countries, includes promotion of positions in international organizations (AC, BEAC, EU, UN, International Maritime Organization), active interaction with neighboring states (including within NCM), implementation of plans and programs on promoting economic and social development of the country's northern regions.

A number of priorities – environmental protection against climate change, human dimension and the issues of indigenous peoples of the North, and strengthening of the AC – make up the foundation of Sweden's Chairmanship Program for the Arctic Council 2011-2013.

Sweden's priorities and Russia's interests in the Arctic

From the point of view of Russian interests in the Arctic, the Swedish strategy contains a number of positive elements.

Against the background of continuing apocalyptic predictions and concerns about potential conflicts in the Arctic due to the establishment of the outer limits of the continental shelf and exploitation of natural resources, a unique statement in the Swedish strategy that the Arctic is a region with a low level of tension and that the popular term "Arctic gold rush" does not have any objective basis is important.

The desire declared by Sweden to, in every way possible, promote the strengthening of the AC as the head political structure on issues of cooperation in the Arctic is equally important. Expanding the jurisdiction of the AC, turning it into a fully-fledged international organization with its secretariat and project budget, which is capable of not only coordinating the priority areas of cooperation, but also implementing applied and practical projects, developing international agreements that are mandatory for all member states, are certainly beneficial to all the Arctic Council members.

However, it should be noted that reducing the need for the Arctic coastal states to drive forward issues within the "Arctic Five" (Russia, USA, Canada, Denmark and Norway) is seen by Sweden as one of the arguments in favor of strengthening the Arctic Council. According to the Swedish side, this will allow the status of the Arctic Council to be maintained and for Sweden, Finland and Iceland to be able to participate in political decision-making on Arctic topics with their legitimate interests being taken into consideration

The matter is that Sweden, Finland and Iceland feel wounded because they have twice not been invited to the meeting of foreign ministers of the five Arctic coastal states – in May 2008 in Ilulissat (Greenland) and in March 2010 in Chelsea (Canada). These meetings reached principally important agreements, in particular, the fact that any overlapping claims in the Arctic will be governed solely by the rules

of international law, primarily, the United Nations Convention on the Law of the Sea of 1982. Sweden, Finland and Iceland have repeatedly expressed concerns that events in an “Arctic Five” format may weaken the Arctic Council.

From the Russian point of view, the five coastal states have a special responsibility for the situation in the area of the Arctic Ocean, and the “Arctic Five” format possesses an independent value. It is this group of five countries that initiated the modernization and strengthening of the AC, increase in its status as a central organization for multilateral cooperation in the Arctic, and establishment of new areas of cooperation.

In the strategy, attention should be drawn to one other point – Sweden’s intention to actively promote the involvement of the EU in the discussion of Arctic affairs. At the Arctic Council Ministerial Meeting that took place in Nuuk in May 2011, the Swedes persistently spoke out in favor of granting an observer status to the EU, warning that by doing otherwise, the Ministerial Meeting would fail and the Arctic Council would discredit itself in the eyes of the world community.

Russia’s position on this issue is more balanced: given the large number of candidates (among the contenders are also Italy, China, South Korea, Japan and Singapore), it is necessary to first establish clear criteria for granting the observer status and its parameters, and then take a decision at the Ministerial Meeting in 2013. However, the introduction of such criteria and parameters (approved at the AC Ministerial Meeting in Nuuk in 2011) does not mean that the AC is slamming the door to applicant countries. The purpose of the procedure for consideration of applications for the observer status is to not be isolated in the Arctic from the rest of the world, but to create, under new historical conditions, guarantees that the observers will respect the sovereignty, rights and jurisdiction of the Arctic states, that the “rules of the game” in the Arctic will be articulated by the Arctic states themselves, and that only them based on a consensus will determine the basic parameters of the development of situations in the region without outside interference.

The prospects of Russian-Swedish cooperation on Arctic issues

Although the Swedish strategy designates Russia as one of the main “players in the Arctic field”, it does not mention the country as a possible partner for cooperation in bilateral contexts (though the strategy does not refer to other Arctic states as such, either, with the exception of Northern-European countries). In most cases, Russia appears in the context of assessment of the prospects for improving the activities of the AC and BEAC.

Sweden’s lack of direct access to the Arctic Ocean, on the one hand, completely eliminates the possibility of the issue of division and use of maritime areas and the continental shelf in bilateral relations, and on the other hand – limits the prospects for cooperation on relevant issues such as ensuring the safety of maritime

navigation (protection of the marine environment, search and rescue), exploration and exploitation of natural resources, especially hydrocarbon resources.

As the authors of the strategy note, due to the lack of the Arctic coast Sweden has no direct energy interests in the region and, therefore, does not participate in cooperation on energy issues. At the same time, there is a possibility of hiring Swedish enterprises as subcontractors, especially in gas and oil production in the Arctic.

Given the priorities defined in the strategy, joint activities on environmental protection, development of mineral (ore) resources, and protection of the interests of indigenous peoples of the Arctic are more promising in terms of expanding cooperation in bilateral and multilateral contexts.

In the environmental field, elimination of “hot spots” in the North-West of Russia can be included in the number of promising areas of cooperation. The efforts shown by Sweden in this sector under its chairmanship of BEAC in 2009-2011 deserve support. These efforts include the design of financing schemes for the Barents Window environmental projects through the creation of a fund of SEK 12 million. Elimination of “hot spots” in Russia will be a significant contribution to the implementation of the initiative of the Russian leadership on carrying out a “general cleaning” in the Arctic.

There is a serious cooperation potential in the field of mining ore resources. Sweden’s desire to expand sales markets for mineral raw materials deserves support, but with certain reservations. In Swedish initiatives, this subject is dominated by the idea of developing mining as a source of supplying EU countries with strategically important raw materials. The Russian point of view is as follows: expansion of cooperation with the EU should not lead to the transformation of the Barents Euro-Arctic Region into “Brussels’ raw materials basket”, but should rather have a broader scope, with a focus on high technology and innovation.

Strengthening the role of the Arctic as a supplier of minerals has another component for cooperation – development of transport links, particularly, to the countries of the Asia-Pacific region. In this context, the good prospects of joint usage of the Northern Sea Route as the shortest water route joining the north of Europe and the Asia-Pacific Region are becoming visible.

An analysis of Sweden’s arctic strategy shows that opportunities for expanding bilateral Russian-Swedish cooperation in the Arctic are quite limited. They come down mainly to environmental protection, minimization of the negative impacts of climate change, research, preservation of the culture, traditions, and languages of the indigenous peoples of the North, and transport development. In this regard, cooperation between Russia and Sweden in the Arctic Council and the Barents Euro-Arctic Council is the most promising area, capable of giving the greatest practical effect. Despite some differences in political approaches, Sweden can

become Russia's powerful partner in the development and implementation of projects that meet Russia's priority interests and focus on the Russian territory.

“Swedish Foreign Ministry criticizes US stance on Arctic Council,” Teller Report, 2 September 2019 [79] <https://www.tellerreport.com/news/2019-09-02---swedish-foreign-ministry-criticizes-us-stance-on-arctic-council-.HJ7xEnPcHr.html>

Overview:

Swedish Foreign Minister Margot Wallström criticized the US stance on the Arctic Council, calling it dangerous and regrettable.

Current & Relevant Information:

The diplomat expressed concern about the actions of the United States, which led to the fact that the Arctic Council in May for the first time did not adopt a joint declaration on climate.

“This (climate in the Arctic region. - RT) is extremely worrying. This is a matter of science. You have a right to your own opinion, but not to your facts. This applies to the Arctic region,” the Financial Times quoted her as saying.

Wallstrom also criticized a statement by US Secretary of State Mike Pompeo about the allegedly aggressive behavior of China and Russia in the Arctic.

“The Arctic Council has never set itself the task of discussing security policy issues. This is a non-military and to some extent peaceful council, where other issues are discussed. They (USA. - RT) want to turn it into something else,” said the Swedish Foreign Minister.

Previously, Germany opposed the militarization of the Arctic.

“Speech and interview of the Swedish Ambassador for the Arctic Affairs Björn Lyrvall,” UArctic, 29 October 2019 [80] <https://www.uarctic.org/news/2019/10/speech-and-interview-of-the-swedish-ambassador-for-the-arctic-affairs-bjorn-lyrvall/>

Overview:

Raising the importance of international cooperation, gender equality and environmental challenges in the Arctic, the Swedish Ambassador for Arctic Affairs Björn Lyrvall gave a powerful speech and video interview at the Stockholm City Hall during the meeting of the Council of UArctic.

Current & Relevant Information:

After welcoming the UArctic members on behalf of the Swedish Government, Ambassador Björn Lyrvall highlighted the creation of UArctic Association as an important step in the successful life of UArctic. Through his speech, Björn Lyrvall emphasizes 4 points for research and scientific cooperation in the Arctic.

"Perhaps self-evident: The Arctic is important. It's about climate change and environmental challenges. But also, Security, Economic development. The well-being of the people of the Arctic. Extraction of resources. Transports. This all paves way for a big power game - a new "great game". As you know, China in its first Arctic strategy published a year ago talks about the importance of the Arctic for the survival, the development and the shared future for mankind. And goes on arguing for research collaboration. The EU, on its part, has also published its Arctic communication, also with an emphasis on research, and appointed an Arctic Ambassador.

On the political level in Sweden, there is a broad understanding of the importance of Arctic affairs, although not always matched by the appropriate resources. The Swedish Arctic strategy from 2011, updated in 2016, focuses on the swift changes in the region, and asks for deeper international and regional cooperation. And stresses the importance of research outlining that "Sweden will continue to be a leading research nation in the climate and environmental field and will focus on the human impact of climate change". We'll start work on a new Arctic strategy this fall, and I'm sure the focus on research cooperation will be even stronger.

There's a lack of data about Arctic developments. As a layman, one would think that every square meter on this planet has been studied. But the High Arctic is a "white spot" on the map in this respect. Need considerably more data points, not least from the Arctic wintertime. And that's difficult and expensive. This calls for international mobilization of resources and cooperation. Science Diplomacy.

This is urgent. We don't have to remind ourselves that the Arctic is undergoing enormous and rapid changes. An escalating development. Warming twice the rate as the world at large. Even with a strict implementation of the Paris agreement, we will not see a stabilization in our lifetimes. Whatever we do, Arctic challenges will rise. A rather dramatic picture is painted in Arctic Council expert reports, also calling on Member States to prioritize research and knowledge building to enhance certainty in predictions of changes to facilitate the development of effective adaptation responses. We have no time to waste. And once again there's a need to work together. As you do through UArctic.

The benefits of this cooperation go beyond research results. As a diplomat I can say, that Arctic cooperation contributes to de-escalation and international cooperation also in other areas. I would argue that Science Diplomacy works. The Arctic Council with its eight member states, six PPs and almost 40 observers, must, despite the recent setback at the Rovaniemi ministerial, be considered a success story. Promoting world class knowledge production, having managed to reach an agreement on Science cooperation. The Second Arctic Science Ministerial was held in Berlin last fall, bringing together ministers from 26 countries. Powerful Swedish research ice-breaker Oden went to the North Pole on an expedition for the ninth time last August. This was yet another example of a fruitful collaboration between our

Polar Research Secretariat and the US National Science Foundation, opening up for broad international participation.

Add to that our research stations in Abisko and Tarfala as important Swedish contributions, and dynamic university cooperation such as Arctic Five in the north. And Sweden intends to continue to contribute to education and research in and about the Arctic.

The UArctic in its Strategic Plan 2020 sets out important goals for the North – under the headlines Educational Access for Northern Students, Research Representation in the North, Expanding Knowledge of the North and an Engaged Membership Network. A pretty impressive set of tasks. And the good story is that a lot has already been done to achieve them."

[Link to the full speech](#)

[Link to the video interview](#)

F. Finland:

“The Arctic Council: About: Arctic States: Finland,” Arctic Council, 2020 [81]
<https://arctic-council.org/en/about/states/finland/>

Overview:

Quick Facts

Arctic Territory: Northern Ostrobothnia, Kainuu and Lapland

Arctic Population: 180,000 (Lapland), 5,500,000 (Finland)

Arctic Indigenous Peoples: Saami

Current & Relevant Information:

Finland and the Arctic Region:

While Finland’s Strategy for the Arctic Region 2013 defines the entire country as Arctic, nearly one-third of the country’s land mass lies above the Arctic Circle in the province of Lapland. Despite its vast size, Lapland is sparsely populated with just under 180,000 inhabitants, while Finland’s total population exceeds 5,500,000.

Finland has contributed expertise and modern technology to industries such as Arctic construction, Arctic environmental technology and the development of Arctic infrastructure, transportation and navigation in ice-covered waters. It also houses various Arctic research and educational programs and institutions. Several biological research stations are located in Lapland, where Arctic ecology is studied. The Arctic Centre, an institute affiliated to the University of Lapland in Rovaniemi, carries out interdisciplinary research on the effects of global changes and on the natural balance of Arctic nature and Arctic societies. The University of Oulu has a research

focus on Arctic medical sciences. Arctic-related issues are also included in teaching and research programs of many other higher education institutions in Finland.

Indigenous Peoples:

The Saami are an Indigenous people who live in Sápmi, an area that stretches across the northern parts of Norway, Sweden, Finland and Russia. The Saami population is estimated between 50,000 and 80,000, with approximately 10,500 located in Finland. The preservation of the Saami's languages and culture is governed by an autonomous Saami parliament in Inari, Finland.

Finland in the Arctic Council:

Specifically, during its first chairmanship, Finland's priorities included:

- Sustainable development in the Arctic
- Capacity building to increase the ability at all levels of society to access and manage different capital resources to develop sustainably
- Promoting decision-making based on science informed by traditional knowledge

Throughout its most recent chairmanship, Finland's priorities included:

- Environmental protection, including the exchange of information on best practices and emerging technologies to promote sustainable and responsible development in the Arctic
- Enhancing the connectivity and availability of broadband services in the Arctic
- Developing circumpolar meteorological and oceanographic cooperation to improve public safety, benefit international shipping and air traffic and enhance Arctic climate science
- Enhancing fair educational opportunities in the Arctic by strengthening the network of education specialists in cooperation with the University of the Arctic

Key accomplishments:

- Under the Finish Chairmanship, the country drove actions to enhance the Arctic Council's relations with its Observers by encouraging Observers to present their work during special sessions organized at SAO plenary meetings, which allowed participants to share information and expertise, and develop closer collaboration between the Council's subsidiary bodies and partners
- Finland assisted in the establishment of the Arctic Biodiversity Congress, which brought together scientists, policymakers, government officials, Indigenous peoples, students, industry and civil society representatives to discuss challenges facing Arctic biodiversity and actions for conservation and sustainable use of the Arctic's living resources

- Before the official conception of the Arctic Council, Finland took the initiative in commencing organized cooperation among the eight arctic countries for the protection of the Arctic environment. This initiative led to the historic Ministerial Conference in Rovaniemi in 1991, which was the first ministerial meeting of the Arctic countries and started a continuous collaboration known as the "Rovaniemi Process"

“State of the Arctic Strategies and Policies – A Summary,” Lassi Heininen, Arctic Yearbook, 2012 [82]

https://arcticyearbook.com/images/yearbook/2012/Scholarly_Papers/1.Heininen.pdf

Abstract:

In the past five years, the eight Arctic states have each published comprehensive Arctic strategies, a manifestation of the growing political interest in the region. This article examines the Arctic strategies of each Arctic state in turn. It goes on to identify common themes found in the strategies: security and sovereignty; economic and business development; sustainable and regional development; environmental protection and climate change; safety, search and rescue; human dimension and peoples; research and knowledge; and international cooperation. Similarities and differences between the Arctic states on these key themes are examined, providing an insightful illustration of current regional values and interests.

Current & Relevant Information:

Background

The recent launch of national strategies and state policies on the Arctic and Northern affairs by the governments of all eight of the Arctic states clearly show, even manifest, the growing interest of these states toward their own northernmost regions, as well as the entire Arctic region. The same level of interest towards the Arctic has also recently been demonstrated by several powers from outside the region, including China, Japan and South Korea in Asia, and France, Germany and UK as well as the European Union in Europe. Comparing this to the situation in the 1990s as regards internal and foreign policies of the Arctic states demonstrates a clear shift in interest towards the North, since in the early 1990s there were only two countries - Canada and Norway – with “an explicit Arctic policy” (Heininen, 1992).

The Arctic strategies and state policies of the Arctic states, as well as agendas and emerging policies on Arctic/Northern issues by non-Arctic states, can be seen as reflections of the changing conditions in the entire Arctic region on one hand. On the other hand, they show the growing international and global interest toward the Arctic region, and the entire North, and the emerging kinds of interrelations between the region and the rest of the globe (Heininen, 2004). Consequently, they can be interpreted as responses to the significant, multi-functional and global change(s) of the early-21st century in the Arctic environment, geopolitics and economies as well

as Northern security. This is rather obvious in the cases of Canada, Finland, Iceland, Sweden and the USA, though the reasons for this range from the broad to the narrow: security risks and threats to sovereignty as a result of the potential impacts of climate change are large factors in Canada's Northern Strategy. The growing global interests toward the Arctic region and its rich natural resources lie at the core of the strategies of Finland and Iceland. The Swedish strategy's response to the challenge is to emphasize biodiversity and the human dimension. And the US policy emphasizes national and homeland security.

In the cases of the Kingdom of Denmark, Norway and the Russian Federation there are other motivations which are as, or even more, important: the new self-governing status of Greenland as well as the first ministerial meeting of the five littoral states of the Arctic Ocean provides a central focus in the Kingdom of Denmark's Strategy. The Norwegian High North strategy is very independent and reflects the new Norwegian-Russian relationship in the Barents Sea region, emphasizing closer bilateral cooperation between the two countries. The Russian State Policy first and foremost is a response to and reflection of the domestic politics of the Federation.

Finally, a common feature in all of the Arctic strategies and state policies is that each of the Arctic states would like to become a natural/real, even leading, actor/player in the Arctic, or in some field of northern affairs, or would like to maintain a leading role there.

This article discusses and compares the recent strategies, or state policies, for the Arctic region of the Arctic states (here Arctic strategies), and their priorities and main objectives with an aim to emphasize their outlining differences and similarities. It is neither an inventory nor analysis on the content of the strategies, but is based on the author's inventory and comparative study on the Arctic strategies and policies (Heininen, 2011). There are also a few other comparative studies on Arctic strategies, though mostly on those of the five littoral states of the Arctic Ocean - Canada, Denmark or Greenland/Denmark, Norway, Russian Federation and the USA. For example, Brosnan et al. (2011) looks at and discusses how cooperation and conflict appear in the Arctic strategies of these five states. Correspondingly, Summers (2010) studies the littoral states and their relations with a focus on energy and the environment, and also looks at China and the European Union as new players in the Arctic.

I will begin by briefly introducing how each Arctic state has (re)positioned itself in the Arctic region, and then by providing an overview of the Arctic strategies and their priorities. It briefly describes how the states (re)position and (re)define themselves as Arctic states/nations, and how the Arctic is (re)mapped. Finally, the paper proceeds to a comparative study between the Arctic strategies based on the explicit priorities or priority areas through nine inwards – and outwards-oriented indicators, emphasizing outlying differences and similarities between them.

Finland's Strategy for the Arctic Region

"Finland's Strategy for the Arctic Region" was adopted by the Finnish Cabinet Committee on the EU and launched in June 2010 (Prime Minister's Office, 2010).

Finland is one of the eight Arctic states with significant economic, political and security interests in the Arctic region. Consequently, the Strategy document clearly states (for the first time) that "[a]s an Arctic country, Finland is a natural actor in the Arctic region" (Prime Minister's Office, 2010:7). Finland has also been active in international Northern and Arctic undertakings like, for example, the initiatives for the Arctic Environmental Protection Strategy (AEPS) and the EU's Northern Dimension (Lipponen, 1997), and has long had some sort of 'de facto' Northern (dimension) policy (Heininen, 1999: 150-198). Finland has not, however, had an official Arctic policy of its own before.

After the five coastal states of the Arctic Ocean had adopted their respective Arctic strategies/state policies and had their first ministerial meeting in May 2008, Finland 'woke up' and started to become interested again in Arctic issues. Behind this re-awakening was the growing interest in Arctic issues in Finland, particularly as regards economic interests and climate change. As a result, Finland started to prepare and roll out a national Arctic strategy, drafted by a working group representing all the ministries appointed by the Prime Minister's Office in February 2010. This governmental activity was accelerated by the report on "Finland and the Arctic Regions" issued by the Foreign Affairs Committee of the Finnish Parliament as well as by a general discussion of Finland's activities in the Arctic in Parliament in November 2009 (Ulkoasiainvaliokunta, 2009).

Finland's Arctic Strategy clearly states that the Arctic region is a stable and peaceful area, but, it adds, significant changes are taking place in the region, including climate change and increased transportation. Consequently, the global significance of the region is growing. Due to all of this, a holistic evaluation on the current situation and circumstances is required, and it is briefly touched upon in the introduction to the Strategy.

The document consists of six substantial chapters, the first four of which define Finland's political objectives in four important sectors, followed by chapters on policy tools and the EU and the Arctic. The first sector "Fragile Arctic nature" states that "the environmental perspective must be taken into account in all activities in the region" (Prime Minister's Office, 2010: 13), and climate change, pollution and biodiversity must be given considerable attention. Climate change is defined as one of the most serious challenges to the Arctic, and increased human activity in the region raises the risk of environmental pollution. Finland's main objectives here are threefold. It is also said that Arctic research, regional climate models and long-term monitoring of the environment should feed into decision-making processes, clearly indicating the importance of the interplay between science and politics.

Finland's objectives in the second sector, "Economic activities and know-how" are ambitious, and here the Finnish Strategy document emphasizes economic activities, as do most of the other Arctic states' strategies, and can be considered business-oriented. The Strategy reflects the desire to promote and strengthen Finland's position as an international expert on Arctic issues and know-how in the fields of winter shipping, sea transport and shipbuilding technology, expertise in forest management, mining and metals industry, and cold-climate research. Although protecting Arctic ecosystems is prioritized, it seems somewhat short-sighted not to give greater emphasis to the promotion and export of Finnish know-how and expertise in environmental technology.

Finland's objectives in "Transport and Infrastructure" are understandable, since the development of transport, communication and logistic networks both in Northern Finland and the Barents Region is much needed. There is also an urgent need to ensure safe navigation in northern seas, both in terms of the physical impact of climate change and growth in seagoing transport. The fourth sector of the Strategy, "Indigenous Peoples", will be realized by facilitating the participation of indigenous peoples in matters to do with their affairs and strengthening the status of the Barents Region's indigenous peoples. Absent, however, is a clear objective to ratify the Indigenous and Tribal Peoples 169 Convention (ILO 169).

In declaring the AC as the main forum for Arctic affairs and policy, and striving to promote international cooperation on Arctic issues at the global and regional level, as well as bilaterally, Finland is taking an important and timely step. Here it is imperative that the mandate of the Council be renegotiated and broadened, as Finland has proposed, so that it can leave its current state of political 'inability' behind. Finally, the EU's recognition of "the importance of the Arctic Region" (Prime Minister's Office, 2010: 45), and that the Union is accepted as a (global) Arctic player, are emphasized. Here, Finland could be seen to be promoting itself as an advocate of the EU in Arctic affairs. This sounds logical from Finland's point of view, but may involve risks for Finland as an AC member and more generally in the context of multilateral Arctic cooperation due to a divided opinion regarding the role of the EU as an Arctic actor among some Arctic states and Northern indigenous peoples' organizations.

All in all, Finland's Arctic Strategy covers most of the features of a modern strategy document in adopting a holistic approach. It does not have clear priority areas, though there is an apparent preference for economic activities. Finally, the Strategy can be seen as reflecting and responding to the recent significant and multi-functional environmental and geopolitical change(s) in the Arctic region, not least by its worldwide approach to the region.

"Finland," The Arctic Institute: Center for Circumpolar Security Studies [83]
<https://www.thearcticinstitute.org/countries/finland/>

Overview:

Finland's interests in the Arctic region are mainly concentrated on sustainable development, business opportunities, Indigenous issues as well as promoting the European Union as a stakeholder in the Arctic. The main objectives of Finland's Arctic Policy are to strengthen multilateral Arctic cooperation, take part in shaping the EU's Arctic policy and raise Finland's profile as an expert in Arctic issues.

Current & Relevant Information:

Finland's first "Strategy for the Arctic Region" was completed in June, 2010. In 2013, the Finnish Government presented an updated version of the country's strategy for the Arctic region. The revised strategy is more business-oriented and based on four key pillars: (1) Finland as an Arctic country, (2) Arctic expertise, (3) sustainable development and environmental considerations and (4) international cooperation.

Finland has long been an active member of the Arctic community and played a key role in calling the first minister-level meeting for Arctic countries in 1991. The initiative for international cooperation in environmental protection in the Arctic was already formed in 1989. The meeting in Rovaniemi was a stepping stone for international environmental cooperation in the Arctic region and was followed by the 'Rovaniemi process.' This eventually led to the founding of the Arctic Council—an effort co-led by Canada.

After joining the European Union in 1995, Finland promoted itself as a northern nation with good relations with Russia and advocated the Northern Dimension of EU foreign policy. This encouraged more southern countries in the EU to turn their attention towards the north. Finland's Arctic Ambassador and Senior Arctic Official to the Arctic Council, Aleksi Härkönen, has highlighted the EU's role in the Arctic and wants the agenda to be in line with Finland's Arctic strategy and EU's policies for Finland's Chairmanship of the Arctic Council. Finland considers the EU as one of the major stakeholders in Arctic affairs.

Following the United States, Finland is currently the chair of the Arctic Council from 2017 to 2019, emphasizing Arctic cooperation on the UN Sustainable Development Goals (SDGs) and the implementation of the Paris Agreement on climate change. The previous Finnish Chairmanship of the Arctic Council from 2000 to 2002 focused on launching projects designed to advance economic and social development as well as strengthening the Arctic Council and its international reputation. Finland also initiated an evaluation process for the Arctic Council's activities to enhance environmental protection and promote sustainable development. During its Chairmanship, Finland attempted to encourage closer cooperation between the European Union and the Arctic Council.

In 2017, in accordance with its chairmanship, Finland issued an action plan for the update of its Arctic strategy, which was decided in 2016. It defines its roles and

objectives in the Arctic in more detail. Priorities in the update are the country's Arctic foreign and EU policy, the commercialization of Arctic expertise, sustainable tourism and supporting infrastructure solutions.

Finland is also a member of the Nordic Council and the Barents-Euro Arctic Council and held the presidency of the Nordic Council of Ministers in 2016, where it promoted the theme "water, nature and people." The aim was to contribute to removing obstacles to cross-border freedom of movement, promoting digitalization and strengthening the importance of the Nordic countries jointly in the European Union.

"Finland's race for Arctic riches," Reid Standish, Politico, 28 March 2018 [84]
<https://www.politico.eu/article/finlands-race-for-arctic-riches-resources-shipping-lanes-high-north/>

Overview:

A new frontier of geopolitics is opening up as countries move to control lucrative and strategically important natural resources and shipping lanes in the Arctic, and Finland doesn't want to be left behind.

The unprecedented rate at which the polar ice caps are melting is creating a flurry of activity. So far, Russia and China are leading the charge for the High North.

Moscow has been keen to stake its claim to an estimated \$35 trillion worth of untapped oil and natural gas under the Arctic seabed and to exert its sovereignty over the Northern Sea Route — a shipping lane through Russia's northern coast that represents a one-third quicker alternative from Asia to Europe than the Suez Canal. Beijing has also pushed its way into the region, announcing its vision in January for a "Polar Silk Road" as part of its trillion-dollar "Belt and Road" initiative.

For Finland, this presents a host of new opportunities.

Current & Relevant Information:

Nestled in pine forests just 160 kilometers below the Arctic Circle, the snow swept city of Oulu along the northernmost reach of the Baltic Sea is perhaps best known as the home of Nokia's research and development facilities. But the city of 200,000 may soon be a vital hub for Helsinki as the government looks to leverage Finland's location as the European Union's northernmost point to become the bloc's gateway to the Arctic and to Asia over the next 30 years.

In the hope of gaining access to the potential flow of goods along the Northern Sea Route, the Finnish and Norwegian governments announced plans this month to move ahead with building a railway that would connect Finland, through Norway, to its deep-water ports in the Barents Sea.

A joint study by Oslo and Helsinki says the proposed railway would go from Oulu along to the Bay of Bothnia and connect to Rovaniemi in Finnish Lapland before ending in Kirkenes in northern Norway. Finalizing the rail link will require cutting through many layers of red tape, but the countries will begin looking at cost breakdowns and precise routing over the next two years.

Both the Finnish and Norwegian governments see the railway as an avenue for economic growth in their underdeveloped northern regions that could help a booming tourist industry, but also provide a more direct route for exporting Arctic resources from the area's lucrative mining, forestry and fisheries industries to Asian markets.

"There is so much immense potential in the Arctic and the increased involvement of all these players has big incentives," said Harri Mäki-Reinikka, Finland's ambassador for northern policies. "Why wouldn't we use the opportunities that are being presented to us?"

Timo Lohi, a bureaucrat from Sodankylä, a municipality north of the Arctic Circle that is home to Finland's largest mine, believes the project would be positive for the communities in the north.

As the development manager for Finland's Northern Lapland region, Lohi is a long-time cheerleader for this pivot toward Arctic development. He says his local-level efforts have received interest from Asian businesses and even officials from China, and that now it's for Helsinki to bring the project to fruition.

"It's still all very long-term at the moment, but I think this is our future," said Lohi. "Now it's up to the national government to find a way to make it work."

New great game

A warming Arctic might appear like good news for transport. But shifting conditions in northern waters make it more likely seas will freeze unpredictably. Despite the 2017-2018 winter having seen the second-lowest amount of Arctic sea ice on record, the Baltic was almost entirely frozen. Off the coast of Oulu, icebreakers could be seen working overtime into March, with their lights beaming into the pitch-black night across an otherwise frozen sea.

Further north, climate change is opening up the Northern Sea Route faster than many expected. A Russian tanker transited the shipping route in the summer without an icebreaker escort and another tanker made history in February by completing the journey on its own in the wintertime. Similarly, traffic on the Northern Sea Route set an all-time high in 2017, transporting 9.7 million tons in volume, according to the Russian Ministry of Transport.

But the Arctic is still a long way off from upending global trade. Only a small fraction of that 9.7 million tons — 194,364 tons — actually moved the entire route and the

vast majority was internal traffic transporting construction equipment for Russian energy projects or moving natural gas, mostly from the \$27 billion Yamal LNG project, to Asia.

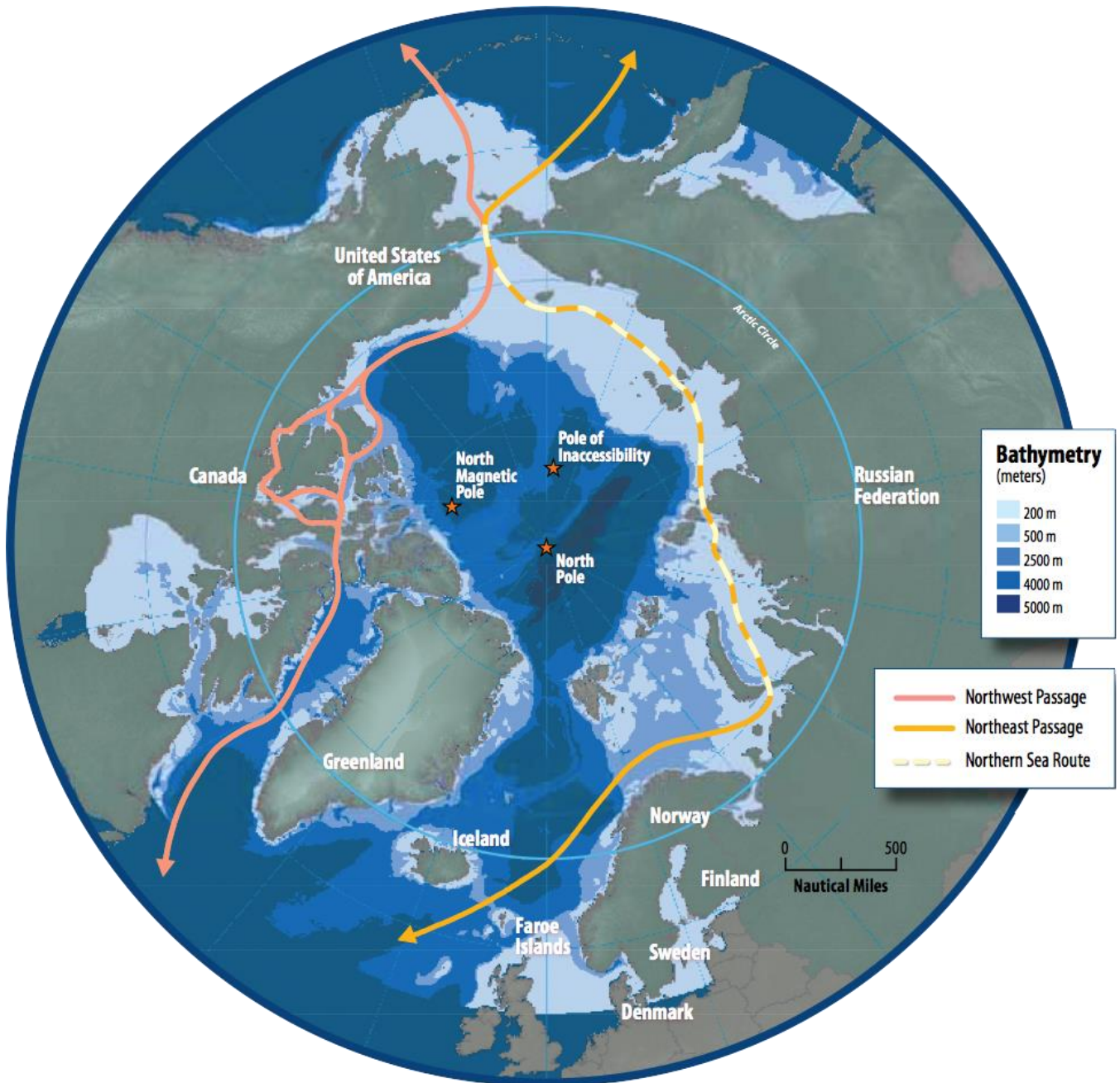
Shipping in the Arctic is still difficult and expensive, and while future Russian energy projects and demand from Asia are likely to see an increase in activity along the Northern Sea Route, many experts still question its potential to become an established channel for shipping cargo between Europe and Asia.

“There will be a lot more activity in the Arctic, especially for the [Northern Sea Route]. But there’s also going to be limits,” said Daria Gritsenko, an expert on Arctic shipping at the University of Helsinki. “Don’t expect it to become the next Suez Canal.”

This may undercut some of the economic incentive for Finland to build a railway to the Arctic, but the added activity — and competition between countries — could still play to Helsinki’s strengths. As countries like China, Russia and the United States increasingly look to the north, demand for icebreakers — and their ability to turn frozen waters into lanes for commerce or defense — is rising. That means more business for Finland’s world-leading industry.

About 60 percent of the world’s icebreakers are designed and built by Finnish companies. Aker Arctic, a partially state-owned Finnish company, designed 15 new LNG supertankers for Russia, each with built-in icebreaker capacity. Similarly, Arctia, Finland’s state-owned icebreaking company, operates the world’s second-largest fleet with eight ships, and is exploring ways to rent out the ships to other countries when they aren’t needed in Finnish waters.

“It will take years for many countries to build new icebreakers,” said Tero Vauraste, the CEO of Arctia, motioning at a map of the Arctic with a Finnish flag at the center in his Helsinki office. “So, we’ll provide our services to anyone that needs them.”



The Northern Sea Route, Northwest Passage and Northeast Passage | Arctic Council

The local Arctic goes global

Amid the talk of grand projects, there's still plenty of room for error and whether Finland's ambitions of gaining political and economic significance in the Arctic can be realized will depend on many factors.

For the disparate communities of the Arctic, the increased attention is both cause for celebration and concern. More development, tourism and industry mean more

economic opportunity, but it could also disrupt the way of life for indigenous communities, such as the Sami that live across northern Norway, Sweden, Finland and Russia.

Lohi, the official from Lapland, agrees that any future plans will need to be carried out in careful consideration with the Sami and said developers should better protect reindeer populations, as herding provides a major source of livelihood for Sami communities. In 2017, more than 100 semi-domestic reindeer were killed by freight trains in northern Norway on a line that passes through traditional grazing areas.

In addition to the Arctic railway, there are also more immediate plans to build a high-speed rail tunnel under the Baltic Sea connecting Helsinki and Tallinn. Once completed (December 2024 is the tentative date), the tunnel will provide a straight north-south connection with the proposed Arctic railway for Asian markets to mainland Europe through Finland.

"It's about trying to fix the problem of Finland being the periphery," said Peter Vesterbacka, a Finnish entrepreneur and former executive of Rovio, the gaming company behind Angry Birds, who is working to bring in Chinese investors through a public-private partnership to finance the tunnel. "For Europe, we are on the edge, but if you look at this from a Eurasian or Arctic perspective, we are right there at the center."

The Arctic has so far set itself apart from other regions as a place where countries have managed to peacefully resolve disputes and cooperate, but the north is hardly immune from the wider geopolitical winds. For example, just after the imposition of U.S. sanctions on Moscow in 2014 for its annexation of Crimea, ExxonMobil was forced to stop its work in Russia with Rosneft, the state oil company. Without the assistance of Exxon, Rosneft suspended its exploration of the massive Victory oilfield in the Kara Sea. While Moscow has since leaned more heavily on China for financing its projects, Western sanctions are a long-term hurdle for developing Russian-Arctic energy resources.

Similarly, with U.S. President Donald Trump now on the verge of entering into a trade war with China, there's plenty of opportunities for conflicts to jeopardize the High North's future as an area for global free trade.

"We are seeing protectionism taking place all around the world," said Vauraste, the Arctia CEO. "All these developments slow down the progress of Arctic trade."

"Foreign Policy Interests of Finland in the Arctic," Lassi Heininen, kas.de, 2014
[85] https://www.kas.de/c/document_library/get_file?uuid=700054f7-39fc-35bc-2fa1-f711a677bf97&groupId=252038

Overview:

Finland is geographically a northern European country and an integral part of the Nordic region. Culturally and geopolitically Finland is located between the East and the West. Finland is also a country with territories above the Arctic Circle, though without an access to the Arctic Ocean. Following from this, it has had cultural, environmental, economic, political, and security interests in the Arctic region. However, Finland to a greater extent used to be a Nordic country with clearly formulated interests within the Nordic region and the Baltic Sea region, as well as having good relations with neighboring Russia. These elements and aspects comprised the so-called 'de-facto' Northern dimension policy, based on Finland's entire foreign policy and activities in North Europe in the Cold War period. During the Cold War the official foreign policy of Finland, led by the President, and for a long time President Urho Kekkonen, was supported by all political parties in the Parliament, as well as the influential metal, paper, and pulp industry, the science community and many civil society organizations. The above-mentioned elements and aspects also guided Finland to launch a Northern Dimension policy after joining the European Union (EU) in 1995. This policy was well supported by most of the political parties, several civil society organizations, and partly by the science community, although among the latter one there was some skepticism about the real influence of the initiative.

Finland did not formulate its own national Arctic strategy or policy before 2010 and has at times lost its interests toward the entire North. Finland is, however, an Arctic state, and a forerunner of current international Arctic cooperation, most notably the AEPS initiative. According to official statements, "Finland has a primordial interest toward Arctic issues. Our geography and history make us an Arctic state." Due to the significant and multi-faceted change of the Arctic in the early 21st century, and after the five coastal states of the Arctic Ocean held their meeting in Ilulissat in Greenland in May 2008 when the first modern Arctic strategies were adopted, Finland 'woke up' and again became active in Arctic cooperation and issues. This renewed interest toward the Arctic was supported by the report on the region by the Finnish Parliament in November 2009. Furthermore, it was emphasized by the statement of Finland's first national Arctic Strategy that: "As an Arctic country, Finland is a natural actor in the Arctic region." According to the Strategy, which was adopted in 2010, Finland's political objectives are in substantial sectors of the environment, economic activities and know-how, transport and infrastructure, and indigenous peoples. It also emphasizes the Arctic as a stable and peaceful area, the importance of international cooperation there, and the Arctic Council as the main international cooperative entity in the region.

This chapter discusses Finland as a Northern country and an Arctic state, and describes and analyses Finland's foreign policy interests in the Arctic region and the entire North, particularly the Finnish Arctic strategy, as well as its initiatives for Northern and Arctic cooperation.

Current & Relevant Information:

Finland's Arctic Strategy

During the first decade of the 21st century, due to significant and multi-faceted change(s) in the Arctic, and after the five coastal states of the Arctic Ocean had their first ministerial meeting in May 2008 and adopted their respective Arctic strategies or state policies, Finland realized there is a new state of the Arctic and became more interested in Arctic issues.

This sparked a growing interest in Arctic issues within the political elite and on the part of industry in Finland. The Finnish science community was already integrated in growing international scientific cooperation on the Arctic, such as the International Arctic Science Committee, and Lapland and Oulu universities were involved in establishing the Northern Research Forum and the University of the Arctic. This emerging interest was especially evident among stakeholders in businesses and organizations involved in the pursuit of regional development, economics, and trade. This growing interest toward the Arctic was accelerated and supported by a report on "Finland and the Arctic Regions" issued by the Foreign Affairs Committee of the Finnish Parliament, as well as by general discussion of Finland's activities in the Arctic at Parliament in November 2009, where all the political parties showed clear support to make and adopt the first Finnish national strategy on the Arctic region. The Ministry of Foreign Affairs began a process of developing Finland's Arctic agenda with the objective of creating a policy or strategy. An ambassador for Arctic issues was named as Finland's "own northern envoy" in the summer of 2009.

A seminar for a Finnish research network on Northern Politics and Security Studies took place in Helsinki in February 2010 to produce material for a working group representing all the ministries, appointed by the Prime Minister's Office in February 2010, "to prepare a report on Finland's policy review for the Arctic region". This kind of procedure, to have an academic seminar as a pre-activity of an official document adopted by the Government, is a very Finnish way to implement interplay between science and politics, which the Northern Research Forum has done in the Arctic, and also globally, within the last 15 years. "Finland's Strategy for the Arctic Region" was adopted by the Finnish Cabinet Committee for the European Union (of the Government) in June 2010. It is based on proposals made by the above-mentioned working group of civil servants from different ministries (appointed by the Prime Ministers' Office). The issue re-emerged on the agenda of the Foreign Policy Committee of the Finnish Parliament in autumn 2010, when the Committee had its hearings and discussion on the Strategy. The Strategy defines Finland's objectives in the following substantial sectors: the environment, economic activities and know-how, transport and infrastructure, and indigenous peoples. These are followed by a list of different levels of means with which to achieve Arctic policy goals. Additionally, there is a chapter on the European Union and the Arctic Region. Finally, the Strategy offers conclusions and proposes further measures.

The Strategy document states that Finland is one of the northernmost nations of the globe, and an Arctic country. The Arctic region is a stable and peaceful area, but, it adds, significant changes are taking place in the region, including climate change and increased transportation. As global interest toward the region grows, so does its global significance. The Strategy has a specific focus on external relations. The four most substantial chapters are titled: “Fragile Arctic Nature”, “Economic Activities and Know-How”, “Transport and Infrastructure” and “Indigenous Peoples” and define Finland’s political objectives in those important sectors. They are followed by a chapter on “Arctic Policy Tools”, which includes policy activities at global and regional levels, bilateral cooperation, and funding. The next chapter, “The EU and the Arctic Region” deals with Finland’s policy objectives on the European Union’s activities in the Arctic, and to make the EU a relevant, perhaps even global, actor in the Arctic was per se one of Finland’s objectives.

The updated version of the Strategy was adopted as government resolution by Government in August 2013. It is based on the 2012 vision of the ‘Arctic’ Finland and consists of the four pillars of policy outlined by the Government: An Arctic country, Arctic expert, Sustainable development and environmental considerations, and International cooperation. It also includes four substantial sectoral chapters on education and research, business operations, environment and stability, and international cooperation. In addition, the strategy includes objectives and detailed actions to attain them.

Analyzing Finland’s Arctic strategy and policy:

When analyzing the 2010 Finnish Strategy there are eight relevant and interesting findings which characterize Finland as an Arctic as well as (Northern) European state: First, the Strategy is comprehensive and ambitious, and reflects great efforts in preparing and outlining Finland’s first Arctic strategy, clearly asserting itself as an Arctic state while referring to the European Union as “a global Arctic player”. The document was prepared by a working group appointed by the Prime Minister’s Office consisting of civil servants rather than a broader advisory board representing different stakeholders. A working group with broader representation and a mandate with a mission of follow up for the Strategy was appointed two months later. However, the whole process was greatly accelerated by the Finnish Parliament and promoted through its Foreign Policy Committee’s statement, as mentioned earlier. There were no public hearings or town hall meetings as a part of the process, unlike in 2013, and therefore it is very difficult to measure to what extent regional and local authorities, or the civil society, supported the initiative and strategy.

Second, the four main sectors and related objectives are according to Finland’s long-term national, political and particularly economic interests in the Arctic and generally in northern regions; they were also mentioned in the Statement by the Parliaments’ Foreign Policy Committee. It is not, however, entirely clear if they are meant to be priorities or priority area(s), or whether they are mostly objectives

supported by strong economic and business lobbies. In any case, the Finnish Strategy document strongly emphasizes economic activities, as do most of the other Arctic states' strategies. For example, it supports increasing marine traffic and transport, and better infrastructure, and there is a perceived need to develop transport and other logistical networks in both the Barents region and North Finland. This is clearly indicated by a list of five transport networks and corridors of Northern Finland which are under discussion; in reality only one or two of those may be implemented in the near future. On the other hand, some of the objectives, particularly those dealing with the drilling for oil and gas in the Barents Sea, can be seen as hopeful expectations rather than realistic goals, although a Finnish company Steel Done Group is involved in the Shtockman gas field project. The same applied when the Snöhvit gas field in the Barents Sea was developed by the Norwegians; expectations among Finnish companies, particularly in North Finland, were high, but very little was gained by them from that project.

Thus, the Strategy is business-oriented with a strong emphasis on economic activities, coupled with expertise, or know-how, particularly the utilization of natural resources, such as oil and gas reserves in the Arctic region. To a certain extent this is understandable, since this is a national report reflecting strong national interests and expectations of stakeholders in both business and organizations engaged in the pursuit of regional development and economic interests. This is also in line with a strategic point of view which emphasizes the importance of the High North's strategic position in (global) energy security, and economically, due to its rich natural resources and potential for transportation (new global sea routes and air routes).

Third, the Strategy reflects the desire to promote and strengthen Finland's position as an international expert on Arctic issues with knowhow in the fields of ice-breaking and other winter shipping (e.g. by the state company Arctia Shipping), sea transport and special shipbuilding technology (e.g. by the planning company Aker Arctic), expertise in forest management, mining and metals industry, and cold-climate research. This is sensible and may be the case in terms of some fields of research, but is not necessarily the case when generally evaluating Finnish research in the context of international scientific cooperation. Taking this into consideration, the Strategy's proposal to launch a study program with interdisciplinary and international cooperation on northern issues was very welcome and led to establishing the Arctic Research Program 2014-2018 by the Academy of Finland.

Fourth, the Strategy also emphasizes special features of, and risks to, fragile Arctic ecosystems; importantly the term "fragile" has re-emerged, but of even greater importance is the protection of ecosystems. Climate change, pollution, and biodiversity receive considerable attention. A need for safe navigation in the Arctic Ocean is of great importance, in terms of physical impacts of climate change and of general increase in sea transports. Increasing sea transport is being defined as "the biggest threat to Arctic marine ecosystems", despite the fact there are heavy impacts

from long-range air and water pollution, and mass-scale oil drilling. Furthermore, it says that Arctic research, regional climate models, and long-term monitoring of the state of the environment should feed into decision-making processes, clearly indicating the importance of the interplay between science and politics. Interestingly the uncertainty related to climate change is not emphasized (as a challenge), but nuclear safety at the Kola Peninsula is, though this problem has been under control for a few years now.

Although protecting Arctic ecosystems is prioritized, it seems somewhat short-sighted not to give greater emphasis to the promotion and export of Finnish know-how and expertise in environmental technology. Furthermore, here the Strategy has at least one internal contradiction: It states that: “Increased human activity in the region also raises the risk of environmental pollution”, but then later in the text it states that: “From the perspectives of Finnish – especially Northern Finnish – industry and employment, it is important that all types of economic activity increase both in large seaports and in land-based support areas of oil and gas fields in Norway and Russia”. Which of these is the first priority? Is there a greater emphasis on more strict environmental protection, or is it mass-scale utilization of natural resources? These questions indicate criticisms against the main content of the first Finnish national strategy on the Arctic region.

Fifth, likewise, the Strategy is somewhat short-sighted to claim a focus “on external relations” instead of a more holistic approach. For example, though somewhat abstract, it seems logical to give the highest priority to protecting Arctic ecosystems which are threatened or at risk due to rapid climate change, by promoting and exporting Finnish knowhow and expertise in environmental technology. Or, at the very least to identify more clearly links between different sectors, i.e. the interactions of economic activities with both ecosystems and peoples, as is actually done later in the document when the ‘Arctic Window’ of the Northern Dimension is introduced. This would establish a more global perspective and invite an alternative interpretation as to why the Arctic region plays such an important role in world politics.

Sixth, the Strategy includes objectives concerning Indigenous peoples, particularly those of the Barents Region such as the Sámi, and their active participation in international cooperation. Absent, however, is a clear objective to ratify the International Labor Organization’s 169 Convention, although it is very timely and relevant for the Sámi and their self-determination. Furthermore, Finland believes that the UNs’ Convention on the Law of the Sea (UNCLOS) is, and will be, a sufficient framework and tool to resolve Arctic issues, and that there is no need for a new international, legally-binding agreement or regime. Although this shows political realism, it is a rather traditional and narrow state-oriented approach. The real challenges are comprehensive and global, and request the attention and

participation of a global community including a discourse on the global commons, coupled with a desire to engage in new ways of thinking.

Seventh, the Strategy succeeds in emphasizing that the Arctic region is a stable and peaceful area - "High North – low tension", and that Finland supports "non-conflictual rules". Further, in recognizing that significant changes are taking place when, for example, the importance of the Arctic climate globally is obvious, and consequently, the global significance of the region is increased. This is a clear statement in support of both the main discourse of the Arctic being a stable and peaceful region in spite of its challenges, and a recent and emerging discourse on globalization.

In declaring that the Arctic Council is, and should remain as, the main forum on Arctic affairs and policy, "Finland strives to increase international cooperation in the Arctic" at many levels and bilaterally. This statement is very important and timely, and shows clear and definite support of the Arctic Council and its work by Finland and its Parliament, Government and Saami Parliament, as well as the science community and several Finnish NGOs. It was, and still is, imperative that the mandate of the Council be renegotiated and broadened so that it may move away from its current state, which is some sort of political 'inability'. The Finnish proposal to organize a Summit of the Arctic states should be seen in this context. It is there that challenges of the future, such as the interrelationship between the utilization of natural resources and the fragile environment, as well as the mandate of the AC and its further development, would be discussed. In the meantime, a more important and necessary prerequisite would be to have enough political will among the eight Arctic states to broaden the AC mandate and working methods to include discussion on the utilization of natural resources, security and security-policy. Furthermore, the Arctic states are ready for a deeper cooperation with all relevant non-state northern actors, such as Indigenous peoples, academic institutions, environmental organizations and other NGOs. The Kiruna Ministerial meeting of the Arctic Council in May 2013 at least showed that Arctic states are willing to enhance interactions with non-Arctic states interested in Arctic issues and allow interested Asian countries to become observers of the Council, and present their vision regarding the future of the Arctic.

Finally, the Strategy emphasizes the importance of the European Union's role in the Arctic region, referring to "The EU as a global Arctic player", and that the EU's Arctic policy should be further developed. This could be interpreted to mean that politics is a priority, trumping economics in the context of the EU, though the reality in the early 2010s seems to be the other way around. Consequently, Finland could be seen as claiming itself as an advocate for, or defender of, the EU in Arctic affairs. This sounds logical from Finland's point of view taking into consideration that Finland initiated the EU's Northern Dimension, which could be integrated more into the EU's emerging Arctic policy. This may, however, involve political inconveniences for Finland as an Arctic Council member and more generally in the context of

multilateral Arctic cooperation. Behind this lies divided opinion regarding the role of the EU as an Arctic actor among some Arctic states, particularly Canada, and Northern indigenous peoples' organizations, such as the Inuit Circumpolar Council, which is reflected in the somewhat hesitant responses to the EU's efforts.

Correspondingly, the follow-up resolution adopted by Government in August 2013 is first of all a review and an updated version of the 2010 Strategy with two public hearings, one in Helsinki and another in Rovaniemi. It is based on the vision, i.e. four pillars of policy outlined by the Government in its special session in October 2012: Finland as an Arctic country, an Arctic expert, which respects sustainable development and environmental considerations, and is active in international cooperation. Now Finland in its entirety is very clearly stated to be an Arctic country and an expert about. Education and research, as well as expertise and know-how, is the first mentioned sector but rather briefly discussed. Like in the 2010 strategy, economic activities and business operations are greatly emphasized and discussed in detail. The environment and environmental protection are keenly bound with (geopolitical) stability and internal security which is somewhat surprising. Particularly so due to the fact the 2013 strategy has a substantial chapter on international cooperation which positions Finland clearly as an Arctic state in the Arctic region. Now the EU's role in the Arctic is described much less and is a sub-chapter unlike the whole chapter in the 2010 strategy, although Finland still supports a stronger presence of the EU in the Arctic and the Arctic Council.

All in all, Finland's Arctic Strategy covers most of the features of a modern strategy document in adopting a holistic approach. It can be seen as reflecting and responding to recent significant and multi-faceted environmental and geopolitical change(s) in the Arctic and in its worldwide approach to the Arctic. It also clearly states the "Arctic dimension" is an important part of Finland's foreign policy in the 21st century. The Strategy has not one clear priority or priority area, though there is an apparent preference for economic activities including transport, infrastructure and know-how, supported by the Finnish maritime and shipping industry, as well as economic and political elites, and, on the other hand, general objectives for international cooperation on Arctic issues based on international treaties.

"Finland is an active and responsible partner," Prime Minister's Office, 2020 [\[86\]](https://vnk.fi/en/arctic-issues/finlands-arctic-policy)
<https://vnk.fi/en/arctic-issues/finlands-arctic-policy>

Overview:

Finland wants to be an active player in the Arctic in a sustainable manner, seeking growth, competitiveness and employment with due respect for the environment. Finland's approach to the Arctic policy is outlined in the [Government Programme](#).

Current & Relevant Information:

The objectives of our Arctic policy are specified in more detail in Finland's Strategy for the Arctic Region adopted in 2013. The leading idea of the strategy is to present Finland as the pioneer of sustainable development in the Arctic. The strategy examines the ways to strengthen Finland's position in the Arctic, trade opportunities that are opening up, environment, security and stability, position of the northern regions, international cooperation, and Arctic expertise in the broad sense. Promoting the rights of indigenous peoples is a key element of Finland's Arctic and human rights policy.

The main outlines of the strategy are still valid today. The Government discussed the priorities of the strategy towards the end of 2016. The update of the strategy specifies further both Finland's role and the Government objectives in the development of the Arctic region. The 2013 strategy has been revised from the perspective of the Government Programme objectives and key priorities, in line with the priorities to be established for the updating process.

In March 2017 Juha Sipilä's Government approved the action plan for the update of the Arctic Strategy, which introduces concrete measures to achieve the objectives and, where possible, provides schedules for the progress to be made.

The framework conditions of sustainable development are taken into account in all activities. Finland wants to be a key player that produces solutions to various kinds of problems and questions concerning the development of the Arctic through innovative products and practices. Special emphasis is placed on the Arctic expertise we have in Finland, sustainable tourism and infrastructure solutions.

Objective is that Finland is a leading actor in international Arctic policy, both in the European Union and globally. Finland also sees the EU as the key actor in the Arctic region and supports efforts to consolidate its Arctic policy. Within the EU, Finland aims to develop Arctic cooperation as one of the priorities of the EU's external relations. Full advantage is taken of the opportunities stated in the third Commission Communication concerning the [European Union policy for the Arctic](#), published in 2016. Finland will be active in implementing the Communication.

The significance of the Arctic region is also stressed in the [Report on Finnish Foreign and Security Policy](#), with special emphasis on Finland's active role as a player in the Arctic region. Finland promotes the stability and security of the Arctic operating environment in bilateral and international contexts. The aim for Finland is broad cooperation that is based on common norms in the Arctic Council and Barents Euro-Arctic Council. The international, political and economic significance of the Arctic region keeps growing. This interest creates opportunities for the region, but there are also challenges. Finland wants to be an active player in the Arctic in a sustainable manner, seeking growth, competitiveness and employment with due respect for the environment. Finland's approach to the Arctic policy is outlined in the Government Program.

“Finland’s strategy in the Arctic Region,” Elena Telegina and Maria Morgunova, RIAC, 3 September 2012 [87] <https://russiancouncil.ru/en/analytics-and-comments/analytics/finland-s-strategy-in-the-arctic-region/>

Overview:

Some experts consider Finland a non-Arctic country. However, only 20-50 km of Norwegian territory separates the Finns from full membership in the “Arctic Club”. The crucial factor is that Finland positions itself as an “Arctic state” and, accordingly, regards itself as a full player, since changes “occurring in the Arctic region have far-reaching repercussions throughout the Finnish society”.

The main documents on Finland’s Arctic strategy place particular emphasis on the potential for Finnish-Russian Arctic partnership. These documents outline the possible areas of cooperation and competition. For several years now, under discussion have been the options of Finnish business involvement in Russian Arctic projects in the field of transportation and resource development. At the same time, the Russian side thinks highly of the Finnish expertise and experience in shipbuilding, construction and organization of port functioning, highlighting that the Finns have the prospects for successful engagement in tenders related to implementation of the designs.

Current & Relevant Information:

Finland in the Arctic: strategy, goals, objectives

The issue with respect to development of the Arctic and its natural resources is becoming increasingly relevant nationally, internationally, and in different sectors of the economy. Finland has no Arctic coastline and energy resources, but the official documents and areas of business indicate that the Finns are tremendously concerned with the development of the Arctic. An ad-hoc group has been established in Finland to support and coordinate the country’s activity in the Arctic. The EU Arctic Information Centre has been launched in Rovaniemi. In 2010, Finland’s Strategy for the Arctic Region was adopted.

Finland’s vigorous promotion of its interests in the north and interaction with other Arctic players has been substantiated geographically and historically, just as close cooperation with Russia in various fields (Neighbouring Area Cooperation between Finland and Russia, 1992, 2004, 2006, 2009, 2012). Finland’s Arctic foreign policy was actively developed under Alexander Stubb, the Finnish Foreign Affairs Minister from 2008 to 2011., and continues to be developed presently under the auspices of new Foreign Affairs Minister Erkki Tuomioja. Finland has been implementing its Arctic policy through membership in international organizations and bilateral cooperation with other members of the “Arctic Club” (Denmark, Iceland, Norway, Sweden).

Finland's main Arctic goals and objectives are outlined in the Government Program and the Finland's Strategy for the Arctic Region (2010). The Strategy defined a range of live issues (maintaining security and sovereignty in the region, environmental protection, economy and infrastructure development, protecting interests of the local communities, activities of international organizations, primarily the Arctic Council) and laid down proposals on upgrading the EU Arctic policy, improving transportation, developing and intensifying Arctic research, and on some other areas of business. Shipbuilding, forest and ore mining industry, and the associated infrastructure are of primary concern for Finland in the Arctic. Finland's main economic goal in the Arctic region is to confirm its status of an international Arctic expert. The use and adoption of technological know-how and public support to companies in the SciTech sphere have all been designated as priorities.

Erkki Tuomioja is quoted as saying that many of the Finnish government's recommendations set out in official Arctic documents have already been implemented. However, since Arctic development conditions are permanently changing, the government will again, in the fall of 2012, discuss policy issues and the country's current priorities in the region. A revision of the Arctic strategy is expected in 2012.

Finnish plans and Russian advantages

Despite numerous challenges and constraints faced by Finland – a country with no full access to the Arctic – in the “Arctic business”, the country is trying to gain substantial economic benefits from cooperation in the field. The Finns are manifesting high business activity, expressing their willingness to participate in joint projects with Russia, offering their scientific and technological developments and innovation, and are acting as an EU coordinator. The Foreign Affairs Ministry emphasizes the significance of Russia as Finland's strategic partner in the Arctic.

Pursuant to the Government Program, the Russia Action Plan was adopted in 2009. It embraces recommendations on closer cooperation with Russia in various sectors of the economy (“Finland promotes active and broad-based bilateral relations with Russia at various levels and works actively to develop the EU's policy towards Russia”). Finland promotes its interests in the Arctic region as a whole and in the border regions of Russia in particular. For its part, the Russian government is capable of using its partnership with Finland to implement its own interests, for example, to develop contacts with the EU and the Arctic Council (with Finland acting as a mediator, for example) and to jointly develop resources in the Arctic region. Russia for the Finns is a gate to the Arctic, while Finland for the Russian government and companies is a traditional business partner with the expertise and know-how required to successfully implement its economic potential.

Another document –Baltic Sea, Barents and Arctic (BBA) Cooperation for the Years 2013-2015 – aims at strengthening cooperation in the Baltic region and accelerating

implementation of Finland's Strategy for the Arctic Region. Both the Strategy and the BBA plan clearly state that cooperation in the Barents Sea region and strengthening of the standing in Russia's northern regions are of particular significance for Finland as an EU Arctic member. The BBA financing policy is aimed at implementing the Russia Action Plan, specifically at promoting and financing various forms of cooperation.

Finnish official documents tend to regard Russia more as an object of policy being pursued. However, development of international cooperation and enhanced integration with the EU, particularly with Finland, plus establishment of contacts in various areas on the national level (for example, modernization, joint activity in the Arctic, etc.) are equally compelling for Russia. Interaction in the framework of regional projects (regional cooperation between Finland and Russia has been underway for twenty years, refer to Agreement between the Government of the Republic of Finland and the Government of the Russian Federation on Cooperation in the Murmansk Region, the Republic of Karelia, St. Petersburg and the Leningrad Region, 1992) is also beneficial to both parties. Such an interaction experience serves as a fruitful ground for further development of economic relations and transition to a new level of cooperation in the Arctic.

Areas of cooperation in the Arctic

Finnish President Sauli Niinistö is reported as saying that environmental protection and sea transport routes are the priority areas of cooperation. Other promising areas of cooperation include research, design and engineering support for Arctic projects, algorithms of operations under extreme Arctic conditions, green technologies and tourism. This is where Finland is ready to offer its unique experience beyond the Arctic Circle, which is evidently beneficial to Russia which is deploying active operations in the Arctic.

The Finnish Strategy highlights the importance of Arctic oil and gas resources for energy supply to Europe. The hydrocarbon resources in the Barents Sea, which are shared by Norway and Russia, and the progress in their development are of great interest to Finnish companies. Their goal is to take part in large projects, similar to Shtokman, as subcontractors, and to access the international level of resource development beyond the Arctic Circle. The agreement on division of the Barents Sea Gray Zone had a significant impact on bilateral Russian-Finnish cooperation in the joint development of hydrocarbon reserves. The Finns expect to receive significant economic and financial benefits from participating in the development of this zone.

The objectives of the Finnish government and companies in the Arctic are supported by specific proposals – offshore operations, shipbuilding, infrastructure development, production of equipment and machinery, logistics, development of cutting-edge environmental protection techniques, etc. Shipbuilding is deemed to be one of the most promising areas in the Russian-Finnish cooperation. Russia's demand for new

ships is enormous (about 1,800 units of various categories) but Russian shipyards are not capable of satisfying that demand. Meanwhile, Finnish shipyards are prepared to accept vessel construction orders, inter alia for the oil and gas industry. The expertise and experience of the Finns in shipbuilding, construction and organization of port functioning deserve high assessment – Finland's shipyards have constructed more than half of the icebreaker fleet currently existing in the world.

Finland is regarded as a world leader in these areas. Therefore, the country has good prospects to participate in major projects through a consortium or as a subcontractor. In the future, driven by increased traffic along the Northern Sea Route, the Finns are ready to offer cooperation in telecommunications and navigation, i.e., where Russia currently has zero technological and competitive advantages. As of now, it would be premature to suggest large merchandise and financial turnover between Russian and Finnish companies. Of particular note, however, is the intensity and persistence the Finns are exerting in offering cooperation, thus preventing the access of rivals from Norway in the area of their concern.

Among other areas of cooperation beneficial to both parties, noteworthy is the construction of northern ports and transport lanes (roads, railways) in arctic and subarctic conditions, safety, monitoring and development of awakening systems. Russian-Finnish cooperation on some of these areas has already been implemented for several decades.

Development of bilateral relations are facilitated by a multitude of bilateral and multilateral legal instruments, as well as forums and discussion platforms that rally Russia and Finland in view of their geographical proximity and historically close economic collaboration.

The business environment features well-established cooperation between Russian and Finnish companies (Finpro, Finnvera, VTT, FinNode/Tekes, Fintra), and with the Finnish-Russian Chamber of Commerce. On the national level, there are regular meetings and official visits (at least twice a year) including on Arctic issues.

Consequently, a system of interaction between Russia and Finland at various government and business levels has been well in place. In official Finnish documents, this cooperation is regarded as far from being optimal, although having good prospects.

Russian-Finnish cooperation in action

Russia is a broad attractive market for Finnish companies and remains Finland's main trade and economic partner. The sales volume between the two countries totals €16bn.

The Russian government will, in the immediate future, pass the Strategic development program for the Arctic up to 2020, while the estimated amount of

investments in the development of the Arctic up to 2020 will reach €45bn. Their development will require broad international cooperation.

Cooperation between Russia and Finland in the shipbuilding can be deemed up and running. The cooperation also involves a South Korean company. One of the partnership proposals related to development of the oil and gas resources in the Arctic – Finnish Innovations Cooperation Cluster “Offshore” (IFCO) – concerns the Yamal LNG project. Concurrently, the Finnish Group is discussing with the Russian side the potential cooperation in geology, geophysics and environmental safety. Russia and Finland have identified these areas of cooperation as priorities within the Barents and Kara Seas. This is particularly about transportation of hydrocarbons, joint construction of ice-resistant vessels and equipment.

Despite the fact that in most cases, Finland is seldom mentioned when making decisions on Arctic development on the global scale, while its competitive advantages over Norway in this area are questionable, Finland is methodically tackling a policy envisaging economic and technological expansion in the Arctic region. Tribute should be paid to the Finnish wisely shaped government policy on “penetration” into the very heart of the international geopolitical game around the Arctic development and the persistence with which Finland is promoting its technology and know-how.

Being a major player in the big Arctic game, Russia possesses immense resources and the potential to develop them. Finnish technology in the chain of Arctic development may find high demand in Russia. In its mutual relationship with Finland, Russia is yet acting as the “host”, the consumer. Given the present-day state of technology in Russia, such a standing is quite appropriate, but in the future Russia needs to maintain a dominant role in the relations with Finland.

“A view from Finland: Security and defense in the Arctic,” Janne Kuusela, DefenseNews, 12 May 2020 [88] <https://www.defensenews.com/smr/frozen-pathways/2020/05/11/a-view-from-finland-security-and-defense-in-the-arctic/>

Overview:

Just by looking at the map, it is evident why the Arctic region matters so much to Finland. Although Finland is not a littoral Arctic country, a sizable part of the Finnish territory lies above the Arctic Circle. Finland is located in both the Arctic and the Baltic Sea regions, which are increasingly perceived by defense planners as a single, Northern European operational theater.

The broad geopolitical interest toward the Arctic region is hardly a new phenomenon. Apart from the couple of decades after the Cold War, the military strategic importance of the Arctic has been mainstream during most of the past 80 years. Today, strategic considerations have returned, combined with prospects of increasing navigation and economic activities.

The Arctic is not insulated from broader global security dynamics and challenges, be it great power competition or the impacts of climate change. Russia is a key actor in the Arctic, especially militarily. It controls a significant portion of the Arctic coastal line and has strong economic and security interests in the region. China has declared itself as a “near Arctic state” and included Arctic sea lines in its Polar Silk Road initiative. China has demonstrated its interest, for example, in low-temperature expertise, Arctic infrastructure, digital connectivity and natural resources.

Current & Relevant Information:

The Finnish government is drafting a new whole-of-society strategy for our Arctic policy, which will lay out the objectives in the long term as well as resources needed to achieve them. Arctic issues also play an important part in Finland’s foreign policy and international role. In our view, international affairs in the High North should primarily be the responsibility of the Arctic countries. Finland worked hard to promote cooperation among this group during the recent chairmanship of the Arctic Council.

For a nation located as far north as Finland, Arctic conditions need to be taken into account in everything we do. In Finnish defense, the Arctic permeates all the way through thinking, planning and operations. We do not have a specific Arctic defense strategy or “Arctic capabilities,” simply because everything in defense is designed to function in Arctic conditions.

Defense cooperation with our partners is an essential element in the Finnish defense policy. Cooperation in the north is very close with Norway and Sweden. We also benefit from broader regional cooperation under the Nordic Defence Cooperation framework involving Denmark, Finland, Iceland, Norway and Sweden. Another important group is the British-led Joint Expeditionary Force, which includes nine countries from Northern Europe. This group has chosen as its regional focus the High North, North Atlantic and Baltic regions.

Exercises play a key role in developing interoperability and common understanding. The Finnish Defence Forces conduct regular national exercises in Arctic conditions. Some of them include international participation, such as the forthcoming main joint exercise Arctic Lock in 2021, which will provide versatile opportunities to test interoperability in a northern environment.

Finns also participate in Arctic exercises abroad. One good example is the air combat exercise Arctic Challenge, jointly executed every second year by Denmark, Finland, Norway and Sweden with a rotational lead role, while the United States Air Force provides considerable support. This sizable exercise sends a clear signal of the strong ties that exist between the Nordic countries and across the Atlantic, and serves as a stabilizing factor in the region. We are looking forward to the next Arctic Challenge under Norwegian leadership in 2021.

In dealing with the region, military and policy planners are well advised to maintain the convention of treating the Arctic as a “low tension” area. However, we have to acknowledge that security does not work in a vacuum, and it is impossible to keep the Arctic isolated from the wider security context. Although the risk of military confrontation in the Arctic remains low for the time being, the possibility of a spillover from conflicts elsewhere must be taken into consideration.

By far the largest reason for concern is the impact of climate change in the Arctic. In this region, we are among the first to feel the effects of global warming. The Arctic ecosystem is very fragile, while the rise of temperatures is higher than the global average. And what happens in the Arctic has consequences for the rest of the world, as melting of the Arctic’s ice cover accelerates climate change on a global scale. As the Finnish president has often said: “If we lose the Arctic, we lose the globe.”

Keeping trouble out of the agenda does not make it disappear. What we need is well-functioning dialogue and cooperation to deal with common issues, be they security and defense or climate concerns. Keeping a watchful eye, maintaining and exercising defense capability, and increasing domain awareness are different from “militarizing” the Arctic. Together with its partners, Finland is committed to continue promoting stability in the Arctic region.

G. Russia:

“The Arctic Council: About: Arctic States: The Russian Federation,” Arctic Council, 2020 [89] <https://arctic-council.org/en/about/states/russian-federation/>

Overview:

Quick Facts

Arctic Territory: Murmansk, Nenets, Yamal-Nenets, Chukotka Autonomous Okrugs and northern municipalities of Arkhangelsk, Komi Republic, Krasnoyarsk Territory, Republic of Sakha (Yakutia)

Arctic Population: 2.5 million

Arctic Indigenous Peoples: 40 Indigenous peoples live in Russia. The largest include: Dolgan, Nganasan, Nenets, Saami, Khanty, Chukchi, Evenk, Even, Enets, Eskimo (Yupik) and Yukagir

Current & Relevant Information:

Russia and the Arctic Region:

The Russian Arctic is an immense territory that stretches over 24,150 kilometers of coastline and includes:

- The whole of the Murmansk Region and the Nenets, Yamal-Nenets and Chukotka Autonomous Okrugs

- The northern municipalities of the Arkhangelsk Region, the Komi Republic, Krasnoyarsk Territory and the Republic of Sakha (Yakutia)
- The archipelagoes and islands in the Russian portion of the Arctic Ocean

Russia stretches over 53 percent of the Arctic Ocean coastline. Approximately two and a half million of Russia's inhabitants live in Arctic territory, accounting for nearly half of the population living in the Arctic worldwide. Therefore, efficient and sustainable development of the Arctic is one of the key national priorities of the Russian Federation. Other key national interests in the Arctic include:

- The use of the Arctic region as a strategic resource base of the Russian Federation, providing solutions to the task of socio-economic development of the country
- Preservation of the Arctic as an area of peace and cooperation
- Conservation of the unique ecosystems of the Arctic
- Use of the Northern Sea Route as a national unified transportation line of the Russian Federation in the Arctic

The extraction of natural resources, primarily oil and natural gas, is Russia's primary Arctic industry. The country is the world's third-largest producer of hydrocarbon resources. Another priority area is the socio-economic development of the Arctic region in the Russian Federation, including improvement of quality of life for the Indigenous population and of social conditions for economic activity in the Arctic. Development of science and technology are key focuses, along with the creation of an up-to-date information and telecommunication infrastructure. Environmental safety and international cooperation in the Arctic are other priority areas for the Russian Federation.

Indigenous Peoples:

Russia has 40 legally recognized Indigenous small-numbered peoples of the North, Siberia and the Far East. Of the 40 Indigenous Peoples, 11 live around or above the Arctic Circle, the largest groups including Dolgan, Nganasan, Nenets, Saami, Khanty, Chukchi, Evenk, Even, Enets, Eskimo (Yupik) and Yukagir. Traditionally, Indigenous peoples relied on reindeer herding, fishing and hunting.

Russia in the Arctic Council:

Russia held the country's first Arctic Council chairmanship from 2004-2006. Throughout the chairmanship, Russia promoted projects in the following fields:

- Enhancing cooperation in the field of international and communication technology, including further practical steps to develop the Arctic Information and Communication Technology Network

- Protection of health of the people residing and working in the Arctic, including telemedicine and prevention of socially significant diseases specific to the polar latitudes
- Sustainable management of natural resources and wider use of renewable sources of energy
- Enhancing international cooperation in the field of environmental protection, including the ratification by the Russian Federation of the Kyoto Protocol to the UN Framework Convention on Climate Change
- Sustainable development of the Arctic Indigenous peoples

Key accomplishments include:

- The organization of the international symposium on prospects for and consequences of the exploration and development of oil and gas resources in the Arctic
- The organization of an international conference to develop a mechanism for the monitoring, prevention and management of emergencies in the Arctic
- The organization of the meeting of Ministers of Culture of the Arctic Council Member States, resulting in the declaration stipulating the need for enhanced cultural interaction between Indigenous peoples and national governments as an indispensable input into the sustainable development of the Arctic region
- The sponsorship of a workshop in advancing sustainable development in the Arctic, which was the first workshop of this kind for the Arctic Council, resulting in the overall assessment of the activities and recommendations on economic and social dimensions of sustainable development

Russia will hold its second chairmanship in 2021-2023. During its upcoming Chairmanship, Russia plans to focus on economic, social and environmentally sustainable development in the Arctic region. Russia will build upon joint efforts with the Arctic Council States on the principles of international law and with respect and consideration of each other's interests in various areas from research and implementation of environmental projects to the use of the Northern Sea Route.

“Arctic Governance: Synthesis and assessment of Arctic governance mechanisms and recent policy actions,” Flavius Mihaies, The Aspen Institute: Energy and Environment Program [90]

<https://assets.aspeninstitute.org/content/uploads/files/content/upload/23%20Arctic%20Governance%20Synthesis%20COLOR.pdf>

Summary:

Summary of existing architecture for the governance and management of the Arctic

Regional forums:

While several institutions are involved in the governance of the Arctic marine area, the most prominent among them is the Arctic Council. The Arctic Council was established as a high level inter-governmental forum in 1996 to “provide a means for promoting cooperation, coordination and interaction [...] on common arctic issues, in particular issues of sustainable development and environmental protection in the Arctic”.

The Arctic Council was established by non-legally binding declaration and is a consensus-based organization. Decisions of the Council do not have any binding effect on individuals.

The eight Arctic states are Members of the Arctic Council and eight Non-Arctic States are Official Observers. A variety of governmental organizations and NGO's also hold observer status. Of particular interest, the Arctic Council establishes significant participation by the indigenous peoples of the Arctic, whom the Council Members must consult prior to any consensus decision-making.

The Council's current responsibilities pertain to research, advising on policy, and disseminating voluntary guidelines on the main topical areas that it is concerned with, including climate change, sustainable development, Arctic monitoring and assessment, persistent organic pollutants and other contaminants in the Arctic and other issues covered by its six Working Groups.

According to Arctic expert Brooks Yeager, the Arctic Council has made major contributions to the Arctic region, by “identifying issues of importance to the conservation of the Arctic environment and the well-being of Arctic people, and in developing assessments that have become the basis for cooperative action by the Arctic governments.” The Council has also issued guidelines and manuals of good practices, particularly related to the Arctic marine area.

Regional Governance:

The Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR) is the legal instrument guiding international cooperation on the protection of the marine environment of the North-East Atlantic.

The OSPAR Convention “covers the regulation of all human activities which can have an adverse effect on the ecosystems and the biodiversity in the North East Atlantic, with the explicit exception of fisheries management and with certain limitations for the regulation of shipping”. The OSPAR Commission was tasked to implement and monitor the Convention and can adopt measures and programs in the form of both legally binding decisions and non-legally binding recommendations.

There are currently fifteen contracting parties to the OSPAR Convention, all from Europe. The European Commission also participates on behalf of the European Union.

OSPAR has been cited as an example of the successful implementation of ecosystem-based management at the international level, even though the OSPAR Convention does not explicitly refer to the ecosystem approach.

Global governance:

The United Nations Convention on the Law of the Sea (UNCLOS) establishes a comprehensive binding framework for the rights and responsibilities of nations in their use of the world's oceans.

To date 156 countries and the European Community have joined in the Convention. The United States is not a member. However, the Convention is accepted as a codification of the customary international law.

Certain UNCLOS articles are directly relevant to the Arctic, such as Article 118 234 (Ice-covered areas) that extend environmental protection powers to Arctic coastal States within the limits of their exclusive economic zones (EEZ) if ice is present in an area for most of the year, and Annex II (Commission on the Limits of the Continental Shelf) and Article 76 (Definition of the continental shelf), which led to the current submissions of “outer continental shelf” sovereignty claims (extending beyond the 200 nautical miles EEZ limit) by some Arctic states to the Commission established by the UNCLOS. In addition, Article 123 calls on the states bordering semi-enclosed seas to cooperate through an “appropriate regional organization”. If the Arctic maritime area were so classified, the littoral States would have greater obligations to cooperate in regard to environmental protection.

The UNCLOS has two implementation agreements, the Part XI Deep-Sea Mining Agreement and the Fish Stock Agreement.

The International Maritime Organization (IMO) is the United Nations' specialized agency that was tasked with developing and maintaining a comprehensive regulatory framework for shipping with a focus on ship safety. The jurisdiction of the IMO includes safety, environmental concerns, legal matters, technical co-operation, maritime security and the efficiency of shipping.

As a United Nations agency, the IMO is composed of 168 Member States and three Associate Members (Hong Kong, China; Macao, China; and Faroe Islands, Denmark).

Regarding the Arctic, IMO Guidelines for Ships Operating in Arctic Ice-covered Waters, also known as the Polar Code, created a unified set of voluntary classification standards for ships navigating in both Polar regions. According to Arctic governance expert Lynda Nowlan, the Polar Code “buil[t] upon existing

treaties administered by the IMO, such as the International Convention for the Prevention of Pollution from Ships (MARPOL), and associated safety and training treaties. Protocols under the LRTAP Convention also contain specific references to the Arctic environment”.

Current & Relevant Information:

The new Russian government’s Arctic Strategy prioritizes the delineation of the Arctic shelf "with respect to Russia's national interests." In addition, according to the document, Russia will create by 2020 a group of forces to protect its political and economic interests in the Arctic. “The basic national interests of the Russian Federation in the Arctic are: [...] to create a general purpose grouping of troops (forces) of the Armed Forces of the Russian Federation and of other troops, military formations and organizations (primarily border organizations) in the Arctic Zone of the Russian Federation that are able to provide for military security under various conditions of military and political situations”.

The document also specifies that Moscow views the Arctic as “a strategic resource base of the Russian Federation that provides for the solution of tasks for the social and economic development of the country;”

Finally, as part of Russia strategic priorities in the Arctic, the document calls on Russia “to strengthen the good-neighborly relations of Russia with Arctic-adjacent states on a bilateral basis and within the framework of regional organizations, including the Arctic Council and the Barents/Euroarctic Region Council” and “to promote participation of Russian state institutions and social organizations in the work of international forums dedicated to Arctic problem sets, including inter-parliamentary interactions within the framework of the Russia-European Union partnership.”

“Perspectives on Security in the Arctic Area: DIIS Report,” Annika Bergman Rosamond, Danish Institute for International Studies (DIIS), September 2011 [\[91\]](https://pure.diiis.dk/ws/files/61204/RP2011_09_Arctic_security_web.pdf)
https://pure.diiis.dk/ws/files/61204/RP2011_09_Arctic_security_web.pdf

Summary:

This report provides multiple perspectives on security in the Arctic area. A key objective is to demonstrate that, although the Arctic is the site of competing natural resources and land claims, which are emerging from such phenomena as melting ice and new sea routes, there are also many signs of fruitful regional cooperation and sound neighborly relations. This thesis is supported by the high level of Arctic institutionalization that has evolved since the end of the Cold War. Despite this, some media outlets have routinely portrayed the Arctic as a possible site of inter-state conflict. Such accounts do not take sufficient account of the collaborative initiatives that take place within the Arctic Council, the Nordic Council of Ministers and the European Union, to mention a few. The Arctic is situated within a complex

web of multilateral and bilateral networks, ranging from states to regional institutions. What is more, there is a great deal of emphasis on the involvement of indigenous and local communities in key decision-making processes. This is not to argue that there are no challenges to security and prosperity in the Arctic area, but rather that we need to investigate these against the backdrop of the ongoing institutionalization of the High North.

Part 1 of the report provides a brief historical account of the Arctic by asking whether there are any previous events that can provide insights into the current situation in the region? A relevant example here is the wish to make the Arctic a 'zone of peace' in the 1980s. The report then offers an examination of the relatively high level of institutionalization and governance in the Circumpolar North and determines what the key challenges to these are. For example, it is argued that the Arctic Council (AC) might need to rethink its position on banning the sensitive subject of military security from its policy deliberations in favor of an open, peaceful and democratic security dialogue, without this necessarily giving rise to tensions between AC members.

Part 2 of the report provides a discussion of contemporary security developments in the Arctic by placing the emphasis on the relationship between climate change and strategic interests related to sovereign claims. The report takes issue with the frequent portrayal of the Arctic as a hotspot for potential conflict by arguing that, although there are unresolved territorial disputes between the Arctic coastal states, there is also broad commitment to Arctic peace and stability through multilateral cooperation and governance.

Part 3 offers a rather brief overview of Danish Arctic policy with emphasis on both non-military and military developments. It is argued that climate change is the key to contemporary Danish security policy in relation to the Arctic.

Part 4 argues that broad dialogue between states and people plus multilevel participation in decision-making processes are central to the creation of new spheres of regional community that exist alongside other loyalties. The discussion is inspired by the political theory of Andrew Linklater and makes a case for new forms of commonality and solidarity across the Circumpolar North. It is suggested that any new policy initiatives – unilateral and multilateral – need to be coupled with local bottom-up activities and transnational civil support, so as to give voice to those who are directly affected by the new policy decisions. The report ends with a brief conclusion that summarizes the key findings and offers the following policy recommendations:

1. The Arctic states should continue to promote global governance and international cooperation as ways of ensuring future stability, prosperity and peace in the Arctic region. Institutions such as the AC can serve to counterbalance an emergent tendency amongst the Arctic coastal states to pursue narrowly defined national

interests and sovereign claims in the Circumpolar North. Key here is open and inclusive dialogue between governments, regional institutions and representatives from indigenous and local communities.

2. Arctic coastal states need to refrain from using the concept of sovereignty in a manner that hampers stability and peace in the Circumpolar North. This involves conceptualizing sovereignty in another-regarding manner that does not center on national security and defense alone. In so doing the Arctic states could promote a conception of sovereignty that promotes the rights of both people and sovereign states, rather than the latter alone. Such an approach to sovereignty is in line with the emphasis placed upon the emergent global norms of responsibility to protect and human security that underpin contemporary international society. What is more, the Arctic actors should continue to promote international law (and abide by it), since this a way of avoiding verbal and other disputes that are detrimental to global peace and cooperation. It is nonetheless important that states refrain from using international law to further their own narrowly defined interests, since this can be damaging to international governance and security.

3. Despite frequently having been placed within the framework of Realpolitik, the Arctic is a fruitful site for community-building clustered around good inter-state relations and the productive involvement of indigenous and local populations in key decision-making processes. The 'alarmism' that has been associated with the Arctic through media constructions, for example, is detrimental to the emergence of new spheres of community and loyalties in the Circumpolar North and should, when possible, be resisted.

Current & Relevant Information:

Russia is generally viewed as a key actor in the Arctic, particularly when it comes to claims to sovereignty. It is instructive to analyze briefly some key events in Russian foreign policy to gain an insight into the overall security situation in the Arctic. In 2007 Russia planted its nation's titanium flag on the Arctic seabed in 2007 as way of staking out its claim to resources in the Arctic, an action that international media outlets have at times used to illustrate the geopolitical situation in the Circumpolar North. The relevance of the act is mainly symbolic, but was nonetheless perceived as provocative by the other Arctic nations. In March 2009 Russia revealed its plans to deploy a dedicated military force to patrol the Arctic and safeguard its interests in the area. Russian border guards are also expected to take part in such exercises (The Guardian, 28 March 2009).

This was followed by the release of a new security strategy entitled 'Principles for Russian Politics in the Arctic in the period to 2020...', in which the country warned that the vast oil and gas resources in the Arctic could lead to conflicts and that 'military force cannot be ruled out' (cited in The Times, May 14 2009a). The chief foreign commentator of The Times, Bronwen Maddox, has described this turn of

events as a 'stunt' designed to make other states 'tremble and surrender their claims', and she rightly observes that 'to talk of war is to ignore the vast legal effort under way to settle just those questions' (The Times, May 14, 2009b). The language used by the journalist in question to describe Russian foreign policy in the Circumpolar North is perhaps somewhat exaggerated in that there is also evidence to suggest that Russia is, like its Arctic neighbors, attempting to make a positive contribution to Arctic developments. An instructive example here is Foreign Minister Sergei Lavrov's statement at the 2009 AC meeting in Tromsø, that 'We ... are not planning to increase our military presence in the Arctic and to deploy armed forces there' (Ria Novosti, 24 April 2009).

A year later, in 2010, Russia and Norway managed to settle their differences with regard to their respective geographical and natural reserve claims in the Barents Sea (New York Times 27 April 2010). Moreover, Prime Minister Putin announced that 'it is imperative to keep the Arctic as a zone of peace and cooperation' and that international disputes can be resolved by the application of international law (cited in Deutsche Welle 23 September 2010). This has nonetheless not prevented Russia from creating an Arctic brigade for the purpose of defending its natural reserves in the High North. The brigade is expected to be fully operational in 2011 (The Daily Telegraph, 31 March 2011).

The Kremlin has also claimed ownership of the Lomonosov Ridge, an underwater ridge that runs for 1800 km across the Arctic Ocean. In 2010, in an effort to convince the United Nations that Russia is the rightful owner of a large proportion of the Lomonosov Ridge, the country sent a research vessel called Akademik Fedorov to the Arctic to collect scientific data to prove its claims to the continental shelf. It is expected that Russia will submit an application to the UN Commission for the Limits of the Continental Shelf (CLCS) in 2012 to extend its continental shelf to include a large proportion of the Lomonosov Ridge and the natural reserves within that area. The situation has been further complicated by Canada making similar claims to the Lomonosov Ridge. However, in 2010 the two countries agreed that the UN should settle their dispute over the 'resource-rich underwater Arctic mountain range ... Lomonosov Ridge' (BBC News 16 September 2010). As will be discussed below, Denmark and Norway are also seeking to extend their part of the Lomonosov Ridge.

A final point here is that, although Russia is seeking to extend its sovereign territory, it is unlikely that it would instigate a conflict in the Arctic, since this would impede upon its future trade and commercial interests by making the circumpolar north an unstable region.

Map 2. The Lomonosov Ridge



“State of the Arctic Strategies and Policies – A Summary,” Lassi Heininen,” Arctic Yearbook, 2012 [92]

https://arcticyearbook.com/images/yearbook/2012/Scholarly_Papers/1.Heininen.pdf

Abstract:

In the past five years, the eight Arctic states have each published comprehensive Arctic strategies, a manifestation of the growing political interest in the region. This

article examines the Arctic strategies of each Arctic state in turn. It goes on to identify common themes found in the strategies: security and sovereignty; economic and business development; sustainable and regional development; environmental protection and climate change; safety, search and rescue; human dimension and peoples; research and knowledge; and international cooperation. Similarities and differences between the Arctic states on these key themes are examined, providing an insightful illustration of current regional values and interests.

Current & Relevant Information:

The Russian Federation's State Policy in the Arctic

The Arctic policy of the Russian Federation "Fundamentals of State Policy of the Russian Federation in the Arctic in the Period up to 2020 and Beyond" was adopted by President D. Medvedev in September 2008, and made public in 2009 (Rossiyskaya Gazeta, 2009).

In October 1987, a speech by the then-Soviet president Mikhail Gorbachev (1987) in Murmansk gave the initial impetus for the current intergovernmental cooperation in the Arctic and led to a significant geopolitical change and the start of broad international northern cooperation, such as the AEPS and the AC (Heininen, 2004). The speech, with its numerous initiatives, was a surprise for the West, but behind it was the fact that the Arctic and the entire North has been, and still is, of particular importance for Russia. For example, most of the federal districts and subjects of the Russian Federation deal with Arctic and Northern regions. From the industrial as well as military points of view the North is an important and strategic area for Russia. Finally, the discourse is increasingly academic with an aim to redefine the role of the Russian North as more than a geo-strategically important resource reserve (Alekseyev, 2001).

At the turn of the 21st century, Russian political discussions centered on Western/EU-Russian relations, and in terms of the EU's Northern Dimension, a focus was given to the role Russia might play in Northern (geo)politics (Sutyryn, 2000). There was also an interesting, though not well-known, statement by President Putin saying that there is a need for a long-term Northern policy in the Russian Federation (ITAR-TASS, 2004). Although nothing tangible emerged at the political level before September 2008, Russia continued its scientific expeditions in the Arctic as well as the Antarctic. Among them were the North Pole-35 drift research station, the integrated high latitude Arctic Expedition and the high latitude deep-water Arctic Expedition to the North Pole in 2007 (IPY 2007/08). One of those expeditions became somewhat of an international public and media hype, largely misinterpreted, and thus a manifestation of how easily a scientific activity can be transferred into a highly (geo) political incident (Heininen, 2010).

However, it was not until September of 2008 that the newly-elected President Medvedev adopted an official state policy, Fundamentals of State Policy of the

Russian Federation in the Arctic in the Period up to 2020 and Beyond. Thus, Russia had recovered and (re)defined itself as an Arctic state, though, for sure even without the State Policy, Russia is viewed as an Arctic nation. This State Policy was intended as a clear indication of national interests and basic objectives of the Russian Federation in the Arctic region, and of how Russia's State Policy in the region should be developed (Lavrov, 2009). The document was supported by several other documents, such as (Heininen, 2011: 44-46): the Russian Maritime Doctrine of 2001, the Foreign Policy Concept of the Russian Federation; Russia's National Security Strategy to 2020; Energy Strategy of Russia For the Period up to 2030; and The Concept of Sustainable Development Of the Small-numbered Indigenous Peoples of the North, Siberia and Far East.

The strategic priorities of the Russian State Policy are: first, to carry out an active interaction of Russia with the sub-Arctic states with a view of delimitation of maritime areas on the basis of norms of international law; second, to create a uniform Arctic search and rescue regime and prevention of man-caused accidents; third, to strengthen bilateral relationships within the framework of regional organizations, such as the AC and the BEAR; fourth, to assist in the organization, management and effective use of cross-polar air routes and the Northern Sea Route (NSR) for international navigation; fifth, to actively contribute to international Arctic forums through the Russia-EU partnerships; sixth, to delimit maritime spaces in the Arctic Ocean and maintain a mutually advantageous presence of Russia in the Spitsbergen archipelago; seventh, to improve state management of the social and economic development of the Arctic, such as to increase support for scientific research; eighth, to improve the quality of life for indigenous peoples and their social and economic activities; ninth, to develop the Arctic resources base through improved technological capabilities; and tenth, to modernize and develop the infrastructure of the Arctic transport system and fisheries in the Russian Arctic (Rossiyskaya Gazeta, 2009).

The State Policy in the Arctic is strongly linked with and supported by other federal policies and strategies as the region is a strategic resource base for the whole Federation. This is an important consideration in the context of the socio-economic gap that exists within the Federation. Furthermore, it is possible to interpret the State Policy as a pragmatic means for domestic politics and development of the Federation, particularly in light of infrastructural challenges in the Russian Arctic and the out-of-date condition of elements such as the road network, airfields, harbors and fleets. Improvements are needed, and of particular importance is the NSR with a status of national passage and federal line of communications.

When it comes to real priorities of the Russian Federation in the Arctic, this State Policy document is not very helpful as so many priorities are included – altogether ten – all of which are called 'strategic priorities.' Thus, it comes as no surprise that several interpretations concerning the actual main priorities exist. An example would

be Lomagin's (2008) short list: first, active extraction of natural resources; second, building transport, telecommunications and border infrastructure; and third, making the Arctic a primary strategic resource base of Russia. Or, perhaps the most recent list of Russian real "top priorities" in the Arctic can be found in the then-Prime Minister Putin's speech (Putin, 2010) in September 2010 with three top priorities: the creation of top-quality, comfortable living conditions for local people; support for new economic growth for large-scale domestic and foreign investment and exchange of innovations; and a substantial investment in the scientific and nature-conservation infrastructure including cleaning-up all the garbage.

Correspondingly, the main objectives of the State Policy can be interpreted to be on one hand, stabilizing Russia's northern frontiers and guaranteeing legal ground for exploration of Arctic resources, and on the other hand, bridging the gap in socio-economic disparities between Russian Arctic regions and the rest of the country, paying special attention to indigenous populations and sustainable development. The tools with which to achieve these objectives will primarily be through bilateral and multilateral cooperation in areas that provide relatively speedy pay offs and strengthen national security. The State Policy defines Russia's basic national interests in the Arctic very clearly: the Russian Arctic as a strategic resource base is seen as a prerequisite to solving challenges of social and economic development.

Further, taking into consideration that delimitation of maritime spaces in the Arctic Ocean (and maintenance of a mutually advantageous presence of Russia in the Spitsbergen archipelago) is one of the strategic priorities of the State Policy, it is easier to understand why Norway and Russia were able to agree on a resolution to the dispute of a maritime border in the Barents Sea by signing an agreement concerning maritime delimitation and cooperation in that area, as mentioned earlier.

Another interesting notion is that the State Policy describes the Arctic both as "a zone of peace and cooperation", where it is necessary to preserve its unique ecological systems; and as a "sphere of military security" including the maintenance of a favorable operative regime, such as "a necessary fighting potential". Such contradiction is also found where concerns the environment. On the other hand, according to its definition of the Arctic the region only includes the five littoral states and the Arctic Ocean. International forums and regional organizations, such as the AC and the BEAC, as well as bilateral relations, such as the Russia-EU partnership, are mentioned, although not greatly emphasized.

All in all, at the same time when the Russian State Policy in the Arctic can be interpreted as a response to the new geopolitical situation in the post-Cold war Arctic, it should be taken more as a pragmatic means for domestic politics of the Federation to achieve the primary aim of the early-21st century's administration, the stabilization of the Federation and its economy. Finally, the Policy can be seen as a process through which Russia will again become a major power and a global energy player in world politics.

“National Interests and Security Policies in the Arctic Region Among Arctic States,” Hilde-Gunn Bye, University of Denver, June 2018 [93]

<https://digitalcommons.du.edu/cgi/viewcontent.cgi?article=2444&context=etd>

Abstract:

The United States, Canada, Russia, and Norway are all Arctic states. However, they prioritize the Arctic region to different degrees in terms of investments of security assets and military presence. What explains why some Arctic countries prioritize the Arctic more than others? This thesis explores this question through using an issue-based approach, which looks at the salience of issues as having implications for foreign policy tools and measures. This thesis finds that having interests and stakes in the region of high overall salience contribute to an explanation of why some countries prioritize the region more, while low overall salience is linked to less prioritization of the region. By having assessed how national interests in the region drives security policies towards the Arctic, this thesis also provides an understanding of why the U.S. is not prioritizing the Arctic in a time when others are increasingly directing their attention to the region.

Current & Relevant Information:

These physical changes are driving some Arctic countries to invest more resources and bias force posture toward the Arctic. Chief among these is Russia. Exemplifying the variation in security policy attention towards the Arctic between Arctic states is Russia’s increased attention towards the Arctic. Indeed, that the Arctic is emerging as a region of major geopolitical importance for the Arctic countries (Åtland 2010, 3) seem to be much clearer in the case of Russia than for instance the United States. The former superpower, often termed as “the world’s most prominent Arctic power” (ibid., 16), has been building up its naval forces in the Arctic and military activity is increasing; the country has for instance resumed strategic bomber flights along the Norwegian coast (Rottem 2013, 246). Since 2015, Russia has established six new bases in the Arctic region and have invested in missile defense systems (Devyatkin 2018). Russian investments in naval capacities in the Arctic has increased significantly; the Northern Fleet, operating in the Arctic region, has the greatest number of icebreakers and submarines of the four Russian fleets (ibid.). In total, Russia has the largest icebreaker fleet in the world with 38 active polar icebreakers (Moe 2014, 794, The Arctic Institute 2018a).

Air, Land and Naval Military Presence and Assets in the Russian Arctic

Russia adopted its Arctic policy document in September 2008 called “The Foundations of the Russian Federation’s State Policy in the Arctic until 2020 and Beyond” which was published in 2009 (Wezeman 2016, 13). This document, in contrast to the 2001 Arctic policy document, refers less to hard security issues in the region and but puts more emphasis on issues such as economic development (Zysk 2010, 104-105). Two main topics of this document is the emphasis on making the

region a strategic resource base for Russia and preserving Russia's role as a leading Arctic country (Åtland 2014, 152). The second document that Russia's Arctic policies are set out in is "The Strategy for the Development of the Arctic Zone of the Russian Federation and National Security Efforts for the Period up to 2020", adopted in 2013 which also focuses on non-military challenges and emphasize cooperation between the Arctic states (Wezeman 2016, 13). These documents also particularly address the importance of the Arctic's resources to Russia's wealth as will be highlighted.

For Russia, Arctic military security is growing in its importance. Developments include expansion of Russian forces in the Arctic, a new "Joint Strategic Command North" in addition to modernizing equipment and increased training (ibid., 14). Major Russian military forces are present in the Arctic which also have become more active than in recent years (ISAB 2016, 8). Russian military presence in the region has particularly increased with regards to naval and air activities. Russia has resumed its deployment of reconnaissance and long-range bomber patrols, for instance increasing the number of flights by Russian bombers along the northern coast of Norway and across the north pole from the Kola peninsula (Østhagen 2017, 240, Expert Commission 2015, 17, 20). In addition to several radar bases and air bases being planned along Russia's northern edge, several of the Arctic air defense and radar bases that were closed after the end of the cold war are also being reopened (Wezeman 2016, 14). Moreover, the Kola Peninsula is also home to Russian ground forces, including naval infantry, and an Arctic brigade of 3600 troops became operational in 2015 (ibid., 14-15).

Russian naval power in the Arctic is largely based in the northwestern corner, on the Kola Peninsula (Åtland 2014, 153). As will be indicated later in this thesis, the Kola Peninsula is a key strategic area for Russia in the Arctic, providing access to the world's oceans for the Northern Fleet. Access to the Atlantic Ocean is of strategic importance to Russia and the Russian navy, especially with limited access to the Baltic and the Black Seas after the Cold War (Zysk 2010, 108). The Northern Fleet, based at the Kola Peninsula right across the Norwegian border, is the largest of Russia's five fleets (Wezeman 2016, 15). "The fleet includes most of Russia's nuclear-powered ballistic missile submarines (SSBNs), which operate in the Arctic area (including under the ice) and are protected by surface ships (including Russia's sole aircraft carrier), nuclear-powered submarines and aircraft" (Wezeman 2016, 15). The Barents Sea and the Arctic Ocean are still important training and stationing areas for the Russian SSBN force, and over half of Russia's sea-based strategic nuclear warheads are found on the submarines operating in the region (Åtland 2014, 153). With regards to priority of investments, the modernization of the country's fleet of nuclear-powered ballistic missile submarines is at the top of the list (ibid.). "Moscow's continued reliance on the nuclear deterrent, together with the focus on enhancing global naval power projection capabilities, indicates that the military strategic importance of the Arctic to Russia will remain high for the foreseeable

future” (Zysk 2010, 110). Additionally, Russia has the largest icebreaker fleet in the world with 38 active polar icebreakers and four of these are operational nuclear icebreakers (Moe 2014, 794, The Arctic Institute 2018a). As of 2015, Russia’s icebreaker fleet working in the Arctic consisted of six diesel-electric icebreakers and four nuclear icebreakers, while more four diesel-electric icebreakers and one nuclear icebreaker were under construction (Moe and Brigham 2017, 55). Of the icebreakers working in the Arctic, let Pobedy, has capacity of breaking through thick ice with the large icebreaker, while four smaller icebreakers have the capacity of breaking through thin ice (Wezeman 2016, 15). The Russian navy is also increasing its capabilities for operations in areas with thin ice with the launching of a vessel that could be used for breaking 1-metre-thick ice, as well as other icebreaking support ships and patrol ships (ibid., 15-16). In sum, the “total of Russia’s deployable military capabilities in the Northern ‘theatre’ is still greater than the combined forces of its neighbors” (Baev 2010, 4).

Population and Population Centers in the Arctic Region

Russia:

With regards to geography and its population in the Arctic, Russia could be termed as the Arctic superpower. The country has a massive Arctic territory, and according to the Russian definition of the North, its Arctic area “encompasses more than 60% of Russian territory” (Keil 2014, 169). While other estimations of the size of Russia’s territory may vary from this, it is clear that Russia has a massive territory above the Arctic Circle. Moreover, Russia’s Arctic coastline is stretching from the border with Norway in the west, to the Bering Sea in the east. Moreover, the Russian Arctic also includes archipelagos and islands in Russian Arctic waters:

the Novaya Zemlya in the Kara Sea, Severnaya Zemlya in the Laptev Sea, and the New Siberian Islands in the East Siberian Sea. To the north-east of the Norwegian archipelago of Svalbard, Russia’s Franz Josef Land is located just 950-kilometer miles from the North Pole. Russia’s closest point to the North Pole is Cape Fligely on Rudolf Island a mere 911 kilometers from the pole (The Arctic Institute 2018a).

Population and Population Centers:

As with the other Arctic regions, the Russian far north entails harsh climate and tundra, however, due to the length of its coastline, the western Arctic has a milder climate due to the Gulf Stream. Moreover, the region is rich in minerals and petroleum resources, which has led to the Russian Arctic having larger population centers and more industrial development. Of the four countries addressed in this paper, Russia has the largest number of people living in its Arctic area. With its 2 million people living in the Russian Arctic, the country accounts for about half of the people living in the Arctic worldwide (The Arctic Institute 2018a). Out of a total population of 143,5 million people (The Arctic Institute 2018a), 2 million represents

about 1,4 % of its total population, a larger number compared to both Canada and the U.S. The largest city located north of the Arctic Circle is Murmansk, a port city in the northwestern part of Russia on the Kola Peninsula in relatively close proximity to the Norwegian border. Murmansk is furthermore the Arctic region's most populous city with approximately 300,000 people (ibid.). Murmansk is a crucial center in the region and the location of much of the region's economic activity. It is an important industrial center, and its port is both an origin and arrival destination for shipping along the Northern Sea Route. Indeed, Murmansk represents an "an ice-free port situated in the heart of the Barents region" (Vartdal 2017). As will be indicated below, the Kola Peninsula which is home to both the Northern Fleet and the city of Murmansk, is of great military and strategic importance.

Moreover, the importance of the city can also be seen as connected to its proximity to other countries in the Barents region, such as Norway, Sweden and Finland. The city holds a role with regards to the development of the Barents region as well as the Russian Arctic partly due to its close social and political proximity to other actors in the Barents area, and as such it could be seen as having a role of being an open meeting place, important for the communities in the north, for instance in terms of cooperation (Vartdal 2017). This area is as mentioned benefitting from the Gulf Stream in terms of having a milder climate and lesser ice extent. Infrastructure is better here than in other areas in the Russian Arctic, and there is thus better connectivity to other parts of Western Russia and the rest of the countries in the Barents area. Furthermore, the Murmansk region has in the 21st century, "experienced a growth in tourism, trade and investment in infrastructure" (ibid.). Moreover, "it is also part of a new development program to support eight Arctic Zones, totaling 210 billion rubles investments until 2020. These zones are meant to develop the potential of the Northern Sea Route and facilitate international trade" (ibid.).

As for larger cities located north of the Arctic Circle, Murmansk is followed by Norilsk in population size, an industrial and more remote city in Krasnoyarsk Territory further east, with a population of approximately 175,000 people (The Arctic Institute 2018a). Russia's third largest city above the Arctic Circle is Vorkuta with approximately 70,000 people (ibid.). However, there are also several smaller cities above the Arctic Circle such as Kirovsk, Monchegorsk, Apatity. With regards to the indicators regarding the salience of territory then, it may be argued that the Arctic territory of Russia can be termed as relatively high. Indeed, the Russian Arctic territory has a strategic location, for both military and economic reasons, and a large permanent population. In this regard, it may be argued that Murmansk and its strategic location plays a crucial role, being both a large industrial, political and military center in the Arctic close to other countries in the Barents region. Murmansk provides a port with access the world's oceans and the region lies along the Northern Sea route, a transportation route stressed by Russian leaders as important for communications and trade reasons, as will be elaborated below. Large population centers such as

Murmansk and Norilsk, as well as the large resource-extraction industry mean that Russia objectively can be termed as the Arctic superpower (Baev 2013, 489). These factors may moreover contribute as explanations for why the security emphasis is greater in the case of Russia and why the Arctic region is higher up on the security agenda in Moscow than it is in Washington. Seeing military assets as a function of its tangible interests here and the salience of these contribute to explain the higher Russian presence and engagement in the Arctic region, and the force posture it has, for instance compared to the United States (Østhagen 2011). In other words, the higher military presence, engagement and capabilities in the Russian Arctic area may partly be explained by the relatively higher salience of the territory and flowing from strategic calculations in this territory.

Navigation and Trade Routes

Russia:

After the second presidential term of Vladimir Putin, there has been significant focus on the Arctic region in both domestic and foreign policy discourses in Russia (Zysk 2010, 103). Russia is a determined Arctic player and the importance of the Arctic to Russia has contributed to fuel its determination to make it clear, by economic and military means, that Russia is a central Arctic actor (ibid.). With regards to navigation and trade routes, a natural point of departure would be to explore the issue the Northern Sea Route (NSR) and the country's interests here in order to explore its tangible salience to Russia.

The Northern Sea Route:

Russia has approximately half of the Arctic coastline as the Russian Arctic territory stretches along 24,140 kilometers of coastline along the Arctic Ocean, from waters "from the Barents Sea in the west at the border to Norway to the Bering Sea and the Sea of Okhotsk in the far east" (The Arctic Institute 2018a). Along parts of this coast lies the Northern Sea Route (NSR), legally defined as "the waterways between the Kara Gate and the Bering Strait" (Moe 2014, 784). The salience of this route can for instance be seen in relation to its strategic location, fish stocks and presence of oil resources within the maritime zone. Due to climatic differences in this part of the Arctic, this route is far more ice-free than the Northwest Passage. Thus, in contrast to the NWP, opportunities for commercial and economic development here may be more likely at the current moment. However, before exploring the salience of the route to Russia, the next section will firstly shed some light on legal issues pertaining to the NSR.

The Legal Status of the Northern Sea Route:

With regards to rights over the route, it is relevant to point out the different positions that some actors hold over the jurisdictional status of NSR. Russia's position on the status of the waterway is that the straits are internal waters, and "that the waterways

north of Russia are a part of the national transport infrastructure holding the country together” (Moe 2014, 786). This means that Russian regulations require vessels entering or intending to enter the NSR to give advanced notice to Russian authorities and pay a fee for using the route (Zysk 2010, 107). Other voices, including the United States, maintain that NSR is an international waterway (Huebert 2009, 17). The U.S. Presidential Directive of 2009 on the Arctic Region states that “(...) the Northern Sea Route includes straits used for international navigation; the regime of transit passage applies to passage through those straits” (US White House 2009).

With regards to navigational rights, UNCLOS “mandates free navigation within the 200 nm exclusive economic zone” (Moe 2014, 786). However, an important exception is to be found in the so-called ‘ice-covered areas clause’, Article 234 which is a foundation for Russia’s argument for controlling and managing traffic on the route (ibid.) Shortly explained, this clause gives coastal states a right to enforce regulations to prevent, reduce and control marine pollution from vessels “in ice-covered areas within the limits of the exclusive economic zone” (UNCLOS 1982, 115). With shrinking sea ice however, Article 234 could become less relevant, which may induce Russia to rather emphasize the historical formation of the route, having been developed over many decades (Moe 2014, 786). Russia has, on several occasions, warned that “attempts by other countries to change the NSR’s legal status and transform it into an international transit corridor would be in conflict with Russia’s national interests” (Zysk 2010, 107). The legal status of the NSR may potentially become an even more contentious issue as its importance is expected to increase (Zysk 2010, 107). The next section will look further into the tangible salience of the route to Russia in terms of commercial and economic interests.

The Northern Sea Route and Economic Development:

One of the most fundamental issues for Russia in the Arctic is the Northern Sea Route and its development (Zysk 2010, 105). Russia has stated that it will use the Northern Sea Route as a “national” transport route, and as a transportation link and a central element in maritime connections between Europe and Asia (ISAB 2016, 8, Zysk 2010, 105). The importance of the route to Russia has been present for decades. From the 1930s, the Soviet authorities especially used the western part of the waterway mainly for industrial development in northwest Siberia (Moe 2014, 784). During the Cold War, the NSR functioned as an important transportation route during the Cold War, supplying Russian local communities through the country’s Arctic territory (The Arctic Institute 2018a). However, after a peak of traffic in 1987, the use of the route decreased after the Cold War, and infrastructure and routes of communications deteriorated as traffic fell due to reduced economic activity in the north (Moe 2014, 785). Again, in the late 2000s, its importance is again rising. Indeed, the route has seen a revival as a national and international shipping route after increased melting of sea ice in the region (The Arctic Institute 2018a).

As indicated above, the route is seen as crucial with regards to economic development of the Russian Arctic region, and its increasing role should also be seen in connection with the growing extraction of natural resources in the Arctic as the increased level of shipping expected through the NSR westward is linked to expected increase in Russian petroleum activity mainly from the Barents and Kara Seas (Zysk 2010, 105). Indeed, along the route are several natural resource projects and the route is seen as vital for the accession, exploitation and export of these hydrocarbon resources (The Arctic Institute 2018a). The Russian authorities especially see liquefied natural gas (LNG) projects such as the Yamal LNG project near the Yamal Peninsula with its LNG factory and port at Sabetta as generator of traffic on the NSR and seen as crucial for further development of the route (Moe 2014, 791).

With regards to international use of the route, the NSR was officially opened for international shipping in 1991, and Russia has lately been encouraging international use of the sea route (Moe 2014, 786). Traffic through the route has increased in the last years, however transits remain very limited in comparison to global shipping routes like through the Suez and Panama Canal. Number of transits increased from four in 2010 to 71 transits on the route in 2013 (ibid., 787). However, voyages counted need not have sailed the full length of the NSR and Russian ports could be both origin and/or destination ports, transits are not necessarily international transit (ibid.).

In any case, development of the NSR is one of the fundamental goals of Russia in the Arctic and it retains high importance to the Russian government, emphasized in several documents (Zysk 2010, 105). Russia has emphasized the importance of the route as a transportation route and for supporting oil and gas activities in the region. In light of these findings the salience of the route to Russia can be termed as high. It may moreover be argued that Russia's tangible interests in the NSR and the high tangible value that the route holds for Russia contribute to explain why the region is being relatively more prioritized in terms of security assets diverted towards the region. The route is perceived as a vital transportation route for industries in the Russian coastal Arctic region and its role is moreover expected to grow as the extraction of Arctic natural resources increases (Zysk 2010, 105). In addressing military presence in the region, it is thus worth noting that "Russia's strategic interests in the Arctic are closely related to the country's economic interests in the region" (Åtland 2010, 16,42). As NSR traffic increases, Russian authorities stress the maintenance of a military presence in the Arctic for security reasons due to territorial and maritime claims in the region (ISAB 2016, 8). Russia has the largest icebreaker fleet in the world, which capacity, particularly its four nuclear icebreakers, is considered vital for transit operations along the route (Moe 2014, 794). As will be explored below, there is fear in Russia that others may take control over natural resources perceived as theirs (Åtland 2010, 16). The issue of military assets as a

function of tangible interests in relation the Northern Sea Route will thus also be explored below in a later chapter on economic resources.

Economic Resources

Russia:

Russia is one of the world's largest producers and exporters of hydrocarbon resources, and oil and gas resources are highly important to the Russian economy. According to the U.S. Energy Information Administration (2017b, 1), Russia has high oil and gas production and the export of energy is a driver of Russian economic growth, moreover, in 2016 almost 40 % of the federal budget revenues were from revenues from oil and natural gas. Russia also has significant interests in the oil and gas resources in the Russian Arctic. With regards to estimated discovered and undiscovered oil and gas resources, official Russian estimates point to 70 billion tons of oil equivalents (Claes and Moe 2014, 108).

Of all the Arctic states, Russia is clearly the country with the greatest essential interests in the region (Keil 2014, 166). Factors such as being the country with the longest Arctic coastline, the largest Arctic state geographically, and being an important actor in global energy markets indicate that Russia is the most crucial Arctic actor and the country expected to gain the most from Arctic resource extraction (ibid.). This particularly pertains to the development of Arctic gas. Indeed, there is expected to be much more undiscovered gas than oil, and most of the natural gas in the Arctic is found on the Eurasian side (Harsem et al. 2011, 8038). According to Claes and Moe (2014, 106), with 95 % of the recoverable natural gas resources in discovered fields, Russia is by far the largest actor with regards to Arctic gas activities. The Arctic is seen as an important source of revenue from both oil and gas resources partly due to how these resources are seen as important for further economic development and competitiveness in global markets (Zysk 2010, 104-105). Indeed, it has been noted that "as much as 20 percent of Russia's gross domestic product (GDP) and 22 percent of the total Russian export is generated north of the Arctic Circle" (ibid., 105). The Arctic oil and gas resources represents almost around 20 % of the Russian economy, and may represent even more in the future (Brigham 2017). Russia has been active in exploring for new sources in the Arctic, as older Russian wells are expected to have declining production (Zysk 2010, 105). As such, the resources in the region are particularly seen as important for Russia for further wealth as they could substitute for declining production elsewhere such as in western Siberia (ibid.). Indeed, in order to meet fiscal targets, there is a dependency on tight oil production, and production in more Arctic offshore fields in order to balance the budget (Stromquist and Johnston 2014, 17). As such, Russia does not only have a significant share of the Arctic region's oil and gas resources, as indicated previously, Arctic resources are seen as salient for further economic development. In future terms, as indicated, "Arctic shelf development is a longer-

term strategic priority that could be a significant source of production growth beyond 2020” (ibid., 18).

Moreover, it is relevant to note that the role of Arctic oil and gas resources plays a broader significance for Russia in they are seen as vital to Russia’s relevance in world affairs (Zysk 2010, 105). “The role of energy reserves in strengthening the country’s position and influence on the international stage has been emphasized in the national security strategy up to 2020 that was adopted in May 2009” (Zysk 2010, 105). Shane Tayloe (2015, 9) explains that abundance of natural resources “makes the Arctic integral to Putin’s grand strategy that aims to accomplish economic prosperity and power parity with the US largely through making Russia an energy superpower.” The Arctic region has clearly been emphasized as a strategic resource base by Russian authorities (Blunden 2009, 125).

Factors Affecting Russian Arctic Offshore Oil and Gas Activity:

The Russian government has nationalized most of the Russian energy sector since the beginning of the Putin era; state-owned Gazprom handles over 80 % of the Russian gas production, while the Russian state also has a majority holding in Rosneft (Harsem et al. 2011, 8042, Claes and Moe 2014, 111). These two companies were the only two companies that fulfilled the criteria in the new laws passed by Russia in 2008 that gave exclusive rights to new offshore licenses “to companies with a state majority holding and at least five years’ experience of working on the Russian continental shelf” (Claes and Moe 2014, 111). However, the imposition of national control and monopolization may also constrain the rapid development of Arctic offshore petroleum resources as in order to assess further offshore activities there is a need to take into account these companies’ interests and abilities to operate on the Russian continental shelf (ibid.). On this note, Russian companies are in need of cooperation with foreign companies for their expertise and technology in operating offshore in the Arctic (ibid.). Western oil companies’ help is for instance noted as crucial the development of these resources (U.S. Energy Information Administration 2017b, 3). Harsem et al. (2011, 8043) notes that: “Russia’s problem, however, lies in obtaining foreign investment and attracting the companies that possess the new technology that is required to increase production.” The sanctions put in place after the Ukraine crisis has contributed to stop the involvement of Western companies in Russian Arctic offshore projects, and together “sanctions and lower oil prices have reduced foreign investment in Russia’s upstream, especially in Arctic offshore and shale projects, and they have made financing projects more difficult” (U.S. Energy Information Administration 2017b, 3).

It should also be noted that the global market for natural gas has experienced some changes in the last few years. Indeed, an intended market for the Shtokman LNG, liquified natural gas from the “gas super-giant Shtokman” which was discovered in 1988, was the U.S. (Claes and Moe 2014, 109-110). However, as already mentioned this market seemed self-supplied after the U.S. shale gas revolution, and the project

was postponed in 2012 (Keil 2014, 168-169). “An obvious lesson from the Shtokman experience is that Arctic offshore gas is marginal in today’s market and that effectiveness and cost of development are crucial” (Claes and Moe 2014, 111). A general decline in gas demand globally as well as increased production of gas has led to oversupply and a decline in the demand for Russian gas (Keil 2014, 168). On the other hand, it should also be noted that this might only hold for the short- to midterm future; increased demand might be generated in the mid- to long-term as gas is considered to be a cleaner form for energy than coal for instance, in turn this could lead to rising prices due to increased demand (ibid.). However, an additional factor to consider is also the economic situation in Russia which might hamper further investments in infrastructure and projects, and may lead to further cuts in its Arctic program (Brigham 2017).

Arctic Oil and Gas Activity Despite Obstacles:

However, despite conditioning factors, the Russian Government does seem inclined to further develop the Arctic resources. Indeed, the fall of oil prices contributed to various measures, or proposed measures, by the Russian government to increase revenues, for instance by selling shares in various Russian companies, increase prices through the Organization of the Petroleum Exporting Countries (OPEC), and change tax regulations (U.S. Energy Information Administration 2017b, 4). Moreover, it is also noted that the sanctions will have little effect on Russian production in the short term as many of the fields that Western companies were partners in for instance in 2012 and 2013, were not expected to be producing for at least 5 to 10 years; “the immediate effect of these sanctions has been to stop the large-scale investments that Western firms had planned to make in these resources” (U.S. Energy Information Administration 2017b, 3). Additionally, in contrast to the U.S. and Canada, the Russian government will not likely put constraints on further hydrocarbon activities in the Arctic when it comes to environmental concerns as the Russian authorities are arguably not very concerned about global warming, suggesting that, due to the importance of these resources, Russia will thus not likely move away from oil and gas as energy resources (Baev 2007, 7, Harsem et al. 2011, 8042). With regards to policy implementation, Russia also starkly contrasts the U.S. As shown above, while documentation and policy activity have increased in the U.S., action and investments have not followed. Russia on the other hand, despite numerous obstacles, has implemented many of its Arctic developments’ goals, for instance through Gazprom and Rosneft’s expansion of projects in the region (Zysk and Titley 2015, 173). Oil production in the Russian Arctic has been growing and there are several projects in development (U.S. Energy Information Administration 2017b, 4,6-7).

Moreover, of all the Arctic nations, Russia has the most developed infrastructure in the Arctic region with several icebreakers; and has among other things constructed

“pipelines of record-breaking lengths from the Yamal Peninsula in Siberia” (Harsem et al. 2011, 8042).

The project at the Yamal Peninsula represents one of the most advanced development projects in the Arctic region:

Two new ports on the eastern shore of the Yamal Peninsula illustrate the critical connection between the NSR and Russia’s push to develop hydrocarbons in the Arctic. A new Arctic marine transportation system using the NSR will service the recently constructed liquefied natural gas (LNG) plant and port at Sabetta, located on the Gulf of Ob (...) An initial fleet of 15 icebreaking LNG-carriers, the world’s first such ships, will carry Yamal gas out of the Russian Arctic to global markets. Each is capable of carrying 170,000 cubic meters of LNG and can operate independently (without icebreaker support) in modest ice conditions (Brigham 2017).

From the assessment above it is clear that Russia has significant tangible interests in the region in terms of these economic resources which may be termed as highly salient to the country. Overall, the Arctic is of outstanding importance for Russia and Russians. In this way, it may be argued that the economic resources are significantly contributing to the salience of the Arctic for Russia through holding economic and strategic importance. They contribute to the salience of the North to Russia which furthermore holds a role in Russia’s ambition to increase its international role (Keil 2014, 170). Indicating this salience is for instance the pursuit of development of the Northern Sea Route in inhospitable environments where temperatures can fall to -40 degrees Fahrenheit: “The NSR is what provides, and will provide, most of the access to these resources (...) In reality, the development of resources and their contribution to the overall security of the Russian economy will be the primary drivers of the NSR’s future use” (Brigham 2017).

In light of the Russian emphasis on developing the Arctic resources, it is relevant to note that much of Russia’s security measures in the region are linked to these economic interests. Indeed, the Russian Arctic policy document from 2009, “stresses the importance of a continued military presence as essential for securing national interests in the Arctic, although Russia’s defense policy in the region is discussed in the Arctic document only in vestigial form” (Zysk 2010, 107). Russian authorities have stressed that increased military presence is a function of the security challenges that may come from the increase in economic activity in region (ibid.). As indicated above, much of this focus has been related to security measures that will support the development of these resources. “Hence they devote much attention to development of search and rescue capabilities, surveillance, and navigation systems to provide safety for and control of the economic, military, and ecological activities” (ibid.). It is also for instance noted that new activities related to oil and gas impose more responsibilities on the Russian Navy: “the Northern Fleet is likely to be tasked with the anti-terrorism protection of the new installations (platforms, pipelines,

terminals, et cetera) and tanker traffic” (Åtland 2011, 272). As such, the Northern Fleet has gotten a “brown-water” function, operating in coastal waters or “the ‘brown-water’ zone” (ibid., 272,281), taking a primarily defensive role. On the other hand, blue water navies can generally be termed as operating globally. Anyhow, interests in the region with regards to economic development and the NSR’s link to the exploitation of natural resources may be crucial for explaining the prioritization of the region in terms of military presence. “The expected increase in industrial and commercial activities in the littoral zone appears to be seen as argument in favor of strengthening the naval and/or FSB presence in the region” (Åtland 2011, 272).

The Intangible Role of the Arctic – Identity and historical Ties to the Region

Russia:

With large parts of its territory above the Arctic Circle, Russia should, more than any other state, “be described and understood as a northern country” (Keil 2014, 169). However, it may also be pointed out that most of the Russian population do not particularly have a strong connection to the Arctic (Khrushcheva and Poberezhskaya 2016, 548). Indeed, within Russia, the relationship with the Arctic varies throughout the large country. Northwest Russians may for instance “speak about themselves as northerners, as opposed to Russian southerners, and as Russians, as opposed to Scandinavians” (Hønneland 2014a, 85). The aim of this section is not to group all Russians together or talk about one specific sub-group of Russians in relation to national identity, but to explore intangible characteristics and aspects related to the Arctic in Russian society and politics.

Firstly, a few comments on historical trends related to the Russian worldview may give a context to explore how the North matters in terms of intangible salience to Russia. The divide between East and West has historically contributed to shape Russia’s worldview (Hønneland 2016, 32). Russia’s relations with the West, or perhaps its concerns, “have been at the heart of Russian political philosophy and Russia’s foreign policy for centuries” (Hønneland 2014, 59). While Westernizers, especially towards the end of the Cold War period, have believed Russia should learn from the West, others have a worldview that connects to a Slavophile worldview that entails how competing civilizations is surrounding Russia (Hønneland 2016, 28-29). However, Russian foreign policy approach has since the millennium and Vladimir Putin been relatively a relatively de-ideologized, and pragmatic to the outside world, despite anti-Western rhetoric: “(...) Putin obviously wanted Russia to be seen as a civilized partner in international politics because it is in Russia’s best interests” (ibid., 30-31). Now, after Russia’s actions in Ukraine this approach may be questioned. With regards to national identity, the East as a symbol of national identity diminished in the early eighteenth century (ibid., 32). It is observed that: “in the worldview of the ever more Westernized upper classes, the North took precedence over the East as Russia’s spatial-ideological point of reference” and early romantic writers in the pre-Revolutionary Russia often used the North in their

writings, employing the North as a symbol of a place indigenous to Russianness (Hønneland 2016, 32). In the current era as well, the intangible salience of the Arctic in Russian society and politics is arguably increasing.

Arctic Narratives in Russia - Russia and the West:

In the debate about the Arctic in Russia, there are two major meta-narratives. The first narrative, 'Russia and the Arctic', incorporates components related to the Arctic as being neglected; the reason being Russia itself (Hønneland 2016, 67). However, the other narrative, which arguably dominates the debate, is related to 'Russia vs the West' (ibid.).

In this domestic discourse regarding the Arctic, relations and concerns with the West and NATO feature into parts of the Russian narrative on the region:

(...) the West is interchangeably talked about as 'Cold NATO' and 'our neighbors'; when these foreign powers seek to maximize their interests in the Arctic, it is referred to either as a natural thing – what any reasonable state (or alliance) would do – or as outright offensive, reflecting the impudent behavior of foreigners in Russia's backyard, or, rather, the country's core area (Hønneland 2016, 67).

Through this discourse about the Arctic, the narratives related to how Russia is different from the other Arctic states is prominent, and the identity-building narrative establishes the difference between Russia and the other Arctic states (Khrushcheva and Poberezhskaya 2016, 561). Indeed, "Russian Arctic policy is explained in the context of ongoing competition for the Arctic's treasures with "the other" (the other Arctic states)" (ibid., 549). By establishing this distinction between Russia and other states, Russian leaders are communicating and emphasizing both the "uniqueness" of Russia and moreover also the salience of the Arctic to the public (ibid., 548-549). The next section will go further into these issues, emphasizing that the Arctic plays an important role politically and for purposes of identity-building in Russia.

The Role of the Arctic in Intangible Terms: Identity and Historical Ties to the Arctic:

Russia's state identity remains shaky twenty years into its post-Soviet history, and the loudly proclaimed intention to expand its Northern borders by securing control over a million sq. km of the Arctic shelf is best understood as an attempt to consolidate it (Baev 2010, 6).

After the end of the cold war, and particularly under Vladimir Putin, it may be argued that the Arctic has been an important component in Russian efforts in trying to re-define Russian identity. Increased attention to the intangible salience of the Arctic may be linked to Russian attempts to connect the region with the prestige and power that Russia has held historically. Relevantly, the region has come to play a role in the Russian efforts related to increasing Russian prestige on the international level (Zysk and Titley 2015, 170). In this context, the historical role of the Arctic for Russia

is emphasized through nationalistic sentiments drawing on the stories of exploration and “military muscle-building” which “is aimed at creating a positive message pertaining to the very core of the still vague Russian national identity” (Keil 2014, 169). In this way, while Russia has a long history in the North, in later years there has been increased attempts in tying Russia to the Arctic and official narratives has emphasized this connection.

The Arctic seems to be playing a role and part in Russian identity-construction in which Russian leaders frame Russia as a great Arctic power, and the Arctic as an essential component of Russian national identity (Khrushcheva and Poberezhskaya 2016, 561). In this identity-building process, “Russian leaders emphasize the historical connection between Russia and the Arctic and, in fact, position the state as a “historical” Arctic Great Power” (ibid.). As such, the identity building-process that draws on the intangible value of the Arctic, such as its symbolic value, can be identified as a way to influence both “the hearts and minds of national and international audiences” of the salience of the Arctic to Russia (Khrushcheva and Poberezhskaya 2016, 548). In this attempt to tie the Arctic to Russia, some comments should be noted with regards to the indigenous peoples living in the Russian Arctic.

Russia has several indigenous peoples living in its Arctic area. Some of these includes the Nenets, Chuckhi, and Khanty (The Arctic Institute 2018a). As with other Arctic indigenous peoples, these groups that have been present in the Russian Arctic for a long time and are also closely connected to resource exploitation in the region (The Arctic Institute 2018a). In light of this, there has been some tension between indigenous groups and extraction companies in the Arctic, in which the latter has posed a threat to traditional livelihood for instance through pasture degradation (Khrushcheva and Poberezhskaya 2016, 555). It is for instance noted that Russian leaders have emphasized coexistence between the indigenous peoples and industrial production, and attempted to act as a defender of the former (ibid.). Moreover, some of the Russia discourses point to how indigenous peoples and their culture are closely connected and part of Russian society, in order to avoid excluding other parts of the Russian population who do not belong to Arctic indigenous peoples, they are not emphasized as core elements (ibid.).

Indigenous people and people in the non-Arctic parts of Russia are often separated both geographically and culturally. The narrative created by the state should create the feeling of belonging to the Arctic across the country, and the feeling of belonging to Russia among the indigenous populations of the circumpolar regions (Khrushcheva and Poberezhskaya 2016, 561).

In sum, the emotional and symbolic dimensions of the region play crucial roles at the political level, in Russian Arctic policies (Keil 2014, 170). Indeed, the “Foundations of Russia’s Arctic policy” document from 2008 highlights the national pride of associating Russia with the Arctic (Khrushcheva and Poberezhskaya 2016, 551). By

rhetorically tying Russia to an identity of being an Arctic nation may furthermore be important for Russian leaders as it may ensure that policies related to Arctic is legitimized, such as rights to Arctic exploration of resources (ibid., 548,561). That intangible issues feature into and matter in terms of policies with regards to the Arctic is furthermore supported by Pavel Baev (2013, 492), who notes that Russia's policies in the north such as resource exploration and the establishment of sovereignty is driven "by deeper (and often imaginary) convictions in Russia's belonging in the North (...) which shapes its core identity."

"Polar powers: Russia's bid for supremacy in the Arctic Ocean," Nastassia Astrasheuskaya and Henry Foy, Financial Times, 27 April 2019 [94]

<https://www.ft.com/content/2fa82760-5c4a-11e9-939a-341f5ada9d40>

Overview:

Just days before a major Arctic conference this month in St Petersburg, where president Vladimir Putin was to host four regional leaders under the banner "Arctic: Territory of Dialogue", Russian warships were on maneuvers in the frigid northern waters. On the waves of the Barents Sea, a frigate from the Northern Fleet fired rockets to shoot down cruise missiles launched from one of its own anti-submarine warships.

It was a show of strength not missed by Mr. Putin's guests. The Barents, whose waters lap Norway's coast, marks the western boundary of the Northern Sea Route, a stretch of water encircling the North Pole that has for thousands of years remained mainly ice-bound, but whose rapid thaw has ushered in one of the world's biggest emerging geopolitical flashpoints.

Fueled by climate change that is rapidly shrinking the northern ice cap, the NSR has become an arena of growing competition. Its potential as a preferential shipping route between Europe and Asia could change global trade flows. The colossal hydrocarbon reserves that lie beneath it could upend energy markets. And its growing militarization has caught the attention of world powers.

Current & Relevant Information:

While dozens of countries have begun staking claims to its riches, none has been as proactive as Russia in seeking to exploit the region, leaving others scrambling to keep pace. One-tenth of all of Russia's economic investments are currently in the Arctic region, Mr. Putin said this month in St Petersburg.

Since 2013, Russia has spent billions of dollars on building or upgrading seven military bases on islands and peninsulas along the route, deploying advanced radar and missile defense systems — capable of hitting aircraft, missiles and ships — to sites where temperatures can fall below -50C. It gives Moscow almost complete coverage of the entire coastline and adjacent waters.

The message is clear. If you want to sail through the Arctic and travel to and from Asia faster, or have designs on the oil and gas assets beneath the sea, you will be under Russian oversight.

“The Americans think that only themselves can alter the music and make the rules,” Sergei Lavrov, Russia’s foreign minister, told the St Petersburg gathering. “In terms of the NSR, this is our national transport artery. That is obvious... It is like traffic rules. If you go to another country and drive, you abide by their rules.”

While traffic is light today, it is growing. Experts estimate that during ice-free months, eastward shipment from Europe to China through the NSR is estimated to be around 40 per cent faster than the same journey via the Suez Canal, lopping hundreds of thousands of dollars off fuel costs and potentially cutting carbon dioxide emissions by 52 per cent. At the moment the Arctic Ocean has just three ice-free months a year but several estimates suggest that number will increase in coming years, boosting access and driving up traffic.

In anticipation of a shipping boom, Russia has pushed through legislation to increase its control, including giving Rosatom, its state-owned nuclear power conglomerate, a monopoly over managing access to the NSR through icebreakers that can chaperone ships.

With a fifth of its land inside the Arctic Circle, Russia has gone in search of more territory, claiming that underwater ridges mean it should be granted another 1.2m square kilometers of the Arctic Ocean. The UN Commission on the Limits of the Continental Shelf has recognized part of the neutral Arctic waters as a continuation of the Russian shelf. As a result, the Mendeleev Rise and the Lomonosov Ridge may become Russian by the summer of 2020, says an official familiar with the talks.

Rivals are scrambling to catch up: This week the US announced it had ordered its first icebreaker for more than two decades, spending \$746m on a ship to be ready in 2024. “Against the backdrop of great power competition, the [ship] is key to our nation’s presence in the polar regions,” says Admiral Karl Schultz, commandant of the US Coast Guard, citing “increased commerce, tourism, research, and international activities in the Arctic”.

In 2007, Russian explorers planted a titanium white, blue and red tricolor flag on the seabed below the North Pole. That act, the most audacious and theatrical part of a bid to claim the Pole, came almost 300 years after Russia’s Arctic exploration began. Expeditions ordered by Peter the Great first mapped out an Arctic coastline of around 24,000km — roughly the same length as Russia’s entire land borders.

Russia built the world’s first icebreaker, the Yermak, 120 years ago. In 1957, it built the first nuclear-powered version, the Lenin. Its Arktika icebreaker was the first to reach the North Pole in 1977. “Little has changed essentially in those years, both in

the shape of the frame and the inside components,” says Sergei Frank, head of state-owned shipping company Sovcomflot.

During the cold war, the Soviet Union threw huge resources at the region. The Northern Fleet was the largest in the Soviet Navy, and Arctic air bases provided refueling points for nuclear-capable bombers. Western powers settled for containment, with NATO forces patrolling the gaps between Greenland, Iceland and the UK in a bid to prevent Soviet submarines armed with ballistic missiles from passing into the Atlantic undetected.

But as the Soviet economy crumbled, the Arctic infrastructure steadily fell into disrepair. Expensive to maintain and lacking a strategic rationale, Moscow slowly shifted focus.

Climate change and the growing power of Asian economies have changed that calculation. Arctic ice has shrunk by 12.8 per cent a decade on average since 1979, according to Nasa data, and last year’s September ice cover was 42 per cent lower than in 1980, turning a frozen, secure northern border into a hotbed of potential exploitation and conflict. Last year Russia’s Northern Fleet conducted its largest military exercise for a decade.

“Russia simply doesn’t have another ocean,” the country’s natural resources minister, Dmitry Kobylkin, said last week. “All projects implemented in the Arctic are our future horizons.”

But where Moscow sees a security challenge, other countries see opportunity. Last August, Danish shipping major Maersk ran a trial shipment along the NSR, when the *Venta Maersk* ferried electronics, minerals and 660 containers of frozen fish from Vladivostok to St Petersburg. The first-ever NSR transit by a container ship, which Maersk says was a “one-off trial” to gain experience, was chaperoned by a Russian icebreaker along most of the country’s north-eastern coastline.

Ships from 20 different countries plied the waters of the NSR last year, carrying a total of 20m tons of cargo. While paltry in comparison to traditional global shipping routes, it is double the amount in 2017, and Russia expects that figure to quadruple by 2025. “This is a realistic, well-calculated and concrete task,” Mr. Putin said this month. “We need to make the Northern Sea Route safe and commercially feasible.”

Rosatom says the cargo target could be beaten, provided it receives new icebreakers on time. “Life doesn’t end there,” says Alexei Likhachev, Rosatom’s head. “We are aiming for 92.6m tons in transit by 2024 rather than 80m tons. And by 2030, we hope to add a significant part of international transit to that.” China’s increased interest in the Arctic, and its developing friendship with Russia, will be critical in hitting that target.

Beijing has observer status on the Arctic Council, a body designed to manage regional co-operation; has a research station on the Norwegian archipelago of

Svalbard; and is the biggest foreign shareholder in Russia's Arctic liquefied natural gas projects, which will rely on NSR shipments for exports. Last year, China published an Arctic policy paper that explicitly linked the NSR to its ambitious Belt and Road strategy of developing pathways for both trade and influence, dubbing it the "Polar Silk Road".

"I remember that just two decades ago people were saying [the NSR] was impossible," says a foreign ambassador in Moscow. "But when I heard the term Polar Silk Road and realized the Chinese were interested, I knew it was serious."

Shipping companies from South Korea, where many of Russia's cargo tankers are built, have also conducted pilot voyages since 2013. "South Korea and other Asian countries consider the NSR the shortest shipping route linking Asia and Europe and one of great commercial potential," says Park Heung Kyeong, ambassador for Arctic affairs for Seoul's foreign ministry.

Yet turning potential into profit will not be easy. Ships often require an escort from an icebreaker as a precaution even when the NSR is ice-free. "This is a very difficult and technologically intense task because we exist in a very competitive environment," says Maxim Akimov, Russia's deputy prime minister.

Russia has the world's only fleet of nuclear icebreakers. All but one of its four-strong fleet will be replaced over the next decade at an estimated cost of between \$500m and \$1.5bn each. By 2035, its Arctic fleet will include at least 13 icebreakers, including nine nuclear powered vessels, according to Mr. Putin.

Moscow also needs to expand and develop ports at both ends of the route — Murmansk close to the Norwegian border and Petropavlovsk-Kamchatsky on the Kamchatka Peninsula near Japan — and has invited foreign companies to invest in the projects. "We are convinced that there is demand for the NSR and plan to implement the project with the help of broad international partnerships," says Rosatom.

At the St Petersburg conference, the most commonly used word among foreign officials was "co-operation". Although senior representatives from Canada and the US were conspicuous by their absence, presidents, prime ministers and top diplomats from European Arctic powers were at pains to make clear they wanted to work with Moscow.

Indeed, they might. Russia's rapid and determined push to assert its control over the NSR has unnerved many of its Arctic neighbors, which are now seeking to collaborate with the Kremlin.

Complicating the issue is the soured relationship between Russia and the west, due to Moscow's 2014 annexation of Crimea, the attempted assassination of a former spy in the UK last year and efforts to meddle in foreign elections.

Those factors, and the resulting sanctions levied by western countries, mean some governments are tentative about working closely with Moscow on commercial or security issues, and have instead focused on areas such as environmental protection and safety.

Without action to mitigate human sources of greenhouse gas emissions, the Arctic Ocean could be ice-free during the summer months before 2050, and possibly within the next decade or two, a UK parliament defense committee report warned last year.

“We want to have good relations with Russia, but at the same time we do not give up on the things which we believe in and things which we look at differently,” Sweden’s prime minister Stefan Löfven told Mr. Putin on stage in St Petersburg.

Marie-Anne Coninx, the EU’s ambassador-at-large for the Arctic, denies that Brussels had been slow to react to the region’s potential. “We have for many years been engaged with the Arctic,” she says. “We are co-operating well with Russia — co-operation not competition.” Brussels is working with Moscow on issues ranging from water waste management to the treatment of nuclear waste in the region, she adds.

“The EU’s member states have the biggest merchant fleet in the world,” Ms. Coninx says. “If there are new economic opportunities, they will be used.” But the west’s other response was illustrated last October, when NATO troops carrying assault rifles poured out of landing craft on to beaches in northern Norway. Operation Trident Juncture was the military alliance’s largest war games since the cold war, and saw 50,000 troops, 10,000 vehicles and 250 aircraft from 31 countries participate in a four-week long exercise close to the country’s border with Russia.

Condemned by Moscow as aggressive posturing, analysts said it illustrated how seriously NATO took Russia’s ambitions in the frozen north, and its understanding that its troops needed experience of operating in the region.

Russia is “staking a claim and militarizing the region”, UK defense secretary Gavin Williamson said last September as he announced the country’s new Arctic defense strategy. “We must be ready to deal with all threats as they emerge.”

Around 800 Royal Marines troops are training in Norway this year, while four RAF Typhoons are patrolling in the skies above Iceland for the first time.

The US is expected to release a new Arctic strategy this summer, a document that the Pentagon has said will focus on how to “best defend US national interests and support security and stability in the Arctic”.

“Russia’s development of its Arctic areas... gets immense attention, and that creates both fair and unfair competition, which is pure politics,” says Konstantin Kosachev, chairman of the foreign affairs committee at Russia’s upper house of parliament.

That challenge of balancing defense and development is the biggest question facing Russia, says Chris Tooke, analyst at GPW, a political risk consultancy.

Moscow helped Arctic gas producer Novatek by relaxing a requirement that only Russian-registered vessels can traverse the NSR which would have dented its export potential. But Mr. Tooke believes such steps will be rare.

“On balance, I would expect security imperatives to trump commercial interests, and this tension and the need to develop infrastructure will probably slow progress in commercial exploitation in the medium term,” he says. “But the potential is definitely there.”

“Russia’s Arctic Strategy: Aimed at Conflict or Cooperation? (Part I),” Pavel Devyatkin, The Arctic Institute: Center for Circumpolar Security Studies, 6 February 2018 [95] <https://www.thearcticinstitute.org/russias-arctic-strategy-aimed-conflict-cooperation-part-one/>

Overview:

This four-article series critically examines Russia’s military, energy, and shipping interests in the Arctic and how Russian policies and actions compare to the existing academic and journalistic rhetoric about the Arctic region.

- [Part II: Military and Security](#)
- [Part III: Energy Extraction](#)
- [Part IV: Maritime Shipping](#)

Current & Relevant Information:

Background

The Arctic is an area of increasing interest among policymakers, journalists, and scholars because of its political, economic, and strategic importance for the entire globe. There is no universally agreed upon geographic definition for the Arctic, but for this study the Arctic is defined as the polar region in the northernmost part of Earth above the 66°33’N latitude line, i.e. the Arctic Circle. Academics and journalists alike predict that there will be “severe clashes over the extraction of natural resources and the emergence of a new “great game” among the global powers.”²⁾ Perhaps the most noteworthy event that sparked international interest in Arctic affairs was the 2007 Russian polar expedition. In July 2007, a team of Russian scientists led by Artur Chilingarov descended to the ocean bottom of the North Pole and planted a Russian flag on the seabed. This symbolic claim of the North Pole as Russian territory was widely criticized in North America and Western Europe as an example of Russia’s forceful expansionism. In the event’s aftermath, Western states enhanced military patrols in the Arctic in response to a perceived threat from Russia. The 2007 North Pole expedition was not the sole catalyst for the

contemporary military build-up in the Arctic, but it can be considered a turning point in Arctic affairs because of the ensuing outcry that renewed the Arctic security debate. All of the Arctic littoral states have formulated Arctic strategies that prioritize sovereignty and national security in their respective territories. Russian, Canadian, American, and Norwegian armed forces, naval vessels, and military aircraft have all made appearances in the Arctic in recent years.

Russia's role in the Arctic particularly stands out. Geographically speaking, Russia's northern shores encompass half of the Arctic coastline. Russia is arguably the region's leader in terms of economic investment since as much as 20% of Russia's gross domestic product (GDP) is generated within Russian territories in the Arctic. The Russian Arctic is also home to approximately two million people and a diverse economy consisting of sectors such as energy extraction and maritime shipping. However, the extensive build-up of military units and infrastructure is the most controversial aspect of Russia's Arctic policy. In accordance with the region's economic and geographical importance, Russia has recently renewed its security activism in the Arctic. Russia's military activities and economic ventures have intensified the debate on the nature of Russia's Arctic policy.

Part I: The Debate so far

“Standing like a black monument in a vast landscape of blinding white,” a nuclear submarine breaks through the ice of the Arctic. The USS Hartford, an American nuclear submarine, is not the first, and most likely not the last, military unit above the Arctic Circle. Why is the Arctic experiencing such military activity? Why is the Arctic described as the setting for a New Cold War? Is Russia's Arctic Strategy more focused on the potential for conflict or cooperation in the region?

Until the twentieth century, the Arctic was widely dismissed as a freezing and faraway wasteland. Nowadays the region has the world's attention and is often framed as the setting for an intensifying struggle between “Western” Arctic states and Russia. This series of articles critically examines Russia's policies and actions in the Arctic and how they compare to the existing academic and journalistic rhetoric about the region. These articles focus on three issue areas within the Russian Arctic policy: military and security, energy extraction, and maritime shipping. There are other parts to Russia's Arctic policy, such as the rights of Indigenous peoples, territorial claims, and climate change, but this study will focus on military, energy, and shipping since these issue areas are most likely to be sources of competition between the circumpolar states. The first part of this series provides an overview of the existing academic debate regarding Russia's Arctic ambitions.

To understand Russia's Arctic strategy, we need to analyze its Arctic policy aims and their implementation, guided by a set of research questions. Is Russia's Arctic policy more focused on conflict or cooperation? How do different international relations (IR) schools of thought understand Russia's actions in the Arctic? What is

Moscow's official strategic approach to Arctic issues? What has Russia actually done in the Arctic, as opposed to the rhetoric about its intentions in the region?

The majority of the existing literature on Russia's Arctic ambitions characterizes the state as either assertively preparing for conflict or pragmatically working towards international cooperation, without an in-between. However, Russia's actual strategy is far more nuanced than these narratives suggest. Consequently, analysts and policymakers tend to adopt dogmatic approaches without considering the possibility of a multidimensional Russian Arctic strategy.

“The Not-So Frozen Conflict: Russia’s Ambitions in the Arctic and their Implications for NATO in the Far North,” Anya Gorodentsev, University of Vermont, 2019 [96]

<https://scholarworks.uvm.edu/cgi/viewcontent.cgi?article=1340&context=hcoltheses>

Abstract:

The Arctic Circle is warming twice as fast as the rest of the world and with the shrinking polar caps, there exists an abundance of undiscovered oil, other natural resources, fish, and the prospect of fast and efficient sea routes. Unlike Antarctica on the opposite pole, the Arctic is a frozen ocean surrounded by continents with United States, Denmark, Russia, Canada, and Norway all laying claim to the area of exploitable territory. Russia in particular has the most vested interest in the area, covering half the coastline and inhabiting three-fourths of the Arctic population. In addition, composing 11% of Russia's national income and an estimated 30% of the world's undiscovered oil, the Arctic has been deemed vital to its national security and economic revival. My research project will demonstrate the importance of the Arctic Circle for Russian identity and national pride as well as the vitality of the region for its economy, particularly the oil industry. It will also seek to express Russia's potential for cooperation with other Arctic states based on President Vladimir Putin's Arctic policy, justified military activity and geopolitical actions and discredit Western authors claiming Russia intends to start a new “Cold War” over the region. My research will lastly present implications facing the future of the Arctic and provide policy recommendations as potential solutions.

Current & Relevant Information:

Putin's Arctic Policy

Russian government and its people regard the Arctic with a sense of identity and pride based on their historical significance. The Arctic myth of the 1930s promoted the idea of man (Russians) conquering nature - a recurring theme in Russian nationalism that continues to this day in feats of military prowess and economic prominence in one of the coldest climates in the world. Several objectives of the Soviet Arctic can be paralleled with contemporary Russian Arctic policy, especially with resource ambitions, however, there are arguably more points of contrast than

comparison. In my opinion, President Vladimir Putin's Arctic policy represents largely a long-term, far-reaching economic plan that includes military development to protect these interests, by way of contrast to Stalin's short-term ideological and assimilation goals in the Arctic. Additionally, with the progression of climate change and globalization, new challenges and opportunities arise in the contemporary Russian Arctic that were not previously encountered during the Soviet era. For example, climate change has provided opportunities to expand economic interests in the Arctic, already comprising 20% of its national GDP and an essential part of Russia's reviving economy. Furthermore, the USSR's legal status of the Arctic and claims to its territory was never challenged, despite the fact the Arctic was a point of intense confrontation during the Cold War. In the current era of globalization, international law is held with significant gravity and the effects of climate change have transformed the legal status of each Arctic country into an issue of the utmost importance with regard to coastal and nautical boundaries. One of these legal issues, for instance, concerns the Northern Sea Route, primarily utilized for Russia's domestic use between selected straits until the early 21st century.³² Ice melt and expansion of geographical boundaries opened the route to viable international commerce and now Russia's claim to "internal waters" of the NSR is being contested.

I believe that the rapid development of Putin's Arctic policies originates from a stagnation of Arctic activity at the end of 20th century, rather than from a duplication of goals during the Stalin-era. In the 1990s, President Boris Yeltsin and the federal government perceived Russia's Arctic regions "as a burden or source of various socio-economic problems rather than an economically promising region." Essentially all Arctic activity during the 1990s was halted: polar stations were abandoned, scientific explorations ceased, and air and maritime traffic levels reached record low points. In an address to the Federal Assembly in 2005, Putin referred to the fall of the USSR as the "major geo-political catastrophe of the century," not because Russia lost its territory and military power, but due to the fact it was followed by one of the worst periods economically-speaking in Russian history and consequently lost its international standing. As soon as Putin came to office, he began to centralize control and enact a number of economic reforms with ambitious goals, the Arctic being a vital component of these policies. He additionally sought to re-establish the Arctic as a region of military-strategic importance. At a Munich Security conference in 2007, Putin called for Russia to play an increasingly active role in world affairs,³⁵ the same year the "Arktika" expedition was launched to the North Pole. Putin's goals as outlined in his Arctic policies and statements are namely two-fold: to protect domestic interests through the Northern Sea Route and natural resources, and secondly, to establish Russia as the Arctic hegemon, militarily and politically, as the only non-littoral NATO Arctic nation. Other Arctic nations and observers are quick to frame this as a sequel to Stalin's Arctic military industrial complex, however, I argue this is an entirely different situation with contrasting goals, ideologies, and political and environmental climates. For example, Paul Josephson in *The Conquest of the*

Russian Arctic argues Putin's development of Arctic industries and the Northern Sea Route are solely driven by an attempt to reproduce Soviet Arctic greatness. However, owning more than half of the Arctic coastline and being one of the largest exporters of oil in the world, Russia's stakes in the region are arguably much greater than any other Arctic nation; therefore, it has reason to secure its Arctic borders and develop its Exclusive Economic Zone in conjunction with its military. Parts of Putin's Arctic policies may in fact advance his ideological nationalism, though, as demonstrated by the subsequent Arctic policies, this is not his main focus of attention in the region.

Arctic policy began to be drafted in the early 2000s, although it was not until 2008 that Russia's first post-Soviet Arctic policy designed to address mainly domestic measures in the Arctic was passed under President Dmitri Medvedev. The primary goals of 2020 included international peace and cooperation efforts and the redevelopment of resource extraction and the NSR for Russia's economic goals. In 2009, two more Arctic policies were subsequently passed: the "2020 Strategy for National Security of the Russian Federation until 2020" emphasizing the military's role in protecting Arctic interests, and the "2030 Russian Energy Strategy up to 2030," which underlined the importance of the Arctic in regard to natural resources. When Putin returned to the Kremlin in 2011, Moscow developed still greater detailed Arctic policies that centralized the Arctic administrations and enhanced Russia's security posture in the region. Worried about Western interference and in the interest of updating outdated Soviet military equipment, he announced the creation of the first Arctic brigade in 2012, established a missile defense system and instructed the Navy to resume patrols of the NSR. The "2020 Strategy for the Development of the Arctic Zone of the Russian Federation" approved in February 2013 was a follow-up to the first Arctic policy passed in 2008, also calling for the protection of Russian national interests and was essentially designed for "domestic rather than international consumption." At any rate, there were components that mentioned initiatives on the international front, including channels of international cooperation for sustainable development of the Arctic in environmental and safety measures. It also provided detailed military tasks in order to ensure military readiness to protect Russian interests in its Exclusive Economic Zone, deter potential threats and improve air and maritime monitoring systems. Therefore, in the following year, Russia announced the reopening and modernization plan of fifty military airfields by 2020 and the creation of the Northern Fleet-United Strategic Command for the Arctic. In addition, the Arctic Commission was established in 2015, responsible for all social, economic, and national security developments of the region chaired by Dmitry Rogozin. That same year, Russia also issued a revised Maritime Doctrine issuing the development of the Northern Fleet to defend economic interests and also resubmitted its claim to the UN Continental Shelf Commission to extend its Arctic territory.

While the Arkitka expedition and the planting of the flag in 2007 was symbolic and arguably confrontational, bombastic and nationalistic statements concerning the Arctic do not appear in Russia's federal Arctic policy or in speeches by Putin. The main purpose of this expedition apparently was to resubmit Russia's claim to the Lomonosov Ridge. Yet, American media outlets and policy reports on the Arctic often reference and sensationalize this flag and nationalistic statements by government officials as Russia's official and definitive stance on the Arctic to produce the image of Russia invoking a new "Cold War." For example, in a report produced by the Center for Strategic and International Studies on "Russia's Strategic Reach to the Arctic," it refers to a quote on several occasions by Dmitry Rogozin, stating the Arctic is "our territory" and foreshadowed "serious economic collisions in the 21st century," despite the fact he chaired the Arctic Commission for merely a single year. In my opinion, this selective bias results in a skewed perspective of misinformation and frames Russia as the adversary in the Arctic, instead of assessing the potential for international cooperation. Critically acclaimed American author and journalist, Richard Lourie, similarly warns the Arctic will become "an undersea Crimea that must be seized and annexed in defiance of all law, even at the risk of war." However, Russian policy statements have never declared intentions of annexing regions of the Arctic and the government has abided by the international law in its submission of its claim to the Lomonosov Ridge. Even Artur Chilingarov, the Russian explorer who planted the flag and laid claim to the Lomonosov Ridge as Russian territory, stated "in the Arctic there are no problems that cannot be solved on the basis of mutual understanding and constructive dialogue," emphasizing Russia's willingness to cooperate on the international front, not act as an aggressor. It should be noted that Russia is not the only country with nationalistic statements regarding its portion of the Arctic: Canadian government officials have made similar claims to the Northwest Passage and declare the area its internal waters; however, this claim has gained less international attention since commercial travel has grown much more slowly owing to difficulty in navigation through the islands of the archipelago; and while Canada's scientists are working closely with their American and Danish counterparts, "each nation with jealousy defend its 'right' to the Arctic seabed" according to Canadian Arctic scholar Robert Bone.

The development of Arctic policies since 2008 may be seen to have built off of one another and consistently have referred to the protection of national interest and security and according to the authors continuously uphold the integrity of international organizations. In an article written by Valery Konyshev and Alexander Sergunin from the Department of International Relations at St. Petersburg State University, Russia's policies in the Arctic represent a mix of "hard and soft power" approaches for their own domestic economic and political interest of an area that composes a significant portion of Russia's economy and focuses on modernization of industrial and military programs; yet for the most part, Russia clearly demonstrates that it prefers to use soft power more often than hard power, as well as act via international organization. Konyshev and Sergunin argue that Moscow's

Arctic policies are predictable, pragmatic and follow a pattern of “responsible cooperation.” Arguably, it should come as no surprise that the reinforcement of Arctic military was an inevitable provision of the development of the Arctic region since normal policing forces are not suited to patrol the harsh climate of these regions.

From the view of Russia’s domain, the country has important economic, political, cultural, and military strategic points of interests in the Arctic that are proclaimed at the federal level to be protected, but security challenges and threats necessitate the development and modernization of defense programs in the Arctic. As outlined by a number of primary source documents originating from the Kremlin’s website, Putin has never stated Russia’s Arctic policy as seeking to demonstrate expansionist military power, though Western scholars and media continue to accuse Russia as being combative and militant, as demonstrated by the authors mentioned above. An analysis of the military operations prove that Russia is following a strategic deterrence initiative. The critical importance of Russia’s interests, its vulnerabilities, and the goal of remaining the dominant player in the Arctic region have necessitated a high level of Russian military activity in the Arctic region in order to protect its domestic interests in terms of its economy and national security.

H. Other Countries (Non-Arctic Countries):

1) China:

“Norway’s ‘northernmost Chinatown’ eyes Arctic opportunity,” Isabella Borshoff, Politico, 20 November 2019 [97] <https://www.politico.eu/article/norway-kirkenes-china-influence-arctic-shipping-opportunity/>

Overview:

Four hundred kilometers north of the Arctic circle, a tiny Norwegian town is playing big-league politics.

Kirkenes, situated just 14 kilometers from NATO’s northern land border with Russia, is no stranger to geopolitical games. But while the world’s superpowers bicker over the rules, Kirkenes’ approximately 3,500 residents pride themselves on keeping the ball in play. Norwegians drive to Russia for cheap gas; Russians come to Norway for high-quality diapers; some end up married. Daily life on this far-flung peninsula has settled into a fragile equilibrium.

But with a new player threatening to enter the fray, this sense of balance might be short-lived. China is pulling no punches when it comes to the Arctic, and its recent polar push has put the United States — a major player in Arctic politics — on high alert.

Rune Rafaelsen, Kirkenes’ charismatic Labor Party mayor, doesn’t share Washington’s concern. In fact, he sees nothing but opportunity. “I don’t believe in

trade wars,” he told POLITICO, pouring coffee from a large camping flask in his office at the town’s northern edge, a piece of traditional Chinese art hanging on the wall behind him.

“I will do everything I can to stimulate more trade and better connection, also with China,” he said.

Current & Relevant Information:

China published its first Arctic white paper in January 2018, despite not actually owning any Arctic territory. In an icy twist to its Belt and Road Initiative, the rising superpower outlined the economic importance of the region and called on Chinese businesses to participate in the development of Arctic shipping routes.

Kirkenes happens to sit at the western edge of one such shipping route. The Northern Sea Route stretches from far-East Siberia along the Russian coastline to the Barents Sea, and has long been touted as a desirable alternative to current Asia-to-Europe passages. For one, it shaves about 40 percent off the distance. It also avoids the geopolitically tense Suez Canal. And in a special bonus for China, it dodges the heavy U.S. Navy presence in the Straits of Malacca. The catch? Thick sea ice has made the route historically unnavigable, except by specially equipped vessels during certain intervals during the summer.

But as climate change ravages the Arctic, the Northern Sea Route is becoming slushier year-on-year. In 2018, the first container ship cruised the Northern Sea Route, and this year, transit volumes increased by 40 percent, reported the Barents Observer (although most were related to the Yamal LNG plant, a China-Russia natural gas joint venture on the Russian coast, rather than regular cargo).

Some experts argue that the complexities of far-North transit — including increasingly unpredictable ice floes and severe winter storms — make even a warmer Arctic inhospitable to commercial interests. Maersk, the global shipping giant that tested the waters in 2018, insists it doesn’t see the Northern Sea Route as a viable alternative to existing routes for its own vessels.

Still, a more crowded Northern Sea Route is likely a question of “when,” not “if.” And China, less constrained by budget and electoral cycles than its global rivals, has the luxury of the long view.

Chinese state-owned shipping company COSCO has made no secret of its intention to ramp up its activity along the Northern Sea Route. At a conference in March this year, it flagged Kirkenes as a location of strategic interest, according to the Barents Observer. And in May, the town hosted a delegation from state-owned China Communications Construction Company Ltd. (CCCC), the world’s largest port infrastructure developer.

For Kirkenes, whose fluctuating fortunes have long been tied to an on-again, off-again iron-ore mine on the western edge of the peninsula, Chinese interest in the thawing Arctic looks like a lifeline.

“There is no alternative for the Chinese,” Rafaelsen said, pointing to the geography of Norway’s northern archipelagos. “It’s not Tromsø, it’s not Narvik, it’s not Bergen.” Kirkenes’ unique position as the first ice-free port on the European side of the Northern Sea Route, he claims, makes it the ideal place for an Arctic shipping hub.

To fulfill that vision, Kirkenes will need much more than a port. Goods landing in the European Arctic are still far from the hungry markets of the major cities further south, and currently, there’s no way to get them there.

To solve this problem, the Norwegian, Finnish and Estonian governments have explored building various sections of a so-called Arctic Corridor, including a railway linking Kirkenes to Rovaniemi, in Finnish Lapland, and an undersea tunnel connecting Helsinki to Tallinn, Estonia.

But these projects are expensive, and with the future of the Northern Sea Route still uncertain, governments have been reluctant to put money on the table. In February, the Norwegian-Finnish working group scoping the Arctic railway declared the project commercially unviable under current cargo estimates. The Finnish and Estonian governments have been sitting on a feasibility study of the Helsinki-Tallinn tunnel since early 2018. Frustrated by government inaction, some northern entrepreneurs have taken matters into their own hands.

In March this year, Finnish entrepreneur Peter Vesterbacka, best known as a creator of the hit game Angry Birds, signed a €15 billion deal with Beijing-backed investment firm Touchstone Capital Partners — as well as three Chinese construction firms — to build the Helsinki-Tallinn tunnel, which he says will be operational in 2024. If the agreement bears fruit, it will be the largest Chinese investment in Northern Europe.

Since then, Kirkenes-based public development company Sør-Varanger Utvikling has inked a preliminary deal with Vesterbacka’s company, FinEstBayArea Development, to build the Arctic railway.

Sør-Varanger Utvikling Chief Executive Kenneth Stålsett insisted it was too early to talk about funding sources, but acknowledged that China’s interest in the region certainly presented “an opportunity,” as well as some uncertainty about whether the Norwegian government would approve large amounts of foreign funding for this kind of project.

But Rafaelsen says drawing attention to the question of foreign investment is part of his strategy. He is using the specter of Chinese development to show Oslo that “we should own our own infrastructure.”

“This is the center of Norway ... This is the closest Norway comes to something that is important regarding foreign policy. Nothing is happening in Oslo,” Rafaelsen said. “They don’t understand what’s going on up here. They don’t have a clue.”

At Norway’s foreign ministry, State Secretary Audun Halvorsen said the increase in shipping activity in the Arctic region was mainly related to “petroleum projects in Russia, fishing activity and cruise tourism,” adding: “The commercial use of the Northern Sea Route as a transit route between Europe and Asia remains limited. A number of factors can explain this, such as demanding weather and ice conditions.”

The Norwegian official said China had “so far played a constructive role” as an observer in the Arctic Council.

For a week in February this year, Kirkenes’ pedestrian thoroughfare gleamed red under the glow of decorative Chinese lanterns. As part of an annual cultural festival, the town transformed itself into “The World’s Northernmost Chinatown.” A special Chinese-style gate popped up in the town center, and visitors from China’s Harbin Theater Arts College performed a traditional dance for the residents of Kirkenes. The Chinese ambassador to Norway, Wang Min, opened the festivities alongside Rafaelsen.

Michael Miller, one of the festival organizers, said the idea behind this year’s theme was “to see what Kirkenes’ possible future would be with ... indications from China that they are really interested in this part of the world.”

Chinese tourism in Kirkenes has exploded over the last five years, according to Miller. (It’s not a phenomenon unique to Kirkenes — the Arctic has become a hotspot for Asian visitors.) This, combined with talk of China’s commercial interest in Kirkenes, inspired Miller and his colleagues to involve locals in the conversation about what the future of their town should look like.

When POLITICO visited months later, opinions on the ground ran the gamut from unaware to cautiously optimistic to fearful.

Pål Riise, a Kirkenes resident who lives on a disability pension, called himself “a little bit paranoid.”

“If you let the Chinese buy one rock ... they will be here forever,” he said.

Others seemed less phased. Kåre Tannvik, who runs the Kirkenes Snowhotel, a major tourist attraction, thinks China could bring stability as well as opportunity.

“I like it, because [right now] there are two boys quarreling. If there are three — Russia, America and if we have China here — it is a chance for peace, to take down the tension,” he said. He’s a supporter of the Arctic railway, and believes China will be involved.

Jostein H. Maehla, a student in his final year at high school in Kirkenes, said the railway “definitely should happen.” The China question will be difficult, he said, but “if the big boys come and they give you cash for something, you better accept it.”

The town may never reach consensus on the question of Chinese investment. But it’s clear that many of its inhabitants are excited by the prospect of a more connected Arctic. Stålsett, who is spearheading the Kirkenes-Rovaniemi railway project, put it this way: “People live here, we have our jobs here, our families ... We want something to say in the development, we don’t want to be looked at like a zoo.”

On the other hand, the indigenous Sámi people have been protesting against the railway for years. They believe it would cause massive disruption to local ecosystems, particularly reindeer migration patterns, and open up their land to exploitation by large corporations. In May this year, after Vesterbacka signed the letter of intent with Sør-Varanger, Sámi youth groups protested outside Finnish parliament.

Jari Vilén, a Finnish diplomat and Arctic adviser at the EU Commission’s in-house think tank, the European Political Strategy Centre, says Europe has a role to play in the discussion about Arctic development.

“Europe needs to define its own narrative,” he said. “What our ambitions are economically and security wise, and what kind of role we want for China there in the Arctic.”

“We don’t have time to wait because other places are acting now,” he said, echoing the Arctic strategy paper released by the Commission think tank in July.

“[U.S. President Donald] Trump, in his own style, made clear his own interest in the Arctic,” Vilén said. “And they [China] have it on paper, they have it in black and white, but we haven’t really been able to define what we have to do.”

In an October meeting with Finnish President Sauli Niinistö, Trump said, in a thinly veiled reference to Beijing, “as you know, there are other people coming into the Arctic, and we don’t like it. And we can’t let it happen, and we won’t let it happen.”

This comment came off the back of his August attempt to purchase Greenland from Denmark, a widely-ridiculed maneuver that nevertheless demonstrated Washington’s real fear of losing its strategic foothold in the Arctic.

Last year, the U.S. Department of Defense reportedly pressured the Danish government to fund two new airports in Greenland, in a move apparently driven by concern that aid-dependent Greenland could fall victim to China’s so-called “debt-trap diplomacy.” (Hypothetically, were Beijing to put up the money for the construction, it could seize control of some strategically-located Arctic runways should Greenland fail to repay its loans.)

Greenland later announced that Denmark would be backing the new airports, and in June this year, the CCCC — China’s state-owned infrastructure behemoth — withdrew its construction bid, citing concerns around worker visas and receiving equal treatment in the selection process.

Rafaelsen is essentially betting on a similar dynamic playing out in Kirkenes: Attract enough attention to the China question, and Europe might just decide to take matters into its own hands.

Philippe Le Corre, a non-resident senior fellow with the Carnegie Endowment for International Peace who specializes in Sino-European relations, says European attitudes toward China have certainly hardened over the last year. “There is a big backlash against China in Europe,” he said.

But whether fear of Chinese influence is enough to compel European governments to funnel cash to their Arctic frontiers remains to be seen, partly because they have other tools at their disposal.

Both Norway and the European Union have introduced foreign investment screening regimes. Oslo passed legislation last year empowering the government to block foreign investment on national security grounds, and in April the EU launched a non-binding mechanism for foreign investment screening across the Union. The system aims for the gradual convergence of domestic screening regimes, and empowers the European Commission to make decisions on deals that affect multiple member states or the EU’s broader interests.

Additionally, China’s credibility as a prospective investor is diminishing. The Belt and Road initiative, for all its initial fanfare, is starting to look less like a highly-coordinated strategic enterprise and more like a haphazard, loose attempt at global influence.

“China has been slightly overambitious,” said Le Corre. “They’re trying to have stakes everywhere. It’s not very logical.”

“There’s a debate internally in China — why are we giving all this money to foreigners?” he said.

In summer, absent the throngs of wrapped up, snow-seeking tourists, Kirkenes is a quiet place. Once a day, the Hurtigruten cruise ship deposits several dozen visitors on the peninsula. But the bustle is short-lived, and once the tourists have done their rounds, the streets lie silent in the shadows of the town’s dreary post-war architecture.

Heading toward the water’s edge, it’s hard to imagine rows of container ships docked in the port. But Kirkenes, like other industrial outposts, has always been susceptible to forces beyond its control. The question will be whether this time, it can

wrangle two big ones — climate change and Chinese ambition — to work in its favor.

Rafaelsen, who was reelected as mayor in September, is hopeful. “This has been my life. I like the sound of a train during wintertime when it’s minus 30 degrees,” he says, staring out to sea.

In Kirkenes, winter is coming. But the sound of a train? That’s still an open question.

“China’s strategic interest in the Arctic goes beyond economics,” Swee Lean Collin Koh, DefenseNews, 12 May 2020 [98]

<https://www.defensenews.com/opinion/commentary/2020/05/11/chinas-strategic-interest-in-the-arctic-goes-beyond-economics/>

Overview:

In its Arctic policy published in 2018, China proclaimed itself as a “near-Arctic state,” a label that has since invited controversy.

Beijing has long regarded the Arctic as consequential to its strategic, economic and environmental interests. China also believes that, in line with international legal treaties — especially the United Nations Convention on the Law of the Sea and the Spitsbergen Treaty — it enjoys such rights as scientific research, freedom of navigation, and overflight, fishery, cable-laying and resource development in the Arctic high seas.

Even before the Arctic policy was unveiled, Beijing gradually expanded its footprint in the region. Notably, since 1999, the Chinese have conducted numerous Arctic expeditions and built their first research base, the Yellow River Station on Svalbard Island in 2004. Generally, China’s current policy involves the acquisition of knowledge about the region; protecting, exploiting and participating in the management of the Arctic Ocean; safeguarding the international community’s common interests; and promoting its sustainable development in the region.

China’s better-known Arctic activities are primarily economic, especially energy cooperation with Russia. As part of Beijing’s effort to wean off coal dependence for power generation and to bolster energy security, in December 2019, it inaugurated the 3,000-kilometer-long “Power of Siberia” natural gas pipeline linking Russia’s Siberian fields to northeast China. Chinese companies also play key roles in the Arctic LNG 2, the second major natural gas project currently under development in the Russian Arctic.

Energy aside, China’s collaboration with Russia on establishing a global transport corridor via the Northern Sea Route, or NSR, has in recent times seized no small amount of attention. Experts believe this route would be around 40 percent faster than the same journey via the Suez Canal, significantly slashing fuel costs. With global warming and the consequent opening up of more ice-free periods per year,

the prospect of opening up international Arctic shipping via the NSR becomes brighter.

Current & Relevant Information:

In order to make the NSR safe and commercially viable, Russia envisaged a network of port terminals and logistics centers along the route, which would therefore require massive investments beyond what Moscow's limited coffers can offer. In this respect, China's Belt and Road Initiative becomes an attractive proposition when it comes to the promise of major funding for infrastructure development, with Russian President Vladimir Putin seeking the inclusion of the NSR as part of China's 21st Century Maritime Silk Road under the "Polar Silk Road" notion.

Still, questions about the slower speed of transit through ice, the need for ice-class vessels that also adds costs, and unpredictable transit times for just-in-time shipping as well as shallow waters dominating the Russian coast along the NSR led to hesitancy among shipping companies.

Purely scientific research for mankind?

China's strategic interests in the Arctic, however, have largely been overshadowed by its economic interests, even though in recent times this aspect has become magnified through the broader geopolitical rivalry with the United States. In a speech at the Arctic Council ministerial meeting in May 2019, U.S. Secretary of State Mike Pompeo warned of the dangers of Chinese investment in the Arctic.

Beijing generally believes that Washington is seeking an anti-China containment scheme using the Arctic as another strategic front. Some Chinese scholars and military strategists, for example, viewed the recent U.S. withdrawal from the Intermediate-Range Nuclear Forces Treaty and President Donald Trump's interest in purchasing Greenland as part of the broader U.S. strategy to enhance nuclear deterrence, which could envisage the installation of a network of missile defense and post-INF Treaty offensive missile systems in the Arctic to counter both China and Russia.

It is with this strategic context in mind that China's lesser known, scientific interest in the Arctic becomes something to scrutinize closely. The numerous Arctic scientific research activities, especially made more prominent by the frequent deployment of an icebreaker, have been particularly interesting. Such expeditions incrementally add new, updated information into China's expanding knowledge database on the Arctic's climactic, meteorological, geomagnetic and marine environmental conditions.

To be sure, such expeditions might be easily passed off as purely civilian scientific research that contributes to future economic programs in the region. For example, the first China-Russia joint Arctic expedition in 2016 could be regarded as paving the

way for future development of the NSR. And the same could even be said of the Arctic Science Observatory, which was jointly inaugurated by China and Iceland in 2018.

However, over the recent years Beijing has instituted a gradually expanding set of scientific research programs in the Arctic that clearly have both civilian and military applications. Since 2014, the Chinese Academy of Sciences kick-started an Arctic acoustic research program, which has been subsumed within the numerous expeditions to the region and involved placement of sensors for long-term ocean observation. It needs to be noted that China has broad interests in creating ocean observation networks on a global scale. As part of this endeavor, Chinese scientists are enthusiastically exploring underwater acoustic sensor networks, with the Arctic also in mind.

The year 2018, when China unveiled its Arctic policy, was a bumper year for Beijing's ocean observation program in the Arctic. In August of that year, the ninth expedition installed China's first unmanned ice station in the region to observe multiple fluxes in the ocean, the sea ice and the atmosphere. The station was described to serve as "an effective supplement [to the research] in the absence of scientific expedition vessels." The same expedition also utilized for the first time China's indigenously developed Haiyi underwater glider.

In December 2018, the Chinese Academy of Sciences launched a project for a cloud-based online platform using remote sensing and numerical models. The platform provides open access to Arctic ice, ocean, land and atmospheric data. The following August-September, China's 10th Arctic research expedition was somewhat special; instead of deploying the workhorse icebreaker Xuelong (or Snow Dragon), the oceanographic research vessel Xiangyanghong 01 made its debut and deployed the indigenous Haiyan underwater glider for ocean observation.

These supposedly civilian, persistent ocean observation activities have inevitably provoked concerns among at least some of the Arctic littorals. For instance, Danish defense intelligence authorities warned in November 2019 that the Chinese People's Liberation Army is increasingly utilizing scientific research as a means of entering the Arctic, describing such activities as not just a matter of science but serving a "dual purpose."

The U.S. Defense Department's annual report to Congress, "Military and Security Developments Involving the People's Republic of China 2019," was more specific, stating that China's "civilian research could support a strengthened Chinese military presence in the Arctic Ocean, which could include deploying submarines to the region as a deterrent against nuclear attacks."

China's subtle creep into the Arctic

Chinese scholars believed that through bilateral negotiations with and authorization by the concerned coastal states, maritime user states establishing logistics bases in support of military activities can still be allowed within the former's exclusive economic zones, so long as these do not interfere with both coastal and user states' rights and freedoms therein. To date, it is difficult to imagine any Arctic littoral — not even Russia, with whom China has such an unprecedentedly close strategic partnership now — would allow Beijing to do that.

Given the suspicion among Arctic littorals toward Beijing's intentions, and a rising chorus to prevent militarization of the region, China would most likely proceed cautiously, as it acknowledges difficulties in carrying out military activities without being subjected to backlash from the Arctic littorals and international community, especially where it concerns building military bases in the region, particularly pursuant to Article 9 of the Spitsbergen Treaty.

In the foreseeable future, Beijing is more likely to exploit the inherent rights and freedoms bestowed upon maritime user states by the U.N. Convention on the Law of the Sea, which would create room for military activities such as exercises and weapons tests on, over and under the high seas in the Arctic.

The deployment of military forces, including submarines, to utilize Arctic shipping lanes has been an idea toyed by the Chinese scholarship community. But because unilateral military activities would be deemed "extremely sensitive," such operations are conducted under a legal framework of international security cooperation.

The existing Chinese scholarship also outlined possible ways to incrementally expand Beijing's strategic security footprint in the Arctic:

1. Creation of dual-use instead of purely military logistics support facilities.
2. Persistent development of polar military technologies, especially through scientific research on the unique climatic and geomagnetic characteristics of the Arctic.
3. Training of military personnel capable of operating under extreme cold conditions.
4. Provision of humanitarian "public goods" services such as maritime and aeronautical search-and-rescue and disaster relief to Arctic littorals and user states.

In fact, even before unveiling its Arctic policy, Beijing paved the way forward for possible maritime security — possibly military — operations in the Arctic. In June 2017, China unveiled its "Vision for Maritime Cooperation under the Belt and Road Initiative," which identified the Arctic shipping lanes as one of those "blue economic passages," stressing the need for efforts to be made to "promote the concept of common maritime security for mutual benefits," including proposed "joint

development and sharing” initiatives such as maritime public services, ocean observation and monitoring networks, marine environmental surveys.

China’s dual-use scientific research activities will likely continue to persist; in the next stage of promoting maritime security cooperation that would presage future deployment of military assets to the Arctic, Beijing is likely to start with “white hull diplomacy,” namely the use of its Coast Guard. This includes possible participation in the Arctic Coast Guard Forum as a way to increase Beijing’s “voice” and its role in managing the Arctic.

It would appear that Beijing is already preparing for such a prospect. In late April, the Chinese Coast Guard conducted a maritime law enforcement exercise, code-named “Deep Sea Defender 2020,” on protecting international undersea internet cables — certainly an area of “common interest” in the Arctic.

“Understanding China’s Arctic activities,” Marisa R. Lino, International Institute for Strategic Studies, 25 February 2020 [99]

<https://www.iiss.org/blogs/analysis/2020/02/china-arctic>

Abstract:

China is stepping up its activities in the far north, seeking economic opportunities presented by the impacts of climate change. But what are the strategic implications of its activities and could they take on a military dimension? Marisa Lino explains.

Current & Relevant Information:

A great deal of attention is being paid to Russia’s increasing activities in the Arctic, and, rightly so, since Russia is an Arctic nation, with approximately one-fifth of its territory found north of the Arctic Circle. Russia is also home to the largest Arctic population. However, China has also been ramping up its efforts in the far north, taking a long-term view of developments and opportunities presented by the impacts of climate change in the region.

China published its own [Arctic strategy](#) in January 2018. It famously declared itself a ‘near-Arctic’ state and outlined a ‘Polar Silk Road’ economic plan. At the time, a US official called the self-designation ‘absurd’ and pointed out to media that China is located 1,844 miles (3,000km) from the Arctic Circle. Nonetheless, China’s Arctic activity will arouse concerns over the strategic implications of its economic activities and whether they might take on a military dimension in the longer term.

At a recent trade fair in Shanghai, China exhibited models of its new ice-capable LNG carriers, while previous reports have indicated that China has built or is building a number of hardened-hull cargo ships. Designing and building polar-capable ships has been a stated policy objective of the People’s Republic since 2016, beginning with the thirteenth Five-Year Plan. For China, regular use of the Northern Route

would be an economic boon. The distance from Shanghai to German ports is over 4,600km shorter via the Northern Route than via the Suez Canal.

Investing in Arctic nations

The People's Republic of China became an observer nation on the Arctic Council in 2013. Its interest in the Arctic region is clear: access to Arctic natural resources and use of the Northern Route, which work together to enhance its image as a major power. The New York Times reported in May 2019 that China is investing heavily in projects in nearly every Arctic country.

For example, it has invested billions into extracting energy sources from beneath the permafrost on the Yamal Peninsula in northern Russia. During a visit to Russia in June 2019, Chinese President Xi Jinping presided over the launch of a joint venture to build the ice-capable LNG tanker ships that were recently exhibited. The joint venture is composed of the Chinese company Cosco and Russia's Sovcomflot. Funding is being provided by the Russian energy group Novatek and Beijing's Silk Road Fund.

The warming of the Arctic and the opening – at least for a few months a year – of the Northern Route has whetted China's appetite for delving into new areas, such as fisheries, mining, petroleum and shipping. The US Geological Survey estimates that the Arctic holds approximately 90 billion barrels of undiscovered oil – about 13% of global estimates – and 30% of the Earth's undiscovered natural gas.

Expanding research capabilities

China's Arctic Strategy highlights its two icebreaker research vessels and its research stations in Iceland and Norway. Arctic nations, including the US, have watched carefully over the last few years as China continues to expand its Arctic capabilities and further develops its interests in the region.

The government of Denmark, which handles foreign and defense policy for Greenland, has openly expressed its concerns about China's interest in the autonomous territory. China had proposed establishing a research station in Greenland, as well as a satellite ground station. It also offered to renovate Greenland's airports and to expand exploration for minerals. China has built a satellite station in northern Sweden and invested in Finland as part of its Polar Silk Road initiative.

What has the Western response been?

With the support of the US, in 2016 Denmark prevented China from buying an old military base in Greenland. Washington also encouraged Denmark to reject Chinese offers to help build the international airports in Greenland mentioned above, promising that the US would instead provide such investment in airports that could

be used for both civilian and military purposes. Ultimately, Denmark underwrote the building of the new airports.

The significance of Chinese investments in ports and other infrastructure projects – and the risks that they present – is beginning to sink in across Europe. In March 2019, the European Union formally declared Beijing a ‘strategic rival’.

China has made efforts to create and align itself with several economic groupings in Europe – the ‘five plus one’ with five Nordic countries, as well as the earlier ‘16 plus one’ including most Central and Eastern European countries. The latter grouping has proven significantly more fruitful than the former, primarily because the former Soviet bloc states in Eastern Europe are hungry for investment and willing to overlook the strings that come attached to the money. China has been eager to make inroads in the economic realm, exploiting differences in attitudes towards the impact of its activities.

US actions

US reaction to China’s stepped-up activities in the Arctic has, in general, been muted, although Secretary of State Mike Pompeo did call out China for criticism at an Arctic Council meeting in May 2019.

At the 2018 NATO Summit, the Allies confirmed the new Joint Forces Command in Norfolk, Virginia, which will be focused on the north Atlantic. The co-located, revived US 2nd Fleet is also focused on the Arctic.

The aim of the US Navy’s 2nd Fleet is to defend US interests in the North Atlantic, as well as in Arctic waterways. In the US Navy’s January 2019 Strategic Outlook for the Arctic, US policy is summed up as defending the US and ‘preserv[ing] the nation’s strategic influence in the Arctic’. This was followed up by several exercises in Arctic waters, the first in decades.

In 2018, as touted by a US Navy press release, a US carrier strike group, which included the Nimitz-class aircraft carrier USS Harry S. Truman, became the first such force to operate north of the Arctic Circle since 1991. This same strike group also participated in the Norway-hosted NATO exercise Trident Juncture in October–November 2018, the largest NATO exercise since the collapse of the Soviet Union. In early 2019, a US exercise, Northern Edge, based in Alaska included a carrier strike group for the first time in a decade.

Only time will tell how sustained and effective US and European efforts to manage and balance China in the Arctic will be. China’s cooperation with Russia will help to boost its own efforts. There are many competing foreign-policy crisis points globally and Western democracies struggle to match the singular, determined and very long-term view of the leadership in China.

“China, Russia, and Arctic Geopolitics,” Ling Guo and Steven Lloyd Wilson, *The Diplomat*, 29 March 2020 [100] <https://thediplomat.com/2020/03/china-russia-and-arctic-geopolitics/>

Overview:

In late February, a Russian icebreaker, *Kapitan Dranitsyn*, successfully carried out a record supply run for the MOSAiC international research expedition representing 20 countries, including the United States, China, and Russia. As the operator of the world’s largest fleet of major icebreakers, Russia’s monopoly on icebreaker operations has largely gone unchallenged. However, China’s new icebreaker, *Xuelong 2*, which is due to return home in April from its maiden journey, has also been slated to assist with the MOSAiC expedition. While Russia has long enjoyed dominance in the Arctic, the expanding presence and influence of other countries — most notably, China — suggest a tidal shift is on the horizon, one that does not necessarily include the United States.

Current & Relevant Information:

The Competing Strategic Visions of Russia and China in the Arctic

As the thawing of the Arctic has increased its geopolitical prominence and potential economic viability, Russia and China have emerged as major players in the future of the region. Their partnership on Arctic affairs, both formally and informally, represents an important component of understanding the long-term strategic balance in the Arctic.

Russia’s involvement in the region is to be expected, as one of the eight countries with territory above the Arctic Circle — and vast territory at that, with thousands of miles of coastline. Moscow’s involvement has been significant and long-lasting, with Russia advocating for the development of the Northern Sea Route along its Siberian coast as an alternative to southern routes through the Suez Canal and investing in the construction of the only icebreakers capable of operating in the Arctic Ocean.

China is a less obvious player in the Arctic, with its closest territory some 5,000 miles by sea from the Bering Strait. Even so, China has in recent years pressed for a greater role in Arctic affairs, becoming one of the 13 observer states of the Arctic Council in 2013. In 2018, China released an official white paper entitled “China’s Arctic Policy” — a step that in and of itself signals the country’s intent to play a larger role in the region — in which it outlines its priorities in the Arctic and describes itself as a “near-Arctic state.”

The cooperation between China and Russia in recent years adds an intriguing complexity to Arctic geopolitics. Experts are divided on whether the warming of Sino-Russian relations is a true strategic alliance or merely a marriage of convenience. Proponents of the former point to the numerous agreements signed between the two countries — punctuated by the personal friendship of the two nations’ leaders — and

the two sides' common voting record on the United Nations Security Council. Skeptics reason that Russia and China often have diverging goals despite mutual interests and remain distrustful of each other's intentions. In this paper, we focus on the long-term outlook for the Sino-Russian relationship regarding the Arctic.

The Sino-Russian State of Play in the Arctic

Russia's involvement in the Arctic and interest in the Northern Sea Route (NSR) perhaps goes without saying, with over 24,000 miles of coastline above the Arctic circle, and a centuries-long history in the region. Russia has two primary economic interests in the Arctic. First, Russia is in a prime position to exploit the region's oil and natural gas. Some 70 percent of Russia's reserves are on the continental shelf off its coast (primarily in the Arctic) and its status as the world's largest supplier of oil and natural gas makes it a leading player in exploiting further reserves in international waters.

Second, Russia is well-positioned both geographically and logistically to be a critical player in the development of shipping routes through the Arctic as retreating sea ice permanently opens those routes. This primarily represents a shipping connection between East Asia and Western Europe, with Russia operating ports and support facilities along the route.

However, it could also represent a boon to development in Siberia. Historically, Russia has bemoaned the fact that all major rivers in Siberia flow north into the Arctic Ocean rather than south to irrigate the deserts of Central Asia. During the Soviet years, mega-engineering projects using nuclear weapons to redirect the rivers were in the planning stages for decades before eventually being abandoned in the 1980s. While low levels of shipping on these rivers do exist today, aided by a fleet of river-based icebreakers, the retreat of Arctic ice in conjunction with the development of modern ports and shipping lanes to support the NSR could provide a lucrative outlet for the vast trove of undeveloped resources in Siberia.

From China's perspective, the Arctic represents one of several regions within which it is attempting to build influence and refine its image as a global power. China has dubbed itself a "near-Arctic state," arguing that given its relatively close proximity to the Arctic, changes in the Arctic have clear downstream impacts on China and "in turn, on its economic interests in agriculture, forestry, fishery, marine industry and other sectors." In 2017, China introduced the Polar Silk Road, a component of its global Belt and Road Initiative, as a framework to collaborate with other parties to jointly develop Arctic shipping routes.

Beijing has taken both unilateral and cooperative measures to pursue its ambitions and legitimize its role in the Arctic. On its own, China has committed significant resources to conduct numerous scientific research expeditions. In mid-October, Beijing's first indigenous icebreaker, Xuelong 2, set off on its maiden voyage to take part in Beijing's 36th Antarctic expedition and will make a port call in South Africa

before turning homeward. The Xuelong 2 serves as a research platform, equipped with state-of-the-art oceanographic and monitoring systems to conduct seafloor and resource surveys, which will further bolster China's scientific diplomacy in the Arctic and Antarctic regions. China is an active participant in the Arctic Council and has invested in bilateral relationships with individual Arctic states and other stakeholders to build support for its initiatives.

In recent years, a notable increase in Sino-Russian cooperation in the Arctic has caught the attention of observers. A convergence in economic interests to develop Arctic trade is certainly a factor in their warming relationship, but does not fully explain the relatively sudden shift from competition to cooperation in this area.

The Road from Competition to Cooperation

Russia has long been particularly concerned with exercising control over a broadly defined physical sphere of influence. Classically (and perhaps overly simplistically) explained as a response to centuries of invasion, this has manifested recently with adventures from the Donbass to the Kuril Islands. A particular soft spot exists for Siberia and the Arctic territories due to Russia's unique and long history in those regions.

As such, Russia views China's economic ambitions in the region with suspicion. In 2012, Russia blocked Chinese vessels from operating in the NSR, causing China to suspend its research activities during its fifth Arctic expedition. The following year, despite initial resistance from Russia, the Arctic Council granted observer status to six countries including China but also notably including Japan, which may serve as a counterweight to China.

However, Russia's calculus shifted significantly between 2013 and 2014. A Russian company, Novatek, and China National Petroleum Corporation (CNPC) partnered on a joint venture in 2013 to fund the Yamal liquified natural gas (LNG) project, of which CNPC purchased a 20 percent stake. China expected to receive at least 3 million metric tons of LNG a year from the Yamal plant, which would be transported through the NSR to Chinese markets. In 2014, when international sanctions were enacted against Russia over its Crimea annexation, Moscow pivoted sharply toward Beijing as other partners in the Yamal project such as ExxonMobil and Eni suspended cooperation. China's Silk Road Fund stepped in to purchase a 9.9 percent stake in the Yamal project, bringing the total stake of Chinese ownership to 29.9 percent.

Friendly ties between Russia and China have also been buoyed by the friendship between the two countries' leaders. Since 2013, Vladimir Putin and Xi Jinping have met more than 30 times. During a visit in June, the two presidents signed more than \$20 billion in deals to boost economic ties, including in the Arctic, with plans to increase the annual volume of trade between the two countries to \$200 billion in the coming years.

In 2018, China introduced the Polar Silk Road, bringing it under the broader Belt and Road Initiative umbrella, as a framework to facilitate joint development of the Arctic. Beijing envisions using the NSR to diversify its shipping route options and cut down transport time between certain destinations. For Russia, the NSR represents a chance to become a major maritime trading power for the first time in history, as the melting ice caps transform its Arctic coastline into an asset. The Polar Silk Road is expected to serve as a vehicle for increased Sino-Russian investment and cooperation in building out Arctic infrastructure to support commercial transit and resource exploration along the NSR.

Future Challenges to the Relationship

Despite the undeniably closer ties between Russia and China since 2014, mutual interests are evolving that may lead to shifts in the balance of their relationship. As Yun Sun, a China expert at the Stimson Center, points out, the “Polar Silk Road” may have been coined by the Chinese, but the idea originated from a Russian invitation to jointly develop the NSR as early as 2015. Sun states that while both sides share reasons to develop the NSR, it is more of an economic priority for Russia than for China, which gives China more leverage to shape the results. Sun claims “Russia has been operating from a position of weakness on the Northern Sea Route’s development, whereas China operates from a position of strength.”

China’s appetite for energy resources will likely continue to grow, but its reliance on Russia as a supplier is not guaranteed, and indeed, Russia’s export capacity is not limitless. While warming Sino-Russian relations have created a mutually beneficial economic relationship, the imbalance in the relationship increasingly favors China. Post-2014, as Russia was desperately looking for alternative export markets to Europe, China was able to negotiate significant concessions in natural gas imports and inked an agreement that required 80 percent of equipment used in the Yamal LNG project to be produced by China. In addition, China is actively pursuing gas exploration in the South China Sea while setting the groundwork for resource exploration in the Arctic.

While many observers have highlighted other benefits of Arctic development such as shorter transit times and diversification of trade routes, China’s long-term interests are centered on the rare minerals and energy resources in the Arctic. As such, Beijing recently reorganized its administrative structure to prime its position at the forefront of Arctic exploration. In March 2018, the Chinese central government simultaneously announced the dissolution of three government organs and the creation of the Ministry of Natural Resources (MNR) to streamline management of the country’s resources.

The Chinese Arctic and Antarctic Administration (CAA) and the First Institute of Oceanography (FIO), which were both previously subordinate to the State Oceanic Administration, were realigned under the MNR. The CAA is responsible for

developing national polar research strategy and policy, supporting polar research expeditions, and coordinating polar cooperation with other countries and international organizations. In a similar vein, the FIO is tasked with enhancing marine science and technology and providing support for marine resource management, security, and development. Last year, the FIO led coordination on China's ninth Arctic expedition, in which sensors were installed throughout the Arctic to provide continuous monitoring. As resource exploration becomes more viable, competition between China and Russia to capture these resources also becomes more of a reality.

On the diplomatic front, in its Arctic policy paper and in various Arctic engagements, China often characterizes Arctic issues as global affairs; this is, no doubt, a way to legitimize its participation. However, Russia remains protective of its Arctic stakes and suspicious of non-Arctic nations' involvement. These incongruent views will only be magnified as Arctic routes and exploration become increasingly accessible and feasible.

Cooperation in the Arctic over the last few years also does not alleviate long-standing conflict between the two countries in the Russian Far East. Part of that is long-term demographic pressures. In contrast to the hundreds of millions of Chinese living in crowded border regions, the Russian Far East is two-thirds the size of the entirety of China, but with a population of barely six million and steadily declining. This pressure has been expressed with enormous quantities of illegal immigration, and the steady Sinicization of border towns like the pairing of Zabaykalsk/Manzhouli, the largest land port-of-entry in China, where Chinese firms have bought up a large proportion of the local businesses on the Russian side of the border.

In addition, the Russian Far East's enormous reserves of natural resources are largely exploited via exportation to China. For instance, some 200 million cubic meters of lumber is exported via train every year from Russia to China, almost entirely harvested in the Far East. Similar figures can be cited for virtually any raw materials produced by Russia.

This makes the relationship between Russia and China a complex one of economic interdependence at odds with prickly nationalism. After all, while Russia's eastern resource wealth has enormous economic value to the country, if those resources are exploited exclusively by a regional competitor, they provide little for Russia's long-term economic prospects. Between demographic pressures and the Russian Far East's economic reality as the fuel for China's economy, this makes the region in the long run Russian in little more than name.

It is clear Beijing and Moscow share mutual economic interests, but their perspectives diverge markedly in the security realm. Russia considers the Arctic its backyard and has announced plans to expand its missile defense umbrella to strengthen domain awareness in the region. China, without Arctic territory,

advocates for maintaining the Arctic passageways as international waters to advance economic interests, while leveraging dual-use technologies (such as satellites and scientific expeditions) to bolster security interests.

China Charting Its Own Course

Even as Beijing and Moscow routinely boast about their high levels of cooperation, the former is taking steps to diversify its options by investing in indigenous capabilities and pursuing bilateral cooperation beyond Moscow.

Following closely on the heels of the Xuelong 2, in June 2018, Beijing commissioned plans to build its first nuclear icebreaker. The proposed 30,000-ton nuclear icebreaker would make China the only country besides Russia to operate nuclear icebreakers. It would also be China's first nuclear-powered surface vessel, which some have reasoned could serve as a stepping stone toward the development of the Type 003 nuclear aircraft carriers currently under preliminary construction. Nuclear carriers have little direct added value in near-China waters and are ideally used for force projection abroad.

As Chinese investments and interests increase in the Arctic, China could potentially justify carrier presence much like U.S. presence in protecting existing global shipping lanes. Where China might see the opening Arctic as a reasonable arena for assertion as an emerging naval superpower, such an assertion would be deeply at odds with Russian pretension toward the Arctic Ocean as a Russian "lake" (similar to American attitudes about the North Atlantic). There is of course a certain degree of irony in the fact that the origins of China's carrier program rest in designs and technology purchased from Russia over the last decade.

Today, Russia holds a monopoly on guided icebreaker escorts through the NSR, which allows it to set the boundaries and fees for each such transit. Russian companies have acknowledged the need to replace aging icebreakers and increase capacity to support a more navigable NSR. However, advancements in Chinese icebreaker capabilities and navigation experience in the polar regions would not only lessen its dependence on Russian icebreaker escorts, it could also provide China the opportunity to compete for market share with Russia.

In addition to bolstering indigenous technology and production, China has established close relationships with other Arctic littoral nations besides Russia to further normalize its Arctic presence. In particular, Iceland and Greenland have been the destination of significant investment by Beijing. According to a CNA report, between 2012 and 2017, Chinese investment constituted almost 6 percent of Iceland's average gross domestic product (GDP) and 11.6 percent of Greenland's GDP (although in Greenland's case, much of that investment is pegged to future projects that have not yet begun operations). The degree and the targets of Chinese investment have led international observers to warn of outsized Chinese influence in these economies, as well as the potential for China to advance its Arctic interests by

“acting through” Iceland and Greenland. Beijing’s expanding partnerships with Iceland, Greenland, and other Arctic states could also diminish its dependence on Russian cooperation in the long term, and strengthen China’s negotiating position to strike favorable economic deals with all of its counterparts in the Arctic.

These actions by China especially make sense in light of its economic co-optation of the Russian Far East. It is acting as an Arctic power, because with the Russian Far East increasingly an extension of the Chinese sphere of influence, in some sense China already has an Arctic coast.

Conclusion

For now, Sino-Russian cooperation in the Arctic is a practical and even mutually beneficial arrangement for both sides — a simple calculus of Russia possessing the geographic proximity and expertise to develop the NSR and China possessing the economic means to support such an endeavor. What may change the tide of their relationship in the long term are indications that China is hedging its Russian partnership with other options (e.g. indigenous icebreaker development, building bilateral relationships with other Arctic states) while maintaining its superior economic standing. Meanwhile, Russia faces an opening of Arctic routes, which it currently lacks adequate capital to shape and control.

While the short-term viability of the NSR remains a topic of debate, what is certain is China’s strategic positioning to drive polar development and stake its claim to resources beneath the surface. Furthermore, Beijing’s encroaching presence in the Russian Far East is likely to exacerbate the slow but steady divergence in interests. Given the current trajectory, China’s burgeoning role in the Arctic could translate into direct competition with Russia, a challenge the latter is unprepared to meet.

For U.S. Arctic policy, there is good and bad news. The good news is, thus far, Sino-Russian cooperation in the Arctic is largely surface-level and likely has a ceiling. The bad news is, without significantly bolstering security presence and economic investment, the United States is neither poised to protect its interests — and the interests of its Arctic allies — nor positioned to deter China’s ambitions and increasing influence.

a) Are there Signs of Cultural Conflict between the Chinese and Indigenous People in the Arctic Region?

“Arctic Demography,” Dmitry Bogoyavlenskiy and Andy Siggner, Arctic Human Development Report, 2017 [101]

http://www.svs.is/static/files/images/pdf_files/ahdr/English_version/AHDR_chp_2.pdf

Abstract:

Approximately 4 million people live in the Arctic. Some countries are completely located within this region, namely Iceland, Greenland, and the Faroe Islands. Other

countries, Russia, Canada, United States, Norway, Sweden, and Finland, have just a small portion of their overall populations residing within their respective Arctic areas.

This chapter describes the different populations in the Arctic by focusing on key demographic characteristics: how many people there are, where they live, fertility, mortality, age and gender composition, and migration. The statistics refer to the population of the Arctic countries as a whole for those countries that are completely within the Arctic. For the other countries, the statistics refer to the geographic areas included in the circumpolar region of the world.

Current & Relevant Information:

General population characteristics

Despite the fact that the demographic situation is different in various parts of the circumpolar region, there are general population characteristics that make the various Arctic populations closely related to each other and distinctly different from those residing in the more southern areas of their countries, or in other non-circumpolar areas of the northern hemisphere.

Fertility, although decreasing, is generally higher in the Arctic when compared to southern parts of Arctic countries and the Nordic countries in Europe as a whole. Mortality is also higher, and life expectancy, accordingly, is lower.

During the last decade of the 20th century, the inflow of population in all the circumpolar regions has been less than the outflow, resulting in a net loss of population due to migration.

The age structure of the Arctic population differs from that of its more southern counterparts. The most noticeable difference is the relatively high share of the population in the labor-force age group, as well as in younger age groups in some circumpolar regions, and a smaller portion in older age groups. This peculiar feature of the age structure is characteristic of the population in the majority of circumpolar regions and depends on migration flows into and out of these regions.

In the countries where there are data for the indigenous populations, these populations tend to be much younger, with a very high share of their populations under 5 years old. Depending on the relative shares of indigenous and non-indigenous populations in each circumpolar region, this factor often has significant impact on the socio-economic conditions of the region. An example is Nunavut, Canada, where 85% of the population is Inuit, and only 15% is nonindigenous. The median age of Inuit in Nunavut is 19 years, old (which means that half the Inuit population is under that age). If one includes the non-indigenous population in Nunavut, the median age rises to only 22 years because of the numerical weight of the Inuit population. By contrast, also in Canada, the Yukon Territory population is 75% non-indigenous and the median age for the total population is 35.8 years, only

2 years younger than for Canada as a whole. Yet its indigenous population has a median age of 28.6 years.

Our inability to obtain data for all the circumpolar countries by indigenous and non-indigenous composition is very likely hiding important demographic distinctions in those countries where such data are not available. Not having such data available may pose serious challenges for the country’s national and regional governments in their planning processes, and subsequently affect outcomes in these regions.

Indigenous and non-indigenous populations in official statistics

A certain part of the circumpolar population is indigenous to these northern localities. They have been residing here for over a thousand years. Another part of the overall circumpolar population is non-indigenous. These ethnically dissimilar populations differ noticeably in their demographic characteristics and lifestyles, despite considerable rapprochement in recent decades.

Official statistics from several Arctic countries do not identify indigenous peoples specifically, nor do they all identify people of other ethnicities. For example, in the Saami inhabited circumpolar areas of Norway, Sweden, and Finland, ethnicity is not registered in official statistics. Therefore, no demographic indicators are available for them. In Greenland, where the indigenous population – the Inuit – are a majority, the situation is similar, although Greenland’s official statistics identify those individuals born in Greenland and those born outside. As a proxy, people born in Greenland can be viewed as indigenous inhabitants. In the US census, indigenous peoples include American Indians and Alaskan Natives. The Canadian census defines as indigenous the following: Inuit, North American Indians, and Métis.

Indigenous Population of the Arctic Region

Arctic Region or Country	Date	Population (1,000) Total	Indigenous	Share of indigenous (%)
USA (Alaska)	Census 2000	627	98 (119)*	15.6 (19.0)
Canada: Arctic region	Census 2001	130	66	50.8
Denmark: Greenland	2003	57	50	88.1
Iceland	2003	288	NA	
Denmark: Faroe Islands	2003	48	NA	
Norway: Arctic region	2003	463		
Sweden: Arctic region	2003	254	50**	~5
Finland: Arctic region	2003	188		
Russia: Arctic region	Census 2002	1982	~90***	>4

Notes:

* Just American Indians & Alaska Natives (American Indians & Alaska Natives and some other race)

** Estimate for Nordic Saami (AMAP, 1998)

*** Estimate author (D. Bogoyaviensky, Census 1989 = 77)

The Russian census identifies the following indigenous peoples (from west to east): Saami, Nenets, Khanty, Sel'kup, Enets, Nganasan, Dolgan, Evenk, Even, Yukagir, Chukchi, Chuvan, and Eskimo/Inuit-Yupik.

Key conclusions and gaps in knowledge

The demography of the Arctic is diverse and thus challenging to describe. The diversity is observed not only across the circumpolar region, but also within the Arctic areas of individual countries such as Canada and Russia. Without specific data on the different ethnocultural groups, the overall population patterns and trends tend to hide important demographic differences within countries or regions. Furthermore, the demographics of the non-indigenous populations in the circumpolar North are quite different from those of their indigenous counterparts. Depending on their weight in the overall population, this also can make a big difference demographically in assessing age structure and total population growth. This suggests that the diverse populations within the Arctic regions need to be more specifically identified in official data collection systems within each country.

That said, this chapter has attempted to highlight the overall demographic picture in the circumpolar regions of the world, with its population of about 4 million. Since World War II, the population has grown. The growth pattern has been somewhat sporadic, but, in general, growth was fairly rapid in the 1950s and 1960s, and in some countries into the 1970s. In recent years, this growth has slowed down and, in some cases, (e.g. Russia) been replaced by population decline. However, some northern areas, such as Canada, Alaska, and Greenland, still show signs of growth. Much of the overall growth pattern appears to be dependent on resource development cycles. Nevertheless, for regions and/or countries where data are available for the indigenous populations, their growth rate is high. This is largely driven by natural increase rather than net migration. In some regions, such as in Canada, there is evidence that fertility rates among the Inuit are starting to decline, but they still remain more than double that of the country as a whole.

Age structures also vary and are very much affected by the relative shares of non-indigenous and indigenous populations in a particular region. Regions with high shares of non-indigenous populations tend to have an older population with more people in the labor-force age groups, while regions with large indigenous shares have younger populations. The latter includes Canada, Alaska and to some extent Greenland.

The size of communities varies greatly across the Arctic. Some regions (e.g. Alaska and Russia) have the vast majority of their population in large urban centers or cities, while others (e.g. Canada) have a large share of the population living in small or very small communities. In many of the circumpolar countries, the indigenous populations generally live in the smaller communities. To understand the

demography of the North, it is thus necessary to take account of this variation in settlement patterns.

With this wide variation in demography, any cross-country comparisons need to control for a variety of key variables, such as the indigenous versus non-indigenous populations, different age structures across regions and groups, and community-size differences. Without more such data, we get a very disjointed picture of the overall demography of the circumpolar region.

“China’s call for more inclusion in the Arctic,” Justinas Svegzda and Kasper Petersen, Roskilde University, 2019 [102]

https://rucforsk.ruc.dk/ws/portalfiles/portal/64870066/Bachelor_Final.pdf

Overview:

In recent years international organizations and non-Arctic states have been showing an increasing interest in the Arctic region (Hong, 2018, p.1) while the Arctic Council, a principal intergovernmental forum that promotes cooperation, coordination and integration between the Arctic States, indigenous communities and other inhabitants of this polar region, has been experiencing a growing presence of international actors that are geographically distant from the Arctic. By March 2019, 13 non-Arctic states, 13 intergovernmental and inter-parliamentary organizations as well as 13 non-governmental organizations have been granted an observer status in the Arctic Council which allows them to participate in the meetings of the Council, propose projects, make and present statements as well as share their opinion on the issues in question. Consequently, exclusive rights of Arctic states to govern the Arctic region have been significantly challenged in recent years due to activities of international actors located outside this polar region (Hong, 2018, p.2).

A particularly striking example of increasing involvement of non-Arctic states in the affairs of the Arctic region is China. After China agreed to the Svalbard treaty and recognized Norway’s sovereignty over the Arctic Archipelago of Svalbard in 1925, there had not been any significant events in the history of China’s involvement in the Arctic up until late 1980s, i.e. for around 60 years (European Parliament, 2018, p.2). However, this situation has changed dramatically in the last 25 years. In 1996 China became a member of International Arctic Science Committee (IASC), since 1999 China has been conducting scientific expeditions in the Arctic and in 2017 Xue Long (Snow Dragon), icebreaker polar research vessel, crossed the Central Arctic Area for the first time (ibid.), to name only a few of China’s Arctic milestones in recent years. Despite China’s geographical distance from the Arctic, its relatively short Arctic history and lack of sovereign rights in the region, a significant attention has been attached to it in the foreign policy agenda of China, particularly during the first term of Xi Jinping’s presidency between 2013 and 2018 (ibid.).

In the context of its involvement in the Arctic Council, China participated in the meetings of the Arctic Council as an ad hoc observer since 2007 to get a better

understanding of how the Council operates, and a year later began to officially express its objective to acquire an observer status in this intergovernmental forum (Hong, 2018, p.3). China, together with Italy, India, South Korea and Singapore eventually obtained observer status in 2013. China's contribution to the Arctic Council as an observer could be seen as an exemplary model for proactive international relations. For example, in 2016 China not only hosted a number of Arctic-related meetings and sessions but also did not miss any of the governmental meetings that the observers were allowed access to (ibid., p.4).

China has also intensified diplomatic relations with the Arctic states and particularly five Northern European states, namely Iceland, Denmark, Norway, Sweden and Finland. For instance, the new Chinese embassy in the capital city of Iceland, Reykjavik, is the largest embassy in the country. Additionally, in 2012 the then-Prime Minister of China, Wen Jiabao paid a visit to Iceland and Sweden and in the same year Hu Jintao, the then-President of China, became the first Chinese president to visit Denmark since the setting up of diplomatic relations between the two countries sixty-two years ago. China has also been holding dialogues regarding Arctic affairs outside the Arctic Council, as Chinese delegations also attended the Assembly of Arctic Circle, the Arctic Frontier, the Arctic Summit Week, the International Arctic Science Committee and the Year of Polar Prediction (ibid., p.5,6)

However, despite a more active participation in the Arctic affairs, China's involvement had still been regarded as low-profile during the first five years of its membership in the Arctic Council and merely included slight improvements in its bilateral relations with the Arctic states and development of regional resources (ibid., p.1). The Arctic states were still skeptical towards China's involvement in the Arctic affairs and little had changed from the time when China was not even a member of the Arctic Council. (ibid., p.17, 21). Additionally, China's position regarding the Arctic affairs was not clear as no document presenting China's Arctic policy or strategy was released during the first five years of its Arctic Council membership (Jakobson, 2010, p.9). That was until January 26, 2018 when 'China's Arctic Policy' was published.

Publication of 'China's Arctic Policy', a white paper by the State Council Information Office of China, marked an unprecedented occurrence as it was the first time that China's Arctic policies voiced by Chinese academics and policymakers were drawn together in a structured manner and have, since the day of publication, been freely accessible to the foreign public (European Parliament, 2018, p.2). Main goals of China's Arctic policy outlined in the document are understanding, protection and development of the Arctic as well as participation in its governance, and the key theme of the paper is cooperation (Hong, 2018, p.1). In its Arctic policy document, China for the first time acknowledged that its motives of involvement in the Arctic are not any more limited to scientific research but now expand to a broad range of activities (European Parliament, 2018, p. 1). The white paper indicates that China

has the intention to extend the scope of activities in the Arctic and it also emphasizes that China is a 'responsible major country' committed to the ideals of cooperation, international law as well as a necessity to balance between potential economic benefits and protection of the environment (ibid., p.2).

China's activities in the Arctic region and its relations with the Arctic states had for many years been limited to scientific research and China's mere observation of the operation of the Arctic Council. However, since 2013 China has been particularly vocal in its support for the objectives of the Arctic Council, respect for the values, culture and traditions of Arctic people and commitment to work together on the problems in this polar region, which allowed it to gain a status of a permanent observer in this intergovernmental forum. China's accession to the Arctic Council is regarded as a step forward in ensuring that the former will be involved in the decisions related to the future of the latter (Hong, 2018, p. 3). In addition to that, China released its Arctic policy white paper in 2018 which presents its intentions to intensify China's presence in this polar region and expand the span of activities. This progression from China's modest formation of bilateral relations with the Arctic states and focus on scientific research towards an eventual association with the objectives and values of the Arctic region, and insistence on more inclusion in the Arctic affairs in the future is of key interest for this paper as it aims to analyze, why and how China calls for the establishment of a more inclusive international society in the Arctic.

Research question:

"Why and how does China call for a strengthened international society in the Arctic?"

Sub-questions

1. "What are China's main motives for involvement in Arctic affairs?"
2. "How does China argue that its main interests are shared within the Arctic community and its involvement is based on common values, norms, identities and existing legal framework in the region?"

Current & Relevant Information:

In the year of 2015, China's discourse continued with approximately the same themes being discussed, however, mentions of 'commitments to international law' and 'respect for Arctic culture' spiked compared to 2014. In his speech the Foreign Minister Wang Yi again stressed that China will respect the Arctic states' sovereignty, sovereign rights and jurisdiction in the Arctic as well as traditions and culture of Arctic indigenous people. Moreover, Yi stated that: "China also believes that the legitimate concerns of non-Arctic countries and the rights they enjoy under international law in the Arctic and the collective interests of the international

community should be respected” (Yi, 2015). In relation to the latter statement, it is evident that Yi is interested in continuing the discourse first outlined by Jia Guide a year before, in which China is reiterating its commitments to international law and respect for the Arctic culture. This is arguably in order to calm the Arctic states that might have a negative view on China’s expanding efforts. The latter quote is important since it indicates that China expects its rights and interests to be taken into consideration as it is a part of a group of non-Arctic states that share common interests and is a member of this international society in the Arctic. As mentioned above, the respect for legal framework and common values is at the center of the concept of international society and this is evidently a reoccurring theme that China intends to make sure is acknowledged by the Arctic community. However, a difference from the previous year is that China now emphasizes the importance for the respect of legal claims of non-Arctic states. A motive for China’s engagement is therefore also to make sure that Chinese rights and concerns are also taken seriously and respected by Arctic states. In terms of international law, Liu argues in his article that in the future China would prefer to be involved in the lawmaking related to Arctic issues. Evidently, this is exemplified by China’s insistence to acquire observer status in the Arctic Council. Observer status should therefore be viewed as China’s decision to embrace the current Arctic regime rather than challenging it (Liu, 2017, p.63)

In addition to that, in 2015, China in its address at the 2015 Arctic Circle, highlighted its appreciation for the Arctic culture: “With respect to the indigenous community in the Arctic region, China respects their traditions and culture and take seriously their concerns and needs” (Ming, 2015). This is a clear attempt to show respect for the indigenous people with an Arctic identity/culture which is also a key point in the Chinese Arctic policy under section 3.2, in which it states that China respects the sovereign rights of the Arctic states over natural resources in accordance with international law and respects the interests and concerns of residents in the region (The State Council Information Office of the People’s Republic of China, 2018).

Conclusion

This paper indicates the main motives of China’s involvement in the Arctic and presents how representatives of China have been calling for a more inclusive international society in their diplomatic communication with the Arctic states.

The first part of the project sheds a light on China’s interests in the Arctic. Through the analysis of the speeches given by the Chinese representatives, the Arctic white paper and the scholarly work on the subject, three main motives, namely scientific, environmental and economic were identified. The findings show that China’s range of interests has widened in the recent years as it had traditionally been linked exclusively with scientific research. The expansion of China’s interests is associated with the global climate change and its effects on the Arctic, which are expected to have significant consequences for the world as a whole, and the opportunities that

environmental changes open for the execution of economic activities that have not been available before, e.g. creation of the Polar Silk road. In addition to that, in its historical context, China's increased range of interests in the Arctic could also be seen as a reflection of its growing role in the international arena.

The second part of this paper examines how China argues that its interests in the Arctic region are shared with the Arctic states and calls for more inclusion on the basis of respect for shared values, norms, identities and existing legal framework. Thematic qualitative text analysis of the statements given by Chinese representatives supplemented by the material from China's Arctic white paper and scholarly work on China's role in the Arctic suggest that China expects its role in the Arctic to be growing and its claims in the region to be respected. China argues that the Arctic affairs are of global rather than of regional concern and should be dealt with collectively by both Arctic and non-Arctic states. This is evident in the findings of the analysis which show that the most frequently recurring themes in China's diplomatic communication with the Arctic states are development of international community and multilateral cooperation. Additionally, China holds that involvement of non-Arctic states in the Arctic affairs is based on mutual benefits as they oftentimes refer to the win-win principle and fulfilment of global objectives, e.g. combating the global climate change. China also argues that its relations with Arctic states are guided by the respect for the sovereign rights of the Arctic countries and the existing legal framework in this polar region by making references to the norms of international law. Finally, Chinese officials appeal to its involvement in the Arctic affairs since 1990s, respect for the Arctic culture and its indigenous communities, and even aim to construct its Arctic identity as a 'near-Arctic state' based on its geographical proximity with the Arctic. In the future China expects to consolidate its status as a 'major stakeholder' in the Arctic as it believes that Arctic development is closely connected to China.

The results of the analysis were supplemented by the writings of the experts on the subject matter and provided this paper with a more critical reflection of its findings. Several scholars of China-Arctic relations argue that diplomatic measures that China employs are not solely related to the common principles that it shares with the Arctic and ideals of win-win cooperation, but rather serve as a public facade that masks its future strategic interests such as exploitation of natural resources, establishment of the Polar Silk Road, opening of new shipping routes etc. Some scholars even go as far as to argue that China's increased involvement in the Arctic should be seen as a security threat to the region.

From the theoretical standpoint of the English School this paper illustrates how a group of states progresses from an international system to an international society. Firstly, the findings support the English School proposition that such progression typically occurs whenever states interact with one another for a lengthy period of time. Secondly, once the states have formed international society they come to

subscribe to common norms, values identities and legal framework guiding their relations. In the process of this progression diplomacy plays a central role as it allows states to articulate these collective principles and strengthen international society as a whole as well as symbolize its existence. Moreover, diplomacy contributes to a further expansion of the areas of cooperation within the group of states. The paper exemplifies this progression by presenting how from 1990s to mid-2000s China's involvement had predominantly revolved around scientific research, but has since then developed to an extent where it also covers economic, environmental and even Arctic-governance-related issues. As noted above, this progression also led to China's subscription to the collective norms, values, identities and legal framework with the Arctic states. Accession of China to the Arctic Council has provided it with the access to the intergovernmental forum, where, through diplomatic measures, China is now able to articulate its position regarding the relations with the Arctic, strengthen its ties with the region and expand its influence in this polar region.

Finally, the project contributes to the scarce literature that examines China's diplomacy in the Arctic outside scientific and bilateral realms and focuses instead on multilateral diplomacy of China in this polar region. Additionally, this paper also addresses the growing importance that the English School attaches to the question of how newly emerging centers of power, such as China, will affect the so-called 'post-Western' international society and what role in it will these power centers attempt to claim through interstate diplomatic dialogues.

“China's Arctic Interests,” Sanna Kopra, Arctic Yearbook, 2013 [103]
https://www.researchgate.net/profile/Sanna_Kopra/publication/269109588_China's_Arctic_Interests/links/58db764145851578dff8c44a/Chinas-Arctic-Interests.pdf

Abstract:

During the last decade, there has been much speculation about whether the rise of China will represent a threat or opportunity for the international system. More recently, the debate has sped up with China's growing interest in the Arctic region. To date, China has not unveiled an Arctic strategy, but consistent with its rising global status, it is likely to take a more active role in Arctic affairs. As China's Arctic activities cannot be separated from its other national interests, this article examines them in the context of the party-state's overall foreign policy objectives. It begins with a review of China's rise to global power status and its perceived implications for international society, particularly for international Arctic politics. Following that, it explores China's foreign policy objectives and looks at how China's Arctic activities seek to promote these goals. The article concludes that China's main Arctic interests include climate change, economic development, and scientific research. In addition, as China wishes to be seen as a “responsible major power”, it seeks to reassert its position in Arctic international politics without challenging the sovereign rights of the Arctic littoral states.

Current & Relevant Information:

Introduction

Since the end of the Cold War, the world has witnessed two significant changes in international affairs. Firstly, the geopolitical position of the Arctic has changed from highly militarized confrontation towards international cooperation, both military and civilian (Heininen, 2010). Particularly, due to globalization and climate change, the Arctic has begun to emerge onto the international stage (Heininen and Southcott, 2010). Secondly, China's international status has risen dramatically, both in economic and political terms. During the last decade, there have been numerous speculations about whether the rise of China will represent a threat or opportunity for the world. More recently, debate has increased with China's growing interest in the Arctic region (see for example, Lasserre, 2010; Rainwater, 2013; and Wright, 2011). In the future, it is believed that the Arctic will provide business opportunities in energy, mining, fishing, and tourism sectors, and Arctic shipping routes may offer more logistically efficient shipping routes compared to traditional passages, such as the Suez Canal or Panama Canal. Not surprisingly, China has also become more and more interested in Arctic affairs. To date, China has not unveiled an Arctic strategy, but has actively increased its cooperation with Arctic states. In May 2013, China received observer status within the Arctic Council. In addition, Chinese companies have started to take part in many business projects within Arctic states, which has raised concerns around the world. Concerning international climate politics, the fate of the Arctic is deeply interconnected with China's climate change policies; while the Arctic is the fastest warming region on the earth (ACIA, 2004), China is the biggest greenhouse gas emitter in the world (PBL Netherlands Environmental Assessment Agency, 2007).

This article examines China's Arctic activities in the context of the party-state's overall foreign policy objectives. It begins with a review of China's rise to global power status, and its perceived implications for international society, particularly regarding international Arctic politics. It will also explore China's foreign policy objectives and examine how China's Arctic activities seek to promote these goals.

China and Arctic Governance

The Arctic Council was established in 1996 to promote cooperation and to coordinate interaction amongst the eight Arctic states and Arctic indigenous communities on sustainable development and environment protection. Since 2007, China has been an ad hoc observer at Arctic Council meetings. At the Nuuk Ministerial meeting in 2011, the "criteria for admitting observers and role for their participation in the Arctic Council" was published. According to the criteria, new observers have to "recognize Arctic States' sovereignty, sovereign rights and jurisdiction in the Arctic", for instance (Arctic Council, 2011). Officially, the Chinese government did not comment on the criteria but various Chinese scholars criticized it

(Jakobson & Peng, 2012: 14). For instance, Guo Peiqing (2011, author's translation), professor of the Law and Politics School, Ocean University of China, argued: "Arctic states announce to the world: The Arctic is 'Arctic-states' Arctic. They oppose the idea that the Arctic is a common property of the whole humankind and desire to advance their own interests and to impair the participation of non-Arctic states through Monroe Doctrine." In May of 2013, China gained an observer status in the Arctic Council. Observer status does not allow China to participate in decision-making, but it guarantees access to all Arctic Council meetings and activities. From the Chinese government perspective, the new status means that "China supports the [Arctic] Council's principles and purposes, recognizes Arctic countries' sovereignty, sovereign rights and jurisdiction in the Arctic region as well as their leading role in the Council and respects the values, interests, culture and tradition of the indigenous people and other people living in the Arctic region" (Hong, 2013).

Conclusion

From the Chinese perspective, China should have a legitimate right to participate in Arctic governance as the melting Arctic has global security impacts and offers opportunities for non-Arctic states as well. However, the Arctic does not represent a top priority for the Chinese government. Presently, the government emphasizes that Chinese Arctic interests are scientific in nature. No doubt, unexploited oil, gas, and mining reservoirs under the Arctic ice shelves and the forthcoming Arctic shipping routes are also of interest to China as they would be important to the continuation of China's economic growth. For the time being, the Chinese government pursues cautious Arctic policies in order to lessen the international fear of China's rising status. But as Wright warns, "this reticence and restraint on China's part will not likely last indefinitely" (2011: 38). He argues that "China is very heavily dependent on international shipping (energy imports and finished goods exports) for its economic, social, and political stability; if and when the Arctic proves to be truly valuable for its natural resources and sea routes, Beijing will likely become much more assertive" (Ibid.). Furthermore, Jakobson (2013: 15) points out that Xi Jinping has to take the "strong nationalist sentiments amongst Chinese elites" into consideration and he cannot take the risk of "being perceived as a leader who allows China to be humiliated by foreigners". Therefore, we can expect that the new generation of Chinese leadership will assert its rights and interests globally, including China's "right to speak up" in Arctic affairs.

China's observer status in the Arctic Council not only brings privileges but also responsibilities. Hopefully it will encourage China to contribute more on polar research, pay more attention to the protection of the fragile Arctic nature, better respect indigenous people's rights, and shoulder more global responsibility. Besides, as Heininen (2011) puts it, "together with the rapid, and partly man-made, climate change, ice as a natural phenomenon is becoming a concept of global politics". We

may even understand ice as a common heritage of humankind, and “a ‘World Without Ice’ would not only look different, but would bring environmental, economic, cultural and political consequences which have more problems and challenges than possibilities” (Ibid.). It is important to not deny China a seat at the table when discussing any global problems. To use Nye’s (2013) piece of advice, the world should “work with China”, not just “contain it”. Thus, China’s voice should be given more attention in global and regional forums, including Arctic affairs, in order to fully engage them with international society.

“China in the Arctic: Interests, Actions and Challenges,” Njord Wegge, Nordlit, 2014 [104] <https://fni.brage.unit.no/fni-xmlui/bitstream/handle/11250/2485903/2014-NW-Nordlit-China+in+the+Arctic.+Interests%2C+Actions+and+Challenges.pdf?sequence=2>

Overview:

China is today experiencing extraordinary economic growth. Having sustained decades-long growth rates of around 7-12%, the new wealth has not only lifted hundreds of millions of people out of poverty, it has also enhanced China’s economic strength relative to other states, making China today the second largest economy in the world (Hu 2011: 1-18). While the new economic “powerhouse” in East Asia certainly has become more visible in issues pertaining to the global economy and international monetary policies, the People’s Republic of China’s (PRC) new strength is also paralleled by an expanded range of foreign policy interests abroad. One of these “new areas of interest” is China’s new engagement in the Arctic, a region where it was recently acknowledged as a legitimate stakeholder by the Arctic Council’s (AC) decision to accept it as an observer on 15 May 2013.

The aim of this article is to give an overview of China’s interest in and approach to the Arctic as well as identifying and discussing some key topics of interest arising from this development. In the first part I will raise the following questions: 1 – Why is China getting involved in the Arctic? 2 – How is China’s engagement in the Arctic playing out or materializing? After reviewing these questions, I will discuss how China’s actions in the Arctic should be interpreted as well as conclude with identifying some key issues that need to be solved in order for China to increase its relevance and importance as a political actor and partner in the Arctic.

I will apply a rationalist approach when seeking to answer the research questions guiding this investigation. I will hence primarily be guided by insight from the realist and liberal approaches. My decision to design the study on a rationalist approach does not necessarily stem from the belief that human actors are always rational, or that such an approach is without pitfalls. Rather, the presumption of rationality emerges from a belief that such a starting point is a productive one, and that the premise of rational behavior is a potent assumption when seeking to understand social interaction (Shelling 1960/1980: 4). However, as cultural factors such as

identities or values certainly matter when seeking to explain social interaction, such elements will also be assessed, but to a lesser extent.

In order to answer these above-mentioned inquiries, I will start out by investigating some theoretical perspectives from the field of International Relations (IR) that are often employed in order to understand China's growth and, its new-found foreign policy interest abroad including China's enhanced influence in world politics more generally. These theoretical approaches are also relevant when investigating China's new interest in the Arctic as well when assessing how China's rise is perceived from the outside—within the international community more generally.

Current & Relevant Information:

China's Arctic interest has also materialized through several new bilateral ties and dialogues with Arctic states as well as through contact with the indigenous peoples' organizations represented in the Arctic Council (AC). While China has held dialogues and exchanges with all Arctic states, the Chinese relationship to Norway stands out as particularly difficult as well as interesting. In the early years of Chinese interest in joining the Arctic Council as an observer, Norway was among the most interesting states for the PRC to initiate bilateral cooperation with, and this was reflected in early bilateral dialogues and broad contact from the bureaucratic to the political level. This was partly because of Norway's favorable geographic location at the entrance/end of the Northern Sea Route (NSR), its less "complicated" role as a rather small country compared to, e.g. the USA or Russia, and also because of its technological competence in areas such as deep water drilling and its possession of untapped energy reservoirs, as well as its inclusiveness in accommodating Chinese research activities at Svalbard (Jacobsen 2010: 11,13). However, with the Norwegian Nobel Committee's awarding the Peace Prize to the Chinese dissident Lui Xiaobo in 2010, the Chinese government decided to freeze all bilateral cooperation with the Norwegian government. This freezing of the ties instantly affected all political contact including putting an almost finalized bilateral free trade agreement on ice. The Chinese MFA also ended their contact with the Norwegian diplomats in Beijing, and researchers and other Norwegian representatives experienced severe problems in obtaining visas for business travel to China.

Because of the Chinese-Norwegian bilateral frozen ties, the other Nordic states have emerged as China's preferred partners in the Arctic. In June 2013 the Polar Research Institute of China formally established a China-Nordic Arctic Research Center, under the supervision of the State Oceanic Administration (China Daily 2013). Today it also appears as if Iceland has developed into one of the most important Chinese partners in the region, e.g. illustrated by China building the largest embassy building in Reykjavik (Li and Bertelsen 2013: 62, Makki 2012, Wright 2011: 34). The newly established close ties to Iceland have also been expressed in the last few years through official Chinese visits to Iceland, through substantial cooperation on the Icelandic continental shelf by the Chinese oil

company Cnooc, as well as through the newly accomplished free trade agreement between the two countries—in fact the first bilateral free trade agreement between China and a European country (Icelandic MFA 2013, Nielsson 2013).

Concluding remarks and future issues to be solved

China has in the last few years increasingly been accepted as a legitimate stakeholder in the Arctic. With important economic stakes related to shipping, investments in resource utilization as well as in the consumption of the same resources, China is an increasingly important economic actor in the Arctic. Moreover, as it has become clear that climate change in the Arctic is directly related to environmental and climatic conditions in China, the PRC is also perceived as an even more relevant scientific partner in the region. With new infrastructure, such as icebreakers and the Yellow River Station at Svalbard, China has also invested in capabilities making it able to contribute to scientific research in the north.

Nevertheless, important issues concerning China's role in the Arctic remain to be solved. First, China's future role in the High North might depend on global geopolitical developments. This includes the PRC's relationship to other great powers--primarily the USA, Russia and Japan--but also developments in global trade patterns, price development on raw materials, as well as growth in world and domestic markets. With higher prices on raw materials in the world market, Arctic resources are more likely to be utilized, hence increasing the stakes and importance of controlling and utilizing these resources. With conflicts escalating in the East and South China Sea a strained cooperation climate in the Pacific region might spill over to affect the governance and cooperation climate in the Arctic. Second, China's role in the Arctic will also depend on developments within multilateral institutions such as the Arctic Council. As no one knows with certainty how the role of the AC observers might develop in the future, institutional development of this high-level multilateral forum might indeed influence China's as well as other newcomers' role to participate in the governance of the region. In this respect it is also worth noting how Chinese representatives have made their viewpoints heard with respect to demanding a greater influence on matters also concerning non-Arctic states--issues such as shipping, environmental issues or trading of resources extracted from the Arctic (Jacobson and Lee 2013: 13). And finally, powerful and influential states like China can also to a certain degree decide for themselves the direction and intensity of their Arctic engagement and their future role in the region. Domestic developments might in this respect be able to influence some of this decision even though the ruling party certainly should be expected to have the final say in this development. To this latter point a future Chinese Arctic policy should be expected, carving out the role China wishes to play.

“China's Interests in the Arctic: Opportunities and Challenges: Examining the implications of China's Arctic policy white paper,” Nong Hong, Institute for China-

Summary:

The geopolitical landscape of the Arctic today is a significant departure from the great power politics of the Cold War. Apart from traditional Arctic states, far more international organizations and non-Arctic states are showing an increased interest in the Arctic. This report explores the growing interests of China in the Arctic and examines the motivations behind its involvement in the region. China's interests range from participating in Arctic governance, promoting bilateral diplomacy in the Arctic area, accessing potential resources, exploiting shipping opportunities and undertaking polar research. Thus far, China's involvement in the Arctic has been fairly low-profile. Since obtaining observer status on the Arctic Council in 2013, China has modestly bolstered its bilateral relations with Arctic states and participated in the development of resources in the region.

The State Council Information Office of China published a white paper titled "China's Arctic Policy" on January 26, 2018. China's policy goals in the Arctic are shaped by four key principles—to understand, protect, develop and participate in the governance of the Arctic. In order to realize these policy goals, the white paper emphasizes the need for “respect, cooperation, win-win result and sustainability.” These policy goals and principles are reflected in the respective areas that China has shown interest in, which are analyzed in this report.

China's Arctic white paper is the result of policymakers' careful deliberation. It also reflects the longstanding expectations of researchers, countries and international organizations involved in Arctic governance. The recent expansion of China's role has invited international suspicion of its intentions in the Arctic, especially from council member states. China's new white paper spells out its intentions for the Arctic and should relieve some concerns over its transparency and commitment to international law.

China's Arctic strategy is only just beginning to unfold and still faces many challenges, including the Arctic states' disputes over territorial sovereignty, vigilance among certain countries, the natural environment in the Arctic region and China's technological constraints. Nevertheless, with China's newly released Arctic policy white paper, China has emphasized a key theme—cooperation.

Current & Relevant Information:

Introduction

The geopolitical landscape of the Arctic today is a significant departure from the great power politics that existed in the region during the Cold War. The supremacy of the military presence and security interests of the two superpowers during that time have now been replaced by the multiple political interests of the eight North

Pole states, dominated mainly by the military and security interests and naval capacity of Russia, Canada, the United States, Norway and Denmark. Through the Ilulissat Declaration in 2008, these five Arctic coastal states (the Arctic Five) have asserted the predominant role in addressing both territorial issues and emerging issues related to resource development in the Arctic region (Yeager, 2008).

The exclusivity of Arctic governance has been challenged by the activities of states from outside the region, such as the United Kingdom, France, Germany, China, Japan, South Korea and India; these states are taking a special interest in many aspects of the Arctic that focus on scientific research, shipping and resource development. Estimated oil and gas reserves in the continental shelves of the northern seas and visions of new trans-Arctic sea routes are also attractive to transnational corporations that are increasingly interested in the potential commercial value of Arctic energy resources (Robinson 2007: 21). This report explores the growing interests of China in the Arctic and examines the nature of its interests and motivations in wanting to maintain its involvement and presence in the region. China's interests range from participating in Arctic governance and accessing potential resources to exploiting shipping opportunities and undertaking polar research.

Seeking participation in the Arctic Council

The Arctic Council is a high-level intergovernmental forum that addresses issues faced by the governments of the eight North Pole states in the areas of environment preservation, sustainable development, culture and well-being of Arctic peoples. Promoting "cooperation, coordination and interaction amongst Arctic states," the Arctic Council does not deal with security issues and has no binding effect on the parties involved. It is unique as a forum for states in that it allows six indigenous peoples' organizations' permanent participant status, giving them full consultation rights in the Council's negotiations and decision-making processes (Arctic Council).

Observer status in the Arctic Council is open to non-Arctic states, inter-governmental and interparliamentary organizations and NGOs. States that enjoy observer status receive automatic invitations to attend Arctic Council meetings. Before 2013, the composition of the observer states was predominantly European; it included France, Germany, the Netherlands, Poland, Spain and the United Kingdom. Participation of the observer states is seen by the Council as "a valuable feature through their provision of scientific and other expertise, information and financial resources" (Arctic Council).

More recently, climate change has increased accessibility to potential Arctic resources, changing the geopolitical landscape and broadening the international focus on the Arctic to include more geographically distant countries such as China, Japan, South Korea, India and Singapore. Seeking observer status in the Arctic Council is regarded by these Asian countries to be an important step towards

ensuring that they are involved in determining the future of the Arctic, a region which they believe will have an effect on their economic interests and global environmental concerns.

Since 2007, China has participated as an ad-hoc observer at Arctic Council meetings to gain a better understanding of the Council's work. In 2008, it began officially expressing its intentions to become an observer on the Arctic Council. Guo Peiqing, a law professor from China's Ocean University, holds that China has great strategic interests in the Arctic; rather than adopting a "neutral" position as an outsider, it should push for the internationalization of the region instead (Guo Peiping, et al. 2009:323-26). However, Guo's proposal of internationalizing the Arctic might risk damaging China's image in the international community, as taking such a stance would not be consistent with its principle of "non-interference."

In May 2013, the Arctic Council granted China, Japan, South Korea, India and Singapore observer status (CBC News 2013). As Norwegian Foreign Minister Espen Barth Eide stated, "There is no such thing as a free lunch. By becoming an observer you're also signing up to the principles embodied by this organization" (CBC News 2013). These non-Arctic states have been working hard to make that happen, though some analysts still question the new criteria for observer status on the Arctic Council (Guo Peiping 2012:21). Part of the new criteria includes an explicit direction that observers must respect "Arctic states' sovereignty" (Arctic Council 2013).

China has submitted an Observer Review Report to the Arctic Council annually since it was granted observer status in 2013. In its 2016 report, China states that it continues to contribute to the work of the Arctic Council as an observer through attending all governmental meetings open to observers under the umbrella of the Arctic Council, attending the Working Groups, Task Forces and/or Expert Groups WG/meetings of the Council and recommending more than 25 experts to relevant programs—8 of whom have been invited to engage in specific programs. The 2016 report also noted that China has hosted several meetings and sessions related to Arctic issues, including the Ny-Ålesund Science Managers Committee Seminar, the country session in the Third Arctic Circle Assembly, the breakout session regarding the sustainable development of the indigenous peoples and Asia's contribution in the Arctic Frontier Meeting. China has contributed to the Indigenous Peoples Secretariat on the "A Story Map of Indigenous Peoples" project and to the celebration of the 20th Anniversary of the Arctic Council (China Observer Review Report 2016).

Promoting bilateral diplomacy in Arctic area

Besides participating in multilateral mechanisms, China is also active in promoting bilateral relations with Arctic states for strategic purposes. Just as Guo remarked in his incisive analysis, China should deal with Arctic states on an individual basis, while rejecting a one-to-many negotiation model because different states have different interests (Guo 2012: 34). This way, China will have much more leeway for

strategic operations. This one-on-one model is similar to China's stance in the South China Sea issue, where China insists on bilateral rather than multilateral negotiation. In order to advance bilateral diplomacy in the Arctic region, China is making two separate but simultaneous efforts. First, China is focusing on resource acquisition in the Arctic through resources-oriented diplomacy. Second, China is trying to expand its influence by bolstering relations with five North European countries.

The rapid expansion of Chinese activity in the Arctic in recent years has been noted by the United States government. A report by the U.S. State Department's International Security Advisory Board (ISAB) states "China's...quest for resources, particularly in Iceland and Greenland, are sources of concern for some" (ISAB Report 2016). The report noted China's cooperation with Russia in the development of natural-gas deposits in the Arctic Siberian Yamal Peninsula. Goodman, an ISAB member, suggested the impact of Sino-Russian cooperation on Arctic regional security has not attracted enough attention from the U.S. government. The report also concluded that the United States should strengthen its operational capacity in the Arctic by building new icebreakers and gradually establishing infrastructure in the Arctic in advance of potential future security crises (ISAB Report, 2016).

China's views on Arctic cooperation

"Cooperation" is an effective means for China's participation in Arctic affairs and "respect" is the key basis for China's participation (white paper). A "win-win result" is the value pursuit of China's participation in Arctic affairs, which carries on the message that all stakeholders should pursue mutual benefits and common progress in all fields of activities. "Such cooperation should ensure that the benefits are shared by both Arctic and non-Arctic states as well as by non-state entities and should accommodate the interests of local residents including the indigenous people."

Conclusion

China's interests range from participating in Arctic governance affairs, promoting bilateral diplomacy in the Arctic area and accessing potential resources to exploiting shipping opportunities and undertaking polar research. Thus far, China's involvement in the Arctic has been fairly low-profile. Since obtaining observer status on the Arctic Council in 2013, China has modestly bolstered its bilateral relations with Arctic states and participated in the development of resources in the region.

The recently published white paper titled "China's Arctic Policy" implies that the policy goals on the Arctic are shaped by four key principles—to understand, protect, develop and participate in the governance of the Arctic. In order to realize these policy goals, the white paper emphasizes the need for "respect, cooperation, win-win result and sustainability."

China's Arctic strategy is only just beginning to unfold and still faces many challenges, including the Arctic states' disputes over territorial sovereignty, vigilance among certain countries, the natural environment in the Arctic region and China's technological constraints. Nevertheless, with China's newly released Arctic policy white paper, China has emphasized a key theme—cooperation.

“Chapter 14: Preservation of Territories and Traditional Activities of the Northern Indigenous Peoples in the Period of the Arctic Industrial Development,” Elena Gladun and Kseniya Ivanova, *The Inter-connected Arctic*, 2017 [106]

http://scholar.google.com/scholar_url?url=https%3A%2F%2Flibrary.oapen.org%2Fbitstream%2Fhandle%2F20.500.12657%2F27784%2F1002221.pdf%3Fsequence%3D1%23page%3D139&hl=en&sa=T&oi=gga&ct=gga&cd=6&d=2459945642685035392&ei=apGX5zjLoyimwGBoYCYBw&scisig=AAGBfm12-clQ91zs-tZ0Q0SVRFVpdGS2xQ&nossl=1&ws=753x637&at=Preservation%20of%20Territories%20and%20Traditional%20Activities%20of%20the%20Northern%20Indigenous%20Peoples%20in%20the%20Period%20of%20the%20Arctic%20Industrial%20Development&btn=1

Abstract:

In Russia the right to traditional use of lands, biological and other resources such as reindeer pastures, harvesting fauna, fish, non-wood resources of forest including wild plants is declared with due regard to the priorities of indigenous peoples. However, in practice the northern indigenous communities can hardly get an access to their traditional lands. They cannot become owners of hunting lands, fishing areas, cannot obtain long-term licenses for the wildlife use rights, quotas for fishing. Due to many reasons the northern indigenous peoples are not able to compete with major industrial companies. As a consequence, the indigenous peoples do not conduct traditional economic activities, nor do they preserve their traditional lifestyle, values and language. Alongside with guaranteed rules concerning indigenous rights, in the Russian legislation there is a gap in proper regulations of traditional territories use. In the current period of intensive industrial development of the Arctic the legal rules should be revised and supplemented with effective mechanisms of granting and protection of traditional territories and activities of the northern indigenous peoples.

Current & Relevant Information:

Changing Conditions in the Arctic Territories

Traditional use of natural resources – fish, forests, wildlife – is a way of life for the indigenous communities of the Arctic. Indigenous peoples continue to rely on the sustainable use of renewable resources and this dependence puts them at great risk from industrial objects and pollutants that find their way in the period of the intensive economic development. Nowadays the indigenous peoples in Arctic regions have to use alternative ways of their economic development, at the same time they are

seeking to balance these emerging opportunities with their traditional lifestyle and values closely connected with the land and wildlife. A good example here is the indigenous peoples of the Yamalo-Nenets Autonomous Area with 40% leading a traditional nomadic life, living right in the forest tundra (News Agency “Arctic-Info”. 2016a, b) and sharing their traditional territories with the major Russian oil and gas companies (Gasprom, Rosneft and others) (Gasprom official site 2008). The relations between industrial companies and indigenous peoples today are built on the basis of cooperation agreements and dialogue so that the indigenous peoples receive some short-term benefits of the projects at the stage of arrangement and the operation of oil and gas fields. The public authorities and companies identify the necessary measures to reduce the burden on traditional habitat and traditional economic activities of indigenous peoples of the North. Also, the compensation is paid for loss of profit when hunting, fishing, gathering and pastures areas are withdrawn for industrial needs (Bykovskii 2013). On the one hand, this model contributes to improving the quality of life and economic benefits of the indigenous peoples, and on the other it is the path to degradation of peoples accustomed to traditional activities on their lands, who with the arrival of a large number of new people and non-traditional activities have become more vulnerable financially and spiritually.

The economic policy of Russia in the new century focuses on the exploration of mineral resources in the northern Arctic territories and the development of the Arctic energy resources (The Foundations of Russian Federation Policy in the Arctic until 2020 and beyond 2009). Much more than benefits the indigenous peoples of the Russian North face threats from intensive mineral, oil, and gas development, and the resulting conflicts with intensive industrial development model of the northern territories have affected all aspects of their life, including social, cultural and spiritual integrity. Yet in April 2005 the 5th Congress of Indigenous Peoples of the North, Siberia and the Far East of the Russian Federation took place in Moscow and gathered more than 300 delegates from 28 subjects of the Russian Federation. The main theme for the Congress was modern social, economic and political processes in the northern territories of Russia and changes in the life of the northern indigenous peoples. Some negative consequences were outlined by indigenous peoples themselves, for example (Gladun and Chebotarev 2015):

- the destruction of the social infrastructure and the public system of medical, cultural, goods, social and transport provision in the places inhabited by the northern indigenous peoples, as a result of which the indigenous peoples involved in reindeer herding and handicrafts, leading a permanent nomadic or semi-nomadic way of life, became completely isolated;
- a deep crisis in the traditional branches of economy, which form the basic life-support of the northern peoples, as a result of ill-considered and swift privatization of the main traditional means of production;

— a decrease of the amount of the indigenous peoples pursuing traditional occupations, as a result of which a general, permanent unemployment is reported, which has led to impoverishment, abrupt increase of morbidity, especially through tuberculosis, and, as a consequence, to a mortality increase and a reduction of the life expectancy for northern indigenous peoples (Gladun and Chebotarev 2015).

In addition, some legal issues were discussed at the Congress – guarantees for the rights of the indigenous peoples and the effective interaction between indigenous communities and organizations with the authorities and industries to implement federal and regional programs of economic and social development of the indigenous peoples (BCЛYX.RU 2005). However, significant changes in legislation have not happened afterwards. In fact, many of the achievements of the federal legal regulation made after enactment of 1993 Russian Constitution were annulled by a series of amendments in 2004. The conditions of life and activities of the indigenous peoples of the North in the mid-2000s became significantly different in various regions of Russia. The considerable political, legal and economic efforts to guarantee indigenous rights and to provide support for indigenous communities have been undertaken by regional authorities in such subjects of the Russian Federation as the Republic of Sakha (Yakutia), the Nenets Autonomous Area, the Khanty-Mansi Autonomous Area –Yugra, the Yamalo-Nenets Autonomous Area. In some regions the living conditions and opportunities to maintain traditional activities, to preserve traditional culture and languages continued to deteriorate.

Facing an unprecedented combination of rapid and stressful changes involving environmental forces like climate change, socioeconomic pressures associated with globalization (Arctic Human Development Report (AHDR) 2004; Nuttall 2000) and intensive industrial development (Gladun and Chebotarev 2015) the indigenous peoples in the Arctic have felt a need to safeguard their culture and traditional way of life.

b) Are there any Influences between the Chinese and Indigenous People?

“Book Review: International Relations and the Arctic: Understanding Policy and Governance (edited by Robert W. Murray and Anita Dey Nuttall). Amherst: Cambria Press, 2014, 742 p.,” Sebastian Knecht, Research Gate, February 2015

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https://www.researchgate.net/profile/Sebastian_Knecht/publication/272162543_Book_Review_International_Relations_and_the_Arctic_Understanding_Policy_and_Governance_edited_by_Robert_W_Murray_and_Anita_Dey_Nuttall_Amherst_Cambria_Press_2014_742_p/links/54dc89ae0cf282895a3a83bb.pdf

Abstract:

The growing importance of the Arctic in international affairs is evident also in the massive proliferation of academic and popular literature on northern governance and

politics these days. Readers of Polar Record's book review section will be well aware of that. Almost all major publishers (and many more minor ones) with international distribution and readership have over the past few years published monographs or edited volumes on the consequences of Arctic transitions for diplomatic and societal relations in the region and beyond. This trend should be welcomed for the Arctic as an object of study and for polar research as a discipline. At the same time, the plurality and higher frequency of contemporary publications might overstrain both the ordinary and the advanced reader and calls for a lighthouse to provide orientation and guidance in stormy Arctic waters. No less than that is what *International relations and the Arctic: understanding policy and governance* edited by Robert W. Murray and Anita Dey Nuttall is.

Current & Relevant Information:

This is a fantastic and elaborate collection of essays to think about sovereignty, security and stability in Arctic affairs and the way forward for regional governance. Sovereignty is as much about security as it is about the effective handling of pressing policy problems. So, no doubt, this book is right on time. To approach these topics, the book follows a tripartite structure beginning with a theoretical discussion of the concept of sovereignty in Part I, then moves on to investigate the eight Arctic state policies and strategies in Part II, and finally extends the book's analytical scope towards actors and institutions below and beyond the Arctic state in Part III. The volume's length of more than 700 pages and 20 essays is indicative of the time and attention to various local, national and international perspectives, interests and interpretations that is required to better understand what sovereignty is all about in a globalized Arctic. The good news about the present volume is that it does not simply treat the region as just another case for the application and replication of paradigmatic international relations (IR) theories. Rather, the book shall 'throw light on how the Arctic as an area of study contributes to the development of the IR discipline' (page 3–4). The contributors have done a great job doing so and their efforts will be of great interest to both the Arctic studies community and IR scholars more generally.

The editors have ceded most chapters in Part I to IR scholars rather than Arctic experts. This turns out to be a reasoned decision. The concept of Arctic sovereignty is explored from the angles of realist, neoliberal institutionalist and English School IR theory in the first three chapters with a strong focus on relevant concepts and assumptions. True, this comes here and there at the expense of debates of Arctic histories and politics, but the authors manage to pull the Arctic out of its long peripheral position in world politics and push it into the mainstreams of IR research. The fourth chapter of Part I differs from the other three in that it outlines a theory of post-sovereign/transnational politics in the Arctic; a valuable and provocative, albeit normatively inspired intervention in current debates of Arctic sovereignty and one

that is reflected in later chapters discussing particularly indigenous peoples' rights and participation in Arctic governance.

Given that the book seeks to overcome the territorial connectivity of the concept of sovereignty in IR, readers might be surprised to see all chapters in Part II of the book dedicated to the eight Arctic Council member states' policies and strategies under the subheading 'Arctic sovereignty in practice'. Yet, to start from more conventional discussions of Arctic politics to which these states are undoubtedly central is justifiable for analytical reasons. The book would still have benefitted from including a more cautious and contextualized discussion of what sovereignty as understood here really means 'in practice' though. One should be reminded that this section's definition of Arctic sovereignty as contained by nation-states in the region is necessarily as varied as the definitions of the Arctic itself. Understandably a consequence of the IR perspective the book adheres to, this conception is deeply rooted in a historical institutionalist interpretation of who belongs to the Arctic and who does not. As one of the authors notes, the establishment of the Arctic Council in 1996 'changed the more traditional conception of the Arctic as related to five states – the littoral countries – into an eight-state body that included Sweden, Finland, and Iceland' (page 292). Yet, these states, often called sub-Arctic, have little in common with the five littoral states when it comes to sovereignty issues as manifest in overlapping territorial claims in the Arctic Basin, offshore resource development, border control, monitoring, patrolling and surveillance, and so on.

Advanced readers might further object that discussions of the national policy and strategy documents of the eight Arctic states have already been discussed at length elsewhere. They will be surprised by the enormous reflectivity and substantial (re-) interpretation many of the chapters provide of why the north matters for Arctic states' sovereignty and security considerations in regional and global contexts. For all others not yet too familiar with Arctic politics, here is the state of the art of what you should know about the eight Arctic states' ambitions and concerns in the region.

Finally, Part III of the book zooms out to address instances of 'Shared sovereignty and global security interests' with regard to the Arctic region. This is a necessary advancement of the concept of Arctic sovereignty and governance as examined in Parts I and II in the light of the well-documented surge of international interest across a wide array of state and nonstate actors in recent years. The ways the roles and interests of indigenous groups, non-Arctic states from across Asia (China, Japan, South Korea and India) and Europe (the United Kingdom), and the European Union interfere with traditional notions of state sovereignty are well covered here. These chapters are further embedded in discussions of how involvement of these actors has serious repercussions on the complex governance regime in place for the Arctic and how international law and institutional settings like the Arctic Council and the United Nations system co-evolve and adapt. Reading these chapters is highly recommended. If one was to look for drawbacks of this third section at all, it would

have been good to reconnect this part to the theory chapters of Part I and to make explicit the theoretical contribution that this book has to offer.

All things considered, this book will be of great value to researchers of Arctic studies and international relations. Each chapter is easily accessible to get a thorough assessment of the respective topic. Together, this is a rewarding compendium about sovereignty and international relations in the Arctic. Good to have this book close at hand.

“The New Geopolitics of the Arctic: Russia, China and the EU,” Andreas Østhagen, Wilfried Martens Centre for European Studies: Policy Brief, April 2019
[108] <https://euagenda.eu/upload/publications/untitled-212267-ea.pdf>

Abstract:

The Arctic is changing. Facing challenges driven by resource demands, changing power relations and climate change, the top of the world demands the attention of European states and EU officials. This paper examines the main geopolitical issues in the Arctic, such as the development of the region’s energy resources, the underlying potential for conflict and the increasing presence of China in the region. It argues that to unpack the region’s complexities, we need to recognize the diversity within the Arctic across a range of issues and to differentiate different levels of analysis: the international and the regional. Furthermore, this paper argues that the EU’s approach to the north suffers as a result of a general deficiency in EU external policies, namely incoherence and a multitude of voices and opinions. To have a more effective Arctic policy, the EU needs to distinguish between the different levels outlined here, raise awareness of the issues facing the Arctic among its member states and politicians, and better communicate the relevance of the Union to Arctic states. The EU must view the Arctic primarily as a long-term strategic priority and as an area of growing geopolitical importance.

Current & Relevant Information:

Introduction

In 2006–7, researchers, policymakers and the media alike began making a range of claims about the future of the Arctic. Climate change is accelerating the melting of the ice in the north. Coupled with high oil prices and positive estimates of the region’s hydrocarbon resources, this led to the Arctic being portrayed as both the world’s new energy frontier and the northern ‘shortcut’ to Asia. As the Arctic littoral states—Denmark (Greenland), the US, Russia, Norway and Canada—placed the north on their domestic and foreign policy agendas, and non-Arctic states such as Japan, France, Germany and China expressed interest in the region, predictions were made that the Arctic would become the next arena for geopolitical conflict.

Since then world events have taken a turn. The fall in the price of oil and gas transformed hopeful Arctic resource projects into unprofitable ventures. Russian ice-

breaker levies and high operating costs turned trans-Arctic shipping into a long-term prospect. The focus shifted to northern industries that were already profitable, such as mining, tourism and fisheries. Simplistic predictions about an Arctic 'boom' turned into equally simplistic forecasts of an Arctic 'bust'. However, as Russia's relationship with the 'West' deteriorated in 2014 over Ukraine and later Syria, headlines warning of an imminent confrontation in the Arctic reappeared. This time it was not the region's resources that were fueling a scramble: it was the region's growing strategic importance for NATO, Russia and even China. The result of these predictions, however, tuned out to be the same: Arctic states have been, and still are, placing pieces on the chessboard in advance of an imminent geopolitical conflict in the north.

However, studies were quick to point out that many of the Arctic predictions were largely inaccurate, whether they had been made before or after Russia's annexation of Ukraine's Crimea region in 2014. Over the past decade scholars have produced more balanced depictions of the dynamics both within the region as a whole and among the various actors with a stake in the Arctic. Moreover, foreign ministries in Arctic states have been particularly active in emphasizing the 'peaceful' and 'cooperative' traits of the region. Even China—an actor prompting a sense of skepticism and uncertainty in northern countries—has played according to the Arctic 'rule book'. It has reiterated the primacy of the United Nations Convention on the Law of the Sea (UNCLOS); and in its White Paper on the Arctic, it emphasizes the importance of cooperation. Finally, those inhabiting the Arctic region—indigenous as well as non-indigenous peoples—have been demanding the right to partake in decision-making forums concerned with Arctic development and have been insisting that there should be less talk about geopolitics and quick business opportunities.

There thus seems to be a multitude of actors, layers and levels at play—the situation warrants further unpacking. The main question this paper asks is, what are the geopolitical characteristics of the Arctic region? By extension, how accurate are the predictions of conflict in and over the Arctic? What is the role of China in all this? And what do these developments entail for the EU and for its ambitions to be an Arctic actor? To answer these relatively large questions in a limited amount of space, a few key points will be made. First, we need to divide the analysis into different levels. This means that, instead of treating all issues as interrelated and part of one picture, we have to differentiate the systemic (international) level from its regional (Arctic) counterpart. In this way we will be able to disentangle some of the arguments already mentioned. Second, when examining issues within each level, we need to recognize the inherent diversity of the region. The paper will show that when we think of Arctic security, it makes more sense to divide the area into subregions: The North American Arctic, on the one hand, and the Eurasian Arctic, on the other. Finally, it is not possible to boil down the dynamics of the Arctic to an antithesis between conflict and non-conflict.

What about China?

There have been a great many reactions from Arctic states and Arctic actors to China's involvement in the top of the world since 2007–8. How can we explain China's involvement in the north, and what are its interests in the Arctic?

These questions have three dimensions: two are region-specific and one is connected to the systemic level described in the previous section. First, China has a considerable research presence in the Arctic, particularly on Svalbard; moreover, it is investing in research equipment and infrastructure destined for the Arctic. This research is mainly focused on natural science and utilizing the Arctic—as many scientists are—as a testing ground for climate predictions and for examining the effects of human activities further south. In a country with ambitious research agendas, a wide range of scholars and researchers are pushing for China to become involved in the Arctic for such purposes.

Second, China has stated economic interests in the north. These range from ensuring it has an advantageous position in the development of the Northern Sea Route, to investing in infrastructure projects and extractive industries. China's One Belt One Road initiative has an Arctic dimension known as the 'Ice Silk Road'. It entails exploring how northern sea-lanes, in tandem with rail capacity, can add to the country's world trade links. The Chinese 'Silk Road Fund' and the China National Petroleum Corporation have 9.9% and 20% stakes, respectively, in the large-scale Yamal Liquefied Natural Gas project in Arctic Russia. This ties Russia and China closer together in the development of Arctic gas resources. As well as long-term prospects and strategic investments, immediate economic prospects are undoubtedly of relevance to China's Arctic endeavor.

Finally, China's involvement in the Arctic also concerns its position as an emerging superpower. As China continues to assert its influence on the world stage, the Arctic will be only one of many regions where presence and interaction are components of an expansion of power in both soft and hard terms. Ensuring Chinese interests, ranging from businesses to opinions on developments related to the Law of the Sea, is a natural part of this expansion, just as it has been for the US over the last half-century. Limited tension between Arctic actors and China might arise, but the Arctic is still predominantly a harsh and challenging domain where the Arctic states will retain their primacy. What is more likely is that the impact of conflicts elsewhere, including those involving China, would spill over into the Arctic. This would be due, not to the Arctic's resources or to internal power struggles, but to the strategic importance of the Arctic and the importance it holds for some NATO countries and for Russia.

However, Chinese officials have made few comments on the importance of the Arctic to China. References have been made to China as a 'near Arctic state', a situation which demands involvement. At the same time, China is not accepted as

an Arctic state and has largely been excluded from regional politics. It has pursued a low-profile approach to the region focused on cooperation—often bilateral—with the Arctic states. In tune with policy documents in all circumpolar states, Beijing has emphasized principles such as cooperation, win–win results and sustainability. In late 2016, Norway and China resumed normal diplomatic relations, which had been in limbo since the Nobel Peace Prize Committee awarded the prize to Chinese dissident Liu Xiaobo in 2010. China has also taken steps to strengthen relations with all Nordic countries over the last decade. The Arctic has similarly been a component in Beijing’s efforts to expand relations with both Russia and Canada in recent years.

With the White Paper launched in the spring of 2018, China signaled its desire to be taken seriously as an Arctic actor, even though it is not an Arctic state in geographical terms. China is now entering a new phase of its northern endeavor, emboldened by its international stature and relationship with Russia. It remains to be seen exactly how this will translate into concrete policies or actions, such as those connected to One Belt One Road. Relations between Arctic countries and those non-Arctic countries that are present in the region are thus likely to be significantly affected by the broader ongoing power shift in the international system, that is, the rise of China. In the short-to-medium term, relations between the two sets of countries are likely to be shaped more by developments outside the region than by those within it. And in the Arctic, Russia and—increasingly—China hold central positions.

Especially relevant are the questions of China’s adherence to UNCLOS and how it views the role of this international regime in relation to its own Arctic interests. So far UNCLOS has been the strongest guarantee of mutual interests in a cooperative region, supporting the interests of the Arctic states themselves. Challenges to this regime could arise from developments in high-seas fisheries and/or protected marine areas, overlapping continental seabed claims or the increasingly common discussions on the status of Arctic sea-lanes. Such challenges could spur questions about the flexibility and adaptability of UNCLOS in a context characterized by changing power dynamics and climatic change. Here China plays a key role.

Conclusion

The Arctic will keep growing in importance to northern states and the international community for two intertwined reasons: (1) the unremitting disappearance of the Arctic sea ice will allow for more activity, and (2) some of the world’s greatest powers are investing in, and focusing on, the region. However, the dynamics of this region cannot be boiled down to the mutually exclusive options of conflict or no conflict. A race for Arctic resources or territory is highly unlikely in the foreseeable future, despite the territorial land grabs that have been occurring in other parts of the world. Thus, it is not the influence of geography on politics that has the potential to cause conflict in the Arctic.

At the same time, the region's growing importance within the international system is becoming increasingly apparent. In this regard the Arctic stands as an arena where the US, Russia and China interact with the EU. Here the EU has several roles to play. It can ensure that its member states and institutions are aware of the complexities of the region, whether these relate to the livelihoods of indigenous peoples or to Russia's (and other Arctic states') military investments. The EU should only involve itself in the Arctic in a regional (and non-threatening) manner. Beyond this, the EU needs to recognize the increasing importance of the Arctic within the international system and the role the Union plays in shaping the region. This it can do by setting clear visionary goals in line with its own interests as the world's second largest economy, after China.

“We are the Indigenous Peoples of the Arctic,” Arctic Council Indigenous Peoples’ Secretariat, 2020 [109] <https://www.arcticpeoples.com/#intro>

Overview:

These are the six Arctic Indigenous organizations that hold Permanent Participant status in the Arctic Council:

Aleut International Association, Arctic Athabaskan Council, Gwich'in International Council, Inuit Circumpolar Council, Russian Association of Indigenous Peoples of the North, and the Saami Council.

Current & Relevant Information:

Our Home: Over 500,000 Indigenous Peoples live in the Arctic spanning three continents, eight countries and 30 million square kilometers.

Our Resilience: “In 20 years, I will be definitely speaking my language. I will definitely be tanning caribou hide every summer. I will definitely be teaching my kids how to thrive off the land. People tend to say that we survived a real Gwitchin harsh environment by living in the high Arctic. We didn't just survive, we thrived.” - Jordan Peter, Gwich'in Tribal Council.

Our Contribution: “The Arctic Council would not be the Arctic Council as we know it without the participation of the Indigenous groups.” - David Balton, Chair, Senior Arctic Officials United States Chairmanship, 2015-2017.

The Indigenous Peoples' Secretariat is a support secretariat for all the Permanent Participants. The Indigenous Peoples' Secretariat assists with creating opportunities for the Permanent Participants to present their causes, and helps provide them with necessary information and materials. Learn more the Secretariat and the Indigenous peoples they represent: [About](#)

“Greenland & the Arctic Council: Subnational Regions in a Time of Arctic Westphalianisation,” Inuuteq Holm Olsen and Jessica M. Shadian, Arctic Year,

2016 [110]

https://arcticyearbook.com/images/yearbook/2016/Scholarly_Papers/8.Shadian.pdf

Abstract:

In recent years renewed global interest in the Arctic and the Arctic Council, in particular, has led to what can be called a 'Westphalianisation' of Arctic politics. This Westphalianisation can be found in the increasing number of globally powerful states including China, Japan, and India as well as the European Union which have all sought a formal role in Arctic policymaking (specifically by seeking observer status on the Arctic Council – the most significant fully circumpolar intergovernmental regime). The Arctic Council itself has shifted from a high-level forum to an intergovernmental regime which has begun to produce a number of binding agreements under its auspice. At the same, over the past thirty years subnational regions around the world have become powerful global actors. This is due in part to the strength of certain subnational economies, the inability for states and the intergovernmental system (e.g. UN) to meet the challenges facing subnational regions, as well as a broader reconceptualization of sovereignty; namely the decentralization of traditional governance. Subnational regions, subsequently, are increasingly finding or seeking a greater voice in global politics.

In the Arctic, unlike earlier periods of history when global powers arrived and were met with little if any political resistance, in today's Arctic subnational entities from Greenland to Nunavut and Alaska have all attained the legitimacy and the agency to engage in global politics on their own accord. This chapter will focus on the future of the Arctic Council in light of this renewed global interest in the Arctic alongside the rise of globally situated subnational Arctic regions. In particular this chapter will focus on a global Greenland as a window into the incongruent forces between the Westphalianisation of the Arctic Council and the growing power of Arctic subnational regions. At the very time that Greenland is gaining its greatest strength on its path towards greater self-determination its role on the Arctic Council is being diminished. Borrowing from IR and political geography literatures this chapter will look at the implications of these tensions for the future of Arctic governance and within this the future efficacy of the Arctic Council.

Current & Relevant Information:

Introduction

It happened over lunch. It was Tuesday the 15th of May 2012. The Senior Arctic Officials (SAOs) of the Arctic Council were in Stockholm for a Deputy Minister's meeting when it was unveiled that Greenland and the Faroe Islands would no longer have a spot at the negotiating table alongside the Danish SAO (Denmark is an Arctic country by virtue of its political relations with Greenland and the Faroe Islands). In reality, the lunch was only one instance among a growing number of changes taking place within the Arctic Council. The origins of these changes reach back to the 2009

Arctic Council Ministerial meeting in Tromsø, Norway. Unlike the low brow nature of past meetings, the 2009 Arctic Council meeting included political leaders from former United States Vice President, Al Gore to the Chinese Minister to Norway and Michel Rocard (former Prime Minister of France under François Mitterrand and appointed French ambassador to the Arctic and Antarctic), among others.

Underlying the impetus behind the sudden increased global attention to the Arctic and subsequent attendance at the 2009 meeting was the fact that the Ministerial meeting was the first official meeting following Arthur Chilgarov (Russia's most famous Arctic explorer) – accompanied by a fellow parliamentarian, a Swedish businessman, and an Australian tour operator – voyaged to the North Pole where a tiny titanium Russian flag was planted on the seabed. Since that flag planting, global interest in the Arctic has grown exponentially. Powerful global states including China, Japan, South Korea, India and Singapore have set out – with great success – to become Observers on the Arctic Council (the EU has been less successful). In attempts to circumvent rather than overtly dismantling the privileged position of the six Indigenous Permanent Participants who also sit at the negotiating table alongside the Arctic states, the Arctic Council responded to growing interest through varying actions that resemble conventional intergovernmental politics (politics by and for states). This includes a growing number of binding agreements that have been negotiated by the eight Arctic states (with various levels – from some to none – of participation by the PPs) under the auspices of the Arctic Council (the Arctic Council does not have the authority to make legally binding agreements).

Parallel to those changes taking place in and around the Arctic Council, Arctic politics more broadly has been affected by emerging global political trends. Beginning in the 1970s, a number of subnational and transnational Arctic governments and institutions have been increasingly forging ahead with their own Arctic politics and collaborations, at times operating on a global scale. In certain instances, their efforts bypass national governments and often those collaborations fall outside of the scope of the Arctic Council altogether.

This article will focus on the future of the Arctic Council in light of this renewed international interest in the Arctic alongside the rise of globally situated subnational Arctic regions. In particular, this chapter will focus on a global Greenland as a window into the incongruent forces between the Westphalianisation of the Arctic Council and the increasing institutionalization and assertion of subnational Arctic politics. This chapter will begin by laying out a brief narrative of what we refer to as the Westphalianisation of the Arctic Council before moving on to a theoretical discussion about regions and the politics underlying the borders that create them. The theoretical backdrop provides context for the following section which looks specifically at a changing Arctic through the eyes of Greenland before taking a closer look at the intersection between the forces of global sub-national regions and a Westphalianising Arctic Council.

Westphalianisation of the Arctic Council

The first iteration of the Arctic Council was conceived and eventually brought to fruition. When the Ottawa Declaration was finally signed in 1996, the Arctic Council established itself as a high-level forum to: “provide a means for promoting cooperation, coordination and interaction among the Arctic States, with the involvement of Arctic indigenous communities and other Arctic inhabitants on common Arctic issues” (Arctic Council, 19 September 1996). The new political collaboration established a platform for the eight Arctic states and three indigenous permanent participant organizations (PPs) (which are now six) to sit together at the negotiating table to discuss how the Arctic environment should be preserved, developed, and governed for the benefit of the Arctic states and those living there. Well beyond the exclusion of security matters, the Arctic Council was namely established as a means to discuss Arctic environmental protection and sustainable development. Given the impossibilities to create a political regime during Cold War, establishing full circumpolar cooperation of any nature in the early post-Cold War years was deemed as a great accomplishment.

Since 2009, the direction that the Arctic Council has adopted is to start making its way down the path of conventional Westphalian politics, coming just short of fully realizing the necessities that come along with that move. Due to new interest and “pressure” by non-Arctic countries to be more involved in Arctic governance, the Arctic Council member states have begun to re-align the way the Council has traditionally operated. For instance, a number of Arctic countries began meeting outside of the Arctic Council and therefore without the PPs. Likewise, some Arctic states began to impose controls which would only recognize and allow the original member states to sit around the table and make decisions. The consequences of the latter action eliminated the practice whereby, until 2011, Greenland and the Faroe Islands sat at the table alongside Denmark. Despite not being full members of the Arctic Council, Greenland and the Faroe Islands are the principal Arctic actors in the Kingdom of Denmark’s Arctic affairs.

The move towards binding agreements is significant in a number of ways. The first, is the obvious point that the agreements are indications of the fact that – despite that the Arctic Council does not have legal authority to make international law – the Arctic states have decided that they do want to be able to determine how Arctic governance should proceed (rather than leave policy to the UN or another international body). Secondly, because the agreements were made among the Arctic States and under the auspice of the Arctic Council rather than by the Arctic Council itself, they have largely excluded the six indigenous PPs (though they were part of the discussions leading up to the Oil Spill agreement). This includes the fact that the PPs did not sign the agreements. These two factors combined are, as such, bringing to the surface the broader question facing the future structure and mandate of the Arctic Council: Who does the Arctic Council serve and who gets to govern?

Though the Arctic Council includes six indigenous organizations (representing northern Indigenous peoples) the new binding agreements are made by the eight Arctic states and those States' capitals are situated in the southern regions of those states, capitals which are often physically located very far from the North and therefore have very different realities and priorities than their northern governments and peoples. Despite that the northern regions make the eight states Arctic States in the first place, it is often the Foreign Ministers and civil servants working in the southern capitals who serve as the SAOs and Arctic Council Ministers (Canada has a long standing exemption in this regard which includes Member of Parliament (MP) from Nunavut, Leona Aglukkaq, who served as Canada's Minister for the Arctic Council and its Chair from 2013-2015 as well as Mary Simon and Jack Anawak who have both served as the Canadian Ambassador to the Arctic.)

Subnational northern regions, therefore, are increasingly finding that they need to go through southern capitals to be heard within the Arctic Council. In effect, the Arctic Council is increasingly speaking on behalf of and is making decisions about its northern regions without their representation. In return, those regions then have little choice but to implement what has been decided. As the Arctic Council continues to Westphalianise and proceed down the path of 'intergovernmental' forum the lingering legacies of colonial practice are coming to the surface.

Conclusion

The Arctic has never quite fit into the mold of conventional Westphalian political system. When the Arctic Council was created it was the first regional political organization to include non-state actors and, in many ways, therefore, it served as a harbinger for a world to come. With increasing global interest in the Arctic, the Arctic Council seems to be making efforts to go back in time and become a conventional intergovernmental political regime. Yet, these efforts also come at a time when some argue that the days of conventional formal international law and policy making on its own are numbered. Increasingly so, norms in global governance includes the participation of non-state actors, best practices, and other forms of soft law (Shaffer & Pollack, 2010).

If the Arctic Council continues to evolve such that it becomes an organization exclusively for and by states where Permanent Participant participation is contingent on the availability of them to possess the resources necessary to participate than some of the most critical issues and changes coming to the Arctic are going to fall outside of its mandate. With the growing power of sub-national Arctic regions and new non-Arctic Council entities engaging in Arctic activities, will the Arctic Council be able to keep pace with an increasingly global Arctic (Shadian, 2016; Dodds, 2016; Heininen, 2016)? Is there a space for sub-national regions on the Arctic Council? If not, what are the implications of sub-national governments doing global negotiations and policymaking concerning the Arctic (trade deals or otherwise) completely separate of the Arctic Council?

Global economic and other interests in the Arctic will continue to grow going into the future. Greenland's own political future being is dependent on its economic performance and development, namely assuming complete responsibility for its government (the ability to cover the costs of those sectors such as justice, law enforcement, immigration policy etc.) As a result, global entities apart from the Arctic Council will play an even greater role in Greenlandic politics.

Much like Greenland, the Arctic's sub-national governments will continue to work towards having a greater say in matters that are of interest and relevance to them. Though the Arctic Council states are turning to conventional state politics to strengthen Arctic governance one might question if those very actions might be undermining its power. Global politics is undergoing vast changes and the Arctic Council needs to decide what role it wants to play in the Arctic going into the future.

“Asia Eyes The Arctic,” Page Wilson, The Diplomat, 26 August 2013 [\[111\]](#)

<https://thediplomat.com/2013/08/asia-eyes-the-arctic/>

Overview:

In May this year, Japan, China, India, South Korea, Singapore and Italy were admitted as permanent observers to the Arctic Council—a forum bringing together the eight Arctic member states (United States, Canada, Norway, Denmark (via Greenland), Russia, Sweden, Finland and Iceland), indigenous Arctic populations, and other interested parties to discuss a range of issues posed in this unique region. Formed in 1996, the Council and its work has been attracting growing worldwide attention in the wake of the record low levels of sea ice coverage documented in the summer months of 2007—a record which itself was broken last year.

Current & Relevant Information:

That five of the six new observers to the Council are Asian states reflects two developments: first, the great interest of these states in the commercial opportunities made possible by a transformed Arctic region; and second, the Council's need to reinforce its position as the preeminent body for the discussion of Arctic matters. Taken together, these developments suggest that the future of Arctic affairs, both inside and outside the Council, is likely to be far more complex and far more influenced by Asian actors than has been the case to date.

Presently, China is attempting its first commercial transit of the NSR, expecting the journey time between Dalian and Rotterdam to be reduced to 35 days, instead of the usual 48 days. The dangers associated with the traditional Suez Canal route—namely, piracy around the Horn of Africa—only adds to the appeal of new Arctic shipping lanes, despite the considerable uncertainty that still surrounds their viability in one of the world's harshest environments.

A second economic rationale underpinning Asian observers' interest in the region is its resources. The U.S. Geological Survey has estimated that the Arctic contains

30% of the world's undiscovered reserves of natural gas, and 13% of its undiscovered oil. The same survey suggested around 84% of the Arctic's estimated resources are located offshore. While global prices for these commodities remain high, there will be a strong incentive to explore recovery options despite the high cost and high risk involved.

Already this year, the China National Offshore Oil Corporation (CNOOC) has submitted a joint application with Eykon Energy to Icelandic authorities for a license to explore and produce oil and gas in Arctic waters. Other recent deals by Chinese companies in relation to oil, gas and mineral exploitation in Russia and Greenland have already been documented.

“Along the Road: China in the Arctic,” Cecile Pelaudeix, European Union Institute for Security Studies, December 2018 [112] <https://hal.archives-ouvertes.fr/hal-01974347/file/2018%20Pelaudeix%20Brief%2013%20EUISS%20Along%20the%20Road%20Arctic.pdf>

Summary:

>> The Arctic has growing importance as part of China's quest to secure access to natural and energy resources, including rare earth elements (REEs). China has also intensified energy cooperation with Russia and built economic partnerships in the Arctic, while systematically developing strategic infrastructure there.

>> While China does not yet have the capacities to project military power in the Arctic, the potential that it could use the facilities, technologies and resources it has acquired for other than civilian purposes is real.

>> The scale and speed of the development of the Polar Silk Road may pose a challenge to the environmental and social standards upheld by the EU.

>> Addressing the many security challenges that the Polar Silk Road entails will require strong political will and unity on the part of EU member states and their partners.

In January 2018, on the occasion of the release of its Arctic policy white paper, China unveiled the Polar Silk Road project – officially incorporating the Arctic Ocean into its trillion-dollar Belt and Road Initiative (BRI). Far more than a mere shipping route, the Polar Silk Road underlines the consistency and the scale of Beijing's ambitions in the Arctic, combining economic and security interests and boosting its strategic presence in the region.

Why and how did Beijing manage to gain ground in the Arctic and what are the implications of this for European security? In many ways, the Polar Silk Road is a good example of China's approach to expanding its influence globally, combining foreign direct investment (FDI) in strategic sectors, 'science diplomacy' and norm shaping. This Brief examines the gradual deployment of these three instruments,

before highlighting the many interconnected security concerns that the Polar Silk Road project entails for the EU.

Current & Relevant Information:

China's rising profile in the Arctic

China's interest in developing strategic infrastructure along the Northern Sea Route dates back to 2016, after it was identified as a plausible alternative to the traditional southern route to Europe, passing through the Malacca Straits and the Suez Canal. Sea ports were among the first targeted infrastructure projects. In October 2016, the Chinese company Poly International Holding Co confirmed its intention to finance the construction of Russia's Arkhangelsk deep-sea port, a major modern transportation hub with an expected capacity of 38 million tons, to be completed by 2035. The state-owned China Ocean Shipping Company (COSCO), one of the world's largest shipping companies, repeatedly demonstrated interest in participating in the construction of a deep-sea port in the northeast of Iceland: the Finnafjord project, expected to become a major hub for trans-Arctic shipment with a 6.3 km long quay, will begin awarding concessions to investors and operators in 2019.¹ Other investment proposals have been received by the Lithuanian port of Klaipeda and the Norwegian port of Kirkenes.

Land infrastructure development follows accordingly. Poly International Holding Co is currently considering the possibility of investing \$5.5 billion in a railway linking Arkhangelsk to Siberia. Another Arctic railway, linking Rovaniemi in Lapland to the Norwegian port of Kirkenes, at an estimated cost of €3 billion, would open up a new connection from the Baltic Sea region to the Northeast Passage and to Asia, and this is also attracting China's attention. The last leg of the 'Arctic corridor' – a 100km-long undersea tunnel between Helsinki and Tallinn – is the latest target of Chinese investors, possibly contributing 70% to the estimated total €15 billion cost.

Finally, in Greenland Chinese investors are eyeing the air transport sector. China Communications Construction Company (CCCC) took part in the bidding process for the tender organized by Kalaallit airports, a Greenlandic-owned company which sought investments for three airport infrastructures on the island: Nuuk (the capital), Ilulissat (a tourist destination due to its UNESCO World Heritage Centre), and Qaqortoq (in the South). The bid put forth by the CCCC gave rise to security concerns in Denmark and in the US. Denmark feared Greenland could fall into a debt trap, an outcome which has characterized a number of Chinese investment deals along its Belt and Road Initiative, such as in Sri Lanka. Greenland, while a self-ruled territory, still depends on economic aid from Copenhagen which amounts to €470 million per year, approximately 40% of the island's GDP. Denmark, which retains competences over defense in Greenland, was also worried that the airports could be used for military purposes and upset the US, with whom the Kingdom has a Defense Agreement since 1951. The Thule Air Force Base is a very important part

of America's missile defense system. Greenland and Denmark therefore concluded an agreement in September 2018 granting Denmark a 33% stake in Kalaallit Airports in exchange for €93 million for the construction and operation of the airports in Nuuk and Ilulissat. Denmark also provides the government of Greenland with a loan guarantee of €60 million. Yet the deal does not rule out China's investment in the project and still excludes the Qaqortoq airport. While approved by the Parliament in Greenland, the agreement is still awaiting approbation in Denmark.

Besides connectivity, the Arctic matters to China for its resources. The region is estimated to contain 13% and 30% of the world's undiscovered oil and gas reserves, which constitute another major target of Chinese FDI. The China National Petroleum Corporation (CNPC) and China's Silk Road Fund hold a 20% and 9.9% share respectively in the Yamal LNG plant, which started its production in Russia in December 2017. Yamal LNG is the largest production site in the country: it has a production capacity of 16.5 Mt/year which represents more than 15% of the world market. In 2017, China Development Bank signed a memorandum of understanding (MoU) with Russia's largest independent natural gas producer Novatek for another economic project – the 'Arctic LNG 2', located on the Ob river estuary, with a production capacity of 19.8 Mt/year. Investments in other offshore projects, such as the CNPC contract with Rosneft to explore three areas in the Pechora and Barents Seas, are yet another example of the intensifying energy cooperation between Russia and China in the Arctic. Finally, in Iceland, China National Offshore Oil Corporation (CNOOC) reached a deal with Eykon Energy to explore its northeast coast. Although it later withdrew from the project due to scarce initial findings, Iceland could be a Chinese gateway to Europe. In the wake of the 2008 financial crisis, it was the first European country to sign a free trade agreement with China in 2013 and is keen to attract Chinese investment flows.

China's interest in Greenland started with its resources, and some of these have a strategic dimension. This is the case of Rare Earth Elements (REEs), which are extensively utilized in alternative energy technologies, electronics, space exploration and the defense sector. Greenland holds 9.16% of global REE reserves and is the most promising potential source of REEs in Europe, along with the Baltic Shield. The Kvanefjeld site in the south of Greenland contains one of the world's largest identified deposits of REE and uranium. In 2016 Chinese state-controlled mining company Shenghe purchased a 12.5% share of the Australian company Greenland Minerals and Energy Ltd to exploit the site. More importantly, in August 2018, the two companies signed an MoU allowing Shenghe to make an equity investment in the project and to acquire all REE output produced at Kvanefjeld to process it for direct supply to the industry. The project thus gives China even stronger control over REE production in the world.

In the Arctic and elsewhere, Beijing has been targeting countries and territories that have been strongly affected by the 2008 financial crisis, or that need to boost their

economies to support their respective political agendas. Chinese investments can also weaken countries' political systems, as could be seen in Greenland after the controversy surrounding the Chinese bid in Kalaallit airports which cost the Greenland government its parliamentary majority: some viewed Denmark's financial offer as incompatible with Greenland's path to independence. Chinese investments can also influence or coerce the host government to adopt Chinese political stands on some issues.

The scale and speed of the development of the Polar Silk Road risks undermining environmental and social standards upheld by the EU. When Chinese investments in natural resources and in industrial projects are planned with partners eager to speed up development, environmental and social standards may be jeopardized. Oil spills, deep-sea mining, air and land contamination have important and lasting transnational impact. Since prevention will always be more effective than clean-up, it is important that the legislation that applies in the EU, and the EEA countries, is kept up to European and international standards, in particular with regard to transparency and sustainability. In the EEZ of Greenland, the government of Greenland has not taken responsibility for the environment, and Denmark's implementation of the relevant EU directives does not cover the Arctic area. This blind spot in the legal covering of Greenland marine areas is clearly a weakness. The value of ecosystem services that are essential to the ecosystem balance and to the living conditions of indigenous peoples in northern Europe and in Greenland needs to be taken into consideration.

2) France:

“France,” The Arctic Institute: Center for Circumpolar Security Studies, 2020 [\[113\]](https://www.thearcticinstitute.org/countries/france/)
<https://www.thearcticinstitute.org/countries/france/>

Overview:

In 2016 France launched its [National Roadmap for the Arctic](#). The document seeks to identify French interests in the region, enhance the legitimacy of French participation in the Arctic, strike a balance in the governance of the Arctic Ocean, and ensure adequate environmental protection for the region's ecosystems. The document further refines its focus to scientific research, economic opportunities, marine protection, security interests, French participation in international fora, the role of the EU in the region, and finding a common interest. For the most part, the document reiterates and codifies France's longstanding approach to the region.

Current & Relevant Information:

Paris has, for example, spearheaded efforts to increase EU participation in the Arctic Council, and is on record as wanting the EU to have a more important position within the organization – potentially even comparable to that of its larger member-nations. Furthermore, France has emerged as a leader in global efforts to combat climate

change, including as it pertains to the Arctic region – a role that most manifested itself as the host of the 2015 UN Climate Change Conference in Paris. French President François Hollande was a featured speaker at the 2015 Arctic Circle Conference in Reykjavik in the immediate lead-up to the conference.

Strategically, France seems to be increasing its presence in the region as well, and has acknowledged that its role in both the EU and NATO could lead it – albeit indirectly – into assuming a strategic posture in the region. Since 2010, France’s national military school’s research institute has included a component on Arctic security, and in 2013 France released a White Paper on Defence and National Security which concluded that “...the reduction in Arctic sea ice already has strategic consequences and the prospect of regular use of new Arctic shipping lanes is drawing closer.” Accordingly, France has – and is continuing to develop – its in-theatre strategic capabilities. French submarines routinely patrol in the Arctic Ocean, with French Next Generation Device-Launching Nuclear Submarines (SNLE-NG) active in the region for training missions, and in 2012 France held joint naval drills with Russia in the Barents Sea. Likewise, since 2009, French infantry battalions have taken part in Norwegian-led multinational NATO exercises in or adjacent to the Arctic. Accordingly, France’s Defence Ministry has claimed the French military has “Arctic-friendly” capabilities and maintains troops equipped for cold-weather deployments that could be used in a regional crisis.

While France has historically involved itself more with the Antarctic than the Arctic, it nonetheless has significant historical, economic, and scientific ties to the region. As the Arctic grows in global importance, France seems to be positioning itself to ramp up its involvement in the region, and take a more active role in regional diplomacy and governance. However, as a non-Arctic nation, its ability to do so is somewhat limited. Accordingly, France has emerged as an advocate for an increased role in the region for supranational organizations such as the EU, via which it may be able to exert greater influence on regional affairs than it would be able to as an individual nation-state. Likewise, as one of the more powerful militaries in the NATO alliance, France is taking a more active role in security and strategic concerns in the region, and is increasing its cold-weather capabilities should a regional deployment of its military become necessary.

“France Compares the Arctic to the Middle East, Claims Region Belongs to No-One,” Siri Gulliksen Tømmerbakke and Amund Trellevik, High North News, 1 October 2019 [114] <https://www.highnorthnews.com/en/france-compares-arctic-middle-east-claims-region-belongs-no-one>

Overview:

The remarkable statements can be found in the preamble to France and the new strategic challenges in the Arctic, the new French Arctic strategy, signed by the Minister for the Armed Forces, Florence Parly.

- The Arctic is far more than a research lab; it is a separate strategic area. The strategic review from 2017 indicated that the Arctic “one day could become an area of confrontation”. That is a fact: The new commercial maritime routes in the Arctic as well as many actors’ appetite for resource exploitation leads to increased competition between various states. Michel Rocard (former French prime minister, [journ.note](#)) summarized these challenges as follows: “Arctic? It is the new Middle East!”, she writes.

It further says that “France will be a clear and unequivocal voice against growing ambitions. The Arctic belongs to no-one. And only cooperation between states will lead to meaningful results”.

Current & Relevant Information:

Catches Norway by surprise

Svein Vigeland Rottem, researcher at the Fridtjof Nansen Institute and expert on Arctic politics argues that the French statements are remarkable.

- This is quite remarkable and will probably come as a surprise to the Norwegian Ministry of Foreign Affairs, which has worked long and hard to defuse the idea of the Arctic as a conflicted region, Rottem says to High North News.

He stresses that he has not read the French strategy, and there often will be a difference between rhetoric phrases versus what countries actually do in practice. Nevertheless, Rottem argues that the idea of protecting parts of the Arctic is not new and that it appears to be heading back into the discourse.

- Sweden and Finland in particular have spoken about protected zones in the Arctic to a greater extent than the [Arctic] coastal states.

Why does France say this?

- If I were to attempt a careful analysis, this probably has to do with the idea about an Antarctic Treaty for the Arctic. There appears to be a widespread understanding of the Arctic as having many of the same capacities as Antarctica. But that is wrong; the Arctic is an ocean and it is regulated under the UN Convention on Law of the Seas (UNCLOS). Antarctica is a quite different matter altogether. Arctic coastal states will probably think that this is a surprising and rather unfortunate rhetoric, Rottem says and adds:

- One should perhaps also look at who the messenger is in this case. The French MFA does not necessarily agree with the MoD. I do not know how well coordinated such a statement might be.

Are there many countries that argue that no-one owns the Arctic?

- Not amongst the countries operating in the Arctic or having knowledge of it. However, the debate about balance between protection and exploitation is there. It was rather heated some ten years ago and is clearly reappearing, Rottem says.

The Arctic is not a land without owners, argues former Norwegian Minister of Foreign Affairs Jonas Gahr Støre. He says this is “words we’ve had from France for years now”, however, argues that the coastal Arctic states hold their clear responsibilities according to UNCLOS.

- The French response to that will probably be that it does not contest the responsibilities and rights of the coastal states, and that by ‘the Arctic’ here refer to areas around the North Pole point, beyond the coastal states’ zones. Nevertheless, this tendency to refer to the Arctic as the world’s last no-man’s land is something Norway as well as the rest of the Arctic Council should clearly oppose. The Arctic is an ocean like any other, even though it is covered with ice for parts of the year. The UNCLOS is in force and we adhere to it, Støre says.

While being foreign minister, Støre repeatedly met with former [French] prime minister Michel Rocard, who at the time was France’s Arctic ambassador.

- Rocard had a view on the Arctic against which I would mark my opposition at every opportunity. Besides, France has professional communities that Norway should want to actively cooperate with when it comes to polar conditions. Our European partners as well as our allies having a correct image of the current status of the Arctic and our High North is our own interest, Støre says.

France heavily involved in Arctic industry

In the French strategy, the potential for conflict and security problems is related to increased tourism and more commercial activity in the region.

Several French companies operate in the Arctic. There is for instance Ponant, planning to send ‘Le Commandant Charcot’, the world’s first cruise ship with icebreaker capability, to the North Pole in 2021.

French-owned Total also owns 20 percent of Yamal LNG and 10 percent of Arctic LNG2, two giant liquefied natural gas production sites in Northern Siberia, Russia.

“France’s New Role in the Arctic,” Maria Lagutina, RIAC, 22 September 2016 [115]
<https://russiancouncil.ru/en/analytics-and-comments/analytics/novaya-rol-frantsii-v-arktike/>

Abstract:

In June 2016, France adopted its National Arctic Exploration Program, which sets out the country’s basic interests in the region and delineates the principal trends and priorities of its Arctic policies in the coming years. It is quite logical that this document has appeared: following the Arctic nations, non-Arctic states also began to

adopt national Arctic programs (Germany, Italy, etc.). In its program, France defines itself as a polar state and a leading actor in the Arctic, staking its claim to a more active role in the Arctic affairs in the near future. Yet, given the current conditions of Arctic cooperation (falling oil prices, the unprofitability of developing Arctic oil and gas fields, the political crisis in relations between Russia – the largest Arctic nation – and the West, etc.), will France succeed in fully implementing its strategic goals and tasks? The question remains open.

Current & Relevant Information:

On June 14, 2016, France presented its National Arctic Exploration Program to the French and international public in Paris. The document had been prepared by French diplomats, politicians and academics. The Program was a logical result of France actively participating in Arctic cooperation over the last few years. At the same time, Paris proceeded from the assumption that the Arctic holds exceptional significance for all the parties concerned, regardless of whether they have a polar coastline.

The Program defines France as a polar state and a leading Arctic actor. The idea has been supported by politicians over the last few years, most of all by the academic community. According to the French Professor Sébastien Gadat, France's diplomatic and geopolitical stance is de facto close to China's concept of a "near-Arctic" state. In other words, France's geographical distance from the Arctic is not considered a serious obstacle to its participation in Arctic affairs. Moreover, for France, the Arctic is an "environmentally sensitive area" where "national interests should be determined while taking common interests and a sustainable development policy into account." It is precisely this factor that determines the importance and the need for France to be immediately present in today's Arctic.

The History of France's Presence in the Arctic: The Main Stages

Before analyzing the text of the National Program, it is necessary to describe the principal stages in the history of the French presence in the Arctic.

France started to participate in Arctic affairs in the late 18th century, primarily through polar research into land and marine ecosystems, anthropology and ethnography. Academic research had been the main form of France's involvement in the Arctic until now. Today, about 500 French academics study the Arctic region. France ranks ninth in the world in terms of the number of academic publications on Arctic-related issues. The Institut polaire français Paul-Émile Victor (IPEV, the French Polar Institute) and the French National Center for Scientific Research (CNRS) play the key role in France's academic activity in the Arctic. Their work is part of the Arctic Initiative National Program.

In 2000, France was granted permanent observer status in the Arctic Council (AC), and since then, it has been an active participant in its work at all levels, from task

forces to working groups. Granting this status, on the one hand, acknowledged France's merits in Arctic research, and, on the other, hand, it signified the emergence of a new area in French politics and diplomacy.

The next event of importance for France's Arctic presence happened in 2009, when the country officially recognized the significance of the Arctic area for its national interests, appointing the well-known politician Michel Rocard as the French Ambassador on Polar Issues (ambassadeur de France pour les poles).

Subsequently, Rocard conveyed to the global public the principal positions of the French leadership on Arctic exploration. Paris proceeded from the basic premise that climate change in the Arctic has global consequences and cannot be managed regionally. Therefore, it has a direct bearing on French national interests; consequently, Paris realized the need to enhance its Arctic presence and to make its interests official. François Hollande stated as much in his speech at the Arctic Circle Assembly in October 2015 in Reykjavik.

In 2013, the thesis of the impact of climatic change in the Arctic was included for the first time in the White Paper on Defence and National Security as a priority in ensuring France's national security in the era of globalization. In the same year, the decision was made to start drafting France's national "road map" for the Arctic; the road map was completed in June 2016.

The Principal Tenets of France's 2016 Arctic Strategy

The National Program presented to the world public in June 2016 comprises seven sections which consistently describe the principal tenets of France's long-term Arctic strategy. They also contain practical recommendations on implementing the strategy.

1. Academic research and cooperation.

France intends to expand its efforts and increase financing for studying the Arctic. Current financing for the work of French scientists in the Arctic is clearly insufficient, even though intensive research has been recognized as the key element of France's participation in the Arctic Council and in international Arctic cooperation at different levels. Therefore, the "road map" stipulates involving business community in academic projects in the Arctic; businesses might be interested in developing the region's economic potential (transportation, air space, navigation, energy, mineral resources, etc.). What is more, French academics pay particular attention to participating in pan-European grant research projects in the Arctic, for instance, in Horizon 2020, a Framework Program for Research and Technological Development, the EU-PolarNet project, etc. Horizon 2020 is the largest program in the history of the European Union, with a budget of about 80 billion euros for the period 2014–2020 (in addition to private investments that are to be attracted by the foundation).

2. Economic opportunities and cooperation.

Mineral resources and using the Northern Sea routes to transport resources, organize tourist cruises, etc., are considered to be France's priority economic interests in the Arctic. Currently, French companies carry out projects in Canada, Norway and Russia. Areva (a uranium mining project in Nunavut), Bouygues and Colas (renovating Iqaluit Airport) and Ponant (a cruise company) operate in Canada; Technip (underwater engineering projects), GDF Suez (energy), Bourbon Offshore Norway (shipping industry for offshore oil drilling), CMA CGM (commercial freight transportation), and Ponant, Grand Nord Grand Large, 66° Nord (tourism), etc. operate in Norway. In Russia, Total and Technip work on energy projects, and Ponant offers polar cruises. One of the recommendations stipulated in the "road map" involves more active participation on the part of French companies in the Arctic Economic Council, the Arctic Business Forum, the Arctic Business Council, the Arctic Oil & Gas Symposium and other similar bodies.

3. Defense and security issues.

As an EU and NATO member, France acts together with the Arctic zone countries and it is interested in maintaining stability and security in the Arctic space. According to the National Program, the Arctic is a space of naval maneuvers. The French Armed Forces has been set the task of using the Arctic space as a transit zone for the navy, the air force and possibly paratroopers. The French Armed Forces participate in NATO military exercises in the Arctic with other NATO countries.

4. Protecting Arctic marine life.

France attempts to limit mining in the Arctic and bring mining in compliance with the environmental tasks set for the region. What is more, France adheres to the multi-target environmental approach to protecting the Arctic marine ecosystems proposed by the United States during its presidency of the Arctic Council (2015–2017). In accordance with that approach, France views the Arctic as a pilot zone for developing green technologies. In particular, France supported the idea of drafting an Arctic Code under the auspices of the International Maritime Organization; France promotes the development of eco-oriented maritime cruise routes and works on projects aimed at limiting the negative influence that navigation has on marine mammals.

5. The French presence at international Arctic forums.

The National Arctic Exploration Program entails France stepping up its participation in Arctic regional bodies – the Arctic Council, the Barents Euro-Arctic Council, the European Union's Northern Dimension, the International Maritime Organization, the Regional Hydrographic Commission, the International Hydrographic Organization, etc. France's participation in multilateral cooperation in the Arctic will allow the country to legitimize itself as a polar state and a leading actor in the Arctic.

6. The European Union and the Arctic.

France supports the European Union in its desire to play a larger role in the Arctic Council. EU countries make a significant academic, technical and financial contribution to the development of the Arctic (in particular, the European Union has invested over 200 million euros in 100 Arctic research programs over the past decade). Given that contribution, Paris consistently promotes the idea of the European Union taking a more active role in resolving the pressing issues of the Arctic region and speaks in favor of granting the European Union observer status in the Arctic Council in 2017.

7. National and common interests in the Arctic.

The National Program states that France has a broad range of interests in the Arctic, which cover various areas from research and economy to politics and defense, and France intends to support them. France will, in collaboration with other Arctic (Russia, Norway, Canada) and non-Arctic states (Germany, Poland, China, the United Kingdom, etc.) that are interested in developing Arctic cooperation, strive to strike a balance between national and public interests in using the maritime space.

French Strategy in the Arctic: Specific Features

There are several important points in the French “road map.”

First, some stipulations in the French strategy – for instance, promoting the interests of the European Union in the region – appear to be the same for most European non-Arctic states. The priority of international cooperation in research and environmental protection in the Arctic is recognized by France, as well as by Italy and Germany.

Second, like other European non-Arctic states, France cares greatly about its status as an Arctic actor, which is legitimized by its participation in the Arctic Council. At the same time, we should take into account the fact that the status of permanent observer at the Arctic Council is largely symbolic and does not allow its holder to take part in decision-making.

Third, France, unlike other European non-Arctic states, pays particular attention in its strategy to the issues of defense and security and intends to participate actively in this area of Arctic cooperation.

Fourth, as an Arctic Council member, France certainly recognizes the sovereignty, rights and jurisdiction of the Arctic states. At the same time, France calls for active Arctic participation by countries outside the polar zone: China, Poland, South Korea, Singapore and other possible consumers of Arctic resources. Thus, Paris views the Arctic as an area of both national and global interests.

Fifth, France is not entirely satisfied with its observer status in the Arctic Council. It is clearly striving to expand its powers in the decision-making process within working groups and upgrade its status to associated membership. Thus, along with the Arctic

Council, the “road map” considers other international forums and institutions. Moreover, French representatives criticize the Arctic Council from time to time for its relative lack of effectiveness in environmental protection and fighting climate change. In particular, Michel Rocard stated several times that the Arctic management system has serious flaws, which are caused, in particular, by its being restricted to the Arctic Council member countries. In Rocard’s opinion, in order to overcome such difficulties, it is necessary to involve interested non-region states in managing the region – for instance, China, South Korea, etc. President Hollande spoke about this at the Assembly in Reykjavik in October 2015.

Conclusion

Having published its National Arctic Exploration Program, France has clearly defined its interests and priorities, as well as a vision of the prospects for Arctic cooperation in various areas – from environmental protection to the military and political dimension – and at different levels (national, pan-European, global). A successful combination of its rich experience in polar research and its state-of-the-art technological and financial potential gives France grounds to position itself as a polar state and one of the key Arctic actors.

To implement its goals in the Arctic, France should, in addition to participating in specialized international organizations, develop bilateral relations with other participants in Arctic cooperation. Currently, Norway and Canada are France’s main Arctic state partners. France is already implementing several joint projects with these countries. Despite the fact that France and Russia have common projects in the region, cooperation between the two countries is hampered by the political crisis in relations between Russia and the West. Under these circumstances, Russia–France relations appear to be most promising in the academic research area. As France and the United States have enhanced their positions in the Arctic, and due to their similar approaches to some Arctic issues, we can expect bilateral relations between these countries to develop further.

One of the key points of the French Arctic “road map” is to change the region’s management system by involving non-Arctic states, businesses and civil society in Arctic affairs. Yet this approach, generally typical for most non-Arctic states, meets serious resistance on the part of the Arctic nations. Therefore, the intentions of French diplomacy to radically transform the current Arctic management system do not appear to be particularly feasible moving forward.

In the near future, French diplomats will channel their efforts into promoting the European Union as a candidate for observer status in the Arctic Council. On the one hand, France is one of the European Union’s leading countries, and its participation in the Arctic Council could enhance its positions in the region. Using the financial potential of the European Union will allow to favorable conditions for France’s efficient participation in Arctic projects to be created. On the other hand, if the

European Union is granted observer status in the Arctic Council, it could threaten the independence of France's Arctic diplomacy. In this case, France risks losing its Arctic actor status.

“The European Union Arctic Policy and National Interests of France and Germany: Internal and External Policy Coherence at Stake?” Cecile Pelaudeix and Thierry Rodon, Research Gate, January 2014 [116]

https://www.researchgate.net/profile/Thierry_Rodon/publication/271270269_The_EU_Arctic_policy_and_national_interests_of_France_and_Germany_internal_and_external_policy_coherence_at_stake/links/54cb81d10cf2240c27e836cd/The-EU-Arctic-policy-and-national-interests-of-France-and-Germany-internal-and-external-policy-coherence-at-stake.pdf?origin=publication_detail

Abstract:

Coherence, a fundamental principle of European Union (EU) foreign policy remains a challenge for the EU. For example, the development of an EU Arctic policy raises both internal and external challenges as two non-Arctic member states, France and Germany, move to establish their own Arctic policies. Internally, EU inter-institutional coherence has also been difficult to achieve as shown by the first effort to draft an EU Arctic policy and by the EU regulation on trade in seal products. However, internal coherence has significantly improved since 2008, and the Parliament, Commission, and Council now maintain similar positions, yet the EU is still waiting for its admission to the Arctic Council. External coherence between EU member states on Arctic issues has proven to be more elusive. France is using high-level diplomacy to define its Arctic agenda, and is clearly challenging the EU consensus on co-operation as an unambitious policy. Germany is pointing at inefficiencies regarding the coordination of EU member states while taking a more collaborative approach with Arctic countries and maintaining close ties with the EU. Although EU Arctic policy is now entering a new phase of maturity, the EU will require better coordination and a clearer vision of its role in order to position itself as an effective foreign-policy stakeholder in the Arctic, in particular when new powerful actors like Asian states enter the geopolitics and geo-economics of the Arctic.

Current & Relevant Information:

France: Promoting National Interest Through the General Interest

France has no territorial claims to the Arctic and no official Arctic policy, but it has been developing its own Arctic agenda. Historically, French involvement has mainly taken the form of scientific exploration through polar expeditions, which were first undertaken by Jean-Baptiste Charcot and then by Paul-Émile Victor. These two adventurers/explorers/scientists were very media-savvy and their adventures have left a lasting legacy that has inspired many French men and women to enter this field of scientific endeavor; the Institut Polaire Français Paul-Émile Victor (IPEV) was created in 1992 to provide France's polar researchers with resources and expertise.

France is also involved in Arctic institutions. It was invited to sit as an observer on the Barents Euro-Arctic Council (1990) and at its request was granted observer status on the Arctic Council in 2000. The observer status doesn't allow France to speak at those meetings but both are important forums for Arctic issues, and it enables France to be informed and discuss issues informally with the main Arctic players. This degree of participation in regional bodies attests to the relevance of France's role in the Arctic.

Structuring and Connecting French Arctic Research

Arctic research remains important in France, although the International Polar Year clearly showed that Arctic research was less developed than Antarctic research, as pointed out in Senator Gaudin's report (Gaudin 2008). His report called for the establishment of an ambassador for the poles and for the creation of an Arctic international and multidisciplinary observatory. The second recommendation was acted on quickly by the Minister of Higher Education and Research Valérie Pécresse (Pécresse 2008).

The creation of an Arctic observatory was also supported by the Grenelle de l'environnement (Grenelle Environment Round Table), a multi-stakeholder process to develop a French environmental policy. In a law adopted in 2009 (France 2009), article two provides for creation of an international scientific observatory in the Arctic and states that France would strive to bring international environmental regulation into line with the new conditions prevailing in the Arctic Ocean:

[Considering] that the Arctic region plays a central role in the global climate equilibrium, France will support the creation of an international scientific observatory for the Arctic. Furthermore, in order to protect the environment, France will promote or will support, through the appropriate international institutions, the adaptation of the international regulation concerning the Arctic Ocean emerging use, that are made possible by its increasing accessibility.

With a lack of development on the creation of an international Arctic observatory, it was decided to launch a French Arctic research initiative instead. The Institut National des Sciences de l'Univers (INSU) took the lead with the support of the Ministère de l'Enseignement Supérieur et de la Recherche (France's department of higher education and research) by launching le Chantier Arctique, an initiative to map out and bring together French Arctic researchers to define an Arctic research agenda. The Chantier is coordinated by the INSU in conjunction with Takuvik, a research laboratory stemming from a partnership between the Centre National de la Recherche Scientifique and Université Laval. The main event until now was the inaugural symposium entitled "Arctic: the major scientific issues" ("Arctique: les grands enjeux scientifiques") housed at the Collège de France in Paris in early June 2013. A research agenda will be drafted on the basis of the material collected during the Chantier. The CNRS has established bilateral co-operation dialogue and

agreements on Arctic research in particular with the United States (National Science Foundation) and Canada (Université Laval).

A French Arctic Diplomacy

The most important move came in 2009 with the appointment of a French ambassador for the international negotiations on the polar regions, the Arctic and Antarctic, another recommendation of the Gaudin Report. Though mostly a symbolic gesture, it did send a signal that France has a stake in both regions and wishes to join in any negotiations. This move's importance was further emphasized by the choice of the ambassador: Michel Rocard, a former prime minister, a former member of the European Parliament (MEP) who had co-sponsored the 2008 European Parliament's resolution on Arctic governance, and one of the negotiators of the Madrid Protocol for Antarctica. His mission orders are not public but according to him it "concerns the instauration of an intergovernmental regulation in order for the Arctic to be protected at a time where the ice is melting rapidly" (Rocard 2013a, our translation).

Even though an Arctic treaty has proven to be a non-starter, Rocard still insists that the Arctic Ocean suffers from a governance gap that needs to be filled, mainly in such areas as fisheries, environmental protection, a safety code for Arctic maritime transit, and regulation of resource exploitation. For Rocard, these issues need international action that would take the form of at least sectorial agreements (2013a). For the Arctic 5 (Canada, the US, Russia, Denmark, and Norway), however, all these issues can be addressed by the Arctic states among themselves by means of existing national regulations and international instruments, "notably the UN Convention on the law of the sea" (Ilulissat Declaration 2008).

Between General Interest and French Interests

The French ambassador stresses the fact that France has no strategic interests in the Arctic and that French diplomacy aims to contribute to the greater good: "France has no strategic interest in the region and very few economic interests ... Our diplomacy, based on the demand of the scientific community, aims to shape the decisions of the international communities in regard to the Arctic Ocean and region" (Rocard 2010). In an earlier declaration he stated that France "is following a general interest diplomacy; there are no French strategic interests; but we all have a huge strategic interest in navigation safety, orderly fisheries without piracy and an adequate military security" (Rocard 2009).

Nonetheless, some commentators do see a strategic role for France in the Arctic, mainly in the event of a crisis, through NATO and the EU, because France is a nuclear power (Collin 2010). France has interests in four other areas: (1) fish stocks; (2) energy resources; (3) commercial interests in oil and gas, mining, and free maritime transit; and (4) scientific research.

In terms of fish stocks, it is the country with the highest consumption of fish in Europe, and half the fish consumed in the EU come from Arctic waters (Plouffe 2012). Access to energy resources is also a concern for France, which already imports oil and gas from Norway and the Barents Sea (Plouffe 2012).

France has some commercial interests in the Arctic, largely through Total S.A.—an oil and gas French multinational. In the Arctic, Total is mainly active in the Barents region but also has projects in the Mackenzie Delta. Nonetheless, its chief executive officer, Christophe de Margerie, has stated his opposition to oil drilling in Arctic waters (Chazan 2012).

France is probably most interested in free maritime transit because of its large commercial fleet. CMA-CGM is France's leading container shipping group and the world's third largest. The French government has a 6 percent share in the company. However, the company is not active in the Arctic and has stated its reluctance to use Arctic waters because they are too hazardous (Haquet and Meignan 2011).

France definitely has some important interests in the Arctic: scientific research, access to energy resources and fish stocks, and free commercial transit. None of them, however, are central for France. It is therefore not surprising that France does not focus its Arctic strategy on these issues even though they are in the background. This non-Arctic state thus prefers to promote a global vision of Arctic issues to remain relevant in this region.

French Arctic Initiatives and External Coherence

French diplomats have been advocating that the Arctic Ocean is a common property that needs to be protected by a treaty or at least by the signing of sectorial agreements that would provide more protection.

On the EU level, based on his experience as a negotiator for the Madrid Protocol (1991), an addendum to the Antarctic Treaty that protects the region from industrial developments for the next fifty years, Rocard at first promoted a similar approach to the Arctic Ocean and advocated the signing of an Arctic Treaty with MEP Diana Wallis (Rocard 2012). For him, the Arctic Ocean was a common good that needed better protection (Rocard 2013b). In fact, Rocard was being consistent with the 2008 European Parliament resolution on Arctic governance, which he had helped to draft as a MEP. It soon became clear, however, that the Arctic states were opposed to an Arctic treaty, and the idea was quickly abandoned at the EU level.

Since then, it seems that France has not had as much influence over EU Arctic policy-making, especially within the European Commission, as seen in the release of a more accommodating Commission and High Representative communication (ECom and High representative 2012) that was intended to appease the Arctic states.

Michel Rocard, a high-profile and outspoken ambassador, has been using his position to challenge the Arctic states. Ambassador Rocard has repeatedly pointed out the weaknesses in Arctic governance, notably for fishery management and environmental protection. He has also strongly criticized the statement by the Arctic 5 that they are fully able to deal with Arctic issues and has been lobbying for an increased role for observers on the Arctic Council. It is clear that making the Arctic a global concern will legitimize a greater role for France in the region. Although these positions have never been articulated in an official French policy or strategy, other French actors like Senator Gaudin have joined in calling for the creation of an international Arctic observatory.

Finally, Rocard has been highly critical of the Arctic Council on two grounds: First, it is not a decision-making forum and has no power on even the most pressing issues, i.e., fisheries and resource development. Second, it is a closed forum where only the Arctic states and the permanent members have a voice, and the observers have no right to speak. This is for him a serious weakness that keeps the Arctic Council from realizing its full potential, since for him Arctic issues are primarily global issues (Rocard 2012). Rocard did send the Arctic Council president a letter, expressing his frustration with the way the Arctic Council was working, but never received a reply (Willis 2011).

In the absence of an official Arctic policy, it is difficult to assess policy coherence between France and the EU, but the French ambassador for the poles is clearly challenging the EU consensus on co-operation.

3) Germany

“The European Union Arctic Policy and National Interests of France and Germany: Internal and External Policy Coherence at Stake?” Cecile Pelaudeix and Thierry Rodon, Research Gate, January 2014 [117]

https://www.researchgate.net/profile/Thierry_Rodon/publication/271270269_The_EU_Arctic_policy_and_national_interests_of_France_and_Germany_internal_and_external_policy_coherence_at_stake/links/54cb81d10cf2240c27e836cd/The-EU-Arctic-policy-and-national-interests-of-France-and-Germany-internal-and-external-policy-coherence-at-stake.pdf?origin=publication_detail

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for its admission to the Arctic Council. External coherence between EU member states on Arctic issues has proven to be more elusive. France is using high-level diplomacy to define its Arctic agenda, and is clearly challenging the EU consensus on co-operation as an unambitious policy. Germany is pointing at inefficiencies regarding the coordination of EU member states while taking a more collaborative approach with Arctic countries and maintaining close ties with the EU. Although EU Arctic policy is now entering a new phase of maturity, the EU will require better coordination and a clearer vision of its role in order to position itself as an effective foreign-policy stakeholder in the Arctic, in particular when new powerful actors like Asian states enter the geopolitics and geo-economics of the Arctic.

Current & Relevant Information:

Germany: Working for a Coherent and Proactive Approach

Germany is currently coordinating its Arctic activities in order to make the Arctic “a central focus of German policy.”¹⁶ Germany has been actively involved in Arctic matters for many years now. It is a signatory to the 1921 Spitsbergen Treaty and it has been an observer on the Arctic Environmental Protection Strategy since its first ministerial meeting in 1991 (with Poland and the United Kingdom as observers of the meeting as well) (Graczyk and Koivurova 2013), as well as an observer on the Arctic Council since that body’s inception in 1996.

A Strong Scientific Background, Clear Interests, and Concerns

Germany has a history of polar exploration, having mounted one of its first expeditions to the Far North in 1868. It strongly supports scientific research in the Arctic. The Alfred Wegener Institute (AWI) for Polar and Marine Research, named after Germany’s most important polar researcher, is one of the world’s leading research institutes. The AWI maintains two permanent Arctic research stations: Koldewey Station, in Svalbard, Norway, jointly run with France’s Institut polaire Paul Emile Victor since 1988, and Samoylov Station, in northern Siberia, run by Germany alone since the end of the Cold War. German research logistics also include the services of the research icebreaker RV Polarstern and two aircraft, the Polar 5 and the Polar 6.

Besides, the Federal Institute for Geosciences and Natural Resources (BGR) is intensifying its exploration for Arctic oil and gas deposits to provide reliable estimates of reserves in the region. Indeed, one of the tasks of the BGR is to participate in securing the supply of the Federal Republic of Germany with mineral resources.

The German Federal Government has clearly stated both environmental concerns and interests in the Arctic. The environmental impact of climate change is taken seriously: the melting ice caps may be raising the sea level, a disturbing trend for Germany (Thönnies 2010). Environmental protection and sustainable development

are broadly shared concerns in German society and politics, according to Foreign Minister Westerwelle, who emphasizes the need to protect “the common heritage of mankind” (Westerwelle speech 2011). Yet this concern has never translated into government support for the proposed Arctic Treaty. The Bundestag (German parliament) was presented in 2011 with a motion for a resolution, made by the minor opposition party Alliance 90/The Greens, but no resolution was developed (Bundestag 2011). In 2009, Westerwelle set a goal of assigning liability for environmental damage.

Germany has various economic interests in the Arctic, of which shipping is certainly the most important one. This country has the world’s largest fleet of container ships (Thönnnes 2010) and the third largest for all vessel classes (Weintrit and Neumann 2011). In Summer 2009, two German merchant ships were the first to complete a commercial transit through the Northern Sea Route in one season. Furthermore, Germany imports 87 percent of the fish it consumes, with 23 percent coming from the Arctic (Thönnnes 2011).

Because of its dependence on Russian oil and natural gas, Germany has made access to natural resources a priority. It imports 97 percent of its oil and 84 percent of its natural gas, mainly from Russia and Norway (Thönnnes 2010). Demand for energy is likely to grow with the decision to phase out nuclear energy and replace it “to a large extent with Renewables” (Meister 2013). Expertise and technology are fields that will interest German companies. Siemens is renowned for its contribution to subsea installations that have made off shore resources accessible, whereas maritime engineering expertise from Bremenports has been required for coordinating the construction of a new port in Iceland.

Building a Coherent Policy

Main actors in Germany are to be found in the polar research institutions, and in the Ministry of Foreign Affairs (MFA), which has been developing, in co-operation with Arctic states and at the inter-ministerial level, its Arctic related activities. In 2009 with Denmark and Norway, and in 2011 with Finland, the MFA organized international conferences on the Arctic region. On the occasion of the latter, Westerwelle deemed the Arctic to be of “crucial significance for the long-term survival of mankind” (Westerwelle 2011).

In 2013, Germany sponsored a series of events with a view to coordinating the Arctic-related activities of the various ministries concerned. In February, the Wegener Institute held the first Arctic Dialogue, which was attended by representatives from six ministries: Education and Research; the Foreign Office; Environment; Transport, Construction and Urban Development; Economic Affairs; and Defence. Another workshop was held in June. This work resulted in the September 2013 drafting and 25 October 2013 publishing of Guidelines for a

German Arctic policy¹⁷ (the Guidelines) with the aim to make the Arctic “a central focus of German policy” (Auswärtiges Amt 2013).

The Guidelines identify ten main points: (1) economic potential and ecological challenges; (2) protection of the environment; (3) Germany as a partner with vast expert knowledge in research, technology, and environmental standards; (4) promotion of freedom of navigation; (5) promotion of Arctic research; (6) commitment to ensuring that the Arctic is used for peaceful purposes only; (7) commitment to international and regional conventions; (8) recognition of the special status of Arctic Indigenous peoples; (9) multilateral co-operation, in particular in the Arctic Council; and (10) support for an active EU Arctic policy and for horizontal coherence on Arctic issues.

The Guidelines focus on ensuring coherence in a few focused sectors, in particular with regards to economic development, which is closely linked to ecological challenges, a field where Germany is promoting its research and technology expertise. On the occasion of the Arctic Energy Summit in Akureyri, on 8 October 2013, German Ambassador to Iceland Thomas Meister highlighted the potential contribution of German know-how and “high environmental standards” to sustainable economic development in the Arctic, and referred to the exhibition “Renewables–Made in Germany” displayed in Akureyri.

In the Guidelines, freedom of research is highlighted as important, Germany having actually been denied access by Russia to some areas near the Siberian coast where the Wegener Institute planes intended to document changes in ice thickness (Schwägerl and Seidler 2011). Since understanding the current changes in the Arctic is seen as crucial, the director of the Wegener Institute, Karin Lochte, emphasized the “need of access to allow our scientists to move about and work throughout the entire Arctic” (Schwägerl and Seidler 2011).

As far as security is concerned, the Federal Government is opposed to militarization of the Arctic and considers the region’s stability to be absolutely essential for both Europe and Germany (Thönnies 2010).

External Coherence of German’s Arctic Policy

The publication of the Guidelines for a German Arctic Policy is said to be driven by purely internal factors, i.e., the need to know where the country is going with its Arctic activities and how to coordinate them. Its activities are said to complement EU Arctic Policy. Indeed, Germany cannot act alone to be influential, and needs the framework of the EU: it supported the EU application to the Arctic Council as an observer in 2011. Nevertheless, several aspects of this policy suggest that the EU could have done more and been better coordinated. The Federal Government supports an active EU Arctic policy and is “working to ensure horizontal coherence on Arctic issues within the Common Foreign and Security Policy, as well as in the domains of research, environmental protection, energy and raw materials, industry

and technology, transport, and fisheries” (Witschel 2011b, Auswärtiges Amt. 2013). Furthermore, regarding the Northern Dimension, which Germany is interested in further developing (interviewee K), the Guidelines highlight the necessity to coordinate the EU Arctic policy and the Northern Dimension in particular when it comes to the environmental partnership (Auswärtiges Amt 2013: 16–17).

Lack of coordination also plagues relations between EU member states on the Arctic Council activities, in particular when it comes to Denmark and the unique situation of its former colony Greenland. For the Danes, European Union solidarity ends at the Arctic Circle, and countries like Germany are only welcome as “guests” (Schwägerl and Seidler 2011). The Guidelines for a German Arctic Policy state that “The Arctic policy should be part of long-term strategic considerations of EU policy.”

Germany remains cautious in advancing its policy—being only an observer on the Council, Germany does not publish a strategy or a policy, rather it publishes “Guidelines.” Moreover, on the principle that it has no Arctic territories, Germany is keen on recognizing the regional nature of Arctic policies, i.e., the “regional policy of the Arctic Council member states” (Meister 2013). Yet on two occasions it has expressed concerns about Arctic governance. First, Germany was worried that the claims of the five Arctic coastal states to the continental shelves would hinder access to Arctic Ocean routes and air space regarding sites for research. Although the Convention on the Law of the Sea guarantees freedom to pursue marine research, this right is disregarded by many countries when it comes to basic research, according to Rüdiger Wolfrum, a professor at the Max Planck Institute for Comparative Public Law and International Law and a judge on the International Tribunal for the Law of the Sea: “Either permits are denied or conditions are defined that make research difficult or even impossible.” Furthermore, it is not always easy to distinguish basic research from applied research for economic development of the continental shelf (Budde 2011). The Convention’s 320 articles provide only a very general framework, explains Wolfrum. The case of the Polarstern stopping its 2010 seismic tests in Lancaster Sound at the request of an Inuit association also illustrates the complexity of accessing research sites in the Arctic Ocean since the tests were approved by both the Canadian federal government and the Nunavut territorial government, the latter through the Nunavut Research Institute and the Nunavut Impact Review Board. In spite of this, the Nunavut Court of Justice ruled on 8 August 2010 that the Canadian federal government did not do enough to involve local communities in its decision making (Pelaudeix 2012).

Another bone of contention, and a major one at that, arose with the new rules that the Arctic Council brought in for observers in 2011. Germany’s ambassador to Canada, Georg Witschel, roundly criticized several provisions: observers have to agree to the existing legal framework, they must submit written statements for ministerial meetings, and they may be excluded from the Arctic Council under certain conditions (Witschel 2011a). He moreover

...urged the members of the Arctic Council to integrate the permanent observers in the widest possible manner into the work of the council while respecting the elevated status of permanent participants and member states. Germany is not an Arctic state and therefore our interests are limited compared to those of the members of the Arctic Council. But they are not in the least less legitimate, and generally they are in line with Canadian interests. Germany will continue to contribute positively to the future of the Arctic region, hopefully more and more often together with Canada. (Witschel 2011b)

The German Federal Government went even further in the Guidelines for a German Arctic Policy with the suggestion to extend observer countries' participation rights on a case-by-case basis, if an observer can substantially contribute to resolving an issue (Meister 2013).

“Germany's strategy for the Arctic,” Vladislav B. Belov, Arctic and North, 2016

[118] http://www.arcticandnorth.ru/upload/iblock/42b/07_belov.pdf

Abstract:

In the last decade Germany has increased activity in the Arctic region. From a formal point of view, the German state connects it with various aspects of international security (mainly — environmental and transport), with needs to respect the rights of peoples living in the Arctic regions and the importance of scientific research in the Arctic. But in reality, they are hiding far-reaching interests of safeguarding the national security of raw materials and access of German concerns to the Arctic resources. In solidarity and in many ways defining the EU's policy in the Arctic, Germany primarily is focusing on their long-term economic and geopolitical goals and objectives, which it will consistently implement in the coming years in the framework of the Arctic Council, and beyond, including within the framework of cooperation with Russia. This article is devoted to the analysis of these goals and objectives, as well as to the definition of medium-term trends in Germany's Arctic policy.

Current & Relevant Information:

The Arctic policy of Germany

Despite the obvious strategic interests in the region, the German state until recently has not got any clear program of actions. Various federal ministries and departments realized some projects that were not coordinated with each other. The coalition government (CDU / CSU and SDPG) made the first steps in the coordination of activities, definition of objectives and interests in 2009. Since March 2008 Germany holds international conferences and seminars where the future of the Arctic is discussed.

The German Foreign Office has a Department of the Arctic Policy and the Division for the economic, environmental and scientific aspects of the Arctic Ocean. The

development of the main lines of the state policy regarding the Arctic started at the initiative of then-head of the Foreign Office G. Westerwelle in 2011. These lines were coordinated with the corresponding regulations of the EU and accepted in mid-2013. The document denotes the chances and risks of development of the region and the main aspects of the German Arctic strategy, as well as in the context of cooperation with leading international organizations and individual states. On 27th of April 2016, the European Commission, largely in view of the German position, introduced a new Integrated Arctic policy of the European Union, which identifies three main challenges for the future: 1) support for research on environmental and climate issues in the Arctic; 2) achieving sustainable economic development in the Arctic on the basis of a reasonable use of resources and environmental expertise; 3) strengthening of constructive interaction and dialogue with Arctic states, indigenous peoples and other partners. The Arctic policy contains 39 measures for further development of EU policy regarding the region in these closely linked lines. EU, as well as Germany, pays special attention to the Arctic cooperation with Russia. After the acceptance of the basic lines of new EU policy, EU High Representative for the Common Foreign and Security Policy F. Mogherini said that cooperation with the Russian Federation regarding solving of the Arctic problems meets the interests of the European Union and must be deepened and expanded.

Germany supports the international development of the Arctic region and criticizes national approaches of the neighboring states, including Russia. In the Arctic Council the German Federal Government supports increasing of the participation of German experts in Council working groups and obtaining of the additional rights for the observer countries in case of their significant contribution to the solution of certain problems. Not being able to directly influence the activity of the Arctic Council, the German authorities use the EU potential (largely forming its policy of the development of the Arctic, including in the context of "normative" force, involving the implementation of the relevant standards and behavior patterns), as well as bilateral relations with several countries -members of the board (in the first place, with Norway).

The German position on many issues coincide with the French. It seems that in the coming years the French-German tandem will more actively coordinate their actions regarding the polar region, among other things, continuing to insist on the determination of the international Arctic status, the introduction of compulsory and law fixed standards of geological exploring works, further extraction of minerals, environmental protection and responsibility of business entities. Germany also supports the activities of the European Investment Bank (EIB) in the area of development of energy, environment, transport and research infrastructure in the Arctic.

In the context of security policy, German supports the peaceful development of the polar region, but it is focused on the implementation of different formats NATO in the

development of partnership, involving the organization of active dialogue between the neighboring countries. The German authorities think that a platform for discussions such as the Arctic Security Forces Roundtable should be added here.

In essence, the current government of grand coalition (especially the Federal Minister for Education and Research J. Vanka) is actively implementing the Arctic policy developed by the previous cabinet. It emphasizes continuity and importance of integrated support of the geopolitical, geo-economics and geo-ecological interests of Germany, highlighting the priority of environmental protection — the issue about it was firstly included in the coalition agreement. Not without reason, the Federal Chancellor A. Merkel addressed with video message to the participants of the Arctic Circle Assembly in Reykjavik in October 2015, where she paid special attention to environmental aspects of the Arctic system. It is obvious that the role of the Arctic in the German foreign policy will be constantly growing and the economic and political goals will gradually come to the forefront. Germany is trying to use the current US chairmanship in the Arctic Council (2015-2017) to lobby German interests. It will be possible to evaluate the efficiency of these efforts in a few years.

“Germany's Arctic Policy Calls for More Restrictions in the Arctic and Receives Mixed Reactions,” Siri Gulliksen Tømmerbakke, High North News, 6 September 2019 [119] <https://www.highnorthnews.com/en/germanys-arctic-policy-calls-more-restrictions-arctic-and-receives-mixed-reactions>

Overview:

Some fear the new Arctic policy guidelines, if adopted by the EU, could have consequences for businesses operating in the Arctic. Others applaud the Germans for making commitments and addressing how they can contribute to solve global issues.

Current & Relevant Information:

Widening cooperation between the five Nordic countries and Germany was highlighted by the Nordic prime minister's and German Chancellor Angela Merkel in Reykjavik, Iceland, Tuesday 21th of August, the same day Germany's Arctic policy guidelines was made public.

An increasing number of powerful nations knock on the door of the Arctic wanting to make decisions in the region.

At a press conference after the ministers meeting, Merkel said that "Germany has so far been involved mainly in research projects, but will in the future observe the strategic importance of the area."

She also admitted that Germany has not paid in recent years enough attention to the strategic development of the Arctic area.

Nevertheless, the new policy guidelines are overall focused on environmental issues and climate change.

The strategy is introduced with a statement that the Federal Government of Germany is assuming greater responsibility for the Arctic region “with a view to shaping it for the future”.

However, taking a closer glance, it seems Germany is advocating more restrictions on the companies operating in the Arctic and total ban in activities in some areas.

Regulations and restrictions

For example, the German strategy calls for “compliance with legally binding regulations on the use and explorations of the Arctic”.

Furthermore, the Germans is committed to “the further designations of protected areas and quiet zones” and “legally binding regulations regarding the explorations and extractions of mineral resources”.

When it comes to international cooperation and shipping, the German Arctic policy includes recommendations for expanding the regulations in the Polar Code.

Preventive measures for ensuring protection against oil spills in the sensitive Arctic region and a complete ban on heavy fuel oil – as in Antarctica – are other important priorities of the Federal Government.

But why is it important for Germany to have an Arctic Policy?

Arne Riedel, fellow at Ecologic Institute in Berlin, describes the new Arctic policy as a sign of the intensified coordination within Germany's ministries and agencies on this topic over the last years.

"Earlier documents by the foreign office and the ministry responsible for research already captured important elements in their respective realms but did not cover the same range or depth. The Arctic policy aims to provide a coherent and more encompassing outlook for Germany's partners abroad, most of all the Arctic states and the Arctic Council. It allows Germany to demonstrate its willingness to further engage with Arctic states and indigenous peoples, following a rule-based approach and respect for their rights" he says in a comment to High North News.

Positioning themselves

Their strategy could have implications for the economy if implemented in the EU, according to Erling Kvadsheim, vice chair of Arctic Economic Council and international director of the Norwegian Oil and Gas Association.

He has no doubt Germany, with these guidelines, are positioning and preparing themselves for the EU Arctic strategy coming up next spring.

“The European commission has prepared a document where they argue a new strategy is needed. In this document, the commission underline not only the need to protect the Arctic, but also a more prudent resource management in the region” he says to High North News.

The previous EU Arctic strategy is overall focused on preservation of the Arctic. Kvadsheim is confident the debate in the next months will turn towards weighing the need for protection up against the need for development and business opportunities.

“The attitude of Germany suggests the Arctic should be seen as a region that needs special care and protection and that all activity must be done with utmost consideration for the environment and its vulnerability”

The AEC vice chair feels the common view in European countries is that the Arctic is a region who is more vulnerable than others and that energy activity inflicts greater damage in the Arctic than elsewhere.

“This is something the industry disagrees with. There is no evidence to suggest that the industry is doing more harm in the Arctic than elsewhere”, he argues.

Hard to predict the consequences

As for possible consequences the German Arctic policy will have for businesses operating in the Arctic, Erling Kvadsheim is more uncertain.

“It is hard to predict. The document is well written. It does not close any doors. On the one hand, they argue that people in the Arctic have the right to a good life. On the other hand, they advocate strict precautions and a total ban on activities in certain areas. What they do not discuss in the guidelines, that there are many areas in both Canadian Arctic, Russian Arctic and Scandinavian Arctic with huge activities the world needs, especially in the future” he says, and warn:

If these views are adopted by the EU next year, it will be even more difficult and expensive to do business and live above the Arctic circle.

“If these views are adopted by the EU next year, it will be even more difficult and expensive to do business and live above the Arctic circle”

Fellow Riedel disagrees: “An important aspect that the German Arctic policy advocates for is the consistent application of the precautionary principle. This suggests to explore potential impacts and take protective measures before any human activities would harm the environment, maybe even irreversibly. This principle does not per se exclude any activities and should be a consensus in any sustainable development. In addition, the “polluter pays” principle calls for clear responsibilities and liabilities for environmental damage”, he comments.

Many northerners see it as a big problem that many European countries and their politicians does not acknowledge the Arctic as eight different countries with eight different needs, but as a homogenic region.

For example: There are arctic conditions along the east coast of Canada all the way down to Newfoundland, a region on the same latitude as Paris, while the Norwegian Arctic is way further north.

“This is something the AEC and Norwegian Oil and Gas spend a lot of time explaining in Brussels, and will continue to advocate in the upcoming months” Kvadsheim tells High North News.

Affects Germany

It is, however, no question that the new German’s intentions are good. Or that their Arctic policy aims to help the Arctic nations to fight the greatest enemy of all times; Climate change.

Not only for the sake of the arctic people region; Germany acknowledges that changes in the extent of sea ice, the volume of ice sheets and the spread of permafrost have global impacts.

“The changes observed in the Arctic affect the entire Earth system via feedback processes. Already now, atmospheric circulation over the northern hemisphere is changing, and this is affecting weather patterns in Europe and Germany”, the policy states.

In addition to the temperature-dependent expansion of the oceans, the melting of the Greenland ice sheet contributes to rising sea levels globally.

“By the end of the century, sea levels are expected to rise by up to one meter or possibly even more, which would have serious consequences in Europe”.

The policy is summed up in five headlines:

- Germany wants to work towards worldwide climate and environmental protection in line with the Paris Climate Agreement.
- The German Government is calling for the deployment of environmentally-friendly technology as well as the application of the highest environmental standards and the designation of protected areas to preserve biodiversity in the Arctic.
- The interests of the indigenous population as well as the safeguarding of their rights to freedom, good health and self-determination in their habitat should be strengthened.
- Germany is committed to free and responsible research in order to learn more about the Arctic.

- For the future of the Arctic, close and rules-based cooperation with other countries within a strengthened international legal framework is necessary. Germany is therefore working in the Arctic Council as well as within the EU and NATO to protect the Arctic as a largely conflict-free region.

“Germany’s interests in the Arctic, as exemplified by its Arctic Council engagement,” Kerstin A. Schley, University of Alaska, May 2019 [120]

https://scholarworks.alaska.edu/bitstream/handle/11122/10537/Schley_K_2019.pdf?sequence=1&isAllowed=y

Abstract:

This thesis is a qualitative research exercise, which tests the explanatory value of the international relations theory of neoliberal institutionalism in explaining Germany’s engagement in the Arctic and in the Arctic Council (AC). The research question further attempts to clarify Germany’s economic and environmental interests pursued through its engagement with the AC.

This thesis analyzes Germany’s engagement in the Arctic from a historical point of view up to Germany’s contemporary interests. Germany’s first Arctic engagement started with the period of whaling, continued through the age of polar heroes, up to the weather war of World War II. After the two World Wars, Germany struggled to restart its Arctic engagement, but nowadays enjoys a high reputation as an Arctic player. This is due to the well-known German polar research institute, the Alfred Wegener Institut Helholtz-Zentrum fur Polar-und Meeresforschung, but also due to Germany’s engagement in the Arctic Council. As a result of Germany’s long history of polar, especially Arctic endeavors, the country became an Observer in the Arctic Council at its founding. As global warming has caused significant melting in the Arctic, Germany’s interest has shifted from environmental concerns in the region to a dual emphasis of protecting the environment while pursuing economic opportunities. Today Germany pursues several interests in the Arctic, including economic, political, and environmental interests. Neoliberal institutionalism argues that cooperation can emerge through mutual trust and the building of norms, regimes and institutions. Realism on the other hand emphasizes security competition among great powers within anarchy of the international system, with the main aim to survive. The results of the analysis suggest that the theory of neoliberal institutionalism has better explanatory power for interpreting Germany’s motivations for engaging in the Arctic Council than the theory of realism.

Current & Relevant Information:

Chapter 1 Introduction

1.1. Germany

1.1.1. General Background

This thesis explores Germany's role as an official Observer to the Arctic Council (AC). When looking back at Germany's foreign policy since World War II, Hans Kundani, a research fellow at the Royal Institute of International Affairs in London, who has written much on Germany's economic power within Europe, describes Germany as a civilian power, that is, "one that, unlike a great power, uses multilateral institutions and economic cooperation to achieve its foreign policy goals, avoids the use of military force except in limited circumstances and in a multilateral context, and thus helps to civilize international relations by strengthening international norms." After WWII Germany was forced to make territorial concessions and the country was divided into two states; meanwhile each state undertook its own foreign policy, shaped by the ideological ideas and strategic interests of the Cold War era.

Former Chancellor of the FRG Helmut Kohl stood among the initiators of European integration, which began in 1950. Thus, West Germany was an original driver of the European Union, along with some other Western European states - France, Italy, and the Benelux states, and it has been very active since. Today Germany and France are the driving forces behind the European Union, in a process that has included the creation of a single market, economic and monetary Union, and the beginnings of a joint European foreign policy.

Germany's current chancellor, Angela Merkel, has been nicknamed "Climate Chancellor" for her long-standing international engagement in reducing carbon emissions. As Merkel started in her fourth term in 2017, doubts have risen as to whether she can live up to that reputation, owing to her new government's decision to postpone the national 2020 climate targets and Germany's lack of recent progress in cutting greenhouse gas emissions. Yet Germany continues to seek influence within multilateral institutions. Germany will take a seat in the UN Security Council in 2019.

Due to its economic strength, Germany has become a global player in the last decades, a role it exercises, for example, through its membership in the G8 group of leading economies of the world. Germany's strong economy elevates its status and influence and affords a certain independence in its decision making. Germany is the most populated and most economically powerful European country, and has strong economic, social, and political ties with all its European neighbors. Germany's economic power depends on close cooperation with its European neighbors and the European Union itself, which both enhances and confines the country's capability to be a foreign policy actor. Today the European Union struggles more than ever, as it addresses challenging new issues, such as the refugee crisis, Brexit, and financial crises within member states.

1.1.2. Arctic Background

Germany's political-economic engagement in the Arctic region is rather new and has been renewed through the German Arctic Policy Guidelines published in 2013, acknowledging the increasing strategic importance of the region. These Policy Guidelines cover climate change, environmental protection, and polar research, but more explicitly they cover geo-economic opportunities in the Arctic. The Arctic attracts Germany through its immense hydrocarbon reserves and new shipping routes developing due to melting sea ice. The main driving force behind Germany's renewed interest in the region seems to be the opportunities and challenges deriving from the changes underway in the region.

Germany does not have direct access to the coast or waters of the Arctic region and therefore does not possess any legal rights to the development of the Arctic continental shelf. Nevertheless, Germany has engaged in polar research for well over a century and can reflect on a long polar history. In the sixteenth and seventeenth centuries, the famous German cartographer August Petermann laid the foundation for German polar research that took place 150 years ago during the age of exploration in the Arctic. Germany's Arctic interest continued into the twentieth century with the age of polar heroes, driven by fascination and the urge for exploration and discovery, but mostly pursuit of research in the natural sciences. After WWII, Germany lost its military power, and its nationalism died, so there was a need to develop a new role in international Arctic policies. Germany did so by emphasizing economic cooperation, foreign exploration and scientific collaboration as well as diplomatic connections and bi- and multi-lateral treaties. Germany has been committed in various ways to providing the international community with relevant data to gain an understanding of the climate system as well as with analysis of future developments of the polar region.

Germany is a long-standing permanent Observer in the AC, has close relationships with all Arctic states, and is in economic terms closely connected to many countries in the region (especially Norway and Russia). For many decades Germany has seen the Arctic primarily as a region of global climate change developments. Therefore, other actors have viewed Germany only as an Arctic stakeholder in terms of polar research and in the context of its leadership role in efforts to mitigate climate change. Only in late 2013 did the German government officially become more interested in the region, by publishing its Arctic Policy Guidelines, entitled "Assume Responsibility, Seize Opportunities." Consequently, Germany's Arctic activities shifted to include economic interests, as well. As an Observer in the AC Germany has always advocated cooperation in research in order to analyze the drivers and consequences of climate change.

This thesis investigates Germany's historical and current interests in the Arctic. It considers Germany's expeditions in and research on the Arctic from the beginning of the seventeenth century with the era of whale hunting, to the present, with special focus on Germany's role as an Observer in the AC. For centuries, Germany,

although a non-Arctic country, has been actively engaged in Arctic exploration and research, and its participation as an Observer in the Arctic Environmental Protection Strategy (AEPS) and the AC is an outgrowth of this history. Furthermore, the thesis investigates Germany's behavior in the Arctic and analyses whether it aligns with the theory of neoliberal institutionalism and whether therefore Germany exerts soft power and influences the region.

Chapter 6 Summary and Conclusion

For centuries, Germany has demonstrated its interest in the Arctic, beginning with exploration in the context of whaling. The century of whaling represented primarily the pursuit of economic aims, and it can be considered a successful era for German polar expeditions, as Germans benefited from whaling through an increase in employment. Due to significant competition with other great seafaring nations, cooperation at this stage was not common. Although scientific research was conducted during the whaling period, by Friedrich Martens for example, scientific research was just beginning in the region. The period following the whaling era, from the middle of the eighteenth century until WWII, was characterized by expeditions in the search of fame, geographical discovery, scientific political gain. Most German expeditions returned with these hopes unfulfilled achievements and. Karl Koldewey stands out as one of the most famous early German Arctic explorers. His two early Arctic expeditions returned with great quantities of scientific data, but served more as character formation and to develop first Arctic experiences. Alfred Wegener, Germany's most famous Arctic explorer, gained his first Arctic experience as a member of a Danish expedition led by Luvig-Mylius-Erichsen. During his own expeditions, Wegener cooperated with other foreign expedition members, such as the Greenlandic Inuit Rasmus Villumsen. Wegener not only came home with scientific data, but proved that Germans could compete in scientific discovery on an international level. Notably, he displayed Germany's technological achievement by using propeller-driven sleds for the first time in the Arctic region. Although this innovation failed, he brought attention to Germany's scientific and technological capacities in Arctic exploration.

The founding of the International Polar Year (IPY) in the 1870s comprises Germany's most lasting achievement in Arctic cooperation. Weyprecht recognized the enormous size of the Arctic region and realized that only a series of Arctic stations operated by scientists from multiple nations could accomplish the immense task of exploring, monitoring and recording a variety of phenomena of interest to the scientific world. Therefore, Weyprecht and Neymayer suggested that multiple nations conduct scientific research in several simultaneous expeditions around the North. While the first IPY only brought back a series of individual scientific data and there was no summarizing publication afterwards, this marked a first important step towards cooperation in the Arctic. The first IPY represented a shift in polar science from individual research towards collaboration, data exchange, and mutual

assistance. For the first time, polar research proved to be a field of international cooperation.

The Arctic expedition of the Zeppelin is one of the most successful German expeditions to the North, brought home numerous scientific achievements with little financial support and no threats to life. This German-led international expedition pioneered the use of complex aerial photography techniques and equipment. Scientists from Germany, the United States, the Soviet Union and Sweden participated. Hugo Eckener commanded the flight, while the Russian Professor Rudolf Lazarevich Smolovich served as the expedition's scientific leader. Cooperation with Russia enabled the exchange of mail in the Arctic. In another breakthrough, Walther Brun founded Aeroarctic to examine the possibility of airship traffic route over the Atlantic. Aeroarctic was an international organization based on cooperation with scientists and engineers from all over the world.

After WWI Germany was eager to regain its status in the world following the disaster of the war and the Treaty of Versailles. The achievements of Wegener's expeditions allowed Germany to reassert itself as a leader in polar exploration, in terms of science, and technological advancement. After the WWII, the new democratic Germany had to reestablish its footing in the new world order. It recognized the benefits of international cooperation and collaboration, as illustrated in its leadership role in multiple international regimes, including the EU and the United Nations, where Germany was elected as a non-permanent member of the Security Council for the 2019-20 term.

Eventually, Germany developed a role in international Arctic politics, a role that emphasized economic cooperation, exploration and scientific collaboration as well as diplomacy. Furthermore, Germany became an international leader in the fight against climate change. The German government worked hard to ensure that the international community negotiated new climate agreements and has provided essential impetus for the Kyoto II or the Paris Agreement. The Federal Government is aware of Germany's role and responsibility regarding global warming. With the German Sustainability Strategy and the Climate Protection Plan 2050, it is orienting itself towards the goal of greenhouse gas neutrality by the middle of the century and is developing concrete models for the specific fields of action for the year 2050.

In summary, Germany's recent Arctic engagement started with an emphasis on mitigating climate change and has shifted to include pursuit of geo-economic opportunities. In recent years, Germany became vulnerable to the effects of global warming and energy shortages. Therefore, Germany depends on the Arctic: on a reliable energy supply, stable markets, and free access to shipping routes, as well as to the Arctic climate, which drives the global climate. My findings thus support a neoliberal institutionalist explanation of Germany's participation as an Observer of the Arctic Council. Scientific research is a high priority for Germany and a means to participate in the Arctic. Germany stands as an environmental leader, and the

German polar research institute AWI enjoys the reputation of being one of the world's leading polar research institutes. Germany has anticipated absolute economic gains, as well as indirect benefits from collaboration to protect the Arctic environment and to engage in scientific research. Germany pursues self-interests in the Arctic, as well as environmental protection, both of which coincide with the theory of neoliberal institutionalism. As neoliberal institutionalists argue, Germany is motivated by economic gains to engage in Arctic affairs. Furthermore, through the AC, Germany participates in numerous projects and WGs of the AC, and therefore supports the fight against climate change. In short, Germany pursues AC Observer status to collaborate with others to further its domestic economic goals, as well as environmental and research interests. Therefore, my findings and analysis regarding Germany's engagement and behavior in the Arctic and the AC clearly align with neoliberal institutionalism.

4) India:

“Explained: India’s re-election as observer to the Arctic Council,” Amitabh Sinha, The Indian Express, 15 May 2019 [121]

<https://indianexpress.com/article/explained/india-re-election-observer-arctic-council-importance-5727126/>

Abstract:

India is one of the very few countries to set up a permanent station in the Arctic for the purposes of scientific research. The station has been used to carry out a variety of biological, glaciological and atmospheric and climate sciences research projects in the last one decade.

Last week at the Arctic Council ministerial meeting at Rovaniemi, Finland, India was re-elected as an Observer to the Arctic Council. India was first granted the Observer status in 2013, along with five other nations.

Current & Relevant Information:

India’s involvement in the Arctic

India is one of the very few countries to set up a permanent station in the Arctic for the purposes of scientific research. The polar regions offer some unique opportunities to carry out research related to atmospheric and climate sciences that cannot be done anywhere else.

The Himadri research station, located in Ny Alesund, Svalbard in Norway, about 1200 km south of the North Pole, was started in July 2008. The Goa-based National Centre for Antarctic and Ocean Research (NCOAR) is the nodal organization coordinating the research activities at this station.

The station has been used to carry out a variety of biological, glaciological and atmospheric and climate sciences research projects in the last one decade, with

over 200 scientists from a number of institutions, universities and laboratories having accessed the facilities at the station.

Himadri came on the back of India's three-decade experience of carrying out scientific research in the polar regions of Antarctica which began in 1981. India's first permanent station in Antarctica was set up way back in 1983. In 2010, Indian scientists undertook a scientific expedition to the South Pole as well. India is now among the very few countries which have multiple research stations in the Antarctic.

Commercial and strategic interests

The Arctic region is very rich in some minerals, and oil and gas. With some parts of the Arctic melting due to global warming, the region also opens up the possibility of new shipping routes that can reduce existing distances. Countries which already have ongoing activities in the Arctic hope to have a stake in the commercial exploitation of natural resources present in the region.

The Arctic Council does not prohibit the commercial exploitation of resources in the Arctic. It only seeks to ensure that it is done in a sustainable manner without harming the interests of local populations and in conformity with the local environment.

“India’s Arctic potential,” Devikaa Nanda, Observer Research Foundation, 18 February 2019 [\[122\]](#) <https://www.orfonline.org/research/indias-arctic-potential-48263/>

Abstract:

This paper examines India's role, and stakes, in the so-called 'Arctic Paradox': As the Arctic region witnesses an unprecedented rate of ice-melt because of global warming, new routes are being opened, paving the way for untapped hydrocarbon and mineral resources to be exploited. While India has been active in the Arctic for over ten years, it has not fully made use of its Observer status, and it must give new energy to its activities in the region. Unlike the Antarctic, however, the Arctic is not considered a 'global commons' and the principle of sovereignty prevents external players from exacting significant gains in the region. India should therefore steer away from advocating for an Arctic common, but must ensure that the environment is strongly considered at the center of all debates at the Arctic Council. India can take the lead in pursuing scientific research in the region, to understand in particular the correlation between the Arctic ice-melt and Indian monsoons.

Current & Relevant Information:

India in the Arctic

Observer states such as India and China find it necessary to forge favorable relations and form alliances with the coastal states within the present framework of Arctic governance. Tangible efforts have been made in this direction in terms of scientific research and other projects and investments. India, for one, opened

Himadri, its only research station in the region in 2008. In July 2018, India displayed an increasing commitment to Arctic research when its National Centre for Antarctic and Ocean Research was renamed the National Centre for Polar and Oceanic Research. Furthermore, India and Norway's bilateral research cooperation is realized in the Norwegian Program for Research Cooperation with India (INDNOR). As India currently lacks a Polar-suitable vessel, it has planned to acquire a Polar Research Vehicle which will be advantageous in escalating scientific research activity. NCPOR has signed a contract with FESCO Transportation Group for access to the company's icebreaker vessel which will be utilized both for general cargo deliveries to Antarctic stations and scientific activities in the region. While this vehicle will focus its activities in the Antarctic, benefits in the Arctic may also materialize. Although India's output of research on the region increased by 300 percent from 2005-2012, little collaboration was seen with other countries. In the absence of an official Arctic policy, India's Arctic research objectives are centered on ecological and environmental aspects, with a focus on climate change. Generally, India is seen to have taken the lead among Asian Observer states placing more weight on environmental and scientific rather than the economic potential of the region. Support for such focus is certainly strengthened by the fact that the importance of agriculture to the Indian economy and its dependence on monsoons, along with its long coast-line with a high population make the country extremely vulnerable to climate change.

In the economic domain, and particularly in energy, India has prioritized its historical relations with Russia and the latter's dedicated focus on oil and gas exploration. To this effect, India and Russia's top oil and gas companies have signed agreements and are cooperating on shared production projects and offshore exploration. India's Oil and Natural Gas Corporation (ONGC) Videsh Ltd. holds a 26-percent stake in Russia's Vankorneft and a 20-percent stake in the Sakhalin-I project. Cooperation with companies from other Arctic and Observer countries is also evident: for instance, the US' ExxonMobil and Japan's SODECO are also partners in the Sakhalin-I project. The Gas Authority of India Ltd. (GAIL) has a 20-year agreement with Russian energy giant, Gazprom, for a supply of 2.5 million tons of liquefied natural gas (LNG) per year. This was recently renegotiated to add two million tons to the agreement, with the contract being extended by three years. This deal has been representative of India's pursuit of strategic autonomy, especially in the context of American sanctions. Diversification of energy imports remains a crucial endeavor for India which has always remained skeptical of alignment with any power. The Arctic region also holds mineral resources, as mentioned earlier, including gold, nickel, copper, graphite and uranium. These minerals are utilized in the manufacture of high-technology products such as mobile phones and nuclear energy, which can help push India's 'Make in India' program.

The 'Global Commons' Question and India's Role in the Arctic

As an observer, India's influence is limited as it must suggest projects either through an Arctic State or Permanent Participant which may be partly funded by India but cannot be more than that provided by the Arctic State in most cases. In addition, while India may offer views, make statements and submit documents in Council meetings, it is only at the discretion of the Chair that it can do so. A key aspect is that the Arctic Council, while being the dominant organization in the region, is more of a political forum that does not have any legal basis. As stated earlier, the Council does not discuss military matters and has limited funds—this weakens its legitimacy. Nevertheless, the Council's presence does complement the broader frameworks and regulations that govern more specific aspects in the region such as sea routes and resources. India has sufficient influence and a definite role to play in these wider regulations which directly or indirectly guide the activities of the Arctic Council, for instance, the UNCLOS. Leveraging of such rights and influence by India and other Asian Observers can therefore bring benefits to the Arctic Council.

What is clear is that Asian Observers including India are in need of energy, new markets and resources. To this end, and even if incrementally, China for instance, hopes to make the Arctic global commons a reality, an undercurrent of which may be identified in its new Arctic Policy. Taking a similar stance may hamper any progress India has made in the region with Arctic states who are firm on their sovereignty, especially as India has accepted the sovereignty clause in its bid for Observer status. The Antarctic Treaty faced little opposition in comparison to what could result if the Arctic region were to be established as a commons. It is likely to be more advantageous for India to avoid being the cause for insecurities both from Arctic states and the indigenous peoples. This is due to any fears and insecurities that could lead to rampant militarization of the region and an undermining of India's position in the global arena. India has enjoyed positive relations with Russia and the US and should not risk these ties as well. It may well be a more realistic proposition for India to take a stance encouraging more cooperation and upholding ecological primacy—whether it is within the existing framework or is incorporated into a legal framework that resolves regional disputes but avoids the commons question.

Having said that, it is crucial that India continues to create a favorable environment for itself. Some have opined that the most plausible method to do so would be through engagement in research and scientific activity, keeping any negative perceptions regarding India's intentions from the Arctic Council members at a safe distance. With the Arctic's commercial potential gradually increasing, a general consensus has emerged around India being unable to gain as much as China, Japan and South Korea. This strengthens the argument that India should channel its energy towards science and environmental concerns in the region. Moreover, developed countries tend to point fingers at developing countries to take the responsibility to reduce carbon emissions. It will not bode well for India to take a more radical stand against resource exploration and extraction in the region, given

that it is itself engaged in similar activities. Despite the absence of significant economic gains, India may still realize some benefits.

The current goal generally shared by most Arctic actors of following a path of sustainable development should continue to be what India also aspires for. Herein lie the prospects for India's contribution, where India should present a more holistic view by means of environmental arguments against the increasingly materialistic approach followed by other Members and Observers at the Arctic Council. This would entail efforts at drawing global attention to the Arctic region that would nudge those involved in the region to upgrade their environmental consciousness.

Polar Research and Climate Change

India's scientific and research activity, although in its early stages in the Arctic could expand given its experience in Antarctica. A correlation between Arctic ice-melt and the Indian Monsoons has been established but the exact effect remains undiscovered. It is believed that melting Arctic ice and the consequent increase of freshwater in the region prevents heat from escaping, leading warmer waters to the Indian Ocean which in turn alters Indian monsoons. The effects of this would be detrimental, specifically on agriculture that remains critical to India's economy and growing population. Sea level rise would be accompanied by a devastating situation for India's coastal inhabitants and ecosystems. Moreover, the Himalayas or often what is called the 'third pole' where India's major rivers originate, will worsen the situation. It is imperative that India improve upon and put in place a more robust Arctic research program to deal with these future threats. Several research stations in the Arctic are functional all-year-round but India's research station, Himadri is not operational in the winter. In this respect, improved facilities that increase the operability of Himadri will aid its research program. Cooperation and collaboration with other countries—whether Arctic Council members or Observers—should be increased as this will result in the sharing of facilities and expertise, increasing India's experience and encouraging friendlier relations with those countries. Most significantly, as both India and China are exposed to the impacts of climate change on the Himalayas, they will equally gain by doing research in the Himalayas and drawing on learnings for environment-related intergovernmental cooperation.

A Platform for Increasing India's Clout

Simultaneously, India may extract out of its position at the Arctic Council and existing activities in the region the ability to strengthen its international presence. In terms of governance, in addition to offering a more holistic view, India can make use of opportunities within the Council. The opportunity at the Council that allowed Observer participation in formulating the Agreement on Enhancing Scientific Cooperation demonstrated that there may be more room in active governance for Observers in the future. Further, India's relative absence in Working Groups where other Observers are actively engaged displays India's underexploited potential in

Arctic governance. To add to this, its participation in other Arctic forums within the region and outside of it has been minimal, such as the Arctic Frontiers Conference in Norway and meetings between other Asian Observers. In comparison to other Asian Observers, India's position in terms of private sector investment in the region is weak, however, India should encourage businesses and other interested parties to participate in the more flexible Arctic Circle that admits non-state actors as a means to further Indian influence. Governance measures such as these would lend more weight to any environmental endeavors that India puts forth as well as build on its self-image and perhaps projected image of a moral and responsible power. It is therefore essential that India consider the strategic and geopolitical angles to have a well-rounded understanding and approach in the region, for no Arctic issues in the current and evolving context can be isolated to fit a specific category.

Taking up strategic ventures while keeping negative perceptions at bay is a possibility. As India does have a growing demand for energy, it has currently made progress in securing an LNG deal with Russia. Natural Gas as a cleaner fuel will align with India's environmental stewardship in the international arena whilst diversifying its energy imports. To further secure its energy needs, strengthening its relations with South Korea which is also an Observer at the Arctic Council, will be beneficial in the long run as South Korea hopes to compete with Singapore in oil-storage and becoming a trade hub. India may utilize other concrete measures to highlight its commitment to the region, build trust in the region and secure for its stronger relations with Arctic countries. Given the increasing discovery of resources and the opening of shipping routes, the need for infrastructural development is consequently increasing. India can help fulfil this need, using it as a basis for building trust. For instance, collaboration and involving skilled Indian labor in infrastructure development such as building ports and other economic activities would act as a relations-building activity. Equally, collaboration with Arctic countries outside the Arctic region may also align with broader Arctic aims as in the case of the Indian Navy. The Arctic is geographically different from the IOR and it is the Coast Guard that primarily deals with search and rescue operations and pollution control activities; however, the Indian Navy also engages in disaster relief operations and could have a valuable contribution to make in Arctic affairs as well. The navy is experienced in the IOR and has cooperated closely with the Russian navy with some experience in the Russian region.

“Why India’s foray into the Arctic matters,” D Suba Chandran, Businessline, 26 September 2019 [123] <https://www.thehindubusinessline.com/opinion/why-indias-foray-into-the-arctic-matters/article29517604.ece#>

Overview:

The idea of a Vladivostok-Chennai maritime route should bring Russia’s Far East in tune with India’s Act East.

Two developments which took place in September demand that India take a closer look at the Arctic and pursue a larger construct to achieve its strategic interests. Early this month, Prime Minister Narendra Modi met Russian President Vladimir Putin at Vladivostok for a bilateral summit, where both converged on the Arctic.

The Arctic may be the northernmost part of the world, geographically far from India. However, the impact of climate change across the coasts of India and the economic fallout should bring up the Arctic more in discussion. Politically and strategically, the Arctic can no longer be perceived as too far.

The second development took place last week when Polarstern, a German research ship, quietly left Tromso in Norway to study the North Pole.

In this context, India will have to look at the Arctic — both from the prism of climate change and also as a strategic construct. The former cannot happen without the latter. Given the region's size, economy and partners (or the lack thereof), India will also have to work with other countries to establish a strong presence in the Arctic.

An 'Indo-Arctic' initiative, as a strategic construct, could provide a platform for India. It could open political space for New Delhi to work with like-minded countries to expand its footprint in the Arctic through its coasts by the Indian Ocean, the Pacific Ocean and the Bering Sea.

Current & Relevant Information:

The Vladivostok opening

The recent visit of Modi to Vladivostok and the discussions/agreements between Modi and Putin provides an opening for India to pursue a grandiose Arctic plan.

Modi was in Russia to take part in the 20th annual summit between India and Russia, besides taking part in the Eastern Economic Forum (EEF). Hosting the bilateral summit in Vladivostok, Russia's Far East, instead of Moscow or St Petersburg, can be perceived as a strategic discussion. The agreements signed there too exemplify a larger process.

The fact that the Indian business community is also looking at Russia's Far East should provide a larger space for New Delhi to act not only from a political prism but also expand its economic and business footprints.

The joint statement of Modi and Putin explicitly mentions India's interest in the Arctic and New Delhi's willingness to cooperate with Russia over the polar region. The statement also mentions India's willingness to play "a significant role in the Arctic Council." India has been an observer member of the Arctic Council since 2013.

Moscow could provide the much-needed opening for New Delhi to step into the Arctic, so to speak.

Linking the coastal city of Chennai to Vladivostok with a maritime route essentially means Russia's Far East would extend to India as well. This also provides an opportunity to expand India's 'Act East' approach into Russia, and then further north into the Arctic. But, how to operationalize this idea?

India does not have deep pockets. Neither does Russia. Moving forward, India and Russia will have to work with partners across the Indian Ocean and the Pacific Ocean in South-East Asia and East Asia. Singapore, Indonesia, South Korea and Japan could be the natural partners to this endeavor.

China has deep pockets, but it also has its own plan in the form of Belt and Road Initiative. Separately, China has formally enunciated a 'Polar Silk Route' initiative and has moved ahead to operationalize the same. Beijing has invested in polar shipping – from ports to trade routes across the Arctic. It has built polar vessels called White Dragons, which include snow cutters. It has also supported research on the Arctic and proactively encouraged Chinese institutes to work with European ones for the same. China also hosted the Arctic Forum this year.

Building the 'Indo-Arctic'

Both India and Russia need partners. The 'Indo-Arctic' policy could provide a framework for such a push.

The Indo-Arctic should have a focus broader than achieving the bilateral interests of individual countries. Climate change can be one primary focus of the Indo-Arctic construct. From Bangladesh and Myanmar in India's immediate east to Japan and South Korea in the Far East, invariably the entire coast is vulnerable to what happens in the Arctic. From rising seas to cyclones, the North Pole unites the South and the East.

India should look at the Arctic from the following perspectives: scientific research, climate change, the 'Look East' policy and a larger construct with Russia.

Politically, Indo-Arctic should be an extension of India's 'Act East'. New Delhi's 'Look East' during the previous decades was limited to South-East Asia. In this decade, India expanded it to East Asia and Australia. The Arctic should be the natural extension during the next decade.

The Indo-Arctic will also strategically balance the US and China. India is working with the US in developing the Indo-Pacific region. Many smaller countries are apprehensive or less enthusiastic about the Indo-Pacific in South and South-East Asia. Russia has also not been enthusiastic about India's engagement with the Indo-Pacific.

An Indo-Arctic construct would complement India's Indo-Pacific push, and enable New Delhi to work with Moscow closely.

Scientifically, India will have to expand its footprints in the Arctic. What is in it for India in the Arctic should be an irrelevant question. If the leadership in the 1940s would have asked this on India's ambitions in space and in the 1980s about the Antarctic, India would not have become a global power in these two fields. India has established a National Centre for Polar and Ocean Research (NCPOR); but we still have to go a long way in actively taking part in the Arctic activities — research and beyond. India will have to be a part of not only the Arctic Council, but take part in various international forums relating to the Arctic that are led by US, Canada, Norway and Russia.

The Arctic Forum, for example, could see a strong delegation from India to its annual meetings, with an aim to host the Forum in the country in the near future. Outside Polar research, India should also make a grand plan on other areas. Polar shipping, trade and maritime routes could also bring the countries from Chennai to Vladivostok, and beyond across the Barents and Norwegian Seas to Tromso in Norway and Reykjavik in Iceland. For East Asian countries, especially South Korea and Japan, the Polar trade route would be economically beneficial a viable to reach northern Europe via the Arctic.

The Chennai-Vladivostok route is a beginning and a means. An Indo-Arctic policy should be New Delhi's endgame. India and Russia should begin work with other countries in South, South-East and East Asia to in order to move forward.

“India's Arctic Engagement: Shifting from Scientific to Strategic Interests?”

Rashmi Ramesh, South Asian Voices, 25 September 2018 [124]

<https://southasianvoices.org/indias-arctic-engagement-shifting-from-scientific-to-strategic-interests/>

Overview:

Recently, India's Ministry of Earth Sciences approved the renaming of its “National Centre for Antarctic and Ocean Research” to the “National Centre for Polar and Ocean Research.” While India has a three-decade history of conducting research in Antarctica, this recent move visibly demonstrates its shifting focus towards the North Pole. Thus far, the impact of climate change on Indian agriculture seems to have been the impetus behind India's interest in Arctic affairs. There are indications, however, that New Delhi's engagement with the Arctic will extend beyond the spectrum of scientific research to secure energy resources, and it may also be advantageous to seek a strategic claim over this region.

Current & Relevant Information:

History of India's Arctic Activities

In the past several decades, climate change has taken a significant toll on the Arctic, most clearly visible in the trend of diminishing sea ice. The maximum extents of Arctic sea ice cover recorded in 2015, 2016, 2017, and 2018 have been the four

lowest on record. This phenomenon in the High North is not limited to the Arctic's littoral countries (Canada, Norway, Russia, Denmark, Iceland, Sweden, Finland, and the United States), but is affecting global sea levels as well as the climate of non-Arctic states. Due to these global effects, non-Arctic European and Asian countries are increasing their presence and participation in Arctic affairs.

India's engagement with the Arctic region dates back to 1923, when the British colonial government of India signed the Svalbard Treaty of 1920, which granted Norway sovereignty over the Arctic Archipelago of Svalbard. Despite this, India's focus has mostly been limited to scientific studies at the South Pole, beginning in 1981. However, worries about the impact that a warming Arctic may have on the monsoon—the backbone of India's agricultural sector, which according to 2016 figures contributes 23 percent to India's GDP and employs 59 percent of India's workforce—has recently pushed the country to expand the scope of its polar research beyond Antarctica to focus increasingly on the Arctic. In 2008, India's first Arctic research station, Himadri, was established on Svalbard. During this time, India has limited itself to scientific research in the Arctic, including glaciological, biological, atmospheric, and marine studies.

India's Shifting View of the Arctic's Importance

Until recently, the Indian government had made little effort to expand its focus to include the Arctic's energy resources. However, in March this year, India received its first liquefied natural gas (LNG) shipment from the Russian Arctic, supplied by independent Russian producer Novatek's plant at Yamal. Then in June, India received its first LNG shipment as part of the Russian state-backed energy company Gazprom's twenty-year import deal with the Gas Authority of India, Ltd, also from a plant in Yamal in the Arctic. These shipments signal an important development: that India may be looking to move beyond scientific exploration in the Arctic to leverage the region's energy resources. This natural gas shipment may be India's way to meet its renewable energy commitments, made after the 2015 United Nations Climate Change Conference in Paris. But being the third-largest oil importer and consumer in the world, India is perhaps also eyeing hydrocarbons, which are essential to sustain the Indian economy. Apart from a tangible push factor like energy resources, India's presence in the Arctic also has a normative dimension. As an emerging power, it desires to make its presence felt in all regions of the world and to be a part of agenda setting. Thus, another speculated motivation for India's move on the Arctic is India's great power competition with China. The latter's strategy-laden economic approach in the Arctic seems to have altered the way India perceives the geopolitics of the High North.

On the governance front, India acquired the status of an "observer" in the Arctic Council in 2013 along with China, Japan, South Korea and Singapore. India seems to have sought this status primarily in order to facilitate more research and contribute its scientific expertise to the work of the Council, but likely also to demonstrate itself

as a potential great power that has agenda-setting capabilities in that region and throughout the world. As an observer, although it is devoid of any decision-making power, India is eligible to participate in meetings of the Council's Working Groups, which tackle issues ranging from disaster preparedness to biodiversity conservation.

What Can India do Further?

Inarguably, climate change and its potentially-disastrous effects on the monsoon have compelled India to shift its focus to the Arctic. However, there are differing perspectives on India's view of the Arctic, of which the "global commons theory" and the "exclusivity" debate occupy dominant positions. Some scholars see the Arctic as a global commons, similar to its southern counterpart Antarctica, and argue that India should pursue this idea in its Arctic policy. They reject the "exclusiveness" of the region and claim that New Delhi's acceptance of observer status in the Arctic Council implies that it has automatically sidelined the global commons idea. On the contrary, other scholars who accept the "exclusiveness" of the region opine that India need not endorse the global commons theory. Instead, they contend that India should diplomatically engage with the eight Arctic countries to push its interests and participate actively in the Council, thereby making its presence felt. By being a part of the Council, India accepts the primary role that the eight states hold in Arctic affairs, but it also has a platform to engage with the littoral countries to further its own interests.

In order to remain relevant in the Arctic game, it would behoove India to begin with releasing a white paper clearly stating its objectives in the region. Additionally, India's Ministry of External Affairs could set up a desk focusing on Arctic affairs, while facilitating university-level research on the subject. By using its soft power capabilities, India can also collaborate on research efforts with the indigenous communities of the region: for instance, recent initiatives have brought indigenous communities of the Arctic and Himalayas together to brainstorm strategies to combat climate change.

While those outlined above are achievable in the short term, New Delhi can focus on medium-term goals, like establishing another research station apart from Himadri, by collaborating with Canada and Denmark (due to their proximity to the North Pole) or Finland (given the interest of both the countries to take cooperation forward on the scientific front). This idea is very much in tandem with India's priority for scientific exploration. India could also consider proposing naval exercises with the Arctic states to strengthen relations.

In the long-term, on the geopolitical front, India can plan a counterbalancing strategy to China's Polar Silk Road by linking the railways and waterways of Russia, Nordic, and Baltic countries with the International North-South Transport Corridor; this would be the quickest and most direct way for India to reach the Arctic and leverage these routes for trade. For this, the INSTC has to stretch beyond the present culminating

point, St. Petersburg, and expand northwards and westwards to integrate with the European rail networks such as the North Sea-Baltic Trans-European Transport (TEN-T) Core Network Corridor, the Scandinavian-Mediterranean TEN-T Core Network Corridor, and the Baltic-Adriatic TEN-T Core Network Corridor. However, this will be possible and viable only if India seriously considers trading with the Arctic littoral countries. Therefore, to stay relevant in the emerging great game in the High North, India should take advantage of the observer status it has earned in the Arctic Council and consider investing more in the Arctic.

5) Italy:

“Italy and the Arctic,” Government of Italy: Ministry of Foreign Affairs and International Cooperation, 2020 [125]

https://www.esteri.it/mae/en/politica_estera/aree_geografiche/europa/artico

Current & Relevant Information:

Italy boasts an ultra-centennial history in the Arctic, which dates back at least to the expedition of the Duca degli Abruzzi in 1899 and to Umberto Nobile's missions of 1926 and 1928. During those expeditions, the support of the Regia Marina [Royal Navy] was significant both for the hydrographic activities and for the rescue operations. Italy's bonds with the Arctic continued over time with the activities carried out by explorers and scientists, citing a couple for all: Silvio Zavatti, anthropologist, who devoted his life to the studies of the Northern peoples, with a special focus on the Inuit communities and Guido Monzino, who contributed by reaching the North Pole in 1971 on sleighs pulled by dogs. The beginning of research activities by the University of Rome at The Thule High Arctic Atmospheric Observatory in Greenland in 1990, alongside the opening in 1997 of the Dirigibile Italia Arctic Station run by the Italian National Research Council (CNR) in the Svalbard Islands, marks the onset of the Italian presence in the Arctic as it now stands. Alongside the CNR, also other Italian research institutes - such as the Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA), the National Institute of Geophysics and Volcanology (INGV), the National Institute of Oceanography and Experimental Geophysics (OGS), have been operating in the Arctic, thus outlining a consolidated high-level scientific presence.

Such highly appreciated contributions to research in the Arctic, together with the economic interests of some major enterprises, represent the basis for the request made to the Arctic Council to obtain the status of Observer State, which was accepted in 2013.

To prepare such request, the Farnesina set up the Arctic Task Force (Tavolo Artico), a forum coordinating the actions of Ministries, agencies and enterprises, which meets on a regular basis and represents an important moment of reflection and interaction among Italian institutional and industrial stakeholders interested in the Arctic. The Arctic Task Force drafted a policy document in 2015-2016, entitled

“Towards an Italian Strategy for the Arctic – national guidelines”, which summarizes the inception, evolution and objectives of the Italian presence in the Arctic, highlighting the political commitment, the environmental and human dimension, the scientific activities and the economic cooperation. In 2016- 2017, the Foreign Affairs Committee of the Italian Chamber of Deputies carried out a survey, organizing auditions with Italian and EU institutional representatives, members of the scientific community and enterprises.

The conclusion of the aforesaid survey highlighted that “Italy’s participation in political cooperation initiatives in the Arctic represents a strategic priority in the light of the changes under way in the region, caused by climate change and the interactions between major international players in the area”. Moreover, the document underlined that “within the framework of the commitment to enhance the resources allocated to research calls for an urgent acknowledgement by our Country of the specificity of research in the Arctic, Italy intends to pinpoint the appropriate institutional and financial tools needed to strengthen international scientific cooperation and to highlight the Italian points of excellence in that field”. The same Foreign Affairs Committee promoted the constitution of a Scientific Committee for the Arctic (CSA) and the creation of the Arctic Research Program in the 2018 budget law for 2018-2020, allocating dedicated funds thereto.

Italy’s approach to Arctic issues complies with several basic principles, in line with the commitments relevant to its role as Observer State in the Arctic Council: respecting the sovereignty of Arctic States and the international law applicable to the Arctic, primarily enforcing the Law of the Sea; promoting the protection of local and indigenous peoples’ traditions and cultures and of international, multilateral and bilateral cooperation on Arctic issues; contributing to the economic development of the Arctic with the involvement of the business community, in compliance with topmost environmental protection standards and sustainable development principles. Hence, a contact person has been assigned to each of the six permanent working groups of the Arctic Council as well as to some of the expert groups and the Task Forces.

The May 2018 Report elaborated for the regular review of the status of Observer in the Arctic Council underlined the value of Italy’s contribution through the concerted action of Italian ministries (MATTM [Environment], MiSE [Economic Development], MIUR [Education], and Defense through the Navy’s Hydrographic Institute), research institutions (especially CNR, ENEA, INGV e OGS), universities and educational centers, alongside major Italian enterprises with interests in the Arctic. In addition, Italy provides an active contribution in other international fora in institutional contexts such as the Arctic Science Ministerial Meeting, which second meeting was held in Berlin in October 2018, as well as in conferences, as the Arctic Circle.

Scientific research represents the prime driver of Italy’s presence in the Arctic, which stemmed from the establishment of a ‘polar community’ created in the '90s with the

National Research Program in Antarctica (PNRA). Scientific activities were therefore performed in the above-mentioned 'Dirigibile Italia' Base in the Svalbard Islands (CNR) as well as at the THAAO international observatory in Thule (Greenland) (a project run by Rome's Sapienza University, ENEA and INGV). Many more research projects have been carried out since then, and others are still in progress, often as part of international collaborations and European Union programs. The OGS polar ship 'Explora' conducted five oceanographic campaigns in the Arctic, in addition to the eleven in Antarctica. Also, the new "Laura Bassi" polar ship will hopefully conduct campaigns in the Arctic other than in Antarctica. Among the recent initiatives that are worthy of mention, also because of their concerted nature involving the participation of all major research agencies, there are the marine geophysics campaigns by the Hydrographic Institute on behalf of the Italian Navy which started from 2017 within the framework of the multiannual program known as "High North".

The approval of the Research Program in the Arctic for the three years period 2018-2020, made in compliance with the above-mentioned provision included in the 2018 Budget Law, seeks to provide further support to Italian research centers and outline a consistent framework for a stronger engagement of the Italian scientific community.

Major Italian firms work in the Arctic and fully participate in the Arctic Task Force to ensure synergy among the diverse Italian stakeholders. These operate in the Arctic with cutting-edge technology to assure utmost respect for a particularly delicate environment. They also seek to involve local and indigenous communities in their activities, aware of the fact that such peoples have a legacy of notions linked to their territory and traditions. Among the stakeholders involved in these actions are ENI, which in the Goliat off-shore platform in the Barents Sea (Norway) and in the North Slope in Alaska, applies innovative operational standards and technology solutions, compliant with the extreme operational conditions, utilizing innovative oil-spill prevention systems with the active participation of the indigenous communities; e-Geos, which deals with the data of the Cosmo-Sky Med satellite system and also has an agreement with the Finnish Meteorological Institute; Fincantieri, the firm that built the new Norwegian polar research ship. In March 2019, CNR and ENI signed an MoU to set up four research centers in southern Italy specifically dedicated to young researchers, one of which is located in Lecce and focuses on the Arctic and climate change.

Finally, another important aspect is supporting the dissemination of Arctic-related themes in Italy. An international conference on Climate Change in the Arctic was held in December 2014 at the Venice International University. In 2016, the Ministry of Foreign Affairs and International Cooperation hosted an international conference entitled "The Arctic Council and the Italian Perspective – The 20th Anniversary of the Ottawa Declaration". The Forum on "New Arctic, Old Mediterranean – together for

an extraordinary destiny” was held in Genoa in November 2018 organized by the Milan Center for Food Law and Policy. In April 2019, Genoa has also hosted an exhibition entitled “The Italian Navy in the North Pole” organized by the Hydrographic Institute of the Italian Navy. The National Research Council has set up a travelling exhibition - “Artico – viaggio interattivo al Polo Nord” entirely devoted to the Arctic. The Ca’ Foscari University in Venice has launched a master's course in polar sciences in cooperation with partners such as CNR, INGV, the Bicocca University of Milan, the University of Pisa and the Insubria University. The Italian Society for International Organizations (SIOI) holds a Master's course on “Sustainable development, resources geopolitics and arctic studies” since 2016. In 2018 and 2019, SIOI organized “Arctic Connection” an international symposium in partnership with the Bodø University (Norway) and the Embassy of the Kingdom of Norway in Rome. As for initiatives specifically targeted to youth, SIOI in 2017 organized an international simulation of the Arctic Council work sessions entitled “One Arctic” and in 2019 the Zero Hackathon “Ocean and Polar Connections” in cooperation with the Embassies of the USA and Norway and the Ministry of Education, University and Research. In September 2018, SIOI was the first Institute of a Mediterranean country to become a member of the UArctic (University of the Arctic) network.

“Interview with Arctic Council Observer: Italy,” Arctic Council, 2020 [126]
<https://arctic-council.org/en/news/interview-with-arctic-council-observer-italy/>

Overview:

Italy has had Observer status in the Arctic Council since 2013. As an Observer, Italy can contribute to the Arctic Council through meeting attendance, providing scientific expertise to Working Groups, project proposals and financial contribution (not to exceed financing from Arctic States, unless otherwise decided by the Arctic Council’s Senior Arctic Officials) and statements.

We spoke with Carmine Robustelli, Minister Plenipotentiary at Italy’s Ministry of Foreign Affairs and International Cooperation about Italy’s interest in the Arctic region, how it engages with the Arctic Council and current projects it is working on.

Current & Relevant Information:

What is Italy’s interest in the Arctic region?

Italy boasts an ultra-centennial history in the Arctic, which dates back at least to the expedition of the Duca degli Abruzzi in 1899 and to Umberto Nobile's missions of 1926 and 1928. It continued over time with the activities carried out by explorers and scientists. Scientific research continues to represent the prime driver of Italy’s presence in the Arctic, with many works in the ‘Dirigibile Italia’ Base in Svalbard, which opened in 1997, as well as at the THAAO international observatory in Thule, Greenland and in other frameworks, often as part of international collaborations and

European Union programs. In addition, major Italian firms work in the Arctic with cutting-edge technology to assure utmost respect for a particularly delicate environment, and involve local and Indigenous communities in their initiatives.

How do you work with the Arctic Council to tackle pressing issues in the Arctic?

We have appointed experts for all the Working Groups and for some past Task Forces and Expert Groups of the Arctic Council, such as the current Expert Group on Black Carbon and Methane (EGBCM). In line with our commitments as an accredited Observer State, our approach to Arctic issues complies with several basic principles: respecting the sovereignty of Arctic States; promoting the local and Indigenous peoples' traditions and cultures; contributing to the economic development of the Arctic, in compliance with topmost environmental protection standards and sustainable development principles. Among the Italian concrete contributions, one year ago, Italy organized a meeting of the Arctic Monitoring Assessment Program Arctic Council Working Group's Expert Group on Short Lived Climate Forcers in Bologna, in the National Research Council (CNR) premises.

What are you currently working on?

It is impossible to resume all the activities of the Italian scientific community, but I would like to mention a recent significant development – the approval of the Arctic Research Program (PRA) 2018-2020. It is a new financial tool that allocates dedicated funds in order to provide further support to Italian research in the Arctic. The objectives and topics of PRA are: monitoring Arctic ecosystem changes; quantitative understanding of the causes of Arctic amplification; paleoclimate reconstructions; assessment of the changes of Arctic seas atmospheric and water column; analysis of the effects of climate change on wellness of Arctic inhabitants and preservation of Indigenous cultures. The actions include, inter alia, open calls for research projects, implementation of a data system and a post degree course on polar issues.

Furthermore, it is worthy of mention the multiannual program called “High North”, a multiannual marine geophysics campaign organized by the Hydrographic Institute of the Italian Navy, which started from 2017 with the participation of all major Italian research agencies.

Who are the key actors in Italy engaging in Arctic Council work?

Alongside with the Ministry of Environment and the Hydrographic Institute of the Italian Navy, all the main Italian research agencies contribute to the Italian participation in the Arctic Council subsidiary bodies: the National Research Council (CNR), the National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA), the National Institute of Geophysics and

Volcanology (INGV), the National Institute of Oceanography and Experimental Geophysics (OGS).

Since the preparation of Italy's application as Observer to the Arctic Council, the Ministry of Foreign Affairs set up the Arctic Task Force (called "Tavolo Artico", or Arctic Table), a coordinating forum with the participation of Ministries (Research, Environment, Economic Development, Defense), research agencies, Universities and companies. The "Tavolo Artico" continues to meet on a regular basis and represents an important moment of reflection and interaction among Italian stakeholders interested in the Arctic. More recently, an Arctic Scientific Committee has been established, with the main task to prepare and monitor the Arctic Scientific Program.

"Little Italy: Seeking a Niche in International Arctic Relations," Rachael Lorna Johnstone & Federica Scarpa, Icelandic E-Journal of Nordic and Mediterranean Studies, 23 March 2016 [127] https://nome.unak.is/wordpress/volume-11-no-1-2016/01_double-blind-peer-reviewed-article/little-italy-seeking-niche-international-arctic-relations/

Abstract:

In December 2015, The Italian Ministry for Foreign Affairs and International Cooperation published *Verso una strategia italiana per l'artico* (Towards an Italian Strategy for the Arctic). In this article, the authors explain and evaluate the document in light of Italy's connections to and interests in the Arctic, the Kiruna rules for observers at the Arctic Council, and the Arctic policies of other observers. They conclude that the intended audience for *Verso una strategia* is the Arctic States. Therefore, the document emphasizes relevant Italian scientific efforts and promotes Italy's oil and gas industry while downplaying the rights of indigenous peoples and avoiding issues of controversy. Publication of the document as a work in progress indicates the ministry's willingness to listen to feedback and adapt its approaches as it develops a more comprehensive and nuanced strategy.

Current & Relevant Information:

Analysis

Although it carries the subtitle 'National Guidelines', the principal intended audience for *Verso una strategia* appears not to be domestic but international, in particular, the Arctic States. It seeks to reassure the latter that Italy's intentions in the North are honorable, that it does not intend to interfere where it is not wanted but nevertheless has a positive contribution to make. (By contrast, a policy document aimed at a domestic audience should be more focused on informing Italian institutions about the Arctic, rather than informing the Arctic about Italy.) *Verso una strategia* follows the model of European observer policy documents and statements on the Arctic and reflects the expectations of the Arctic Council regarding observers, now codified in

the Arctic Council Rules of Procedure that are likely to become the benchmark against which observers will be periodically assessed. It emphasizes Italy's historic ties and research contributions to justify its Arctic presence; it makes the mandatory recognition of State sovereignty and expressions of support for indigenous peoples; it respects the Arctic Council as the principal forum on many issues but indicates the need for global approaches, e.g., on shipping and climate change; and it identifies Italy's commercial interests in the Arctic. Italy does not have anything particularly original to offer and does not try to set itself apart from the other observers.

Italy has integrated the EU Arctic approach (in contrast, for example, to a much more unilateralist British policy). This can be positively interpreted as Italian commitment to multilateral engagement and a strive for research efficiency; or it might be more critically viewed as evidence that Italy does not really have much of an Arctic strategy of its own.

European States' focus on their historical Arctic connections is undoubtedly intended to set them apart from the Asian interlopers – a kind of State-level snobbery of 'old money' versus 'new money'. Yet one might ask why historical connections are still seen as so important. The question for Arctic relations today is what a State (or other non-Arctic actor) can offer now, not what it did a century ago. Indeed, with all this focus on history, it is the 'old' European States that must take responsibility for climate change and yet in climate mitigation negotiations, those same States insist that only current and future emissions are relevant considerations. Further, the Kiruna observer rules require that observers 'have demonstrated their Arctic interests and expertise relevant to the work of the Arctic Council'. This does not indicate much concern with historic exploration which in any case is reminiscent of colonial expansion and the view of the Arctic as terra nullius, awaiting appropriation by 'civilized' European powers.

Multiple references are made to indigenous peoples in *Verso una strategia* but these are all vague and weak. Perhaps Italy shies away from taking a strong position that might alienate some Arctic States and considers indigenous governance a domestic affair of the Arctic States. It is wrong to do so: the international law on indigenous peoples is as binding and internationally relevant as the international environmental instruments that Italy happily cites. Both sets of norms bind Italy as well as the Arctic States whenever its conduct can impact on either the environment or on indigenous peoples. Italy's refusal to commit to more than 'information and involvement' of indigenous communities in its advertorial for Eni demonstrates either a complete lack of understanding of the state of the law on indigenous peoples today or unwillingness to uphold it.

Through the document, indigenous peoples are tied together with the environment as something to be protected, rather than subjects in their own right. For example, Italy will contribute to sustainable development 'that respects the ecosystems and the indigenous populations.' Such a statement neither recognizes that indigenous

peoples are agents of development (sometimes sustainable, sometimes not) nor that sustainable development must respect the rights and needs of all peoples, including future generations. While the lives of indigenous peoples are usually more closely connected to their environments than those of their non-indigenous neighbors, they are not simply curiosities to be preserved like an ancient sculpture. Italy's marginalization of the agency of indigenous peoples is further illustrated in its discussion of the Arctic Council. Italy describes its composition as consisting of member states, permanent participants, observers, task forces and working groups. (The task forces and working groups are in fact made up of representatives of the former three groups.) However, while Italy goes on to list each member State and observer by name, it does not offer the same consideration to the permanent participants' organizations who have a much greater standing and influence than observers in the Arctic Council system. They are: Aleut International Association, Arctic Athabaskan Council, Gwich'in Council International, Inuit Circumpolar Council, Russian Association of Indigenous Peoples of the North, and Saami Council.

Italy's concern with the environment and with climate change in particular is somewhat undermined by its focus on oil and gas and the hard sell of Eni. Yet the document omits other important industrial activities, not least the building of an ice-breaker in Riva Trigoso-Muggiano (Genova) for the Norwegian Institute of Marine Research: this project also illustrates a good bridge between industry and science. It is quite possible those working on the document were simply unaware of the project.

Verso una strategia makes an oblique reference to 'unregulated hunting and fishing' as one of the principal risks for 'local populations' (within its short section on indigenous peoples). The risk of illegal and unregulated fisheries is more likely to come from pelagic fleets based far from the Arctic whereas illegal hunting is more likely to be conducted by persons, not necessarily indigenous, already in the Arctic. Nevertheless, the much bigger threat to subsistence hunting by indigenous populations is climate change.

Otherwise, the paper avoids reference to the controversies surrounding harvesting of marine mammals. Italy was one of the strongest supporters of the EU seal product ban that has caused extensive friction between the EU, some Arctic States and the permanent participants. Italy formally supports the exemption in the trade ban for Inuit products that contribute to their subsistence but has been uncharacteristically vigilant about certification and enforcement. Italy also votes consistently against commercial whaling, an issue for Norway and Iceland. Italy has formally objected to Iceland's purported reservation to the Whaling Convention. The omission of these issues from *Verso una strategia* is almost certainly deliberate as Italy does not want to draw attention to areas of potential discord.

Reading the document, one gets a sense that it is built around a selection of unrelated Italian-Arctic connections and lacks an overarching theme or themes. There is a whiff of 'Arctic policy bingo': a collection of buzzwords such as

'sustainable development', 'climate change,' 'environmental protection,' 'indigenous peoples,' 'Arctic council,' 'sovereignty,' and 'science' but none of these is really developed and some are poorly presented (e.g., on indigenous peoples and sustainable development). Further, its attempts to compare the Italian mountains with Arctic settlements to demonstrate some common challenges is weak and suggests a desperation to find linkages that is not really necessary (when there are sufficient genuine connections, not all of which make the document). The Ministry of Foreign Affairs could have benefited from greater consultation with other ministries (e.g., education, universities and research; environment, protection of land and sea; and economic development). Italy states an intention to reinstate its Tavolo Artico – loose network of Arctic experts from the ministry, the diplomatic corps and academia – and it will be instructive to see how the Tavolo Artico responds to *Verso una strategia*, if at all, and its influence on the next draft.

On the other hand, the ministry's decision to publish *Verso una strategia*, a work in progress, can be interpreted as evidence of a willingness to engage in constructive discussions about its Arctic relations, to listen to the views of other States, indigenous representatives, business stakeholders and experts near and far, and to develop Arctic policies in a responsive manner. The EU Commission has to some degree taken this approach though this might be a practical consequence of the complexity of the EU's internal workings and the number of institutions involved. Otherwise, States have developed Arctic policies and strategies in relative secrecy, publishing only a definitive version that may already be institutionally entrenched and inflexible. Publication of a draft displays a humility that is too often lacking in international relations; Italy's foreign ministry has set out a loose framework of priorities but is prepared to listen and adapt in light of international reactions.

“Towards an Italian Strategy for the Arctic National Guidelines,” Ministry of Foreign Affairs and International Cooperation, 2015 [128]

http://library.arcticportal.org/1906/1/towards_an_italian_strategy_for_the_arctic.pdf

Current & Relevant Information:

ITALY IN THE ARCTIC: THE POLITICAL DIMENSION

Italy was admitted to the Arctic Council as an Observer in May 2013. The Arctic Council ministerial meeting in Kiruna acknowledged the size and the importance of the Italian Arctic record. In science, Italy's contribution includes the creation of important observation platforms in Ny Ålesund like the Climate Change Tower and a number of other research activities, including its oceanographic cruises in the Arctic waters. In the business sphere, the Italian contribution includes investments by Eni. In addition to its extraction programs in Norway and Russia, the company is implementing some remarkable projects aimed at improving safety conditions of maritime transport (against oil spill), mitigating its environmental impact and taking

into account the role of indigenous. All this is happening against the backdrop of an ecosystem rapidly evolving as a result of global warming.

Italy views the Arctic Council, with its wide range of members (Member States, Permanent Participants, Observers, Task Forces, Working Groups ...), as the main debating arena for the region. It is a forum for discussion of the different features and issues of this multifaceted area and for the identification of all viable forms of cooperation. Twenty years after its establishment, the Arctic Council has acquired a broader dimension with respect to the initial idea of an inter-Arctic consultation forum. It is, indeed, also a vehicle of regional stability, whose increasing relevance is demonstrated not least by the growing number of its observer countries – including some European Union member States and Asian Countries.

Italy has embarked on a number of initiatives, on a national as well as on an international level, to ensure that its Arctic footprint, be it scientific or business-related, provides added value. A further aim is to demonstrate our country's commitment to the further, progressive integration of the international presence in the Arctic region. In the multilateral context, Italy takes part in the Senior Arctic Officials (SAO) meetings (a specialized diplomatic representative has been appointed to the Arctic Council to this end). We also take part in a number of Working Groups, through the SAO, through our Embassies or by means of experts selected by the National Research Council (CNR) or other Italian scientific agencies such as the National Agency for New Technologies, Energy and Sustainable Development (ENEA), the national Institute for Geophysics and Volcanology (INGV) and the National Institute of Oceanography and Experimental Geophysics (OGS).

ENVIRONMENTAL AND HUMAN DIMENSION

The Italian approach to Arctic issues is based on the selection of actions and key instruments to be developed in the relevant contexts. These include the promotion of “lessons learned” and the exchange and sharing of knowledge on specific aspects of environmental questions. They also encompass a keen awareness of the decisive role played by targeted actions and awareness raising among the main stakeholders in the relevant discussion fora: notably, international negotiations and political processes involving environmental issues. A major role is also played by activities aimed at securing suitable financing flows from EU and international sources. Such activities, if properly managed, will be instrumental in improving and strengthening the bilateral ties already existing with Arctic States and in fostering new collaboration opportunities. They will enable positive returns for the cooperating parties and for the Arctic as a whole, with beneficial repercussions on a global level.

Cooperation and exchange of experiences with Arctic States can (and must) represent also a development opportunity for Italy. Specific subjects of national interest include sustainable urban environment, which is one of the Italian Ministry of Environment's priorities. To this end, a major role is to be played by scientific and

technological research, a sector where Italy can count on various high-level actors, notably in the context of the Arctic Council working groups.

Actions and key instruments will concentrate on environmental issues which appear as crucial in the Arctic environment, such as: biodiversity protection, air pollution prevention, climate change reversal, protection of sea waters and integrated management of coastal zones, including attention to water quality, natural resources management as well as management of environmental risk arising from maritime transport, tourism, mining and port operations.

HUMAN DIMENSION

- Urban Areas

In view of the distinctive features of Arctic areas, including their vulnerability, the role of urban development is of remarkable importance. Some Arctic States are pioneering in this field: for instance, Sweden, with its holistic approach to sustainable urban development. In other words, urban sustainable design should not be understood only as architectural and urban design, but also as a careful planning of interactions among all relevant subsystems (waste cycle management, energy, heating etc.) that allow a city to be environmentally effective and sustainable, thus improving the quality of life. This holistic approach to sustainability in urban areas has become an integral part of the “smart city” concept.

Urban sustainable development is an Italian national priority. It will be pursued in the framework of the relevant international instruments, notably the Transport, Health and Environment Pan-European Program and the HABITAT III negotiations.

- Indigenous peoples

Being both vulnerable and marginal, many areas in the Arctic constitute highly fragile realities. Indigenous peoples are confronted with ecosystem alteration, loss of biodiversity and the side effects of unregulated hunting and fishing. Anyway, social issues linked to connectivity (or the lack of) should not be under-estimated, as they jeopardize socialization, career development and business opportunities – similarly to what happens in some Alpine areas. In this respect, work conducted under the Alpine Convention is worthy of note. It is intended to improve access to general services for Alpine settlements affected by a significant degree of isolation, by fostering organizational innovation and underscoring the need for general services accessible to the population as a whole.

THE SCIENTIFIC DIMENSION

Against the backdrop of growing concern about the threats posed by climate change, the scientific community is attempting to keep pace with the complexity of the processes, interactions and feedbacks that underlie such phenomena. A need arises to deepen the knowledge of the Earth system, so that reliable and sustainable

solutions can be identified. In particular, more Arctic observation is urgently needed, whether through coordinated monitoring to improve the forecasting quality of the meteorological and climatic model and our understanding of the Arctic system and its role in the Earth system, or through experimental tests and oceanographic expeditions.

ECONOMIC DIMENSION

A number of studies support the notion that the Arctic hosts significant, unexplored amounts of mineral and energy resources (e.g., hydrocarbons and rare earth elements). Their possible exploitation is a complex endeavor and, in many areas, still an impossible one, due to technological, infrastructural and financial constraints. The on-going thinning of ice sheet could make access to such resources easier than it is at the moment. In view of the delicate environmental conditions in the Arctic, however, ensuring the highest operation safety and ecosystem protection standards remains a necessary condition that implies sizable investments and a wide use of cutting-edge technology.

Italy has a significant track record in offshore oil & gas research and exploitation. At the same time, one of its distinctive features is the value of its cultural and environmental heritage, considered at the global level to be truly unique. Therefore, Italian institutions have a keen awareness of the importance of the environmental compatibility of extraction activities. They have developed notable expertise that ensures safety performance levels that are among the highest worldwide. The Italian extraction industry, in turn, has been demonstrating its technical quality since 1959, when the first offshore oil platform in European waters was installed in Italy. Italian institutions can also make their competences available to the Arctic States, by cooperating at the level of Arctic Council working groups, with a view to tackling the problems arising from the increase of industrial and anthropic activities in the Arctic.

CONCLUSION

Italy is about to reach the milestone of a century of scientific presence in the Arctic. Our footprint has been consolidating over time, thanks to the size and quality of the activities conducted by scientific institutions like CNR, ENEA, INGV and OGS, together with many Universities and other research centers.

Accordingly, Italy is set to get increasingly involved in all avenues of Arctic cooperation, be it on a multilateral level (in the Arctic Council and in other relevant fora) or bilaterally, with each of the Arctic States.

At home, the Government will keep on supporting the national research centers currently engaged in the Arctic; moreover, it will continue to promote a growing awareness of Arctic-related themes by the civil society, remaining fully available to collaborate with citizens and other actors who may be interested to know about the Arctic.

Actions by the Government will of course be fully in line with the principles and goals of the European Union environmental policy, as well as with all relevant international obligations. In particular, to those pertaining to sustainable development – that is, the compatibility and the synergetic relationship between economic growth, the protection of the environment and the specific needs of the indigenous peoples.

6) Japan:

“What is Japan’s Arctic Interest?” Andrew Chater, The Polar Connection: Home of Polar Research and Policy Initiative, 6 December 2016 [129]

<http://polarconnection.org/japan-arctic-interest/>

Overview:

Japan’s interest in the Arctic region is apparent – the reasons behind this interest, less so. It is an observer in the Arctic Council and, thus, contributes to Arctic governance. Previously, I have written about China’s interest in the Arctic, which relates to economic gains and environmental worries. During February 2016 in Moscow, Japan’s special ambassador in charge of Arctic affairs Kazuko Shiraishi said Japan’s interest in the Arctic lies in “research, the Northern Sea Route, and the Yamal liquefied natural gas project.” Like China, Japan’s Arctic concerns arise from an uneasy balance of environmental concerns and economic aspirations.

Current & Relevant Information:

Environment

What does Shiraishi mean when she speaks of Japan’s Arctic research? Japan is home to the National Institute of Polar Research, an environmental initiative funded by several universities. It operates the Japanese Arctic Station at Ny-Ålesund in Svalbard, Norway. The institute completes research on evolution, ecosystems, climate monitoring and atmospheric conditions, among many other areas. The research station monitors Arctic pollution and studies environmental protection. Clearly, Japan, as a contributor to science in a broad sense, seeks to contribute to science in the Arctic region.

Much of Japan’s Arctic research centers on climate change, which is a major issue for Japan and every country. Climate change threatens to cost the Japanese economy \$176 billion per year by 2100. It will reduce crop yields across the board and 1.3 million citizens will be at risk of flooding. The Japanese government has pledged to cut greenhouse gas emissions more than 25 percent compared to 2005 levels in the next 15 years, though many experts call for even greater action. Japan is also a world leader in the development of green technology, particularly hybrid and electric cars. Climate change emanating from the Arctic is a major issue for Japanese leadership.

The government of Japan specifically mentions that Arctic climate change, as well as sustainable development, is a profound national issue in a policy brief given to PRPI directors by Kazuko Shiraishi at the 2016 Arctic Circle Assembly. It also notes scientific co-operation, in that, “For more than half a century since the 1950s, Japan has carried out observations of and research on the Arctic.” It promises the establishment of new scientific research by Japan, as well as contributions to the Arctic Council.

Economics

Climate change in the Arctic also creates economic opportunity the Japanese government is keen to exploit. The Yamal project is a new Russian gas plant under construction on the Yamal Peninsula, in the Arctic region. It is owned by Russia, French and Chinese corporations. The project will cost more than \$27 billion USD and will be responsible for more than 16.5 million tons of natural gas per year. Japan comes into the picture in that a Japanese construction company is building the project. After Western sanctions in 2014, the project fell behind schedule. Japan’s Bank for International Co-operation came to the rescue by agreeing to contribute \$400 million USD. It also agreed in principle to finance a second Russia natural gas development, as well.

Why is Japan so interested in this project? Japan is the largest importer of liquefied natural gas in the world. The investment helps ensure Japan has access to natural gas, from a source close to home. A major way to deliver the gas to Japan is via the Northern Sea Route, from Yamal and beyond. The Northern Sea Route is roughly two thirds of the distance between East Asia and Europe versus the Southern Sea Route.

These facts are not to say that the Arctic economic future is without risks. The previously mentioned policy brief obtained by PRPI says, “The Arctic Sea Route is not ready yet for safe and reliable use” and “development in this area of extreme cold and sea ice is with difficulties, requiring advanced development technology.” There are difficulties, but there is a potential for increased economic activity in the Arctic region.

Participation in Arctic Council

Japan has attended Arctic Council meetings for nearly a decade and has been an accredited observer since 2013. Its Council activity is low-key. It rarely provides comments in Council meetings and does not currently sponsor any Council projects. However, it can contribute to working group activities, access the wealth of the Council’s research and participate in special meetings for Council observers. Participation in the Council helps build international trust and status as a country able to contribute to Arctic research, environmental protection and economic activity.

Japan possesses northern territory and is a member of the Northern Forum via the northern Hokkaido prefecture. The Northern Forum is the international institution consisting of sub-national Arctic governments, carrying out research and projects related to environmental protection and human security. In past years, the Northern Forum has been a reasonably ineffective institution, although that might change in the future.

Conclusion

Japan's Arctic interest is similar to China and other non-Arctic countries – the region contains economic wealth worth exploiting, as well as keys to deal with global climate change. Japan's Arctic special ambassador in charge of Arctic affairs Kazuko Shiraishi has confirmed this interest. These goals are often at odds and it is unclear how to balance tensions.

“Japan's Future Priority Areas of Arctic Policy,” The Nippon Foundation National Graduate Institute for Policy Studies Ocean Policy Research Institute of the Sasakawa Peace Foundation, November 2017 [130]

https://www.spf.org/en/opri_media/docs/%E2%98%85WEB%E5%85%AC%E9%96%8B%E7%89%88%EF%BC%88%E3%83%A1%E3%83%A2%E7%84%A1%E3%81%97%EF%BC%89_Japan%E2%80%99s%20Future%20Priority%20Areas%20of%20Arctic%20Policy.pdf

Overview:

Japan is not unaffected by the impacts of such environmental changes in the Arctic. Thus, in order to consider the ways Japan could tackle the "Arctic Issue," in 2016 The Nippon Foundation, the National Graduate Institute for Policy Studies (GRIPS), and the Ocean Policy Research Institute of the Sasakawa Peace Foundation (OPRI-SPF) launched the "Study Group for the Future of the Arctic."

In this study group, approximately 20 core members from a variety of sectors come together for discussions by industry leaders and distinguished Arctic researchers from the natural and social sciences, with 60 observers including representatives from relevant national government ministries and agencies, local governments, as well as Members of Parliament.

Current & Relevant Information:

Introduction

The Importance of the Arctic for Japan:

The Arctic and its adjacent regions are highly sensitive to climate change, and have been warming at more than twice the rate of the global average. Over the past 35 years, the extent of Arctic sea ice in the summer has declined by approximately two-thirds. It is projected that this trend will continue through to at least mid-century. If

increases in greenhouse gas concentrations continue at current rates, the Arctic Ocean could be largely free of sea ice in summer as early as the late 2030s.

The rapid environmental changes underway in the Arctic present the international community, both Arctic and non-Arctic states, with a range of opportunities and challenges. The decline in sea ice is making use of the Arctic Sea Route a reality and is opening up new opportunities, including the development of resources and tourism in the Arctic Ocean. At the same time, warming of the Arctic region is creating new challenges, such as the freshening and warming of the Arctic Ocean associated with the melting of sea ice, the progressing of ocean acidification and its impact on fragile Arctic ecosystems, sea-level rise due to the melting of land-based ice, climate change and changes in the hydrological cycle both in the Arctic and on a global scale, as well as potential changes in the security environment in the Arctic.

These environmental changes in the Arctic region are not completely unrelated to Japan. While Japan is not an Arctic state, but a “maritime state” surrounded by the sea, it is easily affected by climate change in the Arctic region through oceanic and atmospheric circulation. On the other hand, being geographically located closest to the Arctic Ocean in the Asian region, Japan is in a position to enjoy many opportunities in the economic and commercial sectors, such as the utilization of the Arctic Sea Route.

Japan was granted observer status to the Arctic Council (AC) in May 2013. Therefore, it is necessary to bear in mind that it needs to make further international contributions for addressing issues related to the Arctic in a responsible manner. For more than half a century, since the 1950s, Japan has carried out observations of and research on environmental change in the Arctic. Given its long-term accumulation of scientific knowledge and observation in the Arctic, Japan is expected to further contribute to the sustainable use of the Arctic, including active engagement in decision- and rule-making on the Arctic. It is also important for Japan to develop bilateral and multilateral dialogue and cooperation with interested states, including both Arctic and non-Arctic states.

The Necessity of Incorporating Policies on the Arctic into the Basic Plan on Ocean Policy:

The Basic Plan on Ocean Policy adopted by the Japanese Cabinet in April 2013 outlines measures responding to changes in the Arctic Ocean as focus areas to be pursued in a comprehensive and strategic manner. Nevertheless, in the current Basic Plan on Ocean Policy, the policies and measures on the Arctic are regarded as no more than one element of the “policies and measures concerning the oceans,” such as climate change, ocean observation, marine science and technology, marine industries, and marine resources. Given current social and economic trends and interest in the Arctic, both domestically and internationally, such as approval of Japan’s application for observer status in the Arctic Council of May 2013, formulation

of Japan's Arctic Policy of October 2015, recognition of the positive contributions of Observers to the work of the Arctic Council, as well as encouraging further efforts to strengthen relationships with Observers in the Fairbanks Declaration of May 2017, policy elements regarding the Arctic in the ocean policy are more important than ever. Therefore, while there are broadly common elements between Arctic policy and ocean policy, policies on "the Arctic" should be treated as an independent section in the Third Revised Basic Plan on Ocean Policy in order to make the content of Arctic policy more concrete and effective.

Furthermore, since Arctic policy covers a wide range of areas such as diplomacy, security, the environment, maritime shipping, resources, information and communications, and science and technology, it should be addressed in a cross-sectoral and multidisciplinary manner. Nevertheless, Arctic policy in Japan continues to be implemented based on the jurisdiction of each ministry and agency, and not necessarily strategically coordinated among ministries and agencies due to the compartmentalized government structure. Taking into account the cross-sectoral nature of Arctic issues, it is essential for Japan to establish a coordinating system that allows for implementation of integrated measures for addressing these issues, under the general coordination of the National Ocean Policy Secretariat of the Cabinet Office as the "control center," to coordinate relevant ministries and agencies from an "All Japan" perspective.

In addition, nearly two thirds of the Arctic region are covered by ocean waters, but, unlike Antarctica, there is no single comprehensive legal regime governing the Arctic region. Therefore, the law of the sea, especially the United Nations Convention on the Law of the Sea (UNCLOS), is the main legal regime governing the Arctic. In this context, it is appropriate that Arctic policy is recognized as part of the ocean policy.

Against this background, the Study Group for the Future of the Arctic has considered measures and policies on the Arctic that should be given consideration in the Third Revised Basic Plan on Ocean Policy (2018 to 2022), and recommends initiatives.

"Japan's role as an Asian observer state within and outside the Arctic Council's framework," Taisaku Ikeshima, *Polar Science*, 1 August 2016 [131]
<https://www.sciencedirect.com/science/article/pii/S1873965216300652>

Abstract:

After the recent publication of Japan's Arctic policy, the world is carefully considering the kind of role Japan will play in the future. As an economic power, Japan will certainly seek to pursue its national interest, particularly in the development of the Northern Sea Route (NSR) and in the offshore drilling of natural resources in the Arctic region. However, as an Asian observer state, Japan will hopefully play a role of a catalyst and watcher in the Arctic Council (AC) and monitor and report the process and conversation of the forum not only for its own benefit but also in the

interest of the international community. This aspect should be reflected in the implementation of the new Arctic policy of Japan in near future.

Current & Relevant Information:

Introduction

Japan published its Arctic policy for the first time on 16 October 2015 (Ministry of Foreign Affairs of Japan, 2015; Prime Minister of Japan and His Cabinet, 2015a, b). The policy recognizes the need to address some issues of importance and contains Japan's future prospects with respect to fields in which it will take initiative. In May 2013, the Arctic Council (AC) accepted Japan as an observer state (Arctic Council (AC), 2015b, c). It has taken more than two years for Japan to concretize its future plan for making a significant contribution in matters of importance to the AC, whose governance systems are 'flexible and capable of adapting to changing circumstance in a timely manner' (Young, 2009a, 2009b, 426).

In this regard, Japan has taken a great step forward in showing the world its commitment to Arctic affairs. However, at the same time, it is necessary to check whether the policy is a good way for Japan to pursue its national interest in a way that would benefit both the country and the rest of the world. This is mainly because it is maintained that observer states such as China, South Korea, and Japan 'see the role of permanent observers as an opportunity to promote national interests on what is seen as the pre-eminent arena for international Arctic politics' (Hoel, 2014, 63). Most notably, China has made its Arctic interests known both in a positive and negative way, regardless of its real intention (Jakobson, 2010; Ikeshima, 2013).

Because Japan, through its long-lasting scientific observation, has been a major contributor to Arctic affairs in terms of global interest, it needs the Arctic policy for itself and for others from a wider point of view. In this regard, the policy should be twofold. It should differentiate between what is possible and what is not possible for Japan. At the same time, it should make a distinction between what Japan should and should not do.

The policy has some limitations, mainly because Japan is neither an Arctic coastal state nor a significant stakeholder at this moment. These limitations include the structure and purpose of the AC as a 'high-level forum' for consultation (designated under the 1996 Ottawa Declaration), an observer status within the AC, and the role played by a non-Arctic state and an Asian state in the development of Arctic governance, for which the nature of the demand is, though, shifting (Young, 2009a).

The aim of this paper is twofold: first, to consider the role of Japan as a non-Arctic state in the light of the latest policy; and second, to critically fill the gap between the current policy and a desired one.

Concluding remarks

In order to conclude its Arctic strategy, Japan must fix and clarify its foreign policy goals regarding the Arctic. The international community expects Japan to be responsible for its conduct in the region as well as in the world in accordance with its own diplomatic capacity and intention. Active and continuous commitment in the AC will highlight its involvement in the dialogue. However, Japan needs to be indifferent and non-self-centered. As an AC watcher for the benefit of the rest of the world, Japan is expected to make the most of its expertise.

Ultimately, Japan's policy and approach will depend on the following conditions.

For its own national interest, Japan will gain profit from the use of the NSR and resource energy development in the region.

For the benefit of Asia (or a pan-Asian viewpoint), Japan will be expected to act as a mediator and a transfer and/or a catalytic agent to pass any merits on to Asia, and to play a role in establishing various types of relationships between Asia and the Arctic states.

For global interests, the AC will need to have a framework that will help it become more open and encompass worldwide issues as well as regional ones. Since globalization will accelerate the process of economic development and regional connection, the involvement of the international community and humankind as a whole will increase.

“Japan’s Arctic Policy,” The Headquarters for Ocean Policy, 16 October 2015

[132] http://www.research.kobe-u.ac.jp/gsics-pcrc/sympo/20160728/documents/Keynote/Japan_Arctic%20_Policy.PDF

Overview:

The first freighter to sail from Europe to Japan via the Arctic Sea Route arrived in 2012. In the same year, a Japanese research organization announced that sea-ice extent of the Arctic Ocean was the smallest in recorded history. In the context of rapid change in the Arctic environment, as typified by the shrinking amount of the Arctic Ocean sea ice, international interest over the Arctic has been increasing since the 1980s.

The Arctic environment is responding very sensitively to global warming, and Arctic Ocean sea-ice is decreasing at a pace exceeding scientific predictions. Over the past 35 years, the Arctic sea ice extent in the summer has declined by nearly two-thirds. If effective mitigation measures are not taken, and if global warming continues to accelerate at the maximum pace, a nearly ice-free Arctic Ocean in the summer by the mid-century is likely. Although the mechanisms of environmental change in the Arctic are still not sufficiently understood, the impact of global warming is amplified to a greater extent in the Arctic than in any other regions on the Earth.

There is a risk that rapid change in the Arctic environment will have a drastic and irreversible impact on the foundations of the lives of indigenous peoples and others who live in such harsh environment, and on the ecosystem under the vulnerable environment in the Arctic. Therefore, the international society needs to act in a responsible manner. There are also concerns that environmental changes in the Arctic will accelerate global warming, lead to global sea-level rise, increase the frequency of extreme weather events, and adversely affect ecosystems.

At the same time, the decreasing amount of sea ice has expanded the navigable area, enabling the opening of shipping lanes in the Arctic Ocean and other new economic uses. Amid increasing interest in economic activities in the Arctic, including the development of mineral and marine living resources and utilization of the Arctic Sea Route, discussions are underway at the Arctic Council (AC), the International Maritime Organization (IMO) and other forums regarding economic activities that can be carried out in a sustainable manner while preserving the vulnerable and low resilient Arctic environment as well as international rule-making. Some Arctic states, with a view toward securing their national interests and protecting their territories, have become active in the area of national defense. Moves toward expanding military presence may have an impact on the international security environment.

In this way, changes in the Arctic environment have political, economic, and social effects, not only in the Arctic but also globally. Resulting opportunities and issues are attracting the attention of the global community, both of Arctic and non-Arctic states.

Japan is called upon to recognize both the Arctic's latent possibilities and its vulnerability to environmental changes, and to play a leading role for sustainable development in the Arctic in the international community, with foresight and policy based on science and technology that Japan has advantage in order to achieve sustainable development.

Current & Relevant Information:

Background and Purpose of Basic Policy

On the basis of increased interest from the international community over the Arctic, the Basic Plan on Ocean Policy, adopted by the Japanese Cabinet in 2013, outlines the following as focus areas to be pursued strategically and comprehensively: (1) observation of and research on the Arctic from a global perspective; (2) international cooperation on the Arctic; and (3) examination of the feasibility of the Arctic Sea Route.

While basing on the philosophy of the Basic Plan on Ocean Policy, Japan's Arctic policy is intended to define policy for more specific measures. From the standpoint of "Proactive Contribution to Peace" based on the principle of international cooperation, the policy defines strategic initiatives in the fields of diplomacy, national security,

environment, transportation, resource development, information and communications, and science and technology, from a multidisciplinary perspective with contributions from industry, academia, and the government. It aims to set Japan as an important player that contributes to the international community through its action to Arctic issues.

Against this background, Japan will:

- Make full use of Japan’s strength in science and technology from a global viewpoint,
- Give full consideration to the Arctic environment and ecosystem, which is fragile, with a lower ability to recover,
- Ensure the rule of law, and promote international cooperation in a peaceful and orderly manner,
- Respect the right of indigenous peoples to continuity in their traditional economic and social foundations,
- Pay full attention to security developments in the Arctic,
- Aim for economic and social compatibility with climate and environmental changes, and
- Seek possible economic chances for the use of the Arctic Sea Route and for the development of resource by implementing the following initiatives.

7) South Korea:

“South Korea,” The Arctic Institute: Center for Circumpolar Security Studies, 2020 [133] <https://www.thearcticinstitute.org/countries/south-korea/>

Overview:

Former South Korean President Lee Myung-bak (2008-2013) played a formidable role in fostering the country’s interest and engagement in the Arctic. During his tenure, South Korea applied for observer status with the Arctic Council and attended Arctic Council ministerial meetings since 2008 as an ad hoc observer. The country engaged in other international scientific and diplomatic endeavors such as participating in the International Arctic Scientific Committee and regional conferences including Arctic Frontiers. Former President Lee Myung-bak also actively engaged in bilateral diplomacy with Arctic nations. In October 2010, for example, South Korea signed an agreement with Russia on maritime transport and agreed to construct a gas pipeline.

Current & Relevant Information:

In 2013, South Korea unveiled its Arctic Policy Master Plan. The Plan was developed with pan-government collaboration and the support of government-

affiliated institutions focused on the Arctic, including the Korea Maritime Institute and the Korea Polar Research Institute. The overarching vision of the Plan is for South Korea to work towards a sustainable future in the Arctic through (1) building Arctic partnerships to contribute to the international community; (2) enhancing scientific research to resolve common issues of mankind; and (3) developing new industry in the Arctic by participating in economic activities. The Plan goes on to detail four diplomatic, scientific, and business, and challenges for South Korea in the region, with specific tasks or plans to be implemented over the next five years. For example, in 2014 the Plan called for South Korea to participate in the activities of the Arctic Council working groups and Arctic-related organizations and conferences; initiate a study for building a second icebreaker; and conclude a memorandum of understanding with Russia for the development of three major Russian ports along the Northern Sea Route, which has since been completed. The policies and calls to action in the Plan are written with an understanding that the Arctic will not bring tangible benefits to South Korea in the short term.

In late 2017, current President Moon Jae-in launched the Presidential Committee on Northern Economic Cooperation to articulate new economic policies toward Russia, China, and other neighbors in Northeast Asia that include Arctic initiatives. The Presidential Committee has since proposed the '9-BRIDGE Strategy,' aimed at strengthening economic ties with Russia. The strategy proposes joint economic projects in nine fields, three of which are Arctic-specific: (1) jointly promoting the commercial use of the Northern Sea Route (NSR), (2) increasing imports of natural gas from the Russian Arctic, including the planned LNG 2 project, and (3) continuing to build icebreaking LNG carriers and other ice-capable vessels for use in the Russian Arctic and along the NSR. In 2018, South Korea took initiative to organize the first Arctic Circle Forum, where 200 delegates mostly from East Asia attended the conference opened by former UN Secretary General Ban Ki-moon. In October 2019, South Korea joined Canada, the European Union, the United States, Japan and Russia to ratify the Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean. In January 2020, South Korea launched a policy consultative group – the Arctic Club in Korea, to involve ambassadors of Arctic states in Korea to discuss ways to promote Arctic cooperation on conservation and sustainable development

As South Korea's interest and stakes at the Arctic gradually increase, it is reported that the Korean Navy is considering to achieve maritime security in the Arctic with a fleet of ships that could be deployed to the Sea of Okhotsk and the Bering Sea, in alignment with Seoul's Naval Vision 2045.

Korea's current Global Korea Initiative and its Low Carbon Green Growth initiatives highlight the Arctic as both an important consideration in the fight against climate change and as a potential growth engine for the globalized Korean economy. The Arctic also plays a prominent role in Korea's Eurasia Initiative, a national strategy to

build an integrated, creative, and peaceful Eurasian continent, as it is seen as a regional connection by water, rail, and culture between European and Asian countries.

South Korea has engaged all Arctic countries and many Arctic observer states in business and scientific endeavors, with particular cooperation with Norway, Russia, Denmark, Finland, Japan, and China. In order to follow through with its Master Plan, South Korea must allocate enough funds to meet its set long term regional and global goals and make a strategic choice of which Korean port is best poised for Arctic development.

“South Korea, an Unlikely Polar Pioneer, Hosts Arctic Conference,” Mia Bennett, The Maritime Executive, 15 December 2018 [134] <https://www.maritime-executive.com/editorials/south-korea-an-unlikely-polar-pioneer-hosts-arctic-conference>

Overview:

Over the weekend, as the temperature in Seoul plunged to -12°C , Koreans bundled up in the long puffy black parkas that seem to be this year’s signature winter wear in Asia’s capital of style. In the shopping district of Myeongdong, young people took to the streets to go shopping and enjoy the latest innovations in Korean street food like Oreo churros and egg bread (an entire egg cracked on top of a soft, pillowy oval cake). With the unusually cold weather caused by frigid Arctic air rushing down across Eurasia, Seoul didn’t feel all that far away from the world’s northernmost region, where South Korea is increasingly making its presence felt.

As the Arctic warms, northeast Asian winters may get colder through a phenomenon known as “weather whiplash.” This season, a transfer of energy from an unusually warm Arctic is leading northeast Asia to brace for what may be one of its coldest winters in recent memory. The below temperature anomaly map from the University of Maine illustrates that while the Arctic is unusually warm right now – in some cases up to 20°C hotter than average – the Korean peninsula is 10°C cooler. Under the new normal, countries like Korea, Japan, and China aren’t just researching the Arctic from afar. In winter, these countries may even resemble the Arctic just as the region’s own environment becomes increasingly unrecognizable due in no small part to greenhouse gases originating in Asia.

The bitter cold snap came just in time for the meeting of the first-ever Arctic Circle Forum held in East Asia, which took place over the weekend across the street from bustling Myeongdong in the Lotte Hotel. Approximately 200 delegates, mostly from Asia but with some coming from as far as Canada and Iceland, gathered in South Korea’s capital to learn about the country’s vision for the Arctic. Officials from the two other East Asian countries that are Arctic Council observers, China and Japan, also participated. Notably, Singapore did not send any delegates despite the city-state’s interest in northern affairs and climate change. Throughout the conference, speakers’ faces were broadcast on two enormous screens that felt uncomfortably

like the telescreens in 1984, even though the discussions about the Arctic were highly future-oriented.

Current & Relevant Information:

Ban Ki-Moon rings the climate change alarm bells

Former UN Secretary General Ban Ki-moon, the first and only recipient of the Arctic Circle's Arctic Prize, kicked things off on a frosty Friday morning. As delegates gathered in the Lotte Hotel's opulent Crystal Ballroom, he drew attention to how his successor at the UN, Antonio Guterres, had opened the UN Climate Change Conference (COP 24) in Katowice, Poland just a few days prior with the proclamation, "We are in deep trouble." Echoing this worry, the South Korean statesmen poignantly recounted his visits to Greenland and Svalbard in 2014: "All the beautiful ice will be melted down, and all the roaring sounds of this ice, just gathered together – it was like the roaring sound of Niagara Falls. I was so much surprised and alarmed by all this rapidly changing nature."

Poetry aside, Ban forcefully underscored: "I spoke out that President Trump's decision was a political issue... economically irresponsible, and scientifically dead wrong. And he will be standing on the wrong side of history."

He also pointed directly to Poland's hypocrisy, which was visible in plain sight at COP24. The Eastern European country's president, which continues to rely heavily on coal, told delegates, "We have supplies for 200 years, and it would be difficult for us to give up coal — thanks to which we have energy sovereignty."

Yet the same accusations could be lobbed at the leaders of several Arctic countries and their Asian neighbors, which are trying to combat climate change at the same time as they exploit newly accessible oil and gas reserves. In many ways, then, it was business as usual at the Arctic Circle Korea Forum. Calls for sustainable development and respect for northern peoples and environments were made at the same time as the latest and greatest in Korean icebreaking LNG tankers was shown off, without anyone much batting an eye. Case in point, the Deputy Ministry for Economic Affairs from Korea's Ministry of Foreign Affairs, Yun Kang-hyeon, explained, "The challenges of climate change also ironically present us with some opportunities as a shipbuilder and IT provider."

South Korea is taking full advantage of those opportunities by winterizing its cutting-edge maritime and telecommunications technologies. Over the conference's two days, the industrial and technical might of this nation of 51 million people was on full display. Lest anyone be uncertain about what was on offer, Yun closed his speech by stating to the audience: "I urge you to explore the full potential of Korea as an Arctic partner."

Korean icebreakers combine high-tech propulsion with karaoke machines

A representative from Korea's Ministry of Oceans and Fisheries described that Korea made its "polar debut" 40 years ago "by catching krill in the Arctic Ocean." Now, however, the industrial powerhouse is going far beyond fishing. The aptly named Odin Kwon, executive vice president of the Maritime Research Center at Daewoo Shipbuilding and Marine Engineering (DSME), rapidly ran through his company's impressive achievements in Arctic shipbuilding.

DSME has more than 171 LNG vessels on order as of December 2018, of which several are ice-class tankers. One of the shipbuilder's most famous recent outputs in this category was Christophe de Margerie, the tanker that carried the first shipment of LNG from Russia's Yamal project. The tanker is nearly as long as the Eiffel Tower and can carry an amount of LNG equivalent to Korea's average daily consumption. The vessel is winterized up to -52°C and has 70-mm thick steel plates. The vessel also boasts a 15Mw class Arc7 Azipod system, a propulsion system which enables ships to operate either stern or bow first thanks to the propellers' ability to turn 360°. As a result, ships equipped with the Arc7 Azipod system can sail through thick ice (here's a slightly unnerving clip of a ship using the same propulsion system as Christophe de Margerie. China's forthcoming research icebreaker will also use the same technology).

Despite all this state-of-the-art technology, which has gone into a total of up to 15 LNG tankers DSME is building to service Yamal LNG, Kwon emphasized that construction was "very easy." So far, 10 tankers have been completed. More studies are going ahead now for how to improve the ships to support Russia's Arctic LNG II Project, which will take place not far from Yamal LNG.

After Kwon finished his presentation, Kim Jong-deog, Director-General of the Korea Maritime Institute, previewed some potentially groundbreaking innovations that Korean research institutes are pursuing. One is an immediate port facility concept being developed by the Korea Maritime and Ocean University and the Korea Maritime Institute. Researchers are trying to create what would amount to an "instant port" that could accommodate ships of 6,000-92,000 dead weight tons while being capable of generating electricity, desalination, and storing resources like potable water, oil and cereals. Classrooms, a hospital, and small agricultural garden are even being included in the design.

Deploying such a movable facility could be useful in the Arctic. As Michael Perkinson of Guggenheim Partners, an investment firm, noted, the region still has no deep-water port – partly because it doesn't make financial sense, at least right now, for any specific location. What the Koreans are pitching as a "prompt port facility" that could sail in and sail out on demand might be a solution that wouldn't saddle any one place with the sizable economic or environmental costs involved in building a permanent port. Think of it as a maritime infrastructure equivalent to "fly in, fly out" labor.

Korea is also pursuing two other maritime innovations. The first is a second research icebreaker to complement Araon, launched nearly a decade ago in 2009.

The second is a promising ballast-free vessel being designed by Hyundai Mipo Dockyard. When ships discharge ballast water, which they use to enhance vessel stability, sucked up in one ocean into another thousands of miles away, this can introduce invasive species. While international regulations require ships to treat ballast water before discharge, they may not be stringent enough for the Arctic. Although the relatively inconsequential levels of ship traffic to date mean that the number of invasive species in the Arctic is currently low, the region's general lack of biodiversity compared to more temperate places like the Amazon or Southeast Asia means that its ecology may not be well suited to warding off what will likely be greater threats of invasive species in the future as the number of vessels sailing in the region rises.

Already, Korea has invented the first ballast-free LNG bunkering vessel, an ice-class ship that can sail in the Baltic and North Seas. If such maritime technology could be extended to the LNG tankers sailing the Northern Sea Route to Yamal, this could help safeguard the Arctic's marine ecosystem.

“Why are the Asian states interested in the Arctic? Go and visit their polar research institutes, and then you will see the scale of their ambitions in the Arctic. It's truly eye-opening.”

Promoting Arctic cooperation with Indigenous peoples, Japan and China

Korea is working hard to build up its foundations to be an involved player in the Arctic. Korea's Arctic Ambassador, Park Heung-kyeong, explained, “The Korean government plans to develop domestic institutional foundations and plans to pursue the enactment of legal grounds for cooperation in the Arctic region.” Soon, the Korean government will release its boldly named “Second Arctic Master Plan for 2018-2022,” which will set out the directions for the country's Arctic policy over the next half-decade.

Despite Korea's national Arctic ambitions, the country's representatives were keen to position themselves as partners eager to cooperate in bilateral and multilateral settings rather than attempting everything alone. Early on the conference's first day, Yun, Korea's Deputy Minister for Economic Affairs, mentioned cooperation between Arctic states and “non-Arctic states like Korea.” This drew a subtle semantic contrast with how Chinese officials have called their country a “near-Arctic state,” a phrase that makes some northerners bristle.

The Korean government is pursuing Arctic cooperation in two important ways. First, at a people-to-people level, the government provides scholarships to students from the Arctic countries, with priority given to those of Indigenous heritage, to attend the Korea Maritime Institute's Arctic Academy, held each summer, and the Arctic

Partnership Week, which is taking place in the Korean port city of Busan from today through Friday. The Korea Maritime Institute has also partnered with the Aleut International Association (AIA) under the auspices of the Arctic Council to carry out an Indigenous-led mapping project around Alaska's Aleutian Islands. AIA's former director, Jim Gamble, emphasized at the Arctic Circle Forum on Friday,

"Indigenous peoples in the Arctic know how to adapt. All we have to do is listen to them." To at least a certain degree, it seems that Korea has been doing so.

Second, at an international level, Korean officials are promoting the formation of a working group to regularize the efforts of the Trilateral High-Level Dialogue on the Arctic, which China, Japan and Korea have convened over each of the past three years. Kim, the Director-General of the Korea Maritime Institute, noted, "We have an annual meeting, but we don't have any subsidiary body to discuss further cooperation. I think it's a good idea." A subsidiary body would help facilitate cooperation between the three countries, all of which have icebreakers and run expeditions each year to the Arctic, in the areas of shipping and shipping regulations, climate and science.

In terms of formal cooperation, the private sector from these three countries may have a leg up on the public sector, as they're already working together behind the scenes. For instance, the Korean-built ice-class LNG tankers that transported gas from the Yamal LNG Project to China for the first time this summer are jointly owned by Japan's Mitsui O.S.K and China's COSCO.

In an accidental but revealing slip of the tongue, Gao Feng, China's Arctic Ambassador, described Yamal LNG as being located "in Asia, I mean Russia." It was not a mistake, however, when he declared, "Asia means Arctic." He added, "The participation of Asian countries in Arctic governance is indispensable," drawing attention to their involvement in the agreement signed between nine countries and the EU last December to put a 16-year precautionary moratorium on fishing in the Central Arctic Ocean. The fact that the signatories comprised the five Arctic coastal states, the EU, China, Japan and Korea confirms the growing importance of Asian states in polar governance.

Positive reactions to Asian participation in the Arctic, and some skepticism

Even the representative at the Arctic Circle Forum from Greenland, where Chinese investment has elicited negative attention in the Western media, welcomed Asian participation in his country's development. Jacob Isbosethsen, Greenland's first representative to Iceland and a former foreign policy minister, expressed, "We are inviting countries from Asia and other places to be a part of this development, because international cooperation is a key part of this." Subtly referring to the media brouhaha over possible Chinese investment in several Greenlandic airports, Isbosethsen criticized alarmist representations. He argued, "Some medias, some others are putting fear or militarization in place instead of the dialogue that we have.

That's also why we contribute to inviting Asian partners and international partners to Greenland to have a dialogue on a firm basis.”

Marie-Anne Coninx, European Union Ambassador at Large for the Arctic, noted that the EU welcomes Asian states and appreciates their cooperation, including the regional cooperation that has developed among the three northeast Asia countries. She reminded, “We advocate for more responsible approaches, including a more robust and orderly rules-based approach,” and called for an ambitious, science-based, sustainable and inclusive approach.

On this last point, some in the Arctic might see her inclusivity as going a step too far by extending far south of the Arctic Circle. She described an inclusive approach as meaning “inclusive for the people of the Arctic and inclusive for all those who contribute in addressing the challenges of the Arctic within and outside the Arctic.”

“Korea’s expanding role in preserving the Arctic: Work of local scientists helps inform policy in vital region of world,” Esther Chung, Korea JoongAng Daily, 10 February 2020 [135]

<https://koreajoongangdaily.joins.com/news/article/article.aspx?aid=3073634>

Overview:

A vaccine for the coronavirus has yet to be developed. The key to one may lie in the plants found in the Arctic tundra, according to one scientist.

“Around 10 years ago, a lot of people died from a novel influenza virus as it spread at a dangerous rate,” said Lee Yoo-kyung, senior researcher at Korea Polar Research Institute (Kopri). “The vaccine that was developed, called Tamiflu, is made out of shikimic acid, which is extracted from a plant that grows in China and Southeast Asia, called star anise, or *Illicium verum*.”

Lee studies tundra vegetation and is part of a group of scientists from Korea conducting research on the Arctic region.

“Tundra vegetation survives in climates and conditions that would kill other plants,” Lee said. “There is some secret to their survival that could provide us more solutions for our world, but unfortunately a lot of them are dying out before we get to find out more about them.”

Not much has been written about Korean scientists and their work in the Arctic. While attending Arctic Frontiers, the annual conference on Arctic affairs hosted in Tromsø, Norway, from Jan. 27 to 30, the Korea JoongAng Daily found that not only has the country been doing more in the region than what one may expect, but there is a good amount of support for their contributions from the most powerful actors in the region.

Current & Relevant Information:

Korea's place in the Arctic

Korea's work in the Arctic dates back to 2002, when it established the Dasan Arctic Science Center in Svalbard, Norway.

"We have been working together with scientists in Norway to monitor black carbon and dimethyl sulfide [DMS], both of which have come under the spotlight since heightened global interest in climate change and its effects in the Arctic region," said Lee who was stationed in Dasan in 2003 and came back yearly from 2011 to 2018.

It was also a Korean scientist studying the Arctic region who initiated the process to apply for Korea's observer status at the Arctic Council, the forum of eight Arctic nations that decides policies at large in the region.

"It seemed like the right thing to do," said Seo Hyun-kyo, policy researcher and advisor at Kopri. "Kopri by that time had done more research in the Arctic than any other institution in Korea, and I thought that if Korea was able to win the status, it would be a win-win for both the country and the institution as its work would be expanded in the Arctic."

Seo spoke to Korea's Foreign Ministry in 2008 and they began the work to submit an application for the observer status. They applied in 2009, but the decision, which is made every two years, was deferred twice. Korea gained its observer status in 2013.

The Arctic Council has been admitting observer nations since 1998. The observer nations at the council - currently 13 - have the right to "observe" the proceedings of the council but not the authority to write policies. They can also join what's called working groups at the council to contribute to research and preservation of the Arctic region.

Korea has been participating in a number of these working groups, including the Emergency Prevention Preparedness and Response (EPPR) working group, a part of whose work is to respond to oil spills, and the Arctic Monitoring Assessment Program (AMAP) working group.

"I have been part of the AMAP since 2013. Initially, it felt like [the council] was not expecting much [from Korea]," said Lee. "But as we continued to participate in the meetings consistently and shared Korea's findings regarding the region, we became a regular contributing member of the working group."

"Korea is a more engaged partner in the [EPPR] working group," said Nina Agren, project officer of the Arctic Council, during a meeting with the Korean delegation on Jan. 27.

Seo said scientific developments can pave the way for diplomacy.

"Take the example of the Chinese icebreaker Xue Long," he said. "It went to Reykjavik in 2012 for research. The next year, a China-Iceland FTA was signed.

“I’m not advocating that we should use science to get a place for some kind of economic development in the region,” Seo added. “But Korea making any contribution in the scientific research in the Arctic itself is already doing something for the country in terms of its image-making in the region.”

The Korean Foreign Ministry, which in recent years created a specific position focusing on the Arctic region, is hoping to do more in the area.

“More countries are looking toward the Arctic region, and Korea is hoping to play a larger role in the region as well,” Kwon Sei-joong, ambassador of Arctic affairs at Korea’s Ministry of Foreign Affairs, told the Korea JoongAng Daily during the conference. “There are eight member countries to the Arctic Council, but the issues of the Arctic region, like the melting of the sea ice, affect countries all over the world. The Korean government is interested in taking part in the discussions regarding the region and recently adopted an Arctic policy as well.”

The same year that Korea became an observer nation at the Arctic Council, it issued a four-year plan on the Arctic region focusing on scientific research and shipbuilding for use in the Arctic, a plan that was renewed in 2018. More recently, in October 2019, it ratified the Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean.

Evolving geopolitical dynamics

Korea may be doing more in the Arctic than ever before. But is the region ready for more actors?

“Climate change is the single greatest accelerant in the geopoliticization of the Arctic,” said Bobo Lo, an international relations analyst, during a session on the state of the Arctic on Jan. 27. “[The] region is no longer insulated from larger geopolitical and security tensions - witness to Russia’s military build-up in the region, and also the increasingly aggressive stance of the Trump administration.”

Talks about changing geopolitical order in the Arctic region took up most of the conversation at the Arctic Frontiers’ main session on its first day.

When Lo suggested an alternative governance structure to the existing one to meet the challenges posed by an increase in actors in the region, there was evident discomfort at the idea from some representatives of the Arctic nations.

“Chief among such arrangements might be a new Arctic treaty,” Lo said. “Such a treaty would not just cover scientific and environmental issues but also include political and security provisions. It would among other things encompass rules, freedom of navigation, force deployments and security confidence-building measures.”

The Arctic Council’s mandate, the Ottawa Declaration, signed in 1996, does not entail military and security matters in the Arctic.

“The policy that we are pursuing together with all other Arctic states is that the framework that we have is actually both viable, but is also sufficient to cover what we have at the moment,” said Ine Eriksen Soreide, foreign minister of Norway.

“I am very uneasy by the idea that we should start making new treaties or new legal framework because I don’t think there is a need for it, and I think what we have to continue to do is put a lot of emphasis on the cooperation that we have.”

“We hear different things from other countries,” said Ville Skinnari, Finnish minister for development cooperation and foreign trade. “But obviously the most important thing is that we have dialogue, the Arctic council and like this meeting today [in which] we can share our thoughts.”

The representatives of Arctic countries at the conference all agreed that what happens in the Arctic affects the rest of the world, but their opinions inevitably differed on how best to govern the increasing interest in the region.

From the perspective of economic development, however, collaborating with non-Arctic countries is not a bad idea.

“I think that, with the opening of the Northern Sea Route, countries like South Korea, Japan and China would play a more active role,” Rune Rafaelsen, mayor of Sor-Varanger municipality in Kirkenes, which borders Russia, told the Korea JoongAng Daily on Jan. 28. “I think that’s very positive. Norway should be more active [in working] with South Korea because we are also a shipping nation.”

The use of the Northern Sea Route can reduce the shipping time drastically, said the mayor.

“For instance, we made a test with shipping iron coal to Shanghai,” he said. “It took 80 days. If this operation would go through the Suez Canal it would have taken 40 days, so I think what you are doing in South Korea, building good ships that are also being operated in the Arctic, is very positive for the development.”

Rafaelsen said that his city has already been working with Japan, Finland and Russia to install a telecommunications cable in the city for better connection.

Engaging with the community

Despite the changing geopolitical order in the Arctic, some directions remain clear for Korean institutions in going forward with their research in the area, and that is to engage the young and indigenous communities in the Arctic.

“It’s very important at forums such as this that we hear from young scientists,” Kim Min-su, director of the Northern and Polar Research Department of Korea Maritime Institute (KMI), told the Korea JoongAng Daily.

The KMI has been running annually Korea Arctic Academy, a two-week program for 20 students from universities in the UArctic network, since 2015.

“Every year, we are inviting students from indigenous communities in the Arctic,” Kim said.

Julie Babbin, a graduate of the program, said that the Arctic policies of Asian nations are increasingly a topic of interest for students in the field.

“I was a [part] of the Korea Arctic Academy in 2019, it was actually the third time for me to apply because I had been interested in Korea’s arctic policy for a while,” said Babbin, a Ph.D. student on Asian arctic policy at Laval University in Quebec. “We can see now that the Arctic connects the world and that what happens in the Arctic won’t stay in the Arctic. It will have global implications.”

“The Republic of Korea and the Arctic region: from policy formulating to policy making,” Minsu Kim and Maksim L. Marchenkov, Arctic and North, July 2019 [136]
<http://oaji.net/articles/2020/4398-1584817994.pdf>

Abstract:

The following article is a policy review paper devoted to the general analysis of the Arctic policy of the Republic of Korea. The analysis includes the explanation of the country’s demand for conducting its own policy in the Arctic that mostly resides in the peculiarities of South Korea’s geographical position and economic conditions and demands. The policy of South Korea in the Arctic region is highlighted in the three stages: before joining the Arctic Council, during the first master plan for the Arctic, and after the updated Arctic policy was issued. The brief history of the Korea’s participation in the Arctic activities is highlighted. Also, the provisions of Korea’s first master plan for the Arctic are highlighted, and some conclusions are made regarding its implementation. Then the updated Arctic policy of South Korea is examined. The core conclusion is that during 20 year of participation in the Arctic-related activities, the Republic of Korea has transformed its Arctic policy from being research-oriented only to providing national economic benefits from the multilateral inclusion in the Arctic cooperation institutions and events. Some further reflections on Korea’s further Arctic policy are provided at the conclusion.

Current & Relevant Information:

The first Arctic Strategy of the South Korea and its implementation

The first stage in the formation of the Arctic policy of South Korea ended with obtaining observer status in the Arctic Council at the ministerial meeting in Kiruna in 2013. This event prompted the Korean government to develop the first national document on Arctic policy, which would consider all areas of the Arctic interests of the state. So, in 2013, the Republic of Korea became the first Asian country to publish its own five-year Arctic strategy, called the “Arctic Policy Master Plan” [9, Bennett M.M., p. 887]. The overall objective of the political document was “to promote a sustainable future for the Arctic by expanding cooperation with the Arctic states and relevant international organizations in the fields of science, technology,

and economics”. The Master Plan should be completed together with the responsible ministries and the relevant areas of their responsibility, national research institutions and interested industries.

The figure below represents four key points according their theme area as described in the first South Korea Arctic Policy Master Plan.

4 Major Goals	Four Major Goals (2013-2017)
Strengthen International Cooperation	<ul style="list-style-type: none"> • Expand activities in the Arctic Council and its bodies • Participate in the cooperation programmes of the Arctic-related organizations • Facilitate private and academic initiatives
Encourage Scientific and Technological Research Capacity	<ul style="list-style-type: none"> • Support the scientific researches of Arctic stations • Build science infrastructure in the Arctic • Carry out more researches on climate change in the Arctic • Launch a spatial information project for a safer Arctic
Pursue Sustainable Arctic Businesses	<ul style="list-style-type: none"> • Assess the feasibility of the Arctic Sea Routes • Facilitate the development of Arctic technologies • Seek cooperation in the fisheries sector
Secure Institutional Foundation	<ul style="list-style-type: none"> • Establish an institutional foundation for polar policy development • Build a Polar Information Service Center

Fig. 3. The first South Korea Arctic Policy Master Plan⁸.

The activities of South Korea in the Arctic international cooperation are associated with the work of the Arctic Council bodies. The Republic of Korea collaborates with various Council working groups and task forces. The country’s expert representatives take part in meetings and projects, as well as organize their seminars on Arctic issues and invite representatives of these groups to participate. South Korea holds joint workshops with the Arctic Economic Council. Bilateral consultative meetings are held with Denmark, Iceland, Canada, Norway, Russia and Finland. Korean delegations traditionally attend the world’s largest forums dedicated to global Arctic dialogue: Arctic Circle (Iceland), Arctic Frontiers (Norway), Arctic: Territory of Dialogue (Russia). Besides, the 2018 Arctic Partnership Week was held in Busan. In collaboration with the University of the Arctic, the Korean Maritime Institute is organizing the “Korean Arctic Academy” - an exchange project for students from the Arctic states to promote the interests of South Korea in the Arctic region. Korean students are sent to leading international universities in the field of Arctic research as part of the Korean student research program in the Arctic. Korean scientists make presentations at various Arctic scientific conferences around the world. The North EAcific Arctic Conference has been jointly organized by the East-West Center and the Korea Maritime Institute annually since 2011. The list of cooperation could be longer, since Korean research institutions and government

work hard to expand their influence in the Arctic and keep the image of an Arctic cooperation expert.

Another direction of the Arctic Policy Master Plan is research and its necessary infrastructure. Over the past 30 years, the Republic of Korea has created a number of institutions involved in polar and marine research, incl. the Korea Polar Research Institute, an associate institution of the Korean Institute of Oceanographic Sciences and Technology and the Korean Maritime Institute. In conjunction with these institutions, as well as for the implementation of the fourth master plan, the Korean Arctic Research Consortium was created to integrate Arctic research and contribute to the further development of national Arctic policy. The icebreaking research vessel “Aaron” is a useful asset in polar research, both land, and sea. The expeditions of “Aaron” formed the basis of many published studies.

The third area of the master plan covers the participation of Korean business circles in economic activity in the Arctic. Since this direction is mainly associated with the Arctic sea transport corridors, it has more economic prospects (since the main task of the development of the NSR is to obtain financing for the creation and maintenance of the infrastructure of Russian Arctic ports rather than completed projects. Nevertheless, there are several active projects: the construction of icebreaking vessels for the transportation of LNG by Daewoo Shipbuilding and Maritime Engineering by order of the Russian companies Sovkomflot and NOVATEK. Besides, vessels under Korean flag have already passed the NSR. Thus, this area of cooperation is associated with new profitable projects for the development and transportation of Arctic resources in the future.

Analyzing the provisions of the master plan, we can conclude that South Korea’s first comprehensive document on Arctic policy issues retains its previously established orientation toward research and scientific cooperation. Thus, the text testifies to the predominantly research nature of the Arctic policy of the Republic of Korea. In addition, the document highlights issues relating to various aspects of international cooperation in the Arctic (especially within the framework of the Arctic Council, since the state has received observer status), as well as a few points regarding the prospects for Korean business in the region. In general, the Korean Government and companies were able to implement the planned activities and achieve the results set by the country’s first political document on the Arctic. Thus, at the end of the master plan, its effects were used to develop a new paper on Arctic policy for the further integration of South Korea into Arctic issues. As a result, in July 2018, the Second Master Plan for the Arctic (for 2018–2022) was published. The main findings of Korea’s participation in Arctic affairs after obtaining observer status in the Arctic Council are presented in the figure below.

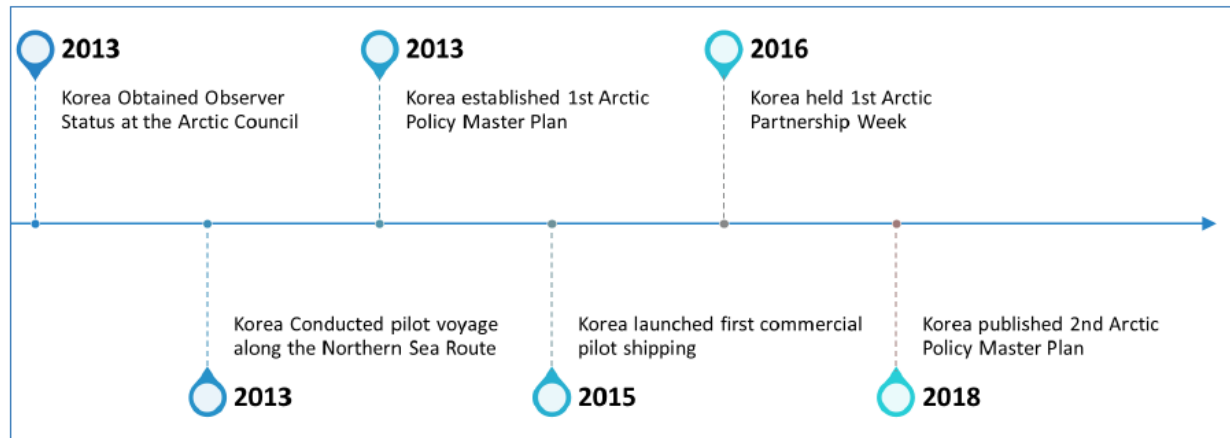


Fig. 4. Main activities of South Korea in the Arctic since 2013.¹³

- 2013 - South Korea received observer status in the Arctic Council;
- 2013 - The first Arctic Master Plan was developed;
- 2013 - Test passage of a Korean vessel along the NSR;
- 2015 - South Korea launched the first trial commercial sea route;
- 2016 - The first Arctic Cooperation Week was held in South Korea;
- 2018 - South Korea developed a second Arctic Master Plan.

8) Netherlands:

“Netherlands,” *The Arctic Institute: Center for Circumpolar Security Studies, 2020*
 [137] <https://www.thearcticinstitute.org/countries/netherlands/>

Overview:

The Netherlands is a seafaring nation with a proud history of exploration, and Svalbard was originally discovered by a Dutch explorer Willem Barentsz in 1596. Dutch exploration in the Arctic region continued, and Dutch nationals have been engaged in industry and commerce in the area since the 16th century, when they were active in whaling and cod-fishing. Present-day involvement includes polar research and the activities of Dutch companies such as Shell.

The Netherlands has several strong areas of interest in the Arctic, both in research and industry. The main two concerns of the Netherlands are the impact of climate change, due to its low-lying coastlines, and the future of the Oil and Gas Industry, due to importance of Royal Dutch Shell to the Dutch economy. The Arctic Center for Polar Research in Groningen is an example of the importance that the Dutch place on the region. Furthermore, in 2016 the Dutch appointed their first Arctic Ambassador, Ambassador Kees Rade. Ambassador Rade was replaced by Ambassador Carola van Rijnsoever in 2017. The Dutch also have an Arctic station in Ny-Alesund, Svalbard which is run by the Arctic Centre in Groningen.

Current & Relevant Information:

According to the [Strategy for the Netherlands Polar Programme 2016-2020](#), “Knowledge about changes in the polar regions and the consequences of these for the Netherlands remains strategically important: the consequences of climate change (locally and in the Netherlands), rises in sea level due to the melting of ice in the polar regions, ocean acidification, the increasing human burden placed on natural resources present there and the potential opening up of new, shorter, shipping lanes are issues that impact on our living environment and the internationally recognized values of the polar regions.”

The Netherlands has been involved in international agreements on the Arctic, from being a signatory to the 1920 Svalbard Treaty to being part of the first group granted Observer Status in the Arctic Council. As with most of its Foreign Policy, the Dutch government prioritizes the rule of international law and the strengthening of multilateral ties with other nations. The Netherlands explicitly believes that UNCLOS is fundamentally important in the maintenance of relations in the region. The Netherlands also believes that in parts of the Arctic that lie beyond state jurisdiction, non-Arctic countries should have a say in decisions on mineral resources. Finally, the role of non-state actors has been important for the Netherlands, both in regards to economic interests such as Shell and NGOs such as Greenpeace, which is headquartered in the Netherlands.

The Dutch have been involved in the Arctic for centuries, primarily through trade and exploration. Today, with the port of Rotterdam, Royal Dutch Shell, and Greenpeace all playing a role, the Netherlands is still actively involved in the region. As strong proponents of international law, the Netherlands focuses on UNCLOS, the Arctic Council, and the role of international treaties to help maintain peace and stability in the region. The priority for the Dutch at the moment remains in strong research links and building long-term international cooperation in the region.

“The Dutch Beef up their Arctic Engagement,” Mieke Coppes, High North News, 9 February 2017 [\[138\]](#) <https://www.highnorthnews.com/en/dutch-beef-their-arctic-engagement>

Overview:

Last year, for the first time ever the Dutch have appointed an Arctic Ambassador, expanding on an already growing and historical interest in the region.

The Dutch have a long history in polar involvement, even though the nation is not geographically near anybody’s definition of either the Arctic or the Antarctic. However, once again they have signaled their interest in the region, this time by appointing their first ever Arctic Ambassador, Mr. Kees Rade.

This position, which was introduced last year, follows on the 2015 report that the Advisory Council on International Affairs was requested to produce for the Dutch government as well as a the “Strategic Polar Plan 2016-2020”.

The current Dutch engagement in the Arctic is based on several facets, including the implications of climate change, its ecological impact worldwide, sustainable development of the North and economic opportunities.

Current & Relevant Information:

Traditional Dutch Engagement in the North

Although the Dutch are not an Arctic nation, they have a long tradition of engagement in the region. This stems back to the late 1500s where Dutch explorers "discovered" many of the Arctic islands, including Spitsbergen, the largest island of the Svalbard archipelago. As fishers, the Dutch have long been involved in whaling and cod-fishing in the region. However, the Dutch are now firmly opposed to whaling.

Another important economic sector, which has huge potential Arctic implications for the Dutch, is shipping. Historically, Rotterdam was one of the largest ports in the world and continues to be the largest port in Europe, with many goods filtering from Africa and Asia through the Netherlands and disseminating into the rest of Europe.

If the Northeast Passage opens up, this will have huge implications for the Netherlands, solidifying Rotterdam's importance in the future of European shipping. Yet, in the immediate future this is not a concern for Dutch policy, as Ambassador Rade said in an interview with HNN, "there is not an extreme sense of urgency yet but as soon as we feel that it is starting to move- intensified shipping possibilities- we will be there from the start."

Current Challenges

The current engagement in the Arctic is based, as Ambassador Rade emphasized, on three focus areas: climate change and the effects thereof, the Arctic ecosystem specifically the migration of Arctic birds, and social, economic and geopolitical implications of change. Each of these areas have a tie to either the overarching domestic or international policy of the Netherlands. There is also specific interest with regards to the rights of Indigenous peoples, as the Netherlands is one of the only countries in the world to have ratified the ILO Convention on Indigenous Rights.

The implications of climate change are clearly important to a country with approximately one third of the country, where two thirds of the population live, below sea level and therefore at risk of flooding. Even a small rise in the world's oceans can have drastic implications on the country. So, the role that the Netherlands plays in international climate change negotiations and regulations directly relates not only to the domestic policy but the very existence of the country.

Many people may not know that Arctic birds migrate south through the Wadden Sea and its islands (which are in the Netherlands) during the winter. This means that the Dutch, as Ambassador Rade said, "feel a very specific responsibility" to the birds

and the ecology of the North. Furthermore, according to the Ambassador, the Dutch have many ornithological experts whose knowledge is consistently being used to ensure the protection of these wild birds.

As for the social and economic changes in the region, the Dutch are well aware, according to the Ambassador that they are observers and that the, "Arctic is primarily the responsibility of the countries around the Arctic, that are part of that region." However, the Dutch also strongly believe in the multilateral cooperation of the Arctic Council; they are in fact one of the oldest observers to the Arctic Council. The Dutch are currently active in three working groups, AMAP, CAFF and SDWG, and Ambassador Rade mentioned they are considering joining a fourth, PAME.

Finally, oil and gas development are also a potential interest when it comes to the Netherlands in the Arctic. Royal Dutch Shell is one of the major oil and gas companies in the world, and is headquartered in the Netherlands. However, when asked about oil and gas development in the Arctic, Ambassador Rade said that "when it happens, it should be done in a sustainable and precautionary way."

Increased Research in the Area

The Netherlands recognizes the importance of research in the future of the Arctic region. This is why they are pledging 4.2 million euros a year until 2020. Ambassador Rade mentioned that, "although our research program is modest, its impact is significant: Dutch polar research publications get the most quotes per article, so in terms of impact we rank number one in the world." The Dutch public is often exposed to the region, specifically with so many different Arctic actors based in the Netherlands. Greenpeace, for example, has their international coordinating body in Amsterdam. With organizations such as Shell and Greenpeace both situated in the country, the Dutch public can easily be engaged.

The Netherlands has worked hard with Arctic nations, including Norway, who Ambassador Rade emphasized was an important partner. The major theme throughout the Dutch policy in the Arctic is similar to Dutch policy in general, multilateralism and cooperation. The present, the past, and most importantly the future of the Dutch engagement in the Arctic will likely revolve around these two themes and the sustainability of Arctic activities, regardless of the focus on shipping, port development, oil and gas, scientific research or anything else.

"The Netherlands in the Arctic: Clear Skies and Choppy Waters," Over the Circle: Arctic Politics and Foreign Policy, 18 November 2018 [139]

<https://overthecircle.com/2018/11/18/the-netherlands-in-the-arctic-clear-skies-and-choppy-waters/>

Overview:

Among the growing list of non-Arctic states with extensive interests in the circumpolar north, the Netherlands stands out, not because of its size but rather due

to its considerable contributions to the study of the region over a period of several centuries. In recent years, the country has begun to pay greater attention to the emerging economic benefits of the Arctic and especially to the shipping potential of the Northern Sea Route (NSR).

Current & Relevant Information:

With several countries, including large Asian economies as well as Western European governments, and of course Russia, developing plans to better utilize the NSR for expanded cross-regional shipping in the coming decades, the Netherlands is seeking to ensure its participation in a potential scramble to develop Arctic shipping routes. As with other non-Arctic states, Holland is seeking to construct a policy balance between supporting scientific diplomacy in the Arctic, while also being mindful of the growing economic opportunities appearing in the region.

The country is hardly a newcomer to the Arctic. Representatives of the Netherlands were present at the initial founding of the Arctic Council in 1996, with the country becoming a formal observer two years later at the organization's Ministerial meeting in Iqaluit, Nunavut. Like its Western European neighbors, including Britain, France, Germany and Switzerland, Holland was able to point to a long history of polar exploration and research in justifying its distinct Arctic identity. Indeed, even a brief glance at the Netherlands' engagement of the Far North is sufficient to confirm the country's Arctic credentials.

One of the most famous European explorers of the Arctic, Willem Barentsz (c.1550-1597), hailed from the Dutch island of Terschelling. Like many other pioneers of the time, Barentsz, also distinguished as a cartographer and navigator, was interested in discovering a shorter sea route to Imperial China, and thought the waters north of Siberia might represent such a pathway. At the time, both England and Holland were looking to Arctic waters as a northeast passage to Asian markets. During Barentsz's three Arctic Ocean voyages, the ships under his command explored the region around Nova Zemlya and the Kara Sea, and were lauded for the official discovery of the Svalbard Islands, including the main island of Spitsbergen, in 1596.

Barentsz's journeys were also credited with the first recorded instance of the 'Novaya Zemlya Effect'. This is defined as a mirage seen in the polar regions which suggests a false sunrise, caused by the high refraction of sunlight between thermal layers of the atmosphere, and creating an illusion of the sun appearing as a squashed rectangle, with the rectangle itself sometimes appearing to be sliced into strips as part of the illusion. As well, the Barents Sea, which sits astride the Arctic maritime frontiers of Norway and Russia and was previously known as the Murman Sea, was named for him.

As part of its deepening Arctic policy, the Netherlands appointed its first Arctic Ambassador, Kees Rade, in 2016, and he was succeeded by Carola van Rijnsoever [In Dutch] in October of last year. Among the priorities for the Dutch government in

the Arctic have been the preservation of regional legal institutions, (including upholding the UN Convention on the Law of the Sea / UNCLOS), monitoring the effects of climate change, including on local fauna, and seeking out economic opportunities for the Netherlands and the greater European Union.

The country has also produced governmental policy papers on its Arctic policies, including a 2014 statement from a committee chaired by Jaap de Hoop Scheffer, former Secretary General of NATO, which acknowledged the growing strategic importance of the circumpolar north, especially in the wake of the Russian annexation of Crimea and subsequent security crisis in Eastern Ukraine, and concerns that deteriorating relations between Moscow and the West might spill over into the Arctic. However, the changing climate conditions in the Arctic were also seen as an opportunity for Dutch interests, especially for shipping interests. The Port of Rotterdam, the largest such facility in Europe, was noted in the 2014 report as potentially benefitting from emerging Arctic shipping as well as increased exporting of northern Russian oil and gas.

The current Arctic scientific policies of the Netherlands were outlined in the December 2014 'Pole Position – Strategy for the Netherlands Polar Programme 2016-2020' statement published by the Netherlands Organisation for Scientific Research, based in the Hague. The report noted the opportunities for research in both the hard science areas of climate change as well as in social and economic areas. In April 2016, these pledges were enhanced by an announcement that the Dutch government would be contributing a budget of €4.1 million (US\$4.7 million) for each year between 2016 and 2020 for research at both poles. The University of Groningen houses a dedicated multidisciplinary Arctic Centre with a specific focus on the interactions between regional ecosystems and human activity, and the Netherlands also maintains a research station at Kongsfjorden on the island of Spitsbergen, approximately 115 kilometers from Longyearbyen, the capital of Svalbard.

Energy and shipping interests are also shaping Dutch Arctic interests, as in addition to the country's port facilities, the country's flagship oil and gas firm, Royal Dutch Shell, had also expressed interest in the Arctic Ocean. However, despite initial optimism about the fossil fuel prospects of the Arctic, by 2015 the firm had withdrawn from the region in the wake of disappointing initial findings, environmental pressures and depressed global energy prices.

There remain greater prospects for Dutch interests in Arctic shipping, especially since China identified the NSR last year as an emerging branch of Beijing's 'Belt and Road' trade route network. In mid-2013, China successfully sent its first cargo vessel, the Yongsheng, owned by China's Cosco shipping firm, through the NSR from Dalian to arrive at the Rotterdam port in September of that year, and the Dutch facilities have been identified as a potential European hub for the 'Maritime Silk

Road' which China is now hoping to construct and involving many regions, including the Arctic.

In October 2015, the Rotterdam Port Authority signed an agreement with the Bank of China to jointly develop investment and infrastructure opportunities. Cosco announced in May 2016 that one of its subsidiaries, Cosco Pacific, purchased a thirty-five percent stake of the Euromax Terminal at the Rotterdam Port, part of a larger trend of Chinese investment in European ports over the past few years. In October 2018, another modified Chinese cargo ship operated by Cosco, the Tian'en, specifically built for Arctic operations, docked in the Dutch port of Eemshaven in route to Sweden after crossing the NSR.

Debates in the Netherlands about closer economic cooperation with China, including in shipping, continue in the country. A February 2018 editorial via the Dutch research institute Clingendael suggested the Netherlands take a more active approach to cooperation with China via the new trade routes, but Dutch Prime Minister Mark Rutte has argued that while the Belt and Road provides many opportunities for Holland and Europe as a whole, there must be improved space for foreign companies, including Dutch firms, to more fully participate in the construction of the trade routes.

In addition to China, Russia will also be a wild card in Holland's developing Arctic policies. As with other NATO members, the Netherlands has become increasingly concerned about Moscow's expanded military presence in the Arctic, and Dutch forces played a major role in the recent 'Trident Juncture' military maneuvers in Northern Europe overseen by the alliance. Last month, a senior Dutch military official accused Russia of deliberately attempting to interfere with a joint UK-Netherlands exercise north of the Arctic Circle, and Russian nationals were detained by the Dutch government during the same month for allegedly seeking to carry out cyber-attacks on the Organisation for the Prohibition of Chemical Weapons (OPCW), a group which had been investigating the recent use of chemical agents in Britain against former Russian spies.

Nonetheless, Rotterdam remains a primary destination for Russian oil tankers, including the Prospekt Gagarina, the first of a new class of liquefied natural gas-powered vessels operated by the Russian firm Sovcomflot, arriving in Rotterdam [In Russian] late last month, with its sister ship, Prospekt Lomonosova, currently in route to the Netherlands. As the strategic relationship between Russia and Western Europe continues to be difficult, this certainly will continue to factor into Holland's developing Arctic engagement.

“Government to invest in polar regions,” Government of the Netherlands, 5 April 2016 [140] <https://www.government.nl/latest/news/2016/04/05/government-to-invest-in-polar-regions>

Overview:

The government is setting aside more funds for scientific research in the North and South Poles. The Netherlands will be making €4.1 million available every year from 2016 to 2020. It is also appointing an Arctic ambassador. All this is set out in the polar strategy which foreign minister Bert Koenders submitted to the House of Representatives on Monday.

Current & Relevant Information:

'Knowledge is needed to deal with these vulnerable regions in a responsible way. And knowledge is gained by study,' said Mr. Koenders, explaining the higher contribution towards research. 'Due to the importance of this unique region and the fact that the Netherlands will be directly affected by rising sea levels, it makes sense for us to increase the budget.'

State Secretary for Education, Culture and Science Sander Dekker, who is also contributing to the research budget from his ministry, said, 'This investment is needed to maintain the level of excellence of Dutch research in the polar regions. This is essential, because the first places where the effects of human activity are visible are the North and South Poles. Proper research is the key to meeting the challenges of global warming and the melting of the polar ice caps.'

The research is being jointly funded by the Ministries of Foreign Affairs, Education, Culture & Science, Infrastructure & the Environment, and Economic Affairs. The Netherlands Organization for Scientific Research (NWO), which is in charge of the Dutch Polar Program, is also making a contribution.

In the coming years, Dutch polar policy will focus on the sustainable development of the polar regions and on protecting nature and the environment. The government is also working to ensure that the Netherlands, as a party to the Antarctic Treaty and an observer in the Arctic Council, plays an active role in these bodies.

For example, the Netherlands will play a bigger role in the Arctic Council's work groups and expert groups. The country is already taking the initiative. One of the expert groups, the Arctic Migratory Birds Initiative (AMBI), is meeting on Texel from 5-7 April. As host country, the Netherlands will be welcoming experts from around the world.

The Netherlands' strategy also focuses on geopolitical factors and economic developments in the North Pole region. The new Arctic ambassador will promote Dutch objectives at national and international level in the shifting regional landscape. The position will be filled by Kees Rade, who will also continue to serve as Ambassador for Sustainable Development.

9) Poland:

"Poland's Policy towards the Arctic: Key Areas and Priority Actions," Michał Łuszczuk, et al., The Polish Institute of International Affairs, May 2015 [\[141\]](#)

[https://www.files.ethz.ch/isn/191034/PISM%20Policy%20Paper%20no%2011%20\(113\).pdf](https://www.files.ethz.ch/isn/191034/PISM%20Policy%20Paper%20no%2011%20(113).pdf)

Abstract:

Given the multidimensional transformation taking place in the Arctic, it is timely to redefine and develop Poland's engagement in the region. Although Poland has neither vital nor direct political and economic interests in the Arctic, the state's multi-faceted involvement in international cooperation in that region may improve national security as well as enhance Poland's international standing, especially in the EU, European and transatlantic dimensions. A clearly defined and comprehensive Arctic policy should be the foundation for further Polish engagement in the region. How this policy should look may be determined on the basis of the previous achievements, current potential, and identification of key rationales and of the areas for future activities.

Current & Relevant Information:

The Changing Arctic: What Happens in the Region Does Not Stay in the Region

Traditionally on the periphery of international relations, the Arctic has been attracting the interest of the international community for over a decade. The reasons for this unprecedented situation are the various implications of climate change, the economic and geopolitical significance of which has a global reach. A more thorough analysis, which runs counter to the oftentimes sensational media reports, reveals the following: (1) the Arctic region is an integral part of the ecological, political and economic international environment, and as such should not be divorced from global transformations; (2) climate change, though transforming the Arctic environment and arousing international interest in the region, is not the key factor fueling the region's socio-economic transformation; (3) the worldwide demand for Arctic resources may be crucial for the state and prospects of the region's fisheries, sea transport and extractive industries, but international interest has not yet translated into the expected expansion of economic activity in the region. Poland, as one of stakeholders in the Arctic, cannot remain indifferent to the ongoing changes there, not only because it shares in the responsibility for those changes, but also because Poland will increasingly feel their consequences.

Polish Presence in the Arctic: Nothing Ventured, Nothing Gained

Poland's engagement in the Arctic is based on a long-established tradition of Polish research in the area, and a hitherto limited diplomatic involvement in international cooperation concerning the region. With an annual budget of approximately €2 million and secure funding for the coming years, the research activity of a dozen or so Polish scientific centers, especially in the European part of the Arctic, is now entering a new stage of development. Plans envisage more coordination (within the

Committee on Polar Research of the Polish Academy of Sciences, and the Polish Polar Consortium), and stepped-up engagement in international projects. Poland has been a party to the Svalbard Treaty since 1931, and an observer state in the Arctic Council (AC) since 1996. The latter is the primary intergovernmental forum for discussing common Arctic issues among eight circumpolar states. Therefore, Poland has legal and political arguments supporting its engagement in the Arctic. A case in point are the Warsaw Format Meetings, which bring together the AC observer states and chairmanship of the Arctic Council, and are organized by the Polish Ministry of Foreign Affairs. In view of the ongoing changes in the region, Polish involvement in the Arctic should be systemized and secured, so as not to risk losing the achieved position, the existing potential, and resources already invested in Poland's presence in the region. It should definitely be developed productively, to serve Polish interests and enhance Poland's international standing. But, in order to seize the opportunities presenting themselves to Poland and Polish players in the region, it is necessary to establish an effective inter-ministerial coordination framework (built, for example, on the Polar Task Force, run by the MFA since 2011), also involving Polish academic, business and non-governmental players in the Arctic agenda. Such development would also facilitate drafting a policy document stating the principles of Poland's involvement in the region, and the key priorities and actions needed.

Priority Actions for Developing Poland's Arctic Policy

Based on the analysis of the situation in the Arctic, and Poland's position in the region, in the first place the set of the following comprehensive recommendations for the shape and substance of Poland's Arctic policy can be formulated: (1) the policy should be built on carefully chosen foundations, or a body of international norms, rules and customs, which have been adopted by the Arctic community and make it possible for Poland to express its respect for the region's inhabitants and natural environment; (2) the decision to develop the policy should be made according to succinct and clear expectations as to its outcome, that is, the vision of Poland's active role as the Arctic's partner; (3) Polish involvement in the Arctic should correspond to the state's various needs and aspirations, as manifested in specific political, economic and social interests in the Arctic areas and the processes taking place there; (4) the principal and interlinked objectives of Poland's Arctic policy should encompass the state's strong and stable position in the region, cooperation among all relevant Polish institutions, ongoing investment in Polish Arctic research, economic cooperation, good relations with social players in the region, international activity, and influence on the EU's Arctic policy.

To reach these goals, it is necessary to select the right and specific means, instruments, and actions, and to make the most of them at the opportune moment. Key measures that should be taken in the near future that could turn out to be most effective in the short-term include the following five recommendations.

Firstly, Poland needs to be more active in the Arctic Council by: (1) regular and committed participation of Polish representatives in the selected AC working groups, based on the competencies and strengths of Polish institutions, (2) establishing Poland's role as a promoter of more intense activity and cooperation among AC observers through the development of Warsaw Format Meetings, by including new, more specialized topics and inviting representatives of Arctic indigenous peoples (AC Permanent Participants) and external experts, as well as stimulating joint initiatives addressing these Arctic Council projects, in which the observers have a particularly important role to play, regarding, for example, long-range pollution or short-lived climate forcers.

Secondly, Poland should promote the distinctiveness of its engagement in the Arctic by the means of public diplomacy (for example, by publicizing Poland's eventual Arctic policy document, initiating discussions about Arctic issues in bilateral relations with Arctic states, organizing scientific, social and economic debates and exhibitions during important Arctic events and on a more regular basis, launching a Polish Arctic website, which would be used to exchange information, coordinating actions, and promoting Poland's active and comprehensive engagement in the region).

Thirdly, it is essential to support Polish Arctic research, through, for example, active engagement with the Arctic Council's Scientific Cooperation Task Force, in order to uphold further development of freedom of research in the region, as well as to improve relevant domestic regulations.

Fourthly, formulation and implementation of the Go Arctic initiative should be advanced, preferably with the participation of Polish and Arctic economic and social stakeholders. This should be done by providing essential regional expertise to Polish companies interested in operating in the energy sector, and in shipbuilding, mining, construction, engineering, ICT, exports, and R&D cooperation. The initiative could also be used as a platform to jointly develop (and declare) social and environmental guidelines for Polish companies operating in the region.

Finally, it is timely to establish an inter-ministerial coordination framework cooperating with representatives from academic, business and non-governmental sectors with an Arctic agenda. This coordination is required not only for operational reasons, but also to advance works on a policy document stating the principles, aims and key issue areas and sectors of Poland's involvement in the region. Such a document would be of benefit both for internal, long-term coordination of Poland's Arctic-related activities, as well as for communication of the government's approach, to partners in the Arctic, and to members of the public in Poland.

“Poland and the Arctic: Between Science and Diplomacy,” Piotr Graczyk, Arctic Yearbook, 2012 [142]

https://arcticyearbook.com/images/yearbook/2012/Scholarly_Papers/8.Graczyk.pdf

Abstract:

Poland has noticeably increased its activity in Arctic affairs in recent years. Although the first Polish research facilities on Svalbard were established back in the 1950s (by virtue of being a party to the Treaty concerning Spitsbergen) and the country has been involved in the Arctic environmental cooperation since its inception in the early 1990s, it was not until 2006/2007 when a policy shift towards assumption of a more ambitious role could be observed. The current Polish activity in the Arctic is motivated primarily by scientific interests, but nonetheless the region has been given a renewed attention in the Poland's foreign policy. Taking advantage of its status as a "permanent" observer to the Arctic Council (AC), Poland has keenly engaged in advancements at different international levels by introducing and supporting various initiatives within the AC and bilateral relations with Arctic and non-Arctic states as well as the European Union. This article attempts to explain the shift in Polish foreign policy towards the Arctic and how Poland, as a country without significant economic and/or strategic interests in the Arctic, has become one of the most active outside actors discussing their role in the region with the Arctic states. Furthermore, it assesses prospects for a coherent Polish polar policy.

Current & Relevant Information:

Among Pioneers – Origins of Polish Political Presence in the Arctic

Poland has a well-established presence in the Arctic in both scientific and political terms. The focus of this article is on Polish political involvement in the region, which, however, stems directly from the scientific one. Poland established its formal connection to the Arctic on 2 September 1931 by ratification of the Svalbard Treaty. Besides equal rights to "the exercise and practice of all maritime, industrial, mining or commercial enterprises" (Svalbard Treaty, Art. 3), it also provides a foundation, although not explicitly stated, for scientific activities in the archipelago for its parties (Machowski, 1995: 18-19). Although there is no international convention regulating scientific activities on Svalbard, they are well carried out based on practices and procedures elaborated throughout the years (Machowski, 1995: 20). Today, all research activities on the archipelago are coordinated by the Svalbard Science Forum, a platform created by the Norwegian government, and chaired by the Research Council of Norway.

It is fair to say that becoming a party of the Svalbard Treaty stimulated further development of Polish polar research, what led to consolidation of the country's scientific interests in the Arctic. Consequently, a need arose to promote freedom of scientific research in the region and to improve political conditions for the integration of non-Arctic scientists in international research programs, most often sponsored by Arctic governments. In this context, Polish interest in concepts of regional cooperative structures that were proposed by Finland, Norway, and Canada (Young, 1998) came as no surprise. Involvement in international institutions, especially driven by Western states, became even more important given the dissolution of the socialist system in the late 1980s and early 1990s and the associated political

situation (Graczyk, 2011: 581). Reformulated objectives of Polish foreign policy, introduced by the newly appointed non-communist minister of foreign affairs Krzysztof Skubiszewski, included closer links, and eventual integration, with “the network of west European interdependencies” (Skubiszewski, 1992: 56).

However, the majority of Arctic states had also been interested in the inclusion of non-Arctic countries that significantly contributed to pollution in the region (Joenniemi, 1989: 119). Moreover, external actors conducting sound research in the Arctic could provide environmental cooperation institutions with valuable data (Nilson, 1997: 32). Therefore, Poland as the only “socialist” non-Arctic country along with the Federal Republic of Germany and Great Britain were invited as observers, when Finland initiated negotiations towards the establishment of Arctic environmental cooperation (Oude Elferink, 1992: 129; Graczyk, 2011: 579, 589; Young, 1998: 90). This bargaining process, also called the “Rovaniemi Process”, led to the adoption of the Declaration on the Protection of the Arctic Environment and the Arctic Environmental Protection Strategy (AEPS) in June 1991 in Rovaniemi, Finland.

From the outset it was important to Poland to have links with the emerging structures that could affect science activities in the Arctic (Graczyk, 2011: 579). Despite limited capabilities to contribute financially to AEPS programs compared to Germany, Great Britain or the Netherlands (cf. Nilson, 1997: 32), Poland was an accredited AEPS observer state until the creation of the Arctic Council (AC) in 1996 and the absorption of the AEPS by the Council in 1997. The four non-Arctic states – Germany, Great Britain, the Netherlands and Poland – which demonstrated their engagement and interest in the implementation of the AEPS, seamlessly became “permanent” observer states at the AC, however this status was officially confirmed in the declaration of the September 1998 first ministerial meeting in Iqaluit, Canada and reinforced in the Council’s Rules of Procedure (Graczyk, 2011: 605). These countries were the first outside state actors to be accorded an observer status and they continue to hold it today.

Furthermore, Polish interest extended to the then emerging Barents Euro-Arctic Council/Barents Euro-Arctic Region (BEAC/BEAR) and Council of the Baltic Sea States (CBSS), which, along with the AC and the Nordic Council of Ministers are often referred to as the “four councils of the North”. Poland has been an observer at the BEAC since 1993, when the institution was established by the Kirkenes Declaration, again as the only non-Arctic representative of the Eastern bloc.⁶ Yet, the CBSS is the only forum for co-operation where Poland is a full member state. This arrangement, although focused on the Baltic Sea region, involves also some Arctic states (Denmark, Iceland, Norway, Sweden and the Russian Federation) and has clear links with the Arctic region as a neighboring and interconnected region. Involvement into these bodies should also be seen as stemming from the then-objectives of the then-foreign policy (Skubiszewski, 1991: 12).

No less important than the actual research activities in the Arctic was the Polish engagement in the formation of regional scientific co-operation structures. From the outset Poland was one of five non-Arctic states (Federal Republic of Germany, France, United Kingdom and Japan), which accompanied the Arctic countries in the process leading to the establishment of the International Arctic Science Committee (IASC) in 1990 (Machowski, 1993: 202). Besides IASC, the Committee on Polar Research is also a member of the European Polar Board – a part of the European Science Foundation.

To a certain extent, it may be said that the science-driven presence in Arctic cooperation structures has not been translated into greater political commitment to the regional affairs, even though the concept of including a “northern dimension” to Polish foreign policy was presented by foreign minister Stefan Meller in 2006 (Grzela, 2011: 193-94). In the age of a changing Arctic, however, the perennial regional presence, both within science and international institutions, appears to be Poland’s major asset, strengthening its position among other outside actors with an interest in the Arctic. This has opened a window of opportunity to promote Polish interests and use these diplomacy channels to develop bilateral relations with both Arctic and non-Arctic states (Graczyk, 2011: 581, 627).

Revitalized Interest in Arctic Affairs

Since 2006, Polish engagement in the Arctic has gained an added impetus in the political realm. In the general view, the key reasons for this renewed interest may be derived from the attention draw by the publication of the Arctic Climate Impact Assessment (ACIA) findings in 2004 and the dramatic message it conveyed to the rest of the world (Hoel, 2007: 126; Koivurova, 2009). From the Polish perspective this made the polar research even more relevant. An understanding of the changing climate in the Arctic gives a better insight into climatic processes in temperate latitudes, and thus has direct impact on responses at the national level. Having a research station in the Arctic – a barometer for global climate change – has become a useful asset and important laboratory for understanding climate processes in other regions (Jania, 2010).

Furthermore, a geopolitical debate concerning the Arctic has intensified after planting a Russian national flag on the sea bottom at the North Pole by the expedition Arktika 2007. Under the circumstances, many outside actors have expressed their interest in being involved in Arctic governance structures. Since the only formal mode of involvement in discussions concerning the region for external entities is to become an observer at the AC, the interest of players such as China, Italy, Japan, South Korea, Singapore, and the European Union has centered on this forum (Graczyk, 2012: 278). However, after according the status to Spain in 2006, the process of admitting new observers has been brought to a halt due to the growing anxiety of the Arctic states and AC Permanent Participants (Graczyk, 2011: 606). Poland, as one of the current six state observers, has found itself in a fairly

exclusive group of countries within a hotly debated political situation in the Arctic. The reform of the Council being implemented by the Arctic states (Axworthy et al., 2012) created an opportunity for Polish diplomacy to engage in the process and advance Poland's scientific interests. To enhance a dialogue between Arctic and non-Arctic actors, the Polish foreign service undertook several initiatives, discussed below.

Since Poland has no direct economic or strategic interests in the Arctic (Osica, 2010: 7-8; Łuszczuk, 2011a: 128), it is important to identify main reasons for Polish increased diplomatic activity in the Arctic. Some authors argue that developments in the region are relevant to Polish foreign and security policy to the extent they affect its political and institutional environment (Osica, 2010: 8-10; Tarnogórski, 2009: 2). This refers primarily to cooperation within CBSS, the North Atlantic Treaty Organization (NATO) and the European Union (EU), which all have expressed their interest in processes above the Arctic Circle. Furthermore, Polish involvement should be seen through the prism of the Baltic Sea region, to which the Arctic is "a natural extension" (Grzela, 2011: 205), that is also politically interconnected (Osica, 2010: 9, 51).

An important factor that significantly contributed to the shift in the Polish approach towards the polar regions was an institutional enhancement within the Ministry of Foreign Affairs. In 2006 a new special post was created within the MFA's Department of Legal and Treaty Affairs to deal with the Arctic and Antarctic affairs. It later evolved to the position of "Ambassador for Polar Affairs". The reasons for that could be discerned in a growing global interest in the Arctic after the ACIA release and associated diplomatic opportunities mentioned above. Moreover, the position was meant to promote Polish scientific interests, notably when the International Polar Year 2007-2008 (IPY) was about to start.

The creation of this position, and the appointment of a former deputy minister of foreign affairs and ambassador to Denmark and Libya – Jakub T. Wolski – was a clear indication that Polish engagement in the polar regions was to be strengthened. The tasks of this position include attendance at AC and Antarctic Treaty System's meetings. Previously, these conferences had been mainly attended by ambassadors to the countries where the meeting was being held. This system suffered from lack of coordination, discontinuity and unfocused actions that prevented any policy towards polar regions to be carried out efficiently. Moreover, it was detrimental for Polish scientific interests as it had limited access to the AC Working Groups, which had been conducting important research projects to understand changes in the North and produced knowledge that laid foundations for policy developments. The newly appointed ambassador was also supposed to improve Polish participation in the Antarctic Treaty Consultative Meetings (ATCM).

Nonetheless, a particularly important driver for Poland's renewed interest in Arctic affairs has been an increased engagement of the EU institutions in debate on Arctic

governance and its goal to become an observer at the AC. The subsequent documents of the Commission (2008), the Council (2009) and the Parliament (2008 and 2011) outlined the general, however not entirely coherent (Wegge, 2012: 22-24), direction and principle of gradual development of the EU Arctic policy. Poland supports the general approach stemming from these statements and seeks to be involved in the policy making process (Łuszczuk, 2011b). For instance, it proved to be critical to enrich EU institutions' understanding of and sensitivity to Arctic governance issues (Wegge, 2012: 20). Poland, along with other EU member states that are also AC member states⁹ and observers, may provide the EU institutions with essential knowledge, expertise and its own experience with the AC.

A Polish Arctic Policy?

Long-standing scientific activity is a crucial foundation of Polish presence and foreign policy in the Arctic, which might be characterized as a continuous exchange between science and diplomacy, with primacy on the former one. This aptly illustrates the Polish approach to polar affairs, which is based entirely on the scientific interests and thus does not involve either controversial or challenging issues in relations with the Arctic states (Eyres, 2010) nor excessive ambitions with regard to Arctic politics.

Given the Arctic states' reluctance towards external entities, notably within the AC, it seems pertinent to build confidence, transparency and mutual understanding. One way to achieve this is to define the role(s) and formulate statements of interest. The processes unfolding in the Arctic may affect Poland's political, security, and institutional environments (Osica, 2010: 8; Łuszczuk, 2011b: 1) creating a need to adopt an adequate position. However, it is important that such a document would not be just a passive and derivative policy built on the priorities of organizations such as EU and NATO, but rather an active and conscious policy process meeting Polish capabilities and aspirations. Not taking action would likely result in Poland losing direct influence on the factors and processes shaping its international environment (Łuszczuk, 2011a: 130). Moreover, a well-defined policy might facilitate carrying out coherent and coordinated actions by various Polish institutions. In the latter context, the concept of a Polish polar policy in relation to scientific research in the Arctic and Antarctic is not entirely new and can be traced back to the 1970s and 1980s, when the Council of Ministers passed a number of resolutions establishing a legal framework for Polish research activity in polar regions (Machowski, 1993: 205).

Over the past four years a great deal of effort has been made to develop a Polish approach to the polar regions. A closer inspection of official statements (Kremer, 2008; Borkowski, 2010, 2011; Szpunar, 2011) reveals that the issue and focus areas have varied during this period. Nevertheless, they now seem to have crystallized and may well become central points in an officially formulated document in the near future. Importantly, it will most likely cover both polar regions, bearing in mind all the differences between them (Szpunar, 2011). Key aspects of a possible Polish polar

policy will include freedom of scientific research; role of observers in the AC; EU efforts to be granted Observer status; compliance with international law and norms; and development of the EU Arctic Policy and public diplomacy (Kremer 2008; Borkowski 2010, 2011; Szpunar, 2011).

“Poland,” The Arctic Institute: Center for Circumpolar Security Studies, 2020 [143]
<https://www.thearcticinstitute.org/countries/poland/>

Overview:

Poland's scientific presence in the Arctic region began during the Second International Polar Year in 1932 with a 12-month expedition to Bear Island (1932/1933). Since then, Poland has established a network of university research summer bases in Svalbard and the permanent Stanisław Siedlecki Polish Polar Station in Hornsund in the Svalbard Archipelago. Poland has a research vessel s/y Oceania that is used for research expeditions in the European Arctic. Furthermore, the Polish research community is involved in international Arctic science cooperation via various networks (such as IASC, SAON, EU-Polarnet, BOREAS) and research projects in many Arctic sciences and disciplines.

The Committee on Polar Research and Polish Academy of Sciences oversee Polish scientific activities in the region. In addition, in 2015, 18 major scientific institutions established the Polish Polar Consortium; currently, 17 partner institutions are involved. The Consortium aims to enhance collaboration in conducting and managing polar research in order to gain a better understanding of the current environmental changes in the Arctic and Antarctic, and their influence on other parts of the Earth. The Consortium initiated the Polish Snow Research Program on Svalbard, which aims to define the role of snow in the functioning of the present polar environment. In April 2013, Kraków hosted an Arctic Science Summit Week.

Current & Relevant Information:

Polish engagement in the Arctic is founded primarily on multidisciplinary research and long-term involvement in the work of the Arctic Council, in which it was one of the first nations to gain observer status. Poland has also been involved in political cooperation in the Arctic region first as an observer in the AEPS and then in the Arctic Council. Poland is also an observer in the Barents Euro-Arctic Council, and is a party to the 1920 Spitsbergen (Svalbard) Treaty, Antarctic Treaty and the UN Convention on the Law of the Sea (UNCLOS).

Poland has worked to develop a pragmatic dialogue of the Arctic Council chairs with state observers – the so-called Warsaw Format Meetings – which took place in 2010, 2013, 2015 and 2018. The Warsaw Format is one of the few forums in which state observers have a chance to discuss problematic issues with each other and with the current leadership of the Arctic Council.

The Ministry of Foreign Affairs established the Polar Task Force in 2011, which consists of representatives of government agencies, scientists, academics, experts and others. The Polar Task Force is a platform for exchanging information and coordinating measures by different actors. At the Polar Task Force meeting in December 2019, Deputy Minister Przydacz emphasized the importance of polar policy to Poland, and called for strengthened internal cooperation and a multidisciplinary approach to face emerging climatic threats. Domestically, Poland has not presented an official Arctic policy document. A consultation process between the different involved ministries is currently in place.

The Ministry of Science and Higher Education of the Republic of Poland held a session “Poland and the Arctic” at the Arctic Circle Assembly in 2017. Poland will be hosting the 38th International Polar Symposium “Environmental changes in polar regions: New problems – new solutions” in 2020, and celebrating the 45th anniversary of the Nicolaus Copernicus University Polar Station on Spitsbergen.

“Interview with Arctic Council Observer: Poland,” Arctic Council, 30 March 2020
[144] <https://arctic-council.org/en/news/interview-with-arctic-council-observer-poland/>

Abstract:

Poland has had Observer status in the Arctic Council since 1998. As an Observer, Poland can contribute to the Arctic Council through meeting attendance, providing scientific expertise to Working Groups, project proposals and financial contribution (not to exceed financing from Arctic States, unless otherwise decided by the Arctic Council’s Senior Arctic Officials) and statements.

We spoke with Piotr Rakowski, Senior Advisor for Arctic Affairs at Poland’s Ministry of Foreign Affairs about Poland’s interest in the Arctic, how the country takes part in Arctic Council projects and initiatives and its key actors that engage in Arctic work.

Current & Relevant Information:

What is Poland’s interest in the Arctic region?

For many years, Poland has been involved in the Arctic through its research. For more than 40 years, the Polish Polar Station has operated in Hornsund, Svalbard on an annual basis. There are also four seasonal polar stations run by the Polish universities. So, Poland has a long-lasting footprint in Arctic research and science.

However, due to the rapidly changing world and detrimental consequences of climate change that are especially seen in the Arctic, the decision was taken to adopt the Polish Polar Policy as a tool for national actors for more enhanced engagement in this particular region and its implications. The draft is at the final stage of adoption, but the major objective is that Poland should be more present and engaged overall in Arctic affairs. Thus, Poland will continue its research activities, and also engage in other multinational fora and areas of cooperation for the sake of

the Arctic's future. It shall include international dialogue and diplomacy, economic partnerships based on the sustainability principles and overall analysis of the geopolitical situation.

How do you work with the Arctic Council to tackle pressing issues in the Arctic?

Polish representatives are involved in various Arctic Council activities in different ways. First of all, Poland attempts to be involved in as many Working Groups, Task Forces and Experts Groups as possible. In particular, most recently Polish experts are participating in the works of the Protection of the Arctic Marine Environment (PAME) Working Group and the Conservation of Arctic Flora and Fauna (CAFF) Working Group. Polish experts are also involved in the Expert Group on Black Carbon and Methane (EGBCM).

Secondly, the specific working formula to enhance dialogue between the Senior Arctic Official (SAO) Chair, Observer States and the EU as well as the Arctic Council Secretariat and Working Group representatives was established (i.e. the so-called Warsaw Format Meetings). This is a sole national initiative that is not formally linked with the Arctic Council; however, it provides a working platform of dialogue and interaction between all the participants. It is also fully transparent, provides support for the chairmanship and the results of the meetings are shared with all SAOs.

Last but not least, Poland also tries to support Arctic Council activities via digital diplomacy tools, in particular on Twitter. A special account was established by the MFA (@PolarTaskForce) that highlights the most important activities of the Arctic Council and its members on regular basis.

What Arctic Council initiatives are you currently working on?

As indicated above, Poland is participating in chosen Working Group and Task Force activities as well as Expert Groups.

A special project that Poland – alongside the U.S., Republic of Korea, Italy and the Northern Forum – is involved in was agreed under PAME and deals with enhancing the cooperation between the Observers and the Arctic Council in shipping-related activities. The project is currently ongoing.

Who are the key actors in Poland engaging in Arctic Council work?

The overall coordination of the policy towards the Arctic, understood as a part of the State's foreign policy, is coordinated by the Ministry of Foreign Affairs.

The special role lies with the Ministry of Science and Higher Education, which is responsible for all the research and scientific activities in general and is involved with the polar research and specific institutions. It is worth mentioning that the Ministry adopted the concept of the Strategy of Polar Research for 2017-2027 and serves as a guidance to all relevant partners in this matter.

The other ministries that are relevant are inter alia the Ministry of Climate, the Ministry of Maritime Economy and Inland Waters, the Ministry of Development and the Ministry of National Defense. Other special administrative bodies and agencies competent in specific fields are also involved, especially in relation to foreign trade and economic cooperation, to name an example.

A special role lies with the chosen science and research institutions, including the Institute of Oceanology, the Institute of Geophysics and the Institute of Biochemistry and Biophysics of the Polish Academy of Sciences. Additionally, major Polish Universities conduct teaching and research activities related to polar issues.

10) Singapore:

“Singapore,” The Arctic Institute: Center for Circumpolar Security Studies, 2020
[145] <https://www.thearcticinstitute.org/countries/singapore/>

Overview:

Unlike many other Asian states involved in the Arctic today, Singapore does not have a historic tradition of polar science. It has not conducted any specific scientific research or expeditions in the Arctic, and has no icebreakers. Rather, its involvement in the region only began in the early 2000s based on interests in shipping, energy resources, and climate change. Singapore does not have a political agenda in the Arctic. Rather, its interest stems from the Northern Sea Route’s potential challenge to Singapore’s role as a global shipping hub, as well as from the consequences of the melting sea ice.

Current & Relevant Information:

Singapore has been vocal about its expansion of diplomatic efforts towards the Arctic since its submission for observer status to the Arctic Council in late 2011, but does not have a formal Arctic policy. In 2012, the Ministry of Foreign Affairs appointed a special envoy for Arctic affairs, who issued a number of statements on Singapore’s interest in the region and attended regional events such as Arctic Frontiers and Arctic Circle. Currently, the Minister of State, Sam Tan, represents Singapore on Arctic affairs.

Through government statements, events, and actions Singapore has shown an interest in the relationship Arctic navigation of cargo ships will play for its port and maritime traffic. In 2013, Singapore gained observer status in the Arctic Council alongside China, Japan, South Korea, and India. Since its acceptance as an observer state, Singapore has matured into a well-respected Arctic actor, inviting Arctic Indigenous groups to the country, holding roundtable events, and playing an active role in shaping the Polar Code.

Singapore has established itself as a capacity-building partner for Permanent Participants of the Arctic Council, all of which are Indigenous people’s organizations.

They have been invited to Singapore for courses on climate change adaptation through the Singapore Cooperation Program, pursued cultural exchanges to discuss sustainable development and culture preservation, and have established a postgraduate scholarship program that allows Arctic Indigenous students to study public policy, public administration, and maritime studies in Singapore.

For now, it is yet to be seen if these actions represent a long-term foreign policy commitment by Singapore to the region or if it is driven primarily by a business ambition to export maritime expertise and technology to an emerging market.

“Singapore: An Emerging Arctic Actor,” Stewart Watters and Aki Tonami, Arctic Yearbook, 2012 [146]

https://arcticyearbook.com/images/yearbook/2012/Scholarly_Papers/5.Tonami_and_Watters_Singapore.pdf

Abstract:

This paper analyses the extent to which Singapore has an Arctic policy and what factors may be driving that policy. Although a small, Southeast Asian territory located near the equator, Singapore is an influential maritime actor that has articulated its interest in Arctic governance through government statements, diplomatic initiatives and an application for observer status to the Arctic Council. We find that Singapore has considerable economic and political interest in the development of international maritime policy, including the Arctic, and is concerned by the potential local impacts of the climate change already visible in the Arctic. Singapore also has specific interests in the development of its domestic maritime industries. As a developmental state, there are close links between Singapore’s state institutions and major commercial enterprises. Singapore’s competence in the management of complex port infrastructure and the fostering of global leaders in the offshore marine and engineering industry are of particular note in analyzing factors driving the Singapore government’s interest in the Arctic’s potential. We conclude that Singapore’s Arctic policy is in its early stages of definition. It is not yet clear whether Singapore’s efforts to contribute to Arctic governance represent a foreign policy objective in its own right, or if Singapore’s Arctic diplomacy is driven primarily by an ambition to exploit an emerging market niche in which it sees itself as a technological and expertise leader.

Current & Relevant Information:

An Overview of Singapore’s Arctic Engagement

To date, Singapore has not publicly articulated an overall Arctic policy or strategic direction, therefore it is useful to briefly summarize the actual activities of the Singaporean government.

In December 2011, Singapore submitted a request to the Arctic Council to be considered for permanent observer status at the next Arctic Council Ministerial Meeting in May 2013, under the current Swedish Presidency.

In January 2012, the Singapore Ministry of Foreign Affairs appointed a Special Envoy for Arctic Affairs, Ambassador Kemal Siddique (Singapore Ministry of Foreign Affairs, 2012). This position lies within the MFA, heading up a Working Group that includes officials with area responsibility in Europe and Southeast Asia. However, a wide range of government agencies, the private and academic sectors cooperate on Arctic issues.

Singapore joins China, Japan, Korea, the EU and Italy in seeking permanent observer status. However, due to changes in the Arctic Council's Rules of Procedure from May 2011, Singapore may not attend Arctic Council meetings or working groups as an ad hoc observer. This rule does not apply to states that applied for observer status prior to May 2011.

Singapore is viewed as an active candidate for the Arctic Council and as having diligently embraced the application criteria set out in the May 2011 SAO report. The Singaporean government, for its part, has been encouraged by the response to their application and acknowledgement of their 'legitimate interests'. Singapore officials have attended meetings in Sweden during the Swedish Arctic Council chairmanship (albeit in the margins), joined a High North Study Tour to Svalbard organized by the Norwegian government in August 2012 and participated in the 10th Conference of Parliamentarians of the Arctic Region in September 2012. A number of representatives of the Arctic Council's Permanent Participants visited Singapore at the government's invitation in May 2012.

These efforts and the appointment of an Arctic Envoy indicate an assessment by the Singaporean government that achieving a consensus decision by Arctic Council states on Singapore's status requires a dedicated diplomatic effort. Singapore's future participation in Arctic Council matters will rest on Council member's general position on inclusivity towards non-Arctic states. In this regard, the Nordic members have proven most open to granting permanent observer status to applicants that live up to the criteria adopted at the Arctic Council Ministerial Meeting in May 2011.

Singapore's Interest in the Arctic

In this paper, we identify two areas that have, to varying degrees, been advanced by Singaporean policymakers as having Arctic relevance:

1. Singapore's importance as a maritime stakeholder.
2. Threats and opportunities for the Singaporean economy, particularly related to (a) Singapore's hub port status and (b) commercial potential for the offshore and marine industry.

Singapore as a Maritime Stakeholder

Singapore has played an important role in the global governance regimes and institutions for ocean management and transportation as an island state and a major shipping hub. Singapore is a longstanding member of the International Maritime Organization (IMO) and was re-elected to the IMO Council for the 10th consecutive term in November 2011 (Singapore Ministry of Transport, 2011). Singapore has played a role at the IMO that is disproportionate to the size of the country (IMO, 2004).

Singaporean officials have also articulated views on UNCLOS that indicate official thinking on relevant issues. They have stated that freedom of navigation represents an issue of “vital interest”, that the high seas are the common heritage of mankind and that there must be improved cooperation between littoral and user states. For Singapore, “discussions on ocean governance must be open, inclusive and involve all interested stakeholders” (Hean, 2012).

We can therefore say that (1) Singapore has a keen interest in international ocean law and the development of global shipping; (2) it has committed diplomatic resources to influence these; and (3) it has a set of principles it applies to these issues. Seen from this perspective, it is not surprising that Singapore is seeking to follow the development of Arctic shipping and resource exploration more closely.

Some Arctic Council member states have acknowledged Singapore’s maritime heritage as a legitimate factor in its application for Observer Status, while Singapore’s Arctic Envoy also reasons that IMO competence is an area of expertise Singapore can share with the Arctic Council.

Singapore’s Economic Stake in Arctic Developments

Aspects of Singapore’s interest in Arctic affairs are best understood by acknowledging Singapore’s history as a developmental state ruled by a single party, the People’s Action Party (PAP), since 1959.

Singapore is characterized as a developmental state (Low, 2001), whereby the legitimacy of the state derives from economic growth and the state involves itself in the education of the labor force and adaptation of the national economy to changes in the global economy (Airriess, 2001: 240). This developmental statist can be observed in (1) the significant degree of involvement of state institutions and government officials of the ruling PAP in the management of the Singaporean economy and its major commercial entities (Liw, 2011); (2) the creation of large-scale initiatives such as competence clusters and hubs across government, academia and industry and the adoption of a long-term strategic approach to foreign economic policy; and (3) the identification of challenges to Singapore’s economic wellbeing as representing national security threats (Dent, 2001).

The Singapore government's direct intervention in the management and direction of the economy and strategic enterprises and sectors means that wider economic initiatives and concerns do, in part, drive Arctic engagement. Of particular note are concerns about (a) the long-term challenge to Singapore's hub port status that future trans-Arctic shipping may represent, and (b) the commercial potential of the strategically important offshore and marine sector.

A. The Northern Sea Route (NSR) as a Challenge to Singapore's Shipping Hub

Some analysts assert that more northerly Asian ports could benefit from a reliable Arctic passage, at the expense of Singapore (Ho, 2011; Ramberg, 2010). As a large proportion of ships transiting the Malacca Straits currently are either Chinese or carrying cargo to China, this would impact Singapore. It is also argued that projected energy resources in the Arctic and the transit potential may shift energy import patterns in the energy hungry economies of Northeast Asia, namely China, Japan and Korea. The Malacca Straits are an acknowledged strategic chokepoint (US Energy Information Administration, 2011), and with the problem of piracy and political instability in the Middle East potentially impacting the Strait of Hormuz, the case for alternative energy supply routes through the Arctic would seem compelling.

In opposition, other analysts challenge the extent of the threat to Singapore's hub port status. Questions remain about the near-term potential of large-scale, highly regularized Arctic shipping, related to navigational safety, transit time, capacity restrictions, limited seasonal access, as well as an uncertain Russian bureaucracy and lack of existing infrastructure (Lasserre & Pelletier, 2011). On the displacement of Singapore as an international hub, there are "few grounds for concern" and the NSR is likely to have a "marginal effect on global shipping movements" (Graham, 2012). Furthermore, the role of Chinese ports and Singapore are complementary (Tongzon, 2011), and the rise of Chinese ports, due to Arctic shipping or otherwise, need not impact the Port of Singapore negatively. Indeed, there may well be an upside to a fully-operational NSR: the state-owned Port of Singapore Authority (PSA) has internationalized its footprint, particularly in the last decade, and Singapore's broad expertise in the running of major port facilities may be an opportunity for PSA International as new northern port infrastructure is required to facilitate Arctic shipping.

Nevertheless, a potential future in which Singapore's status as a maritime node is threatened presents a challenge to Singapore's economic wellbeing. For a developmental state where the legitimacy of the PAP leadership and the bureaucratic management of the economy is intertwined with economic success and effective planning, major challenges to the economy are perceived as national security challenges (Dent, 2001: 2). Therefore, on the one hand, the challenge of the NSR to Singapore may prove to be overblown, but integrating Singapore into the Arctic governance system represents a means of hedging risk while understanding and influencing Arctic change.

B. Potential for the Offshore and Marine Industry

Singapore is home to global leaders in Offshore and Marine Engineering (OME), a critical sector for Singapore's economic strategy. In 2007, the Chairman of the Maritime and Port Authority of Singapore (MPA) made an explicit connection between developments in the Arctic and Singapore's OME sector:

It [the offshore and marine engineering sector] must look beyond its current capabilities and products to stay relevant and remain at the top. It is thus essential to invest in R&D, especially in areas that can overcome future challenges faced by the global offshore oil and gas industry. Some of these technological challenges include the extraction of oil and gas from marginal fields and the development of oil and gas fields in deeper waters and in the arctic regions where climactic conditions are extreme. (Ong, 2007)

Certainly, among some observers linked to the Arctic Council, this aspect of Singapore's interest in Arctic affairs is viewed as the most significant.

Singapore's developmental statist helps explain the link between Singapore's OME sector, the Arctic and the actions of the Singapore government. The importance of Singapore's Maritime Cluster (SMC) and Singapore's strategic ambition to establish itself as a "global maritime knowledge hub" by 2025 (Maritime and Port Authority of Singapore, 2009) indicate that Singapore's wider state initiatives have a bearing on Singapore's Arctic engagement.

The SMC comprises more than 5000 maritime establishments (Khong, 2012) and has strong linkages to the rest of Singapore's economy, with a total direct and indirect value-added contribution of around 9% of GDP (Wong, Ho, & Singh, 2010). Significant effort is being expended to transform this maritime cluster into an international leader, adopting a top-down, coordinated multi-agency approach to developing the cluster (Wong, Ho, & Singh, 2010: 111). The Maritime and Port Authority of Singapore (MPA) has overall responsibility for the development of the international maritime cluster and official institutions have been proactive in investing in core infrastructure and moving vulnerable industries, for example ship repair, into more modern niche markets.

The OME sector is central to the SMC and the development of the maritime knowledge hub. It accounts for 20% of total value added in the SMC and 25% of total maritime employment in Singapore (Wong, Ho, & Singh, 2010: 88). Singapore's OME sector accounts for 70% of the world's jack-up rig-building market and 2/3 of the global Floating Production Storage and Offloading (FPSO) platform conversion market (Singapore Economic Development Board, 2012), both crucial technologies for offshore drilling in hostile environments. Singapore's Keppel Offshore and Marine and Sembcorp Marine dominate these markets (Wong, Ho, & Singh, 2010: 96) and have close ties to state institutions.

Keppel Offshore and Marine entered the Arctic icebreaker market in 2008, delivering two vessels to Russia's LUKOIL that are currently operating in the Barents Sea (Keppel Offshore & Marine, 2012a). In February 2012, Keppel and ConocoPhillips announced their intention to jointly design a pioneering jack-up rig for offshore Arctic drilling, with project completion expected by the end of 2013 (Keppel Offshore & Marine, 2012b). The success of Keppel OM and Sembcorp in particular has fueled growth in related industries, such as supply vessels, logistics, IT repair and support (Wong, Ho, & Singh, 2010: 98).

In the development of the maritime knowledge hub, there is a close state-industry-academia cooperation, as is typical of the developmental state (Airriess, 2001: 240). The Singapore government has sought to grow Arctic expertise to complement its existing industrial expertise. It has instituted a number of R&D initiatives involving the MPA, the National University of Singapore (NUS) and the private sector. Most notable are Arctic research projects at the Centre for Offshore Research & Engineering (CORE) at NUS (Elias, 2008). CORE was established in 2004 "to strengthen Singapore's performance as an oil and gas hub in the wake of high growth forecasts for the industry globally" (Wong, Ho, & Singh, 2010: 99). The Keppel Corporation is a founding member of CORE.

"How Singapore legitimises its presence in the Arctic Council," Hema Nadarajah, Today, 24 July 2018 [147] <https://www.todayonline.com/commentary/how-has-singapore-been-legitimising-its-presence-arctic-council>

Overview:

Sixteen years after its admission into the Arctic Council, France published its official Arctic roadmap in 2016.

Japan released a 'Basic Plan on Ocean Policy' in 2013 highlighting its official Arctic initiatives, and it published a more comprehensive official Arctic policy paper in 2015.

In January 2018, China became the latest Arctic Council observer to release its policy.

But Singapore, despite joining the Arctic Council in 2013, has yet to publicly release an official policy, leading some other Arctic states to question what its interests truly are in the region.

Current & Relevant Information:

While China has labelled itself as a near-Arctic state and France has called itself a 'polar nation', Singapore is well aware that it is both an outsider and a relatively new player in the Arctic.

As such, it treads carefully — it has often sought in various official speeches to articulate why the city state is interested in the Arctic and what it can contribute, rather than what its long-term strategy and goals are.

Singapore was active in the Arctic in the years leading up to its admission to the Arctic Council as an observer in 2013.

Such activities primarily occurred in its maritime industry, with the government-linked Keppel Corporation building its first two icebreakers in 2008 for Russian oil company Lukoil-Kaliningradmorneft.

But unlike some other Arctic Council member states, Singapore's interest and involvement in the region has continued with increased vigor even after its admission.

Since 2013, Singapore has reiterated a two-pronged approach in the region: to assist in whatever way possible within the Arctic Council and the region itself, and to gain a better understanding of how changes in the Arctic may affect the island state.

On the first approach, Singapore has engaged extensively both within working groups (such as the Conservation of Arctic Flora and Fauna group) as well as with the Council's permanent participants via its Singapore Cooperation Program (such as offering postgraduate scholarships for Arctic indigenous peoples to study in Singapore).

It has also co-organized offshoots of the region's pre-eminent conferences such as Arctic Circle and Arctic Frontiers in the form of smaller, local forums.

Unlike China, Japan and South Korea, Singapore has exhibited a preference to work with Arctic states directly via both bilateral and multilateral engagements.

It has undertaken efforts to deepen its bilateral engagements not only with the NATO states in the Council but also with Russia.

On the second approach, Singapore is actively expanding several of its Arctic research programs ranging from climate science to maritime law and engineering.

Aside from solely focusing on Arctic-specific issues, Singapore has also attempted to bridge sustainable energy solutions between the polar region and Southeast Asia.

The island city state does not presently have plans to articulate an official Arctic policy, though it has toyed with the idea of doing so.

Unlike its Asian counterparts, such as China and Japan, Singapore's presence in the region is relatively nascent.

Captain Ashley Roach, who prepared an Arctic observer manual in 2017 catered to the city state, believes that while it is not entirely necessary for an observer to

publish an official document on its Arctic strategies, it has become somewhat of an expectation given the proportion of observer states that have done so.

India is the only other Arctic Council observer in Asia that is yet to produce an official document articulating its policy in the region.

Other observers' policies have not gone down smoothly.

China's official policy aimed to allay suspicions of its intentions in the region, but the policy has not been entirely well received and in some ways has heightened existing trepidations about China's Arctic involvement.

Captain Roach commented that China's policy comes across as a 'self-aggrandizing effort' that fails to put to rest China's potential motives in the region by setting itself up as having more rights than other observers and perhaps as many rights as the littoral states.

Whether such an effort is actually China's policy or more a manifestation of propaganda remains unknown, but such a criticism serves as an example of the potential ricocheting effect that an observer state's policy paper can have.

Singapore, the only small island observer state in the Arctic Council, is unquestionably a unique entity within the Arctic sphere: it is approximately 140 times smaller than the smallest Arctic Council member state (Iceland) and is 7,000 kilometers away from the Arctic Circle.

But regardless of the strangeness of its presence in the Council, Singapore has constructed itself a reputation for upholding and advocating a robust international legal regime both within and without the Arctic context.

It has also managed to portray itself as a benign yet valuable member in its various forms of participation within the region as well as in playing a pivotal role in translating solutions between regions.

Singapore seems to believe that articulating an official policy paper is not the only way for a state to legitimize its position in the Arctic, and appears to prefer its actions and efforts at engagement to take precedence instead — at least for now.

“Climate Change and Global Warming: Singapore and the Arctic,” Viji Menon, Rajaratnam School of International Studies, 16 October 2019 [148]
<https://www.rsis.edu.sg/wp-content/uploads/2019/10/CO19205.pdf>

Summary:

The latest report by the Intergovernmental Panel on Climate Change has added urgency to the need to address enduring changes in the world's oceans due to global warming. In this respect, the Arctic is expected to be where the most rapid changes will take place. They will have implications for Singapore in the long term.

Current & Relevant Information:

Challenges for Singapore

If global warming due to greenhouse gas accumulations is expected to be severe world-wide, it is worse in the Arctic region. The Intergovernmental Panel on Climate Change (IPCC) pointed out that ice loss from Greenland and the Antarctic is speeding up and is expected to accelerate from the middle of this century. Surface air temperature in the Arctic likely increased by more than double the global average over the last two decades -- over the next 50 years the increase is expected to be in the range of three to four degrees Celsius.

The report points out that sea levels could rise by 1.1 meters if greenhouse gas emissions continue to increase strongly. Under the most pessimistic scenario, sea level rise is projected to exceed rates of several centimeters per year, resulting in a multi-meter rise by 2300. Singapore is keenly aware of the implications of these predictions.

Rising sea-levels

At the recent Climate Action Summit in New York, Prime Minister Lee Hsien Loong said that “like many Small Island States, Singapore is vulnerable, especially to the effects of global warming, and especially the rise of sea-levels. For us, climate change is existential.” Earlier, at the National Day Rally in August 2019, the Prime Minister also highlighted that rising sea levels due to global warming will be a serious concern for Singapore. He then outlined the steps that Singapore will take in the next few years to mitigate the effects of rising sea levels.

As the Arctic will be where the most rapid and dramatic changes will occur during the 21st century, the region is critical as a barometer for global climate change. Thus, Singapore’s decision to apply for Permanent Observer Status in the Arctic Council in 2013 appears to be a far-sighted one. (The Council was formed in 1996, with eight Arctic nations as members: Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden and the United States).

The Council has matured from a largely symbolic organization to one addressing the quickening pace and consequences of climate change in the Arctic. In 2013, it agreed to expand to include six new nations, including Singapore, India, Italy, China, Japan and South Korea as observer states, as a changing climate focuses increasing international attention on the Arctic. By having a seat at the table, Singapore is better able to remain abreast of developments in this fast-changing region.

Trade routes

Apart from rising sea-levels that threaten Singapore’s viability, the latest IPCC Report also observed that summertime Arctic ship-based transportation (including

tourism) increased over the past two decades concurrent with sea ice reductions. It pointed out that this has implications for global trade and economies linked to traditional shipping corridors.

Experts estimate that regular trans-polar summer transport (four months) may not occur until towards the middle of this century. But other routes, like the Northern Sea Route along Russia's northern shore are already navigable — albeit not easily — during certain times of the year. Transiting the Northern Sea Route above Russia between the North Atlantic and the North Pacific would reduce time and distance compared with the use of the Suez Canal.

At present, Singapore is a key shipping node on the route via the Suez Canal, a trip that takes about 45 days. However, the Northern Sea Route could bypass Singapore and cut short the journey by 11 days should it become commercially viable in the future. Already there are plans to build trans-Arctic ships and plans for hub port development in Northeast Asia that will take advantage of this ice-free passage.

Opportunities

As Singapore prepares itself for a world severely impacted by climate change, it also must be ready to grasp opportunities that come its way. For instance, according to estimates by the United States Geological Survey, the Arctic holds 30 per cent of the world's undiscovered gas and 13 per cent of its oil. With the opening of the Arctic routes and the Arctic in general for oil exploration, there would be an increasing need for new offshore rigs, special-purpose offshore facilities and vessels which can withstand the cold and harsh Arctic environment.

Singapore's marine industry has built up strong credentials in shipbuilding and repair, and offshore engineering. Already, Singapore's shipbuilding company, Keppel, has constructed the first icebreakers built in Asia in 2008. It is critical that Singapore's private sector prepares to seize these opportunities to make the most of the economic potential in the region.

With the opening of the Northern Sea Route, there would also be an increasing need for ports to service ships that ply the route. This is another area where Singapore companies could offer their expertise. There could also be opportunities for research and development into ship technology.

Long-term interests

While neither the challenges nor opportunities arising from climate change in the Arctic are likely to impact Singapore in the short-term, it has to understand and prepare for the inevitable changes that will come and which are sure to affect Singapore's interests in one way or another in the long term. Singapore must sustain its interest in and devote attention and resources to this critical region, so that it is able to respond in a timely manner to developments there.

11) Spain:

“Spain,” The Arctic Institute: Center for Circumpolar Security Studies, 2020 [149]
<https://www.thearcticinstitute.org/countries/spain/>

Overview:

From the Age of Discovery, the Spanish presence in both Polar Regions has been constant. Consistent with that fact, the official Spanish political position parts from the basic consideration that the polar research—both in the Antarctic and the Arctic—is crucial for the study of virtually all sciences, including the environmental ones. According to this premise, Spain explains its responsibilities within the framework of international cooperation (the notion already appears in the Preamble to the Spanish Constitution) largely through scientific cooperation, which in turn would eventually allow it to diversify their policy options.

Current & Relevant Information:

Actually, it is the premise of international cooperation that inspired the development of the future Spanish Polar Strategy: a document of political character which will contemplate both the Antarctic and the Arctic regions. However, that last fact has attracted criticism given the natural differences—continental masses in the Antarctic versus large maritime spaces in the Arctic—and the highly unbalanced Spanish presence between the two polar spaces (currently, in favor of the Antarctic).

The mobile infrastructure for polar research is the Oceanographic Research Vessel “Hespérides,” which is based at the Arsenal of Cartagena (Murcia, Spain). This vessel has been responsible for scientific campaigns in both the Antarctic and the Arctic regions and, when necessary, also performs general logistic support to the Antarctic campaign.

The National Centre for Polar Data, headquartered at the Geological and Mining Institute of Spain was created in 1998 to comply with the international obligations resulting from the Antarctic Treaty and, in particular, its art. 3 (c) that states: “[i]n order to promote international cooperation in scientific investigation in Antarctica, as provided for in Article II of the present Treaty, the Contracting Parties agree that, to the greatest extent feasible and practicable, (...) scientific observations and results from Antarctica shall be exchanged and made freely available.” The main objectives of the Centre include management of (meta)data obtained during the Spanish researches, as well as storage, management and dissemination of the documentary collections under the supervision of the Spanish Polar Committee. The Centre also incorporates the Spanish Polar Archive.

International Agreements and Spanish Involvement in Polar Governance

Most of the Spanish scientific work in the polar regions has taken place in the Antarctic, although, recently, many researchers have started similar investigations

on the Arctic or are collaborating with foreign scientists within the framework of international projects covering all possible sectors of scientific research.

To develop its polar scientific activities Spain has at its disposal the following structure:

- The Spanish Polar Committee: The committee, attached to the Spanish Ministry of Science and Innovation, represents the country at the main international polar institutions—such as the Arctic Council. This is the national body that grants authorizations for any scientific activities in the polar field, coordinates and manages the data obtained from the scientific activities in Antarctica and the polar zones in general. Therefore, it can be said that the Committee is, indeed, the Polar Authority of Spain.
- Annual Programs for Scientific Investigation These programs, organized by the Spanish Ministry of Science and Innovation, regulate matters concerning both polar areas, including the funding of the scientific projects relating thereto.
- Superior Council for Scientific Research
- The Army Manages the research vessel Hesperides and the logistic vessel Las Palmas, both involved in the Antarctic campaigns.

In addition to these bodies, the Spanish Oceanographic Institute (IEO) monitors all fisheries, in order to ensure the sustainability of the resource's exploitation in the Arctic.

It is important to bear in mind that at present the Spanish Polar Strategy is still under development. The popular group at the Congreso de los Diputados (Congress of Deputies is the lower house of the Cortes Generales, Spain's legislative branch). It has introduced for discussion at the Commission on the Climate Change Studies a no-proposition on the law on measures for the conservation and protection of the Arctic.

In 2016, Spain published "Guidelines for a Spanish Polar strategy", which lays out Spanish interests in the polar regions. The most important aspects of the strategy are:

- Foster peacekeeping, environmental protection and research in the framework of international cooperation;
- Protecting the polar environment;
- Support Spain's involvement in all the major polar organizations;
- Consider the importance of action in the social and human spheres in the Arctic, especially indigenous communities;

- Promote the necessary measures for free, safe and environmentally friendly trans-Arctic maritime transit in line with international law:
- Consider Spain's geopolitical interest in having an Arctic presence and in maintaining its status as observer country in the Arctic Council;
- Promote the implementation of environmental protection and sustainable exploitation policies in the Arctic;
- Support the creation of protected marine or terrestrial areas underpinned by the best scientific basis;
- The fishing industry must consider that the management of fishery resources is an EU mandate, falling under the aegis of its Common Fisheries Policy;
- The general principle guiding fisheries is to ensure the sector's sustainability, which includes respecting the environment and combating illegal, unreported, and unregulated fishing.

Since 2006 Spain has obtained an observer status at the Arctic Council. Later, in March 2009, the country was admitted to the International Arctic Science Committee (IASC) and ever since participated in its various Working Groups.

“Spain Report,” Juan Luis Muñoz de Laborde, Arctic Council, November 2016
[\[150\] https://oaarchive.arctic-council.org/bitstream/handle/11374/1858/EDOCS-4016-v1A-2016-11-23_Spain_Observer_activity_report.PDF?sequence=1&isAllowed=y](https://oaarchive.arctic-council.org/bitstream/handle/11374/1858/EDOCS-4016-v1A-2016-11-23_Spain_Observer_activity_report.PDF?sequence=1&isAllowed=y)

Overview:

Spain has been an Arctic Council (AC) observer country since 2006 and a member of the International Arctic Science Committee (IASC) since 2009. Spain is also a member of the OSPAR Convention and of the European Polar Board (EPB)

Spain is aware that decisions taken by the Arctic Council, though regional, have an increasingly global impact. Bearing it in mind, Spain participates regularly in the meetings of the Senior Arctic Officials (SAO) since 2005 taking into consideration the important role of observer states in Arctic research and the implementation of AC objectives. The fundamental pillar of Spain contribution in supporting AC objectives, is its Arctic research potential.

Spain's strategy for polar research in the Arctic is based in collaboration with other countries that may host our researchers in their stations and on our Research Vessels, the R/V Hespérides and the R/V Sarmiento de Gamboa

Regarding organizations in the Arctic, the Secretary of State for Research, Innovation and Development is in charge of managing scientific activities from Spain, and planning investments. The Spanish Polar Committee is in charge of coordinating activities in the Polar Regions.

Polar research is a strategic priority for the Spanish scientific policy, due to its scientific importance and, also, to its strategically and socio-economically high impact in areas of interest to Spain.

Concerning Arctic Ocean resources protection, the Spanish Oceanographic Institute (IEO) monitors all fisheries, using a system that includes a network of data collectors in landing ports and a team of scientific observers aboard fishing boats, to ensure the sustainability of the resources exploitation. The data collected covers not only fishing statistics but, also, scientific information relevant to studies on biodiversity and biomass evolution. The IEO participates yearly, on the “Regional Coordination Meeting of North Sea and Eastern Arctic; RCM NS & EA”, reporting and developing national actions related to the extractive sector (PNDB) in the North Sea and East Arctic.

These activities are enabling Spain to develop an internationally renowned polar scientific program, with a widened Arctic view.

Current & Relevant Information:

SPANISH CONTRIBUTION TO ARCTIC COUNCIL WORKING AND EXPERT GROUPS FIELDS OF INTEREST

AMAP

- The Spanish National Polar Data Centre (NPDC/IGME), is in charge of the polar data archive, management and coordination, according to our national and international data policy. NPDC provides a metadata web-based system and is an active member of AMAP/SAON Board, SAON/IASC Arctic Data Committee (ADC), and AMAP/SAON Committee on Observations and Networks (AMAP/SAON. CON).

- IAOS, EU Horizon 2020 “Integrated Arctic observation system” Project. Dr. F. Navarro (Universidad Politécnica de Madrid, UPM), participates, combining a large set of data from various sources, into modelling experiments.

- SVALGLAC Research Project “Sensitivity of Svalbard glaciers to climate change”, ERA-NET within the Polar CLIMATE program. The role of the Spanish team was to develop models of glacier flow dynamics and calving fluxes, using a ground-penetrating radar. The IP of the Spanish team, Dr. F. Navarro (UPM), was the co-coordinator of the project.

- SATICE (Dr. P. Elosegui coordinator and PI). SATICE is the first high-rate, high precision, continuous GPS positioning experiment on sea ice in the Arctic Ocean. Spain/CSIC is responsible for the development and deployment of the high-precision GPS component. Nine SATICE GPS buoys are being deployed across the Arctic for dynamic ocean topography and Arctic freshwater storage determination.

- University of Valladolid. From 2002 the group is performing Arctic campaigns in cooperation with ALOMAR (Arctic Lidar Observatory for Middle Atmosphere

Research); for the scientific use of CIMEL photometer permanently operative in RIMA net.

CAFF

- The National Museum of Nature Sciences (Dr. A. Barbosa) works in the study of the geographic variation of infections, parasites, immune system functioning and pollution levels in birds.

- Collaboration between UAM (Madrid Autonomous University), Canadian University of Laval and CEN. This long-term cooperation is aimed to increase knowledge on how global change affects polar freshwater ecosystems in lakes. (Dr. A. Quesada (UAM) is the leader of this long-term collaboration. CLIMARCTIC, in the European Union H2020, the ERA-NET program BIODIVERSA funds the project. Dr. A. Quesada is a member of the steering committee that investigate the biodiversity in High Arctic at watershed level, covering lakes, soils and vegetation, related with climate change.

SDWG

- “Arctic: opportunities and challenges deriving from climate change”. Dr. Elena Conde (Universidad Complutense de Madrid, UCM) group analyze climate change dynamics regional consequences in the Arctic exploring the international legal and political framework available in addressing the challenges taking place at present in the Arctic.

- Project INUIT WINDSLED. (Ramon Larramendi) has created a wind moved vehicle that can be used for science. The vehicle has been working on Greenland research projects.

- European Union Project EU- Polar Net (Polar Regions Connecting Science with Society). The Spanish role includes the scientific responsibility in the WP2 in which Spain is deputy leader and task leader.

ACAP

- Absorbing aerosol monitoring over remote regions. Dr. L. Alados (University of Granada UGR) is working in global atmosphere particles contamination including plane measurements over the Arctic. In 2016 the project overflowed the Arctic, with a specially instrumented plane, measuring atmospheric black carbon and particulate contamination.

- University of Barcelona, and University of Sevilla collaborate to study the transport, dispersion and accumulation of particulate matter in the Arctic Ocean using isotopes (TEIs) in studies of dispersion of contaminants.

- REMARCA. Dr. J. Dachs (IDAEA-CSIC) explores in the Arctic and the Antarctic the fate and remobilization of POPs and the polar amplification process.

PAME

- ECOPELESLE-2. IEO (Spanish Inst. Of Oceanography), Starting in 2016, is a 5 years program onboard Spanish commercial ships to monitor fishing resources in Svalbard (ICES-IIb-2) protected area.

- EVAPESLE-3. IEO cooperates with ICES/AFWG on Arctic fisheries, getting data and reporting on Spain`s extractions.

- DEGLABAR. Dr. JL Casamor, conducts research on the characteristics of the last glaciation in Barents Sea, and analyses the impact of glacial melting in the instability of the continental margins.

- The Autonomous University of Barcelona is working in a long-term study of the natural variability, at sub-millennial frequencies, of the interactions between climatic variability, sea-ice, export productivity, and pelagic-benthic coupling during the Holocene. Study areas are the Barents Sea and the Svalbard NO/ Fram Strait zones.

Considering the present and future situation as an Observer Country of the ACI, Spain has recently published ``Guidelines for a Spanish Polar Strategy`` and its commitment to:

- Foster peacekeeping, environmental protection and security in the polar regions, as well as the development of scientific and technical polar research in the framework of international cooperation;

- Consider the impact of climate change on the polar regions and vice versa, protecting the polar environment on the basis of the precautionary principle, making use of the best available scientific knowledge at any given moment, including the adoption of the necessary measures to reduce emissions;

- Support Spain's involvement in all the major polar organizations to ensure its participation in such fields of special interest as scientific research, environmental protection, natural reserves, energy, industry, resources, polar technologies, bioprospecting, tourism, transport, fisheries and support for the lifestyles and cultures of the indigenous Arctic populations;

- Consider the importance of action in the social and human spheres in the Arctic, pursuant to the resolutions adopted by Arctic coastal States. The indigenous communities must be taken into account and are entitled to benefit from the activities carried out in their habitat, including respect for their environments and their lifestyles;

- Promote the necessary measures for free, safe and environmentally-friendly trans-Arctic maritime transit, in strict compliance with the 1982 UNCLOS and the IMO's International Code for Ships Operating in Polar Waters (Polar Code), the natural multilateral framework for managing navigation issues, including polar navigation;

- Consider Spain's geopolitical interest in having an Arctic presence and in maintaining its status as observer country in the Arctic Council. To maintain this status, the necessary measures must be taken to facilitate and promote the involvement of Spanish researchers in the Council's different working groups;
- Support, in the scope of the OSPAR Convention, the expansion to the Arctic of the Convention on Biological Diversity agreements, and promote the implementation of environmental protection and sustainable exploitation policies in the Arctic on the basis of the precautionary principle, using the best scientific knowledge available;
- Support the creation of protected marine or terrestrial areas underpinned by the best scientific basis available at any given time, thus highlighting the importance of polar research as a global geostrategic instrument;
- Any strategic Spanish approach to the fishing industry must consider the fact that the management of fishery resources is an EU mandate, falling under the aegis of its Common Fisheries Policy. In this context, it must be taken into account that Spain, as an EU Member State, is now a member of the NEAFC, whose remit includes Arctic waters;
- The general principle guiding Spain's actions regarding fisheries is to ensure the sector's sustainability, which includes respecting the environment and combating illegal, unreported, and unregulated fishing.

“Why the Arctic Matters for the Rest of Europe,” Kristine Berzina, kas.de [151]
https://www.kas.de/c/document_library/get_file?uuid=b19a4075-f249-6f64-bd29-58dec9fd524f&groupId=252038

Overview:

As temperatures rise in the Arctic, scientists, shippers, and military strategists are peering northward into what was, a few years ago, an inaccessible mass of ice. In the past, the international community associated the Arctic with wildlife conservation and indigenous peoples' rights. But this decade has brought Arctic sea ice to record lows and opened the region to a broader range of interested outsiders. Scientists are focusing on the Arctic to measure the impact of increased greenhouse gas emissions, and businesses are pursuing economic activity once thought impossible in Arctic waters, such as maritime shipping and offshore oil drilling.

The eight countries with territory above the Arctic Circle are best positioned to manage the transformations coming to the region. But the Arctic states are no longer the only stakeholders involved. Changing climate conditions are making the High North an important area for global actors scientifically, economically, and strategically.

Europe is deeply tied to the Arctic. Three members of the European Union (EU) and two members of the European Economic Area are also Arctic states. Europe has

made significant investments in scientific research and economic development in the region. From a security perspective, Europeans are becoming concerned about their own Arctic capabilities and are focusing strategic attention northward. Asian states are gaining observer status in the Arctic Council and investing in mining and extractive industries, prompting further European anxiety. As a result, European countries far south of the Arctic Circle are increasingly involved in the region.

This chapter provides an overview of actors in the Arctic. It describes Europe's engagement in the region and the drivers for the increased interest. These drivers fall into three categories: immaterial interests, material interests, and security concerns.

Current & Relevant Information:

Arctic actors

The growth of interest in the Arctic has led to a proliferation of actors in the region. Traditional stakeholders – the Arctic states and the Arctic Council – remain the region's primary players. This said, ever more countries, organizations, and private companies are seeking to shape its future. These new actors are geographically diverse and come from a broad spectrum of sectors and industries.

The main political players in the Arctic are the eight states with territory above the Arctic Circle: Canada, Denmark (including Greenland), Iceland, Norway, Sweden, Finland, Russia, and the United States. In 1996, these eight countries founded the Arctic Council, an intergovernmental organization, to address issues related to trade, environment, climate change, indigenous peoples, and natural resources. The Arctic Council often serves the function of an advisory body rather than a governing institution, since it was formed through a declaration (the Ottawa Declaration) rather than by an international treaty. It commonly issues non-binding recommendations instead of binding measures.

The Arctic Council includes permanent representatives from indigenous communities and other residents of the region. Arctic indigenous groups were first invited to join the Arctic Environmental Protection Strategy, the predecessor of the Arctic Council, as observers. These groups, including the Saami, Inuit, and Russian indigenous peoples, gained the right to be consulted on decisions made by the Arctic states. Over the course of the 1990s, the number of indigenous peoples' organizations in the Arctic Council doubled. As indigenous groups have attained broader rights of self-governance, they are playing an increasingly independent role in Arctic affairs.

Although the Arctic Council is the main forum for Arctic questions, different groups of Arctic states also meet in other settings to discuss particular topics. For example, Iceland, Finland, and Sweden do not border the Arctic Ocean, so for issues pertaining to the Arctic Ocean the other five states may meet separately. In 2008,

Denmark convened the five Arctic Ocean littoral states under its Ilulissat Initiative to sign a cooperation agreement. The agreement affirmed the validity of existing legal frameworks, expressed concern over the effects of climate change, and prompted efforts for greater cooperation on emergency preparedness, environmental stewardship, and scientific research in the Arctic Ocean.

Non-Arctic states are playing an increasingly active role in the Arctic region. The Arctic Council permits certain countries to serve as observers, allowing these states to participate in working groups, attend Council meetings, and propose projects through Arctic states or permanent participants. As of 2014, seven European and five Asian countries hold observer status: France, Germany, Italy, the Netherlands, Poland, Spain, the United Kingdom, China, Japan, the Republic of Korea, Singapore, and India. The European Union has applied for full observer status but only has ad hoc observer rights. This means that the EU is granted permission to attend meetings on a case-by-case basis.

Intergovernmental, inter-parliamentary, and non-governmental organizations play a significant role in both the Arctic Council and in the region more broadly. They are permitted to join the Arctic Council as observers with the same rights as non-Arctic observer states. In 2014, nine intergovernmental and inter-parliamentary organizations have observer status as do 11 non-governmental organizations. These include the International Federation of Red Cross & Red Crescent Societies, the Nordic Marine Mammal Commission, the United Nations Economic Commission for Europe, the United Nations Development Program, the International Arctic Science Committee, and the World Wide Fund for Nature's Global Arctic Program, among others. Many of the non-governmental and inter-governmental observers focus on the environment, wildlife issues, and scientific pursuits. This interest group has expanded its activities in the Arctic over recent years as the influence of climate change has become especially pronounced.

Although it is not an observer of the Arctic Council, the International Maritime Organization (IMO) is playing a growing role in the region. The IMO, the United Nations agency responsible for maritime safety, is developing a Polar Code for ships traveling through challenging Arctic and Antarctic waters. The Polar Code will set newly binding standards for ship design, construction, operation, training, search and rescue, and environmental protection.

The actions of nongovernmental organizations in the Arctic can catalyze change or heighten disagreements between state actors in the region. In 2013, Russia jailed 30 Greenpeace activists and journalists who were protesting oil and gas drilling in the Arctic and had attempted to climb an oil rig in the southeast part of the Barents Sea. Russian authorities threatened to charge the activists with piracy. The international reaction to the protest increased popular awareness of the presence of oil and gas companies in the Arctic.

Lastly, private sector actors also play a significant role in the region. The opening of the Arctic is attractive for a number of companies, especially those in the oil and gas, mining, and shipping businesses. Some of these private sector actors aim to extract natural resources from the Arctic or transport goods through Arctic waters. Others seek to take advantage of the Arctic's unique conditions to pursue research and develop new technologies.

“The Arctic: what are the EU’s interests in this rapidly changing region?” Joanna Cap, *Europe in the World*, 4 April 2019 [152] <https://www.thenewfederalist.eu/the-arctic-what-are-the-eu-s-interests-in-this-rapidly-changing-region?lang=fr>

Overview:

The European Union constantly seeks to develop its Arctic policy because it is directly affected by the geopolitical, climatic and scientific changes in the Arctic. Is the EU able to defend its interests in the Arctic, at a time in which the geopolitical appetite of various actors is increasing?

The interests of the EU in this vast icy region have historical, geographical and scientific foundations. Ever since the 16th century, Europeans sought a Western shortcut by sea from Europe to Asia. However, this quest ended in 1845, following the disappearance of a British expedition commanded by Captain John Franklin. The geographical links are rather obvious, especially considering that the territories of three EU Member States extend into the Arctic (Sweden, Finland and Denmark via Greenland), as do the territories of two EEA Members (Iceland and Norway).

This explains why the EU is “one of the main beneficiaries of the resources and goods deriving from the Arctic region”. Relations between the EU and the three other countries which border the Arctic (the United States, Canada and Russia) are of immense strategic importance. All these factors explain why the Arctic plays an important role in legal and economic matters concerning the EU.

The “United Nations Convention on the Law of the Sea”, adopted in 1982, lays down a comprehensive regime of law and order in the world’s oceans and seas, defining States’ rights and uses with regards to certain sea areas and the resources within. Essentially, a State enjoys full sovereignty within its territorial waters. Coastal States may exercise exclusive rights to explore and exploit natural resources in the exclusive economic zone and the continental shelf extending to a maximum distance of 350 nautical miles, provided that this area is constituted by the physical extension of the continental shelf at sea. On the other hand, the high seas fall outside the jurisdiction of any State.

Following the media coverage of the abundance of natural resources in the Arctic, States began to present geological arguments early in the 21st century. The strong rhetoric of governments only intensified the conflicts in the quest for the Arctic. The deadline for filing claims with the “Commission on the Limits of the Continental

Shelf', has expired for all coastal States. Only the United States, not having ratified the Convention, did not have the opportunity to present its claim.

Still, this whole situation has been followed by the emergence of several disputes, such as the one between Russia and Norway concerning the Barents Sea or Russian, Canadian and Danish claims concerning the Lomonosov Ridge. Presenting claims was more of a race against time rather than a race against other countries, considering that all these States had collaborated in the past on scientific research.

We should also consider the impact which global warming has on the region. It led to a record increase in temperatures in the Arctic in 2016. The actors involved in the quest for the Arctic are considering sailing along new paths, unveiled by the melting of ice. In light of these new economic opportunities, can the EU still hold its ground in the struggle against climate change?

Current & Relevant Information:

Overweening ambitions?

Faced with all these transformations in the Arctic, the EU seeks to promote stability in the region, which is very important from a geostrategic and geopolitical point of view. Nevertheless, the EU is still seeking legitimacy for its participation in the Arctic Council. The latter was created in 1996 and is an intergovernmental body of neighboring countries and organizations representing indigenous peoples. Three EU Member States are members of the Arctic Council (Finland, Sweden and Denmark), and five EU countries are permanent observers (Germany, Spain, France, Italy, the Netherlands and Poland).

The EU is still waiting for the permanent members of the Arctic Council to grant it a permanent observer status. Its 2008 nomination for the title was rejected by Canada, a permanent member of the Arctic Council. As the EU imposed an embargo on seal products that same year, the conflict of interest between the two parties seemed to be rather obvious. Moreover, in 2008 the European Parliament's proposal to render the Arctic Ocean's status similar to the one of the Antarctic (a territory ruled by sovereign neutrality), called into question the provisions of the 1982 Convention. The European Parliament's project could not obtain approval amongst the permanent members.

Even though the relationship between the EU and Canada softened, the EU's candidacy was again blocked in 2015, this time by Russia. Permanent participation seems vital, if not important, for the EU. Even though the Arctic Council has very limited authority to make decisions and does not concern itself with security issues, it is nonetheless a privileged space for sharing knowledge and research on climate change. Still, the absence of permanent observer status does not prevent the EU from participating in working group meetings within the Arctic Council itself.

In addition, in October 2018, the European Commission, Finland and Germany organized the “Second Arctic Science Ministerial” conference in Berlin. Although not on the Arctic Council’s agenda, it provided the opportunity for stakeholders, leaders and media representatives to debate societal and environmental issues.

Actions against climate change

This initiative is fully in line with the integrated EU policy for the Arctic, adopted in 2016 by the European Commission and the High Representative of the Union for Foreign Affairs and Security. Its aim is to boost research on climate change, support sustainable economic development, and pursue a constructive dialogue with Arctic countries and indigenous peoples.

In concrete terms, it is a question of putting various actions in place such as the creation of protected marine areas and better management of fish stocks. In addition, the European Commission has committed to allocate €1.5 million to an initiative to “reduce black carbon emissions in the Arctic region”. Black carbon is the result of the incomplete combustion of fossil fuels, biofuels and biomass. This phenomenon causes the darkening of snowy and icy layers, thus amplifying the climatic repercussions.

The EU, through this integrated policy, has defined its common position on the Arctic, which has enabled it to sign an agreement with 9 other countries in October, banning unregulated commercial fishing in the Arctic Ocean’s high seas for at least 16 years. Indeed, the EU, the United States, Canada, Russia, Norway, Greenland / Denmark, China, Japan, Iceland and South Korea anticipated the adverse consequences of the entry of fishing boats in the region.

Is China closer to the Arctic than the EU?

China, constantly asserting its commercial supremacy in the world, continues to emphasize its growing interests in the Arctic region. In January 2018, it unveiled its “Polar Silk Road” project as an integral part of the New Silk Road. This project includes infrastructure projects related to the seas, land and air. Indeed, China has confirmed its financial support for the construction of a Russian offshore port in Arkhangelsk and by the year 2035 its size will allow for an annual transit of 38 million tons of goods.

In addition, a Chinese conglomerate called “Poly International Holding Co.” is interested in investing \$5.5 billion in connecting Arkhangelsk and Siberia through railroads, thus reducing the current distance by 800 kilometers. A Chinese company called “China Communications Construction Company” is participating in a tender for the construction of three airports, launched by the Government of Greenland. The Chinese project is still being processed because Denmark is worried about the region being too dependent on Chinese investments. However, by granting China

the status of observer in the Arctic Council in 2013, the permanent members have demonstrated that they trust China.

Indeed, the Chinese government has used scientific diplomacy skillfully, as demonstrated by its establishment of a research center in 2013 in Shanghai called “the China Nordic Arctic Research Center.” China has also recently focused on scientific projects with Iceland and Finland. The EU feels the effects of China’s Arctic policy directly. Indeed, the close relations of the Nordic countries with China may call into question the cohesion and strategic autonomy of the EU.

On the other hand, although China still declares that it never seeks to interfere in the internal situation of countries, the case of Greenland demonstrates that the interference of an external actor is inevitable. In addition, it is difficult for European companies to be competitive with Chinese state-owned enterprises which are receiving numerous grants for strategic projects. Finally, the “Polar Silk Road” risks compromising the environmental and social standards that are at the heart of the EU’s soft power.

12) Switzerland:

“Switzerland Presents Its Vision for the Arctic at the Arctic Circle in Reykjavik,”
Department of Genetics & Evolution, 12 February 2016 [\[153\]](#)
<https://genev.unige.ch/media/21>

Overview:

This year’s annual Arctic Circle Assembly in Reykjavik, the world’s largest conference devoted to the Arctic region and the scientific, political, environmental and economic challenges it poses, will include a presentation by Switzerland of its vision for the Arctic and an overview of its activities there. The focus of this year’s Assembly, which will be held on 7-9 October 2016, is on the consequences of climate change. The Swiss delegation, whose members include political representatives and scientists, is headed by State Secretary Yves Rossier. Switzerland’s participation at the Arctic Circle Assembly takes place against the background of its candidacy for observer status on the Arctic Council.

Current & Relevant Information:

Switzerland has been invited to present an overview of its vision, policy and involvement in the Arctic at a plenary session of this fourth annual Arctic Circle Assembly. Switzerland will take advantage of this opportunity to highlight the parallels between Switzerland and the world’s northern countries. Glaciers have played a substantial role in the shaping of Switzerland’s geography. Like Greenland’s ice sheet, glaciers are particularly sensitive to climate change. Switzerland can boast many years of experience and a long-standing tradition in the exploration of the cryosphere, the regions of the earth that are covered by ice masses. That expertise has been put to use for many years in a variety of

exploration projects in the Arctic. The largest of those projects is the Swiss Camp research station in eastern Greenland, which has been conducting climate measurement for over 20 years.

At a plenary Country Session, Switzerland will highlight its numerous interactions with the Arctic region and its scientific activities there. State Secretary Yves Rossier, National Councilor Tiana Angelina Moser, Frederik Paulsen, co-founder of the new Swiss Polar Institute, Konrad Steffen, Director of the Swiss Federal Institute for Forest, Snow and Landscape Research (WSL), and Matthias Finger of the Swiss Federal Institute of Technology in Lausanne (EPFL) will attend the session.

Switzerland's participation at the Arctic Circle Assembly takes place against the background of its candidacy for observer status on the Arctic Council. The members of that intergovernmental forum include, in addition to the eight countries bordering on the Arctic (Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden and the United States), organizations representing indigenous peoples and countries with a significant involvement in the region.

Arctic Circle

Ice melts in the Arctic are making possible new trade routes between Asia and Europe. At the same time, they are contributing to the acceleration of climate change and opening access to large and hitherto unexploited natural resource deposits. The political, economic, scientific and environmental questions this raises are the subjects on the agenda of this year's Arctic Circle Assembly.

The Arctic Circle Assembly is an annual gathering attended by political decision-makers, business leaders, environmentalists, scientists and representatives of indigenous peoples. Its purpose is to stimulate more dialogue between the various actors and to draw the attention of the international community to the future of the Arctic.

As a result of the increasingly important strategic role played by the Arctic, the Arctic Circle Assembly has rapidly taken on a significance that goes far beyond the interests of the countries that border on the Arctic. Thus, at the 2015 Assembly, some 2000 participants from 50 countries met in Iceland to discuss the future of that vulnerable region.

Indigenous peoples and cultures

Switzerland's interest in the Arctic is not limited to scientific questions, but also extends to cultural issues. Among other things, Switzerland is an advocate for the inclusion of indigenous peoples in the discussion. At a side event to the Arctic Circle Assembly, guests from Switzerland and Greenland will discuss the consequences of climate change for the inhabitants of the Arctic. In addition, there will be an exhibition devoted to Switzerland's activities in the polar region, which will highlight the many ties that exist between our country and the Arctic.

“Switzerland and the Arctic Council: The New Kid on the Block,” Marc Lanteigne, ed., *Over the Circle: Arctic Politics and Foreign Policy*, 26 September 2017 [154] <https://overthecircle.com/2017/09/26/switzerland-and-the-arctic-council-the-new-kid-on-the-block/>

Overview:

At the conclusion of the Arctic Council’s Ministerial in Fairbanks in May of this year, the main story was clearly the Agreement on Enhancing International Arctic Scientific Cooperation signed by the eight member governments and which held the promise of greater region-wide consultation and education on various science endeavors including Arctic climate change. Considering the misgivings expressed about the American commitment to combatting environmental damage in the far north, prompted by previous remarks by the Trump government expressing skepticism about climate change and hinting at a possible withdrawal from the 2015 Paris Climate Accord, there was some sense of relief that the US was not going to be drastically changing its stance on Arctic cooperation in the near term.

However, the other looming question during the Fairbanks gatherings was whether the politically thorny issue of new observers to the Council would be addressed this year, especially in light of the decision made at the Iqaluit Ministerial Meeting in April 2015 to defer all observer applications until this year. Ultimately, the Fairbanks Declaration published after the Ministerial, called for six intergovernmental / non-governmental organizations to join the roster of Council observers, namely the International Council for the Exploration of the Sea, the National Geographic Society, Oceana, the Oslo-Paris Commission, the West Nordic Council and the World Meteorological Organization. There was also a single government aspirant which made the cut: Switzerland.

Current & Relevant Information:

Applications by other governments which had sought observer status this year, including Greece, Mongolia and Turkey, were not accepted. The European Union, a perennial also-ran in the ‘observership’ race, was also left out in the proverbial cold in Fairbanks despite ongoing attempts by the organization to better build a more comprehensive Arctic identity and policy platform, including via the European Parliament’s release of a document entitled ‘An Integrated EU Policy for the Arctic’ in March of this year.

After first mooting a bid to become an observer in 2014 and then being caught in the de facto moratorium on new Arctic Council observers the following year, there was little doubt that Switzerland would prepare an updated application for the Fairbanks meeting given its longstanding commitment to participating more fully in Arctic affairs via the Council. Despite not being an Arctic state, Swiss representatives had long argued that the country has a long history of scientific research on ice conditions and glaciers thanks to Switzerland’s mountainous terrain, and has also been heavily

engaged [In French] in studies of the Arctic region including in the areas of climate change, as well as more specific research into snowfall patterns, atmospheric/climate conditions, natural hazards, permafrost and mountainous ecosystems.

This commitment was extensively advertised at the annual Arctic Circle conference in Reykjavík in October 2016, which included speeches and exhibits from Swiss government officials and specialists who described Switzerland as being connected to the 'vertical Arctic' meaning the Alps, which had provided Switzerland with a better understanding of the geological and environmental conditions in the circumpolar north. As Switzerland's Ambassador to Russia, Yves Rossier, noted during his speech at the Reykjavík conference, 'Ice and snow are in the DNA of our people, in our folklore and in our collective memory.'

In promoting its Arctic credentials, Switzerland did point to its extensive record of regional exploration and scientific endeavors, most notably in Greenland. As one of the 2016 Arctic Circle panelists noted, Switzerland was operating in the region 'before it was trendy'. These feats included the work by explorer Alfred de Quervain, from Uebeschi, Canton Bern, who led expeditions [paywall] in Greenland in 1909 and 1912-3, and led the first team to winter there by drilling into the island's vast ice sheet in order to build a campsite.

De Quervain was also responsible for naming the then-isolated region of Schweizerland in eastern Greenland in 1912. Greenland has remained a major focus of current Swiss research in the Arctic, work which includes measuring the effects of erosion of the Greenland ice sheet on the local environment. Other recent scientific projects [pdf] at both poles have included the studies of the impact of far-northern climate change on European weather patterns, polar oceanography, and regional effects of greenhouse gases.

Another factor in Switzerland's developing Arctic policies is the long-established tradition of Swiss neutrality, which has dominated the country's politics at least as far back as the Battle of Marignano in the early sixteenth century, and was further codified at the Congress of Vienna in 1815. Neutrality principles, coupled with the idea of 'Sonderfall Schweiz', ('Switzerland as a special case'), contributed to a traditional wariness towards joining international organizations.

However, in the post-cold-war era Switzerland has begun to soften its views on engaging international and regional organizations. At the same time, Switzerland has traditionally been a strong supporter of economic integration and liberalized trading, especially given its location in the heart of Europe and the need for trade for many goods and services. The country is a member of both the EU's Single Market and the Schengen Agreement. Therefore, the potential importance of the Arctic as an emerging economic area further explained Swiss policy of seeking greater engagement with the Council.

Although there was little doubt Switzerland was going to resubmit its bid, it was confirmed during an interview between Ambassador Rossier and the Russian news agency TASS during his visit to the Territory of Dialogue Arctic international forum in Arkhangelsk in late March of this year, that Switzerland would do so. As with the 2015 application, Switzerland sought to underscore its Arctic identity in the areas of comparative climate and glaciology studies, research missions dating back to the nineteenth century, including in Greenland, developing partnerships with Arctic Council member states in various projects in the far north, and a commitment to adhering to international maritime law, including the Law of the Sea, and advocacy of the rights of indigenous persons in the Arctic.

Switzerland has also sought to enhance its position in the expanding areas of Arctic research by announcing the founding of the Swiss Polar Institute (SPI) in 2016 and the holding of the Arctic Science Summit Week and associated meetings in Davos under the aegis of 'POLAR 2018' in June of next year. As well, since its unsuccessful bid two years ago, Swiss officials had continued to engage scientific actors and other stakeholders in the region, and benefitted [In French] from its venerable foreign policy traditions of neutrality.

In a statement released by the Swiss Foreign Ministry, right after the country's official acceptance as a Council observer, the decision was lauded as an opening for Switzerland to 'contribute expert knowledge to the Council at the level of working groups and to participate in research projects in a region with enormous economic potential and growing geopolitical weight,' including for the benefit of Arctic populations which have been affected by climate change.

As the chair of the Arctic Council is passed from the United States to Finland, the question of new observers, and what their qualifications should be, will likely persist. A May 2017 article in Bloomberg suggested that 'the Arctic Council has risen in importance and attention as the top of the world became a place where developed economies want to play. Everybody wants in.' This is only half the issue, however. There is also the question of how governmental observers already within the Council can best distinguish themselves in a field which is crowded and will likely only get more so. For Switzerland as the 'new kid', there will be the opportunity for the country's Arctic specialists and policymakers to better engage with the Council's member states and other organizations.

Switzerland's new role in the Arctic Council is yet another sign that the country continues to move away from its traditional wariness towards membership in international organizations, (the country remains outside the European Union and the European Economic Area, and only joined the United Nations in 2002), as well as traditional *Alleingang* or 'going it alone' views towards becoming too integrated into the global community and moving too far away from neutrality in foreign policies. In recent decades, Swiss foreign interests have begun to expand well beyond Europe, especially as relations with the European Union remain occasionally bumpy,

and so the Arctic has been identified as an area where Switzerland's expertise as well as its diplomacy can play an expanded role.

The addition of Switzerland to the Council's observer roll call not only further augments Europe's presence in the organization, (as other Council observers include Britain, France, Germany, Holland, Italy, Poland and Spain), but also underscores how the Arctic, and the Council itself, continues to evolve as an international concern in addition to a regional one.

“Swiss polar research: Pioneering spirit, passion and excellence,” Swiss Federal Department of Foreign Affairs FDFA, 2015 [155] http://www.polar-research.ch/downloads/Schweizer_Polarforschung_EN.pdf

Overview:

Passion and curiosity, a thirst for knowledge and a pioneering spirit coupled with a dash of adventure were also hallmarks of the natural scientists and mountaineers of landlocked Switzerland who began exploring the Arctic from the 18th century and laid the cornerstone for the country's expertise in polar research.

The region known as Schweizer land in East Greenland for example, which was named after its discoverers, is a testimony to Swiss research and exploration. The highest summit in these mountains is called Mont Forel in honor of the Genevan scientist, François-Alphonse Forel, whose support for and promotion of the 1912 expedition led by Alfred de Quervain was crucial.

Today, researchers from Switzerland – particularly in the interdisciplinary field of climate research – rank among the best in the world. They participate in research on the very specific climate conditions and ecosystems of the two polar regions that are impacted by the way we manage natural resources and which, in turn, have consequences for the weather and climate that we experience. Their results make a significant contribution to improving our understanding of the world's ecosystem; they make it possible to reveal not only the past but also to make predictions for the future of our planet. And they help political decisions to be made on leaving behind an environment worth living in for the coming generations.

The special interest that Swiss researchers have in the Arctic and Antarctic can also be explained by the close relationship between polar and high-altitude research, which is more connected than at first appears. Large parts of Switzerland were formed by glaciers and ice, and parts of the Alps are covered with snow and ice all year round. As is the case in the Arctic, we are also seeing glacier recession and “warmer” winters in Switzerland.

Polar research – as can be evidenced by this publication – is international. And achievements in this field can rarely be attributed to one individual alone, but rather to a team. It is absolutely necessary that scientists from all over the world pool their resources and efforts, and work in international and multidisciplinary teams that

transcend national borders. That is why Swiss researchers work closely together with their colleagues abroad, predominantly from the eight member states of the Arctic Council and one of the states party to the Antarctic Treaty.

Switzerland ratified the treaty in 1990 which stipulates that the uninhabited Antarctic may only be used for peaceful purposes, in particular scientific research and tourism. In contrast to the Arctic, the use of natural resources in the Antarctic is forbidden.

The Arctic Council was established in 1996 to balance the interests of the Arctic states and the indigenous peoples of the Arctic region. It coordinates research and development projects in order to promote climate protection and security in a region which has up to two million inhabitants. Both the Antarctic Treaty and the Arctic Council embody concerns and objectives shared by Swiss foreign policy: to actively contribute to stability and peace in the world.

Switzerland's major involvement in the Arctic and Antarctic research networks is also significant in terms of its foreign policy. Just as Swiss diplomacy endeavors to open doors for our researchers abroad, so do they – through their participation in international teams – contribute to the worldwide promotion of Swiss expertise in research and innovation.

The projects presented in this brochure show how they play a natural role in what is fundamental to Swiss foreign policy: they demonstrate that Switzerland, as a global leader in research, innovation and technology, assumes its share of the responsibility in solidarity with the rest of the world to solve the great mysteries of our planet and to tackle the biggest challenges facing our existence.

This brochure aims to bring you closer to the work of our scientists and share in the adventure of Swiss polar research.

Current & Relevant Information:

SWISS POLAR SCIENCE: FROM PIONEERING SPIRIT TO EXCELLENCE IN RESEARCH

Swiss scientists belong to the world leaders in polar research. This may seem astonishing at first glance, as Switzerland, a landlocked country in the heart of Europe, traditionally does not belong to the grand seafaring nations. However, history shows that the impact of glaciers and ice on everyday life in Switzerland directed the attention of Swiss scientists and explorers towards the polar regions from early on – especially the large ice sheets in Greenland and Antarctica. On the other hand, the growing 19th-century awareness that glaciers the size of Greenland do exist led to the ultimate breakthrough of ice age theories put forward by Swiss and other scientists. These explained many of the landscape and topographic features of Switzerland.

Swiss polar researchers also made their mark in 1912, a unique but also tragic year for polar discovery. A highlight of that year was the Greenland expedition of Alfred de Quervain, who crossed Greenland from west to east and succeeded in bringing all members of the expedition safely back to Switzerland. In the same year, explorers were most active in Antarctica. They included Swiss lawyer and ski champion Xavier Mertz, who lost his life at the end of the tragic Australian expedition led by Douglas Mawson.

THE IMPACT OF CLIMATE CHANGE ON THE GREENLAND ICE SHEET

Swiss Scientists are primarily involved in field research into the dynamic behavior of the Greenland Ice Sheet and the surface melt process, focusing on changes in the ice mass and ice flow dynamics on the west coast of Greenland. These field investigations provide the basis for further scientific research and are complemented by methods using satellites for measuring and providing images (remote-sensing) and computer models.

SWISS CONTRIBUTION TO MODELLING OF POLAR OCEANIC AND ATMOSPHERIC CIRCULATIONS

High-resolution numerical models of the ocean and atmosphere have been developed to simulate complex flows in the polar regions. In addition, high-quality observation-based multi-decadal global datasets became available – so-called reanalyses – which serve to perform diagnostic studies of polar atmospheric circulation.

Swiss research in this field – particularly at the University of Bern and the Federal Institute of Technology Zurich (ETHZ) – makes an important contribution to better understanding these processes and phenomena in the polar regions. They encompass development of a regional high-resolution coupled atmosphere-ocean model in the South Atlantic, study of how oceanic eddies effect the overlaying atmosphere, analysis of cold air outbreaks from Antarctica, and study of water vapor transport to and heavy precipitation in polar regions.

SWITZERLAND'S LEADING ROLE IN POLAR RESEARCH ON SNOW

Their work is being carried out in the Antarctic and Greenland (primarily at Summit Camp located at the apex of the Greenland Ice Sheet at 3,300 meters above sea level and at the Swiss Camp). The study includes research into how deep sunlight penetrates snow. The findings were incorporated into the Swiss computer software SNOWPACK, which measures snow and energy balance.

IMPACT OF SEA ICE ON THE CLIMATE AND WEATHER IN EUROPE

Most Swiss sea-ice research to date has focused on the importance of sea ice to global weather and climate systems. Particularly satellite remote-sensing, climate and atmospheric modelling, and field campaigns to evaluate the physical properties

of sea ice help understand the modelling and remote-sensing results. Modelling and laboratory research on the mechanical behavior, chemistry, and micro-structural properties of sea ice has been another area of important Swiss contributions.

FROM THE ARCTIC TO THE ANTARCTIC ON THE TRAIL OF GREENHOUSE GASES

In the Arctic, the Norwegian Institute for Air Research NILU measures gases at the Zeppelin measuring station (Ny Ålesund) in Spitzbergen. The Swiss Federal Laboratories for Materials Science and Technology (Empa) built a special measuring device for this purpose. The station is one of eight measuring points worldwide as part of the international Advanced Global Atmospheric Gases Experiment or AGAGE project in which Empa and the NILU are working together closely. This includes a detailed comparison of how measurements are carried out at all stations to ensure consistent results. In the Antarctic, Empa works with the Korea Polar Research Institute (KOPRI) at the King Sejong station on the South Shetland Islands. Instead of measuring gases on-site, air samples have been taken every week since 2007. The bottled samples are later measured at Empa. Empa's results help global emissions and the distribution of gases to be characterized and quantified.

**“World Environment Day: BNP Paribas renews its support for polar research,”
Danièle Rod, BNP Paribas, 4 June 2020 [156]**

<https://www.bnpparibas.ch/en/2020/international-environment-day-swiss-polar-institute/>

Overview:

After an initial partnership cycle between the Swiss Polar Institute and the BNP Paribas Swiss Foundation to support young researchers from across the country between 2016 and 2018, the two entities have decided to renew their commitment for three more years.

Current & Relevant Information:

The Polar Access Fund: a unique tool to support polar expeditions led by young researchers

Based at EPFL, the Swiss Polar Institute (SPI) is a consortium of Swiss universities – the EPFL, the Swiss Federal Institute for Forest, Snow and Landscape Research (WSL), ETH Zurich, the University of Bern and the University of Lausanne – and Editions Paulsen, created in 2016. The aim is to make Switzerland one of the key, unifying players in the field of extreme environments and polar research.

Following a successful first collaboration in 2016 in the context of the Antarctic Circumnavigation Expedition, the SPI and the BNP Paribas Swiss Foundation have decided to jointly create a support fund to enable young researchers from a range of disciplines to embark on their first polar expedition: The Polar Access Fund. All of

the beneficiaries will be PhD students or young post-docs at a Swiss university studying an issue linked to climate change.

In addition to driving research forward, the PAF is the first tool in Switzerland to support this demographic of young researchers in their first expedition in the field. The beneficiaries have a lot to gain from this initiative. As well as receiving financial support, recipients will learn to plan an expedition, while simultaneously managing a budget and the logistical issues that arise from it, with support from SPI experts every step of the way.

Going to the ends of the earth to study the effects of climate change

To date, PAF has enabled 18 researchers and 8 Swiss research institutes to carry out expeditions in the field. The fact that 45% of beneficiaries were women was a resounding success for the project, since women are often underrepresented in natural sciences. Research fields include biology, paleoclimatology, atmospheric sciences, glaciology and many more. All of these disciplines complement one another and, as such, perfectly illustrate the complexity of climate change research.

To complete their research, all beneficiaries are alike in needing to visit the polar regions. However, this term covers a wide array of locations on the planet. While the Arctic and Greenland are often given as examples, there has been a lack of exploration in Antarctica because of the extreme weather seen there for large parts of the year. Lastly, while this is not common knowledge among the general public, the scientific community considers high-altitude regions such as the Himalayas and the Andes as the “Third Pole” – a vertical pole with endless glaciers. To prepare for what are sometimes extreme conditions, PAF researchers must follow a training regime before setting out.

A multi-disciplinary network propelled by the new generation

A genuine community has sprung up around this fund. As new beneficiaries are added each year (between 5 and 10), PAF researchers make up a multi-disciplinary network of individuals with a passionate interest in climate change. This network goes far beyond the borders of Switzerland. Without doubt, these young researchers demonstrate the growing global interest in the polar regions, which help to explain climate change.

13) United Kingdom:

“United Kingdom,” The Arctic Institute: Center for Circumpolar Security Studies, 19 June 2020 [157] <https://www.thearcticinstitute.org/countries/united-kingdom/>

Overview:

The United Kingdom has one of the longest histories of interest and activity in the Arctic of any country. Merchants, hunters, sailors and scientists have visited the Arctic from the British Isles since at least the 15th Century. Most famous of all were

the expeditions to discover fabled marine passages through the north to the lucrative markets of East Asia. Yet while attempts to navigate passage through the Arctic foundered – often tragically as in the case of Sir John Franklin – they facilitated the emergence of whaling, sealing, fishing and fur trapping industries in North America and Russia. Both the Muscovy Company and the Hudson’s Bay Company were founded by English royal charters, and resources brought back from the Arctic were used to feed the expansion of British industry. It is worth noting that by contemporary standards, the UK was an Arctic state until 1880, when it gave up its remaining Arctic territories to Canada.

By the early 20th Century, the nature of the UK’s relationship with the region had changed further. After the search for the Franklin expedition ended, the British government turned away from the Arctic to focus its attention on Antarctica. Overfishing and the declining use of whale oil also led to a reduction in the UK’s long-standing use of Arctic resources to feed its economy (although coal mining on Svalbard was still of interest). However, the emerging strategic importance of the region during the First World War brought the UK back to the Arctic as the British sought first to support its White Russian allies during the Russian revolution, and later the Soviet Union during the Second World War. The strategic importance of the region would remain high throughout the rest of the 20th Century as the UK became a lynchpin in the defense of Norway and the North Atlantic against the threat of the Soviet Union, and its nuclear-armed submarines patrolled beneath the Arctic sea-ice.

After a period of limited engagement in the 1990s (although the UK was an observer to the Ottawa convention in 1996, attended the first Arctic Council ministerial meeting in 1998, and has maintained a national scientific research program in the Arctic since the end of the Cold War), interest in the Arctic is growing again, driven by concerns about climate change, emerging economic opportunities, and defense and security. As an island nation, highly dependent on global trade, the geostrategic importance of a new ocean becoming navigable, for at least part of the year, is also attracting interest.

Current & Relevant Information:

The United Kingdoms’ recent set of Arctic policies were first set out in [Adapting to Change: UK policy towards the Arctic](#), a white paper first published in 2013.

The document sets out that the UK’s approach to international cooperation in the Arctic is built on three pillars: respect for the sovereign rights of the Arctic states and views and interests of people who live and work in the Arctic; leadership on issues such as climate change and international scientific cooperation; and cooperation with all other Arctic stakeholders. According to the paper, the UK’s main interest areas are in climate change, environmental protection and economic development. It does not address defense issues although this is also an area where the UK has

interests and responsibilities. Underpinning all aspects of the UK's engagement with the region is a commitment to undertaking, and using, high-quality, independent science. This is being coordinated by the Natural Environment Research Council (NERC) Arctic Office, which is hosted by the British Antarctic Survey in Cambridge. Further scientific activity in the Arctic is diffused throughout the UK university sector.

The UK Parliament has also shown an increasing interest in better understanding the opportunities and challenges emerging in the Arctic. In 2012, the Environmental Audit Committee (a House of Commons Select Committee) investigated what more the UK could do to promote responsible development in the region (and updated/re-discussed in 2018). This was followed in 2014 by an inquiry by the House of Lords Ad Hoc Select Committee on the Arctic, which considered whether the UK was pursuing its interests in an effective way. One of the main outcomes of this inquiry was to reignite the debate about whether the UK should have an Arctic ambassador, although the government continues to resist such a move. In 2015, the All-Party Parliamentary Group for the Polar Regions was launched to improve awareness and understanding of Arctic issues among UK parliamentarians. In 2018, the House of Commons Defence Committee also published an inquiry on UK Arctic defense capabilities, which contributed to the decision by the Ministry of Defence to prepare a UK Arctic Defence Strategy.

In summer 2018 the Foreign and Commonwealth Office of the United Kingdom published a new policy document towards the Arctic, titled *Beyond the Ice: UK policy towards the Arctic*. The document is founded on concepts of respecting the rights and interests of Arctic peoples and states while showing leadership in cooperative science. More so than the 2013 document, the new policy positions the UK's Arctic activities in relation to its Global Britain approach to foreign affairs, where world-leading science, business investment, environmental protection, and international cooperation will ensure the UK will remain an active player in world affairs post-Brexit. The largest change from the 2013 policy is the UK's decision to leave the European Union, effective January 31, 2020. While the final terms of the UK's future relationship with the EU will be negotiated throughout 2020, much uncertainty remains over how Brexit will affect Arctic-UK relations. The biggest projected impact will be a more limited role in fisheries negotiations for the Central Arctic Ocean and an exodus of European scientists based in the UK.

In September 2018, the UK Defence Secretary Gavin Williamson announced a new Defence Arctic Strategy, acknowledging an increase in military activity in the region and outlining UK military commitments for the High North. As part of the strategy, the Royal Marines committed to a ten-year cold weather training program with its Norwegian counterparts. The strategy also commits the UK to introduce new anti-submarine aircraft to be based out of RAF Lossiemouth in northeast Scotland in 2020. At the end of 2019, an official strategy document is yet to be released.

In the wake of Brexit, Scotland is using the Arctic as a means of reinventing its foreign policy to differentiate itself from the UK. In Fall 2017, the Scottish Government hosted the Arctic Circle Scotland forum in Edinburgh to identify policy links between Scotland and the far north. In September 2019, Scotland launched its first ever Arctic policy framework, named “Arctic Connections.” The framework sets out goals for Scotland across the Arctic and encourages stakeholders to engage with international counterparts to address challenges facing the area. Arctic Connections prioritizes environmental and climate change action as well as the strengthening of trade and investment in areas such as renewable energy. The framework also aims to promote Scotland as a marine transport and logistics hub for the High North.

The UK is an observer to the Arctic Council. In addition, the UK is a member of multiple international organizations and regimes involved in Arctic governance including the IMO (the only major UN agency based in London), NEAFC, OSPAR Commission, Convention on Biological Diversity, CITES, CMS, LRTAP, Stockholm Conventions on POPs, UNFCCC, and many more.

“What are the UK’s Interests in the Arctic?” Richard Clifford, The Polar Connection, 11 May 2017 [158] <http://polarconnection.org/uks-arctic-interests/>

Overview:

The UK has been cautious in forming and enacting an Arctic strategy thus far. In many ways, this is unsurprising given that it is not an Arctic state, and thus its regional role is secondary to the 8 states in the High North. However, the UK does have a number of national interests in the region, and the Arctic will present increasing opportunities and challenges in the coming decades. The UK forms the closest landfall south of the Arctic and is its closest neighbor, its northernmost point just 400km south of the Arctic Circle. Global interest in the Arctic is increasing, and failure to engage in the region fully could endanger the UK’s regional interests. In order to avoid being outmaneuvered by less capable states, the United Kingdom must build upon the 2013 ‘Adapting to Change’ strategy and increase its focus and engagement in the region. This article will outline the UK’s interests in the region and speculate how these could enhance engagement going forward.

Current & Relevant Information:

Climate Change

Climate Change is a global issue with wide ranging implications across the planet. In the United Kingdom, across political lines, there is dedication to leading on issues of climate change and mitigating their effects. Following the election of climate skeptic Donald Trump in the United States and the political turmoil afflicting the European Union and its states, it could fall to the UK to be a leading global voice on climate issues. Inevitably, looking to tackle climate issues leads to focus on the world’s polar

regions. The Arctic is at the forefront of the battle against climate change, with global warming impacts increasingly clear in the region. In the Arctic, there are a number of major mechanisms at play that are affecting global systems, so-called feedbacks by which Arctic change impacts the rest of the planet; an example of this would be the changes in reflectivity of the earth's surface. Snow and ice serve to reflect approximately 80% of the sun's rays, and as they melt, their reflectivity declines proportionally, which then serves to hasten the earth's warming. There are numerous indicators that highlight the warming of the Arctic region. Arctic ice levels have been decreasing rapidly, tying a record low with 4.14 million sq. km in September 2016. Sea temperatures in 2016 also saw significant rises with temperatures averaging 4 degrees above average between October and November, 2016.

The United Kingdom, along with other states, must be proactive in looking to combat regional change. As the closest landfall to the Arctic, the UK is particularly vulnerable to Arctic weather variation. The cold winters of 2009 and 2010, for example, were a result of Arctic temperature variation. Scotland, geographically the closest part of UK territory to the Arctic, has recorded warming seas of 1°C over the last 20 years. This has already resulted in changing ecosystems, and if these trends continue, it could impact regional UK economies like Scottish fisheries. In St Kilda, for example, declining Puffin populations have been blamed on warming climate. The Arctic Council, in 2010, recognized that Arctic climate change has impacts beyond the region, and thus other states not within the Arctic gained a voice in Arctic climate government. The UK is an observer in the Arctic Council, and could use its position in this forum to voice initiatives and plans for regional action. Given that the United Kingdom has advanced scientific and research facilities based in the Arctic and at home, it is well placed to conduct regional research and work alongside other states in collaborating regional climate data.

Arctic Security Issues

The deterioration of Western-Russian relations, following Crimea's annexation and exacerbated by events in Syria, has led to changing security conceptions in the Arctic. In reality, there has long been concern that Russia under Putin may attempt to play an expansionist role in the region, going back as far as 2007, when explorer Arthur Chilingarov planted a Russian flag beneath the North pole. After recent Russian aggression, the Arctic is frequently viewed by commentators as a frontier. Enthusiasm for a permanent NATO role within the region has increased in some quarters, and this would directly impact the United Kingdom as a member of the alliance, giving the UK a clear stake in regional security developments.

5 of the 8 Arctic states are also members of the NATO military alliance, while Sweden and Finland are increasingly moving to collaborate with the organization. Distrust of Russia is understandable, given their military activities in other theaters, and the lack of transparency regarding Russian military buildup and drill in the Arctic.

Russian actions have concerned allies, and with good reason. Russia has unparalleled military strength in the Arctic with 2/3rd of its Naval force based in the Kola Peninsula. Russia has shown its military strength in the Arctic in a number of major military operations, including part of its Vostok exercise, the largest post-Soviet drill at the time.

An emboldened Russia has, from 2014, increasingly tested the United Kingdom's defense response times. Russian submarine activity in the Arctic is naturally a concern for security planners as through these waters they can access UK maritime territory. Tracking Russian submarine activity around UK waters has been a challenge for the United Kingdom, following the retirement of the Nimrod MR2 plane. This was apparent in 2015, when off Scotland's waters, the UK required the assistance from a French plane and other NATO allies to search for suspicious activity. This capability gap has recently been recognized and addressed as part of the 2015 SDSR. Following the review, 9 P-8 Poseidon planes were ordered.

It should be noted that despite increased security fears from the UK's allies, cooperation in the Arctic on low level issues has been maintained, and deepened in some instances, post Crimea. The UK attended the first annual White House Ministerial in 2016, which also saw a Russian delegation present and working collaboratively with the other states. While there is nothing inevitable about security competition with Russia in the region given the geopolitical situation, the UK has moved to improve its capacity to fight in cold weather theatres. The Royal Marines form the UK's only dedicated mountain and Arctic warfare specialists, and conduct a number of training exercises to prepare and remain prepared for Arctic warfare. Royal Marines conduct Arctic preparation war games in Scotland annually, as part of their cold weather training. In January 2017, 400 commandos endured sub 0 temperatures, and conducted cold weather training in war games designed for Arctic conditions, as part of exercise 'Green Claymore.' The UK's military has agreements in place with Norway, allowing the military to utilize Norway's Bardufoss military base inside the Arctic for training exercises. The air wing of the Royal Marines has been tested in the Arctic with the 845 Merlin's going to Norway's base in Bardufoss in March 2016, clocking 120 hours of flying time. The UK army also conducts training efforts out of the Bardufoss base. The army maintains the ability to fight in the Arctic, with training courses for reserves and regulars.

With potential security issues in waters north of the UK, and with a likely increase in maritime traffic as sea ice melts, the UK Naval forces may increasingly see themselves patrolling in the Arctic and surrounding waters. The UK had not sent a submarine to the Arctic following an accident in 2007, on board HMS Tireless, which killed 2 soldiers. As shipping increases north of UK territorial waters, and the Russian threat grows, the prospect of restarting extended patrols in the UK's northern waters and tours of the Arctic become more attractive. It should, of course,

be noted that this project would be a major stretch on naval resources, and greater investment alongside the Trident successor program would have to be made.

Research and Commercial Opportunities

The UK engages in a number of Arctic research projects in which it lends its expertise and resources. Going forward, these links could provide leverage with regional states. Examples of such projects include an EU Integrated Arctic Observing System, a project with a €15.5 million budget, involving 49 partners in 20 European and non-European countries. Another example is the Blue Action project, which examines the Arctic's impact on weather and climate. The end goal of this project is the implementation of the Trans-Atlantic Ocean Research Alliance, and to the EU's Blue Growth Agenda, along with supporting sustainable growth in marine and maritime sectors as a whole. It has a budget of €7.5 million, involving 116 experts from 40 organizations in 17 countries. The UK plays a leading role on projects like ICE-ARC (Ice, Climate, Economics – Arctic Research on Change). This project is managed by the United Kingdom, and involves researchers from 21 institutes from 11 European countries. These links to the Arctic will promote UK engagement further in the coming years, and highlights the excellence of the UK's research facilities.

Developments in the Arctic will offer fruitful commercial opportunities in certain sectors. The United Kingdom, and certain regions in particular, will increasingly find opportunities for investment and engagement. Scotland, for example, could capitalize on its geographic position, and establish itself at the heart of a wider Trans-Atlantic 'Arc of Prosperity.' The Arc of Prosperity includes the United States, Canada, Greenland, Iceland, Faroe Islands, Denmark, Norway, Sweden and Finland. Investment in emerging industries among these Arctic nations is likely to be significant, as most Arctic nations are among the world's most productive economies, and with the exception of Russia, they enjoy strong reputations in business, for their stability and respect for the rule of law.

As Arctic maritime activity increases, the United Kingdom is well placed to explore shipping opportunities such as the creation of a container hub off Scotland's northern coast, in a location such as the Orkney Isles. Arctic tourism could well increase as ships are able to independently navigate Arctic waters. In September of 2016, Crystal Serenity became the first cruise ship to pass through the Northwestern passage. The UK could be well placed to take advantage of such opportunities, and regions may see a boost in tourism as a result. Arctic oil developments will also have an impact and provide opportunities for the UK's energy sector. While the UK doesn't have a claim to these resources, new oil production in the Arctic would likely move its way through UK markets. UK companies like BP could also play a role in oil extraction projects going forward. Currently, however, they will not be able to do so in projects with Russian companies as a result of the sanctions regime.

Conclusion

The UK has a strong incentive to increase engagement with Arctic states and the Arctic region. Climate change, Arctic security dilemmas and opportunities for UK research and investment will and should pull the government to plan more thoroughly the UK's policy in relation to the region. The United Kingdom is an expert within certain fields of research, and its engagement within the region is valuable in recording and mitigating the impact of climate change. Given that the UK will continue to respect the rights of the Arctic states to set the agenda, and their sovereignty over resources, it is likely that increased engagement on regional issues will be well received.

“The United Kingdom and the Arctic in the 21st Century,” Duncan Depledge, Arctic Yearbook, 2012 [159]

https://arcticyearbook.com/images/yearbook/2012/Scholarly_Papers/7.Depledge.pdf

Abstract:

Britain's interest in the Arctic stretches back over half a millennium. British explorers, companies, ships and scientists have at various times been at the forefront of bringing the Arctic into wider global, economic, political, scientific and cultural networks. This paper offers a glimpse into how the Arctic is seen by UK civil servants in the contemporary British government, as well as the challenges they face in reconciling the Arctic with broader global interests. No formal Arctic Strategy has been published although there has been a tentative declaration of intent. Lastly, the paper suggests how the UK can make a constructive contribution to the region through the development of a formal strategy.

Current & Relevant Information:

The Arctic in UK Policy

Traditionally, the UK has been an Antarctic state. However, in recent years, an increasing number of civil servants and parliamentarians in London have become aware of, and started reacting to, extraordinary environmental changes occurring in the Arctic (ACIA, 2004). These reactions have gone beyond simply invoking the Arctic in service of an established 'Green' domestic political agenda as reported in the British media (Jowit and Aarskog, 2006), or as a natural extension to the UK's activities in the British Antarctic Territory. The meeting of Arctic stakeholders in Oban, Scotland, hosted by the UK Foreign and Commonwealth Office (FCO), and the UK Parliament Environmental Audit Committee's inquiry, 'Protecting the Arctic', as well as the provision of funding for a new Arctic science program, are indicative of just some of the ways in which the British government has recently sought to clarify how the Arctic matters to the UK (DEFRA/JNCC, 2008; Parliament, 2012; NERC, 2012). The Ministry of Defence has also shown greater interest in the future security of the region (DCDC, 2007; 2010).

While there is ambiguity about whether the UK has any kind of formal Arctic Strategy (Archer, 2011; Depledge and Dodds, 2011), in 2011 the FCO Minister, Henry Bellingham, outlined a tentative statement of intent:

Our principal aims in the Arctic are to promote peace and good governance, and increase UK influence in the region by maintaining good bilateral and multilateral relationships with the Arctic States, for example through supporting the work of the Arctic Council and other international and regional bodies.

The UK recognizes the need to protect the Arctic environment, particularly in light of rapid regional climate change, but also recognizes that the Arctic region is crucial to UK energy security and of increasing interest to British business and scientists. The government therefore works with the Arctic states to promote and support British interests in the region, including in respect of science, energy, fisheries and potential transport routes opened up by melting sea ice” (Hansard, 2011: col 700W).

The website of the FCO further helps to orientate the direction of UK engagement with the Arctic. The UK’s “active role in Arctic affairs” since the 16th Century, its geographical position as the “Arctic’s closest neighbor”, the presence of British citizens and the implications of climate change (including for energy security and increased shipping) are all invoked in various accounts of UK-Arctic relations where past, present and future are used to justify the UK’s continuing interest (and presence) in this part of the world (FCO, 2012). The FCO’s Polar Regions Unit represents the UK’s ‘Arctic face’ internationally, helping to coordinate the UK’s contribution to Arctic Council working groups. As the working groups are generally recognized as the workhorses of the Arctic Council, this is where the UK expects to have its greatest impact on Arctic assessments and policy, particularly when it comes to environmental protection. Contributing to these groups is also crucial for justifying the UK’s continued presence as a permanent observer to the Arctic Council. In evidence submitted to the British parliament by the Foreign and Commonwealth Office’s Polar Regions Unit (PRU), specific British interest in the Arctic was discussed in terms of this permanent observer status at the Arctic Council, energy and climate change research, international climate negotiations, protection of biodiversity, the potential of new shipping routes, the implications for bilateral relations (with Denmark and Norway in particular), and the country’s contribution to fisheries management (Parliament, 2012b). While these interests may appear marginal to some observers, the UK-Norway fisheries dispute, which the UK referred to the International Court of Justice in 1951 (Evensen, 1952); the UK-Iceland ‘Cod Wars’ (Jónsson, 1982); and the UK’s on-going disagreement with Norway over the application of the Svalbard Treaty (Pederson, 2006) have demonstrated the UK’s willingness to defend them.

Responsibility for different UK interest areas is spread out among a diffuse set of government actors. For example, responsibility for climate change and energy

exploration and exploitation issues lies with the Department of Energy and Climate Change (DECC). The Department for Transport (DfT) and the Maritime and Coastguard Agency (MCA) respond to developments in shipping. The Department for Food and Rural Affairs (DEFRA) leads on question of biodiversity, the environment and fisheries, and the Department for Business, Innovation and Skills (BIS) is responsible for overseeing the Arctic Research Program run by the Natural Environment Research Council (NERC). Defense rests with the Ministry of Defence (MOD). The FCO, aside from the work of the PRU at the Arctic Council, also manages bilateral relations with the so-called Arctic states through country-specific posts and its network of British Embassies and High Commissions (Parliament, 2012b). What this means in practice is that bilateral relations have an Arctic dimension quite apart from the work of the PRU as evidenced in the UK's Memoranda of Understanding (MOU) with Norway and Canada (AANDC, 2009; FCO, 2011). Similarly, DECC's attention to climate change and energy, or DEFRA's responsibility for fisheries, treats the Arctic as part of a much broader policy agenda.

The above is indicative of the way in which the UK claims no interest in the Arctic per se. This stands in contrast to the way that Arctic states such as Canada, Norway and Russia portray the Arctic as a place that is intrinsic to their national identity/objectives. However, this has not stopped the UK from seeking to use the Arctic to support its own interests, relating, for example, to scientific research, negotiations on climate change, national security and potential economic opportunities. These interests are largely linked to the UK's own sense of itself (and the recognition it seeks from Arctic states) as not just a 'sub-Arctic' or 'near-Arctic' state (as China has – see SIPRI, 2012), but as the Arctic's "closest neighbor" (FCO, 2012). This in turn is seemingly used to justify, to domestic and international audiences, the claim that the UK has an extra responsibility to protect the Arctic (Parliament, 2012a), as well as a sense that the UK is somehow more vulnerable (physically, economically, and militarily) to an Arctic undergoing rapid geopolitical and environmental transformation. The notion of vulnerability is particularly suggestive of the ways in which the Arctic also physically demands attention from the UK, because of the influence the Arctic can potentially exert on the UK's local weather systems, marine surroundings, and ecosystems, as well as larger Earth systems (terrestrial, oceanic and atmospheric). The UK is subsequently assembled by government as an actor that is not only relevant to the Arctic region, but potentially more relevant than other states and organizations from outside the region, particularly as a partner for scientific and economic collaboration [see the recent MOUs signed with Canada and Norway, and attempts by UK-based energy firms to secure hydrocarbon exploration licenses in the Arctic (Dulnev, 2011)], but also in negotiations over the future role and remit of the Arctic Council (Koivurova, 2010) and regional security (Depledge and Dodds, 2012).

“The UK’s new Arctic policy: More explicit, but still conservative,” Ragnhild Grønning, High North News, 18 June 2018 [160]

<https://www.highnorthnews.com/en/uks-new-arctic-policy-more-explicit-still-conservative>

Overview:

Although UK’s new Arctic policy framework supports the status quo, the strategy is more explicit when it comes to connecting Arctic interests to its broader foreign policy interests, as a part of ‘Global Britain’.

The Foreign and Commonwealth Office of the UK published a new policy document towards the Arctic in the beginning of April this year, updating the UK’s Arctic policy from 2013. The document reiterates the three concepts of respect, co-operation and appropriate leadership, but is less conservative than the previous policy document when it comes to its role and interests in the region.

Duncan Depledge, Director of the All-Party Parliamentary Group for Polar Regions Secretariat in Westminster and Special Adviser to the UK House of Commons Defence Committee, explains that there is little that surprises in the new Arctic policy framework.

- It is a conservative document that supports the status quo. The UK is still trying to position itself as a model Arctic neighbor that respects the rights and interests of Arctic peoples and states, shows leadership in areas such as science, and acts in partnership with other Arctic stakeholders, says Depledge to High North News.

Current & Relevant Information:

The Arctic as an example of ‘Global Britain’

When the UK published its first Arctic policy framework in 2013 it was careful not to overstate its interests in the region. Although the UK has been a permanent observer to the Arctic Council since it was founded in 1996, it does not want to provoke other Arctic states by being too assertive in the region.

However, since the previous UK Arctic policy document was published, several other non-Arctic nations have shown more explicit interest in the region by publishing strategies and policy papers. For example, China issued its first Arctic policy in January this year. Similarly, Japan, South Korea and the EU have issued Arctic strategy documents over the last few years.

- What stands out for me in the new Arctic policy framework is that the UK Government is more explicit about connecting its Arctic interests to its broader foreign policy interests and portraying its strengths in the Arctic as an exemplar of ‘Global Britain’ in action, says Depledge.

This aspiration is reflected in the foreword of the policy document, where Sir Alan Duncan, Minister of State for the Polar Regions states that ‘UK’s role in the Arctic

reflects the very best of what Global Britain has to offer, from world-leading science, and business investment, to our commitment to environmental protection, international cooperation, and the rule-based system'. 'Global Britain' has become a common slogan used by politicians to describe the UK's new foreign policy, reassuring that the UK will remain an active player on the global arena post-Brexit.

Science and innovation: advancing knowledge on climate change

The UK is one of the Arctic's closest neighbors and has a long history of engagement in the region, especially in the field of polar science and innovation. The policy document states that 'UK science and innovation helps advance global understandings of how changes in the Arctic have global consequences and helps to find new solutions to the challenges.' For example, the UK has maintained a research station at Ny-Ålesund on Svalbard since 1972, and is a part of multiple forums and agreements for science and research collaboration with other Arctic nations.

- The Government clearly wants UK-led science and innovation to lead the way in advancing global understanding of how changes in the Arctic have global consequences, and I think it is in that drive to produce knowledge that has global reach where government officials see the most opportunity to influence the rest of the international community, explains Depledge.

The uncertainties of Brexit

The policy document states that the biggest change to the UK's Arctic position since 2013 is the decision to leave the European Union. It is however uncertain how Brexit will affect the UK's policy in the Arctic as its final agreement with the EU is not ready yet.

Meanwhile, Depledge explains the UK has always had its own independent relationship with the Arctic, rooted in bilateral and multilateral science and defense partnerships that have developed independently of the EU. He underlines that one area where the UK might lose out is in the fisheries negotiations for the Central Arctic Ocean.

- It seems unlikely that the UK will secure an independent seat at the Central Arctic Ocean fisheries negotiations, says Depledge.

There is also a chance that science cooperation might be affected by Brexit, adds Depledge:

- The biggest risk for the UK at the moment is that British-based scientists will be excluded from future EU-Arctic science programs. I'm cautiously optimistic that the two sides will find new ways of working together on Arctic science.

3. United States Interests and Role:

“Arctic Governance: Synthesis and assessment of Arctic governance mechanisms and recent policy actions,” Flavius Mihaies, The Aspen Institute [161]

<https://assets.aspeninstitute.org/content/uploads/files/content/upload/23%20Arctic%20Governance%20Synthesis%20COLOR.pdf>

Summary:

Summary of existing architecture for the governance and management of the Arctic

Regional forums:

While several institutions are involved in the governance of the Arctic marine area, the most prominent among them is the Arctic Council. The Arctic Council was established as a high level inter-governmental forum in 1996 to “provide a means for promoting cooperation, coordination and interaction [...] on common arctic issues, in particular issues of sustainable development and environmental protection in the Arctic”.

The Arctic Council was established by non-legally binding declaration and is a consensus-based organization. Decisions of the Council do not have any binding effect on individuals.

The eight Arctic states are Members of the Arctic Council and eight Non-Arctic States are Official Observers. A variety of governmental organizations and NGO’s also hold observer status. Of particular interest, the Arctic Council establishes significant participation by the indigenous peoples of the Arctic, whom the Council Members must consult prior to any consensus decision-making.

The Council’s current responsibilities pertain to research, advising on policy, and disseminating voluntary guidelines on the main topical areas that it is concerned with, including climate change, sustainable development, Arctic monitoring and assessment, persistent organic pollutants and other contaminants in the Arctic and other issues covered by its six Working Groups.

According to Arctic expert Brooks Yeager, the Arctic Council has made major contributions to the Arctic region, by “identifying issues of importance to the conservation of the Arctic environment and the well-being of Arctic people, and in developing assessments that have become the basis for cooperative action by the Arctic governments.” The Council has also issued guidelines and manuals of good practices, particularly related to the Arctic marine area.

Regional Governance:

The Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR) is the legal instrument guiding international cooperation on the protection of the marine environment of the North-East Atlantic.

The OSPAR Convention “covers the regulation of all human activities which can have an adverse effect on the ecosystems and the biodiversity in the North East Atlantic, with the explicit exception of fisheries management and with certain limitations for the regulation of shipping”. The OSPAR Commission was tasked to implement and monitor the Convention and can adopt measures and programs in the form of both legally binding decisions and non-legally binding recommendations.

There are currently fifteen contracting parties to the OSPAR Convention, all from Europe. The European Commission also participates on behalf of the European Union.

OSPAR has been cited as an example of the successful implementation of ecosystem-based management at the international level, even though the OSPAR Convention does not explicitly refer to the ecosystem approach.

Global governance:

The United Nations Convention on the Law of the Sea (UNCLOS) establishes a comprehensive binding framework for the rights and responsibilities of nations in their use of the world's oceans.

To date 156 countries and the European Community have joined in the Convention. The United States is not a member. However, the Convention is accepted as a codification of the customary international law.

Certain UNCLOS articles are directly relevant to the Arctic, such as Article 118 234 (Ice-covered areas) that extend environmental protection powers to Arctic coastal States within the limits of their exclusive economic zones (EEZ) if ice is present in an area for most of the year, and Annex II (Commission on the Limits of the Continental Shelf) and Article 76 (Definition of the continental shelf), which led to the current submissions of “outer continental shelf” sovereignty claims (extending beyond the 200 nautical miles EEZ limit) by some Arctic states to the Commission established by the UNCLOS. In addition, Article 123 calls on the states bordering semi-enclosed seas to cooperate through an “appropriate regional organization”. If the Arctic maritime area were so classified, the littoral States would have greater obligations to cooperate in regard to environmental protection.

The UNCLOS has two implementation agreements, the Part XI Deep-Sea Mining Agreement and the Fish Stock Agreement.

The International Maritime Organization (IMO) is the United Nations' specialized agency that was tasked with developing and maintaining a comprehensive regulatory framework for shipping with a focus on ship safety. The jurisdiction of the

IMO includes safety, environmental concerns, legal matters, technical co-operation, maritime security and the efficiency of shipping.

As a United Nations agency, the IMO is composed of 168 Member States and three Associate Members (Hong Kong, China; Macao, China; and Faroe Islands, Denmark).

Regarding the Arctic, IMO Guidelines for Ships Operating in Arctic Ice-covered Waters, also known as the Polar Code, created a unified set of voluntary classification standards for ships navigating in both Polar regions. According to Arctic governance expert Lynda Nowlan, the Polar Code “buil[t] upon existing treaties administered by the IMO, such as the International Convention for the Prevention of Pollution from Ships (MARPOL), and associated safety and training treaties. Protocols under the LRTAP Convention also contain specific references to the Arctic environment”.

Current & Relevant Information:

On January 9, 2009, the Bush Administration issued a new policy directive to update the United States government’s Arctic policy.

It notes human and environmental changes affecting the region, “This directive takes into account several developments, including, among others: “...The effects of climate change and increasing human activity in the Arctic region; [...] A growing awareness that the Arctic region is both fragile and rich in resources.” and emphasizes the need for the U.S. to assert its interests, “The United States has broad and fundamental national security interests in the Arctic region and is prepared to operate either independently or in conjunction with other states to safeguard these interests”. It also calls on Congress to ratify the UNCLOS (“The Senate should act favorably on U.S. accession to the U.N. Convention on the Law of the Sea promptly,”), yet rejects the need for a binding new international or regional instrument, “The geopolitical circumstances of the Arctic region differ sufficiently from those of the Antarctic region such that an “Arctic Treaty” of broad scope -- along the lines of the Antarctic Treaty -- is not appropriate or necessary.” Nevertheless, it leaves open opportunities for improving existing structures, “The United States is nevertheless open to updating the structure of the Council, including consolidation of, or making operational changes to, its subsidiary bodies, to the extent such changes can clearly improve the Council's work and are consistent with the general mandate of the Council”.

“Arctic Region,” U.S. Department of State: Office of Ocean and Polar Affairs [162\]](https://www.state.gov/key-topics-office-of-ocean-and-polar-affairs/arctic/)
<https://www.state.gov/key-topics-office-of-ocean-and-polar-affairs/arctic/>

Overview:

Arctic Council:

Established by the Ottawa Declaration in 1996, the Arctic Council is the preeminent intergovernmental forum for addressing issues related to the Arctic Region. The members of the Arctic Council include the eight Arctic States (Canada, Denmark, Finland, Iceland, Norway, Sweden, the Russian Federation, and the United States). The Arctic Council is not a treaty-based international organization but rather an international forum that operates on the basis of consensus, echoing the peaceful and cooperative nature of the Arctic Region. The Council focuses its work on matters related to sustainable development, the environmental protection; its mandate explicitly excludes military security. Traditionally, the Council is chaired by the foreign minister of the country holding the chairmanship. Its day-to-day work is carried out by the eight Senior Arctic Officials (SAO) and six PP representatives, with input from working groups, expert groups, and task forces.

The United States held the rotating chairmanship of the Arctic Council from 1998-2000 and 2015-2017.

Current & Relevant Information:

Key Documents

[2016 Implementation Framework for the National Strategy for the Arctic](#)

[Executive Order on Enhancing Coordination of National Efforts in the Arctic \(2015\)](#)

[Implementation Plan for the National Strategy for the Arctic Region \(2014\)](#)

[National Strategy for the Arctic Region \(2013\)](#)

[Interagency Arctic Research Policy Committee](#)

“Changes in the Arctic: Background and Issues for Congress,” Congressional Research Service, 18 June 2020 [163] <https://fas.org/sqp/crs/misc/R41153.pdf>

Summary:

The diminishment of Arctic sea ice has led to increased human activities in the Arctic, and has heightened interest in, and concerns about, the region’s future. The United States, by virtue of Alaska, is an Arctic country and has substantial interests in the region. The seven other Arctic states are Canada, Iceland, Norway, Sweden, Finland, Denmark (by virtue of Greenland), and Russia.

The Arctic Research and Policy Act (ARPA) of 1984 (Title I of P.L. 98-373 of July 31, 1984) “provide[s] for a comprehensive national policy dealing with national research needs and objectives in the Arctic.” The National Science Foundation (NSF) is the lead federal agency for implementing Arctic research policy. Key U.S. policy documents relating to the Arctic include National Security Presidential Directive 66/Homeland Security Presidential Directive 25 (NSPD 66/HSPD 25) of January 9, 2009; the National Strategy for the Arctic Region of May 10, 2013; the January 30,

2014, implementation plan for the 2013 national strategy; and Executive Order 13689 of January 21, 2015, on enhancing coordination of national efforts in the Arctic. The office of the U.S. Special Representative for the Arctic has been vacant since January 20, 2017.

The Arctic Council, created in 1996, is the leading international forum for addressing issues relating to the Arctic. The United Nations Convention on the Law of the Sea (UNCLOS) sets forth a comprehensive regime of law and order in the world's oceans, including the Arctic Ocean. The United States is not a party to UNCLOS.

Record low extents of Arctic sea ice over the past decade have focused scientific and policy attention on links to global climate change and projected ice-free seasons in the Arctic within decades. These changes have potential consequences for weather in the United States, access to mineral and biological resources in the Arctic, the economies and cultures of peoples in the region, and national security.

The geopolitical environment for the Arctic has been substantially affected by the renewal of great power competition. Although there continues to be significant international cooperation on Arctic issues, the Arctic is increasingly viewed as an arena for geopolitical competition among the United States, Russia, and China. Russia in recent years has enhanced its military presence and operations in the Arctic. China's growing activities in the Arctic have become a matter of increasing curiosity or concern among observers.

U.S. military forces have begun to pay more attention to the Arctic in their planning and operations. The Department of Defense (DOD), the Navy, and the Coast Guard have all issued Arctic strategy documents in recent years. Whether DOD and the military services are adequately resourcing these strategies and taking appropriate and adequate actions for defending U.S. interests in the Arctic has emerged as a topic of debate and congressional oversight. The Coast Guard has two operational polar icebreakers and has received funding for the procurement of the first of three planned new polar icebreakers.

The diminishment of Arctic ice could lead in coming years to increased commercial shipping on two trans-Arctic sea routes—the Northern Sea Route close to Russia, and the Northwest Passage close to Alaska and through the Canadian archipelago—though the rate of increase in the use of these routes might not be as great as sometimes anticipated in press accounts. International guidelines for ships operating in Arctic waters have been recently updated.

Changes to the Arctic brought about by warming temperatures will likely allow more exploration for oil, gas, and minerals. Warming that causes permafrost to melt could pose challenges to onshore exploration activities. Increased oil and gas exploration and tourism (cruise ships) in the Arctic increase the risk of pollution in the region. Cleaning up oil spills in ice-covered waters will be more difficult than in other areas,

primarily because effective strategies for cleaning up oil spills in ice-covered waters have yet to be developed.

Large commercial fisheries exist in the Arctic. The United States is working with other countries regarding the management of Arctic fish stocks. Changes in the Arctic could affect threatened and endangered species, and could result in migration of fish stocks to new waters. Under the Endangered Species Act, the polar bear was listed as threatened on May 15, 2008. Arctic climate change is also expected to affect the economies, health, and cultures of Arctic indigenous peoples.

Current & Relevant Information:

U.S. Identity as an Arctic Nation

As mentioned earlier, the United States, by virtue of Alaska, is an Arctic country and has substantial political, economic, energy, environmental, and other interests in the region. Even so, Alaska is geographically separated and somewhat distant from the other 49 states, and relatively few Americans—fewer than 68,000 as of July 1, 2017—live in the Arctic part of Alaska. A March 6, 2020, research paper on the Arctic in U.S. national identity, based on data collected in online surveys conducted in October-December 2019, stated the following:

We found that Americans continue to mildly disagree with the assertion that the United States is an Arctic nation with broad and fundamental interests in the region. On a scale from 1 to 7, with higher numbers indicating stronger agreement, Americans' average rating was 3.40, down slightly from 3.51 in 2017. A plurality of respondents (29%) answered with a score of one, indicating the strongest disagreement. As in previous years, men and older Americans showed greater inclination to agree with the combined assertion of Arctic identity and interests than women or younger respondents. Asking separately about Arctic identity and interests this year revealed stronger disagreement with an Arctic identity, but a slight inclination to agree with the existence of American interests in the region....

We also asked for associations with Alaska and found that while Americans dominantly associate Alaska with cold, snow, and ice, they also associate a greater diversity of other concepts with the state than with the Arctic. In particular, Americans more readily associate animals and wilderness with Alaska than with the Arctic.

U.S. Arctic Research

Arctic Research and Policy Act (ARPA) of 1984, As Amended

The Arctic Research and Policy Act (ARPA) of 1984 (Title I of P.L. 98-373 of July 31, 1984) “provide[s] for a comprehensive national policy dealing with national research needs and objectives in the Arctic.” The act, among other things

- made a series of findings concerning the importance of the Arctic and Arctic research;
- established the U.S. Arctic Research Commission (USARC) to promote Arctic research and recommend Arctic research policy;
- designated the National Science Foundation (NSF) as the lead federal agency for implementing Arctic research policy;
- established the Interagency Arctic Research Policy Committee (IARPC) to develop a national Arctic research policy and a five-year plan to implement that policy, and designated the NSF representative on the IARPC as its chairperson; and
- defined the term “Arctic” for purposes of the act.

The Arctic Research and Policy Act of 1984 was amended by P.L. 101-609 of November 16, 1990. For the texts of the Arctic Research and Policy Act of 1984 and P.L. 101-609, see Appendix A and Appendix B, respectively

Major U.S. Policy Documents Relating to Arctic

January 2009 Arctic Policy Directive (NSPD 66/HSPD 25)

On January 12, 2009 (i.e., eight days before its final day in office), the George W. Bush Administration released a presidential directive establishing a new U.S. policy for the Arctic region. The directive, dated January 9, 2009, was issued as National Security Presidential Directive 66/Homeland Security Presidential Directive 25 (NSPD 66/HSPD 25). The directive was the result of an interagency review, and it superseded for the Arctic (but not the Antarctic) a 1994 presidential directive on Arctic and Antarctic policy. The directive, among other things

- states that the United States is an Arctic nation, with varied and compelling interests in the region;
- sets forth a six-element overall U.S. policy for the region;
- describes U.S. national security and homeland security interests in the Arctic; and
- discusses a number of issues as they relate to the Arctic, including international governance; the extended continental shelf and boundary issues; promotion of international scientific cooperation; maritime transportation; economic issues, including energy; and environmental protection and conservation of natural resources.

For the text of NSPD 66/HSPD 25, see Appendix C.

May 2013 National Strategy for Arctic Region

On May 10, 2013, the Obama Administration released a document entitled National Strategy for the Arctic Region. The document appears to supplement rather than supersede the January 2009 Arctic policy directive (NSPD 66/HSPD 25) discussed

above. The executive summary of National Strategy for the Arctic Region begins by quoting the above statement from the previous May 2010 national security strategy document, and then states the following:

The National Strategy for the Arctic Region sets forth the United States Government's strategic priorities for the Arctic region. This strategy is intended to position the United States to respond effectively to challenges and emerging opportunities arising from significant increases in Arctic activity due to the diminishment of sea ice and the emergence of a new Arctic environment. It defines U.S. national security interests in the Arctic region and identifies prioritized lines of effort, building upon existing initiatives by Federal, state, local, and tribal authorities, the private sector, and international partners, and aims to focus efforts where opportunities exist and action is needed. It is designed to meet the reality of a changing Arctic environment, while we simultaneously pursue our global objective of combating the climatic changes that are driving these environmental conditions. Our strategy is built on three lines of effort:

1. Advance United States Security Interests – We will enable our vessels and aircraft to operate, consistent with international law, through, under, and over the airspace and waters of the Arctic, support lawful commerce, achieve a greater awareness of activity in the region, and intelligently evolve our Arctic infrastructure and capabilities, including ice-capable platforms as needed. U.S. security in the Arctic encompasses a broad spectrum of activities, ranging from those supporting safe commercial and scientific operations to national defense.
2. Pursue Responsible Arctic Region Stewardship – We will continue to protect the Arctic environment and conserve its resources; establish and institutionalize an integrated Arctic management framework; chart the Arctic region; and employ scientific research and traditional knowledge to increase understanding of the Arctic.
3. Strengthen International Cooperation – Working through bilateral relationships and multilateral bodies, including the Arctic Council, we will pursue arrangements that advance collective interests, promote shared Arctic state prosperity, protect the Arctic environment, and enhance regional security, and we will work toward U.S. accession to the United Nations Convention on the Law of the Sea (Law of the Sea Convention).

Our approach will be informed by the following guiding principles:

- Safeguard Peace and Stability – Seek to maintain and preserve the Arctic region as an area free of conflict, acting in concert with allies, partners, and other interested parties. Support and preserve: international legal principles of freedom of navigation and overflight and other uses of the sea and airspace related to these freedoms, unimpeded lawful commerce, and the peaceful resolution of disputes for all nations.

- Make Decisions Using the Best Available Information – Across all lines of effort, decisions need to be based on the most current science and traditional knowledge.
- Pursue Innovative Arrangements – Foster partnerships with the state of Alaska, Arctic states, other international partners, and the private sector to more efficiently develop, resource, and manage capabilities, where appropriate and feasible, to better advance our strategic priorities in this austere fiscal environment.
- Consult and Coordinate with Alaska Natives – Engage in a consultation process with Alaska Natives, recognizing tribal governments’ unique legal relationship with the United States and providing for meaningful and timely opportunity to inform Federal policy affecting Alaskan Native communities.

January 2014 Implementation Plan for National Strategy for Arctic Region

On January 30, 2014, the Obama Administration released an implementation plan for the May 2013 national strategy for the Arctic region. The plan states that it

complements and builds upon existing initiatives by Federal, State, local, and tribal authorities, the private sector, and international partners, and focuses efforts where opportunities exist and action is most needed. The Implementation Plan reflects the reality of a changing Arctic environment and upholds national interests in safety, security, and environmental protection, and works with international partners to pursue global objectives of addressing climatic changes.

This Implementation Plan follows the structure and objectives of the Strategy’s three lines of effort and is consistent with the guiding principles. The lines of effort of the Strategy and the Implementation Plan are as follows:

- Advance United States Security Interests
- Pursue Responsible Arctic Region Stewardship
- Strengthen International Cooperation

These lines of effort and guiding principles are meant to be implemented as a coherent whole.

The plan also states the following:

Climate change is already affecting the entire global population, and Alaska residents are experiencing the impacts in the Arctic. To ensure a cohesive Federal approach, implementation activities must be aligned with the Executive Order on Preparing the United States for the Impacts of Climate Change while executing the Strategy. In addition to the guiding principles, the following approaches are important in implementing the activities across all of the lines of effort:

- **Foster Partnerships with Arctic Stakeholders.** As outlined in the Strategy, all lines of effort must involve Arctic partners, particularly the State of Alaska and Alaska Natives in the Arctic region. Federal agencies, the State of Alaska, tribal communities, local governments, and academia will work with other nations, industry stakeholders, non-governmental organizations, and research partners to address emerging challenges and opportunities in the Arctic environment. The Federal Government should strive to maintain the free flow of communication and cooperation with the State of Alaska to support national priorities.
- **Coordinate and Integrate Activities across the Federal Government.** Multiple Federal bodies currently have authority for Arctic policy (e.g., the National Ocean Council (NOC), Arctic Policy Group, and Interagency Arctic Research Policy Committee (IARPC)). The National Security Council Staff will develop an Executive Order through the interagency process to maximize efficiency, align interagency initiatives, and create unity of effort among all Federal entities conducting activities in the Arctic.

The plan outlines about 36 specific initiatives. For each, it presents a brief statement of the objective, a list of next steps to be taken, a brief statement about measuring progress in achieving the objective, and the names of the lead and supporting federal agencies to be involved.

On March 9, 2016, the Obama Administration released three documents discussing the implementation of the national strategy for the Arctic: (1) a report entitled 2015 Year in Review—Progress Report on the Implementation of the National Strategy for the Arctic Region; (2) an appendix to that report entitled Appendix A, Implementation Framework for the National Strategy for the Arctic Region; and (3) another appendix to that report entitled Appendix B, Interagency Arctic Research Policy Committee 5-Year Plan Collaboration Teams: 2015 Summary of Accomplishments and 2016 Priorities.

January 2015 Executive Order for Enhancing Coordination of Arctic Efforts

On January 21, 2015, then-President Obama issued Executive Order 13689, entitled “Enhancing Coordination of National Efforts in the Arctic.” The order states the following in part:

As the United States assumes the Chairmanship of the Arctic Council, it is more important than ever that we have a coordinated national effort that takes advantage of our combined expertise and efforts in the Arctic region to promote our shared values and priorities.

As the Arctic has changed, the number of Federal working groups created to address the growing strategic importance and accessibility of this critical region has increased. Although these groups have made significant progress and

achieved important milestones, managing the broad range of interagency activity in the Arctic requires coordinated planning by the Federal Government, with input by partners and stakeholders, to facilitate Federal, State, local, and Alaska Native tribal government and similar Alaska Native organization, as well as private and nonprofit sector, efforts in the Arctic....

There is established an Arctic Executive Steering Committee (Steering Committee), which shall provide guidance to executive departments and agencies (agencies) and enhance coordination of Federal Arctic policies across agencies and offices, and, where applicable, with State, local, and Alaska Native tribal governments and similar Alaska Native organizations, academic and research institutions, and the private and nonprofit sectors....

... the Steering Committee will meet quarterly, or as appropriate, to shape priorities, establish strategic direction, oversee implementation, and ensure coordination of Federal activities in the Arctic....

The Steering Committee, in coordination with the heads of relevant agencies and under the direction of the Chair, shall:

(a) provide guidance and coordinate efforts to implement the priorities, objectives, activities, and responsibilities identified in National Security Presidential Directive 66/Homeland Security Presidential Directive 25, Arctic Region Policy, the National Strategy for the Arctic Region and its Implementation Plan, and related agency plans;

(b) provide guidance on prioritizing Federal activities, consistent with agency authorities, while the United States is Chair of the Arctic Council, including, where appropriate, recommendations for resources to use in carrying out those activities; and

(c) establish a working group to provide a report to the Steering Committee by May 1, 2015, that:

(i) identifies potential areas of overlap between and within agencies with respect to implementation of Arctic policy and strategic priorities and provides recommendations to increase coordination and reduce any duplication of effort, which may include ways to increase the effectiveness of existing groups; and

(ii) provides recommendations to address any potential gaps in implementation....

It is in the best interest of the Nation for the Federal Government to maximize transparency and promote collaboration where possible with the State of Alaska, Alaska Native tribal governments and similar Alaska Native organizations, and local, private-sector, and nonprofit-sector stakeholders. To facilitate consultation and partnerships with the State of Alaska and Alaska Native tribal governments and similar Alaska Native organizations, the Steering Committee shall:

(a) develop a process to improve coordination and the sharing of information and knowledge among Federal, State, local, and Alaska Native tribal governments and similar Alaska Native organizations, and private-sector and nonprofit-sector groups on Arctic issues;

(b) establish a process to ensure tribal consultation and collaboration, consistent with my memorandum of November 5, 2009 (Tribal Consultation). This process shall ensure meaningful consultation and collaboration with Alaska Native tribal governments and similar Alaska Native organizations in the development of Federal policies that have Alaska Native implications, as applicable, and provide feedback and recommendations to the Steering Committee;

(c) identify an appropriate Federal entity to be the point of contact for Arctic matters with the State of Alaska and with Alaska Native tribal governments and similar Alaska Native organizations to support collaboration and communication; and

(d) invite members of State, local, and Alaska Native tribal governments and similar Alaska Native organizations, and academic and research institutions to consult on issues or participate in discussions, as appropriate and consistent with applicable law.

As stated in the above-quoted passage, Executive Order 13689, among other things, established an Arctic Executive Steering Committee (AESC) to “provide guidance to executive departments and agencies (agencies) and enhance coordination of Federal Arctic policies across agencies and offices, and, where applicable, with State, local, and Alaska Native tribal governments and similar Alaska Native organizations, academic and research institutions, and the private and nonprofit sectors.” Regarding the AESC, a February 28, 2019, press report states the following: “Although the [executive] order has not been rescinded, the Trump administration has left the committee dormant for the past two years.”

December 2017 National Security Strategy Document

The National Security Strategy document released by the Trump Administration in December 2017 mentions the term Arctic once, stating that that “A range of international institutions establishes the rules for how states, businesses, and individuals interact with each other, across land and sea, the Arctic, outer space, and the digital realm. It is vital to U.S. prosperity and security that these institutions uphold the rules that help keep these common domains open and free.”

U.S. Special Representative for Arctic (Vacant Since January 2017)

On July 16, 2014, during the Obama Administration, then-Secretary of State John Kerry announced the appointment of retired Coast Guard Admiral Robert J. Papp Jr., who served as Commandant of the Coast Guard from May 2010 to May 2014, as the first U.S. Special Representative for the Arctic. Under the Obama Administration,

the duties of this position involved, among other things, interacting with ambassadors to the Arctic region from other countries. Papp served as the U.S. Special Representative until January 20, 2017, the final day of the Obama Administration and the first day of the Trump Administration; the position has been unfilled since then.

“Perspectives on Security in the Arctic Area: DIIS Report,” Annika Bergman Rosamond, Danish Institute for International Studies (DIIS), September 2011 [164]
https://pure.diis.dk/ws/files/61204/RP2011_09_Arctic_security_web.pdf

Summary:

This report provides multiple perspectives on security in the Arctic area. A key objective is to demonstrate that, although the Arctic is the site of competing natural resources and land claims, which are emerging from such phenomena as melting ice and new sea routes, there are also many signs of fruitful regional cooperation and sound neighborly relations. This thesis is supported by the high level of Arctic institutionalization that has evolved since the end of the Cold War. Despite this, some media outlets have routinely portrayed the Arctic as a possible site of interstate conflict. Such accounts do not take sufficient account of the collaborative initiatives that take place within the Arctic Council, the Nordic Council of Ministers and the European Union, to mention a few. The Arctic is situated within a complex web of multilateral and bilateral networks, ranging from states to regional institutions. What is more, there is a great deal of emphasis on the involvement of indigenous and local communities in key decision-making processes. This is not to argue that there are no challenges to security and prosperity in the Arctic area, but rather that we need to investigate these against the backdrop of the ongoing institutionalization of the High North.

Part 1 of the report provides a brief historical account of the Arctic by asking whether there are any previous events that can provide insights into the current situation in the region? A relevant example here is the wish to make the Arctic a ‘zone of peace’ in the 1980s. The report then offers an examination of the relatively high level of institutionalization and governance in the Circumpolar North and determines what the key challenges to these are. For example, it is argued that the Arctic Council (AC) might need to rethink its position on banning the sensitive subject of military security from its policy deliberations in favor of an open, peaceful and democratic security dialogue, without this necessarily giving rise to tensions between AC members.

Part 2 of the report provides a discussion of contemporary security developments in the Arctic by placing the emphasis on the relationship between climate change and strategic interests related to sovereign claims. The report takes issue with the frequent portrayal of the Arctic as a hotspot for potential conflict by arguing that, although there are unresolved territorial disputes between the Arctic coastal states,

there is also broad commitment to Arctic peace and stability through multilateral cooperation and governance.

Part 3 offers a rather brief overview of Danish Arctic policy with emphasis on both non-military and military developments. It is argued that climate change is the key to contemporary Danish security policy in relation to the Arctic.

Part 4 argues that broad dialogue between states and people plus multilevel participation in decision-making processes are central to the creation of new spheres of regional community that exist alongside other loyalties. The discussion is inspired by the political theory of Andrew Linklater and makes a case for new forms of commonality and solidarity across the Circumpolar North. It is suggested that any new policy initiatives – unilateral and multilateral – need to be coupled with local bottom-up activities and transnational civil support, so as to give voice to those who are directly affected by the new policy decisions. The report ends with a brief conclusion that summarizes the key findings and offers the following policy recommendations:

1. The Arctic states should continue to promote global governance and international cooperation as ways of ensuring future stability, prosperity and peace in the Arctic region. Institutions such as the AC can serve to counterbalance an emergent tendency amongst the Arctic coastal states to pursue narrowly defined national interests and sovereign claims in the Circumpolar North. Key here is open and inclusive dialogue between governments, regional institutions and representatives from indigenous and local communities.
2. Arctic coastal states need to refrain from using the concept of sovereignty in a manner that hampers stability and peace in the Circumpolar North. This involves conceptualizing sovereignty in another-regarding manner that does not center on national security and defense alone. In so doing the Arctic states could promote a conception of sovereignty that promotes the rights of both people and sovereign states, rather than the latter alone. Such an approach to sovereignty is in line with the emphasis placed upon the emergent global norms of responsibility to protect and human security that underpin contemporary international society. What is more, the Arctic actors should continue to promote international law (and abide by it), since this a way of avoiding verbal and other disputes that are detrimental to global peace and cooperation. It is nonetheless important that states refrain from using international law to further their own narrowly defined interests, since this can be damaging to international governance and security.
3. Despite frequently having been placed within the framework of Realpolitik, the Arctic is a fruitful site for community-building clustered around good inter-state relations and the productive involvement of indigenous and local populations in key decision-making processes. The ‘alarmism’ that has been associated with the Arctic through media constructions, for example, is detrimental to the emergence of new

spheres of community and loyalties in the Circumpolar North and should, when possible, be resisted.

Current & Relevant Information:

Shortly before leaving office, President George W. Bush identified a set of American national security and homeland security interests that could be affected by future developments in the Arctic. The official position of the Bush administration was that 'human activity in the Arctic region is increasing and is projected to increase further ... This requires the United States to assert a more active and influential national presence to protect its Arctic interests to project sea power throughout the region' (Security Presidential Directive and Homeland Security Directive, 2009: 2). Bush thus steered the US towards a potentially more muscular Arctic policy, in particular if its national interests were to be challenged. The strategic interests that were given priority in Bush's Security Directive included 'missile defense and early warning; deployment of sea and air systems for strategic sealift, strategic deterrence, maritime presence, and maritime security operations; and ensuring freedom of navigation and overflight' as well as 'fundamental homeland security interests in preventing terrorist attacks and mitigating those criminal or hostile acts that could increase the United States' vulnerability to terrorism in the Arctic region'.

The Bush regime thus called for a range of military measures to meet the challenges of the Arctic area. However, such things as environmental protection and the conservation of natural resources were also given attention. The document underlines the centrality of both 'international organizations and bilateral contacts' in dealing with US interests in the Arctic and as such opts for an approach that is not solely based upon bilateralism. In line with this position, the Bush administration committed the USA to signing the UN Convention on the Law of the Sea to safeguard US national interests by ensuring 'US mobility of our Armed Forces worldwide' (2009: 3).

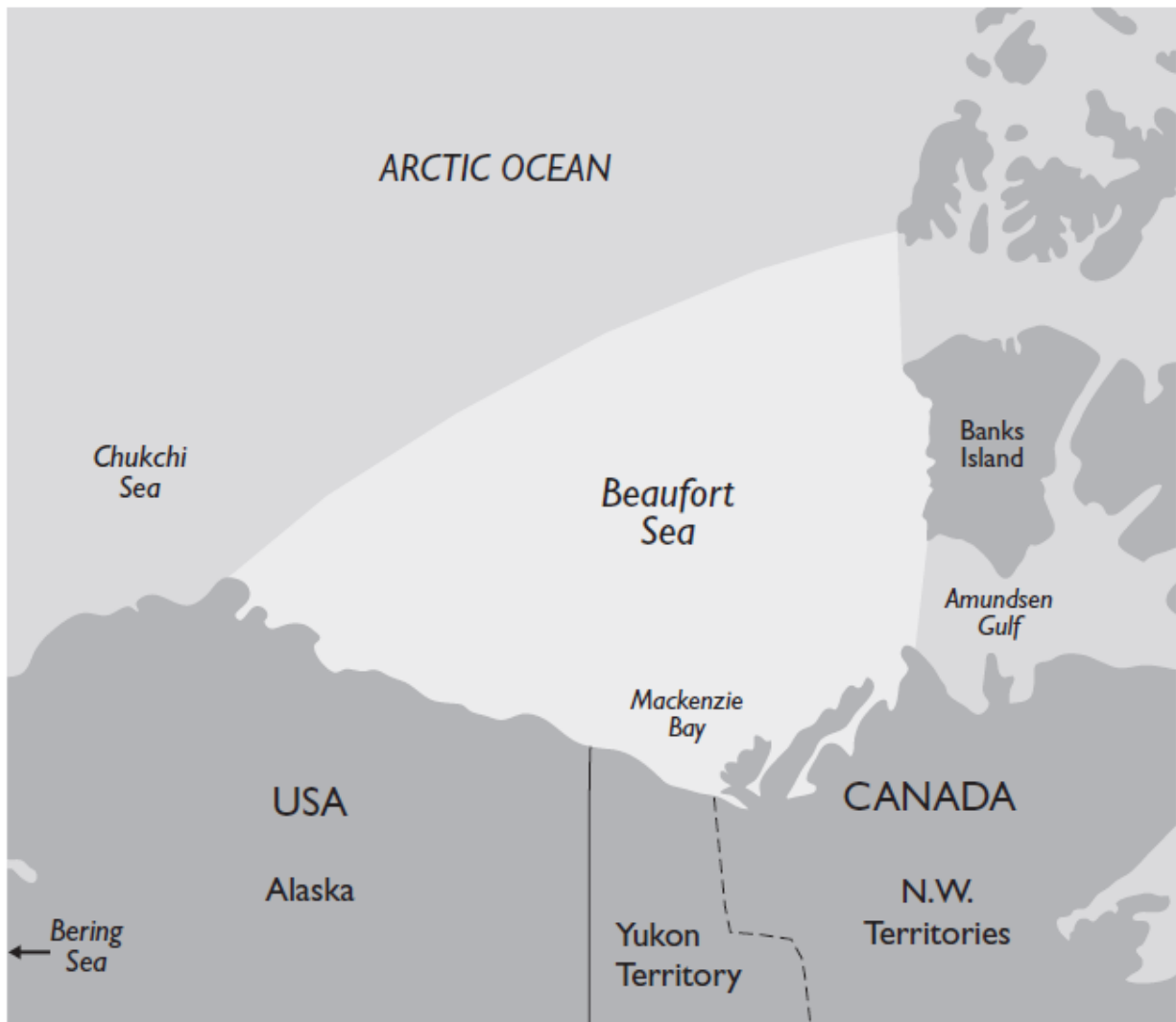
In 2009, one of the key authors of the US security directive, David A. Balton, Deputy Assistant Secretary of State for the Bureau of Oceans and International Environmental Scientific Affairs, U.S. Department of State, told an audience at the Carnegie Endowment for International Peace that the Obama administration would be likely to stick to the Bush security directive. In his judgement the USA should go ahead and ratify the Law of the Sea Convention. He also argued that cooperation with regard to Arctic matters is fully feasible between the USA and Russia. This line of thought is supported by Secretary of State Hillary Clinton, who has stated that the US will implement its Arctic policy on the basis of international cooperation (Barents Observer, 2009b). The US has hitherto not ratified the Law of the Sea Convention.

The US security directive of 2009 was criticized by Canadian newspapers, which objected to what they saw as attempt to assert US national interests in the Arctic. The Calgary Herald (31 January 2009), for example, defined Bush's policy as

'another forceful rebuttal of Canada's claims of sovereignty over the Northwest Passage' and argued that it served to undermine 'Canada's claim of sovereignty over what is emerging as a major global shipping route because of the shrinking polar ice cap'.

Since the 1970s, Canada and the USA have diverged on how to carve up the Beaufort Sea, which is situated off the coasts of Alaska and the Yukon (see Map 3 below).

Map 3. The Beaufort Sea



<http://www.worldatlas.com/aatlas/infopage/beaufortsea.htm>

The situation has been complicated by the potentially rich natural reserves yet to be explored in the Beaufort Sea. The dispute led the former Secretary General of NATO, de Hoop Scheffer (2009: 1), to criticize NATO's Arctic members for their military activities in the Circumpolar North. He described them as a direct response

to 'the changing environment' in the Arctic and argued that, 'although the long-term implications of climate change and the retreating ice cap in the Arctic are still unclear, what is very clear is that the High North is going to require even more of the Alliance's attention in the coming years.' Some efforts have been made on the part of both governments to settle the dispute in a neighborly manner, with the former Canadian Minister of Foreign Affairs, Lawrence Cannon, being particularly keen to come to some form of agreement through bilateral dialogue (Cannon, 2009; Menasborders 2010).

One of the key challenges of the Obama regime has been whether to allow new forms of coastal natural gas and oil drilling in US offshore areas. After initial skepticism about such drilling, the Obama administration decided to allow it in certain areas, but to protect Bristol Bay in Alaska from new kinds of exploration. However, the Beaufort Sea could be subjected to drilling, which might add force to the energy race in the Arctic. Barack Obama himself justified his decision by arguing that:

this announcement is part of a broader strategy that will move us from an economy that runs on fossil fuels and foreign oil to one that relies more on homegrown fuels and clean energy. And the only way this transition will succeed is if it strengthens our economy in the short term and long term. To fail to recognize this reality would be a mistake. (Obama cited in Market News 2010)

Rather surprisingly, the National Security Strategy, a sixty-page long report, only contains the following paragraph on the Arctic, which appears at the very end of the document. In the words of the White House, ' the United States is an Arctic Nation with broad and fundamental interests in the Arctic region, where we seek to meet our national security needs, protect the environment, responsibly manage resources, account for indigenous communities, support scientific research, and strengthen international cooperation on a wide range of issues' (The White House 2010: 50). As emerges here the key objectives of American foreign policy in the High North are quite similar in character to the stated objectives of many of institutions that we have examined above.

“State of the Arctic Strategies and Policies – A Summary,” Lassi Heininen, Arctic Yearbook, 2012 [165]

https://arcticyearbook.com/images/yearbook/2012/Scholarly_Papers/1.Heininen.pdf

Abstract:

In the past five years, the eight Arctic states have each published comprehensive Arctic strategies, a manifestation of the growing political interest in the region. This article examines the Arctic strategies of each Arctic state in turn. It goes on to identify common themes found in the strategies: security and sovereignty; economic and business development; sustainable and regional development; environmental protection and climate change; safety, search and rescue; human dimension and

peoples; research and knowledge; and international cooperation. Similarities and differences between the Arctic states on these key themes are examined, providing an insightful illustration of current regional values and interests.

Current & Relevant Information:

The United States of America's document "National Security Presidential Directive/NSPD – 66" concerning an "Arctic Region Policy" was released on January 9, 2009 by President George W. Bush's Administration (White House, 2009).

The Arctic has not in general played an important role in US foreign or domestic policy. For example, the Clinton Administration had issued, but did not publicly circulate, its US Arctic Policy Objectives in 1994 which had as its main objectives the protection of the Arctic environment, sustainable use of natural resources, strengthening of intergovernmental cooperation, involving northern indigenous peoples in decision making, enhancing scientific research, and meeting post-Cold War national security and defense needs (Macnab, 2009).

After the Russian expedition to the North Pole in August 2007, some experts argued that the United States was falling behind Russia in the Arctic 'race' (Borgerson, 2008). The U.S. State Department, however, declared in September 2008 that the Arctic countries use different criteria to define whether their territory is considered to be a part of the Arctic region or not. There were also some lobbying efforts within the US, the purpose of which was to emphasize that the United States needs "an Arctic agenda" and has to understand its identity as "an Arctic nation", too (Commonwealth North, May 2009). Thus, it started to become clear to the US Government that it was "necessary to develop coherent approaches to problems that occupy a wide spectrum of issues" (Macnab, 2009: 27). Subsequently, the US President's Administration released an Arctic Region Policy in January 2009, which supersedes the 1994 "Presidential Decision Directive/NSC-26 with respect to Arctic policy but not Antarctic policy" (White House, 2009: 1).

The policy objectives/priority areas of the "US National Security Presidential Directive/NSPD – 66" concerning an "Arctic Region Policy" are first, national security and homeland security; second, international governance; third, extended continental shelf and boundary issues; fourth, promoting international scientific cooperation; fifth, maritime transportation; sixth, economic issues, including energy; and seventh, environmental protection and conservation of natural resources. The document states (for the first time) that the United States of America is "an Arctic nation, with varied and compelling interests in that region" (ibid: 29).

The US Arctic Policy strongly emphasizes national and homeland security and borders, particularly dealing with maritime areas – "(F)reedom of the seas" - through increased military presence and the projection of sea power throughout the region (ibid: 3). This is not surprising, but what is striking (Macnab, 2009) is that the US Policy is the only one excluding (indigenous) peoples or communities from its main

priorities or objectives, although the involvement of the “Arctic’s indigenous communities in decisions that affect them” is stated as one of its targets (White House, 2009: 2).

US ratification of UNCLOS is also supported by the document, but this decision remains stuck in the US Congress. Behind this is the fact that although the US has not as yet ratified UNCLOS, it would like to establish the outer limits of its continental shelf as well as push Russia towards ratification of the 1990 US-Russian boundary agreement. In practice, it has agreed on certain common rules with other littoral states of the Arctic Ocean through the Ilulissat Declaration.

The US Arctic Policy places a high priority on the environmentally sustainable management of natural resources and economic development in the region. Furthermore, it appears to promote international governance, to take place primarily through the AC, and the strengthening of institutional cooperation among the eight Arctic states. It also declares continued US cooperation on Arctic issues through the United Nations and its agencies as well as international treaties, such as the United Nations Framework Convention on Climate Change (UNFCCC). On the issue of environmental protection, the text identifies the challenge of climate change and the related uncertainties, and recognizes that “[B]asic data is lacking in many fields”, there is, however, no mention of climate change as regards the implementation of the Policy. In order to implement the US objective to “continue to play a leadership role in research throughout the Arctic region”, President Obama issued a Presidential Memorandum in the summer of 2010 “that assigns responsibility for Arctic research to the White House National Science and Technology Council” (Farrow, 2010).

Although the US “Arctic Region Policy” was approved and released by the Bush Administration as one of its last documents, it itself as well as the above-mentioned and a few other documents of the Obama Administration indicate that in the early-21st century the Arctic region is steadily emerging as a new important area in US foreign policy. This was pointed out and emphasized by State Secretary Hilary Clinton in her interview in Newsweek (2009/2010) calling the Arctic as an emerging area in US foreign policy with “a matrix of issues”.

All in all, despite the high emphasis on national (and homeland) security the US Arctic Region Policy can be interpreted as a response to the recent significant environmental, geopolitical and geo-economic change(s) in the Arctic.

A. Economic:

“Changes in the Arctic: Background and Issues for Congress,” Congressional Research Service, 18 June 2020 [166] <https://fas.org/sqp/crs/misc/R41153.pdf>

Summary:

The diminishment of Arctic sea ice has led to increased human activities in the Arctic, and has heightened interest in, and concerns about, the region's future. The United States, by virtue of Alaska, is an Arctic country and has substantial interests in the region. The seven other Arctic states are Canada, Iceland, Norway, Sweden, Finland, Denmark (by virtue of Greenland), and Russia.

The Arctic Research and Policy Act (ARPA) of 1984 (Title I of P.L. 98-373 of July 31, 1984) "provide[s] for a comprehensive national policy dealing with national research needs and objectives in the Arctic." The National Science Foundation (NSF) is the lead federal agency for implementing Arctic research policy. Key U.S. policy documents relating to the Arctic include National Security Presidential Directive 66/Homeland Security Presidential Directive 25 (NSPD 66/HSPD 25) of January 9, 2009; the National Strategy for the Arctic Region of May 10, 2013; the January 30, 2014, implementation plan for the 2013 national strategy; and Executive Order 13689 of January 21, 2015, on enhancing coordination of national efforts in the Arctic. The office of the U.S. Special Representative for the Arctic has been vacant since January 20, 2017.

The Arctic Council, created in 1996, is the leading international forum for addressing issues relating to the Arctic. The United Nations Convention on the Law of the Sea (UNCLOS) sets forth a comprehensive regime of law and order in the world's oceans, including the Arctic Ocean. The United States is not a party to UNCLOS.

Record low extents of Arctic sea ice over the past decade have focused scientific and policy attention on links to global climate change and projected ice-free seasons in the Arctic within decades. These changes have potential consequences for weather in the United States, access to mineral and biological resources in the Arctic, the economies and cultures of peoples in the region, and national security.

The geopolitical environment for the Arctic has been substantially affected by the renewal of great power competition. Although there continues to be significant international cooperation on Arctic issues, the Arctic is increasingly viewed as an arena for geopolitical competition among the United States, Russia, and China. Russia in recent years has enhanced its military presence and operations in the Arctic. China's growing activities in the Arctic have become a matter of increasing curiosity or concern among observers.

U.S. military forces have begun to pay more attention to the Arctic in their planning and operations. The Department of Defense (DOD), the Navy, and the Coast Guard have all issued Arctic strategy documents in recent years. Whether DOD and the military services are adequately resourcing these strategies and taking appropriate and adequate actions for defending U.S. interests in the Arctic has emerged as a topic of debate and congressional oversight. The Coast Guard has two operational polar icebreakers and has received funding for the procurement of the first of three planned new polar icebreakers.

The diminishment of Arctic ice could lead in coming years to increased commercial shipping on two trans-Arctic sea routes—the Northern Sea Route close to Russia, and the Northwest Passage close to Alaska and through the Canadian archipelago—though the rate of increase in the use of these routes might not be as great as sometimes anticipated in press accounts. International guidelines for ships operating in Arctic waters have been recently updated.

Changes to the Arctic brought about by warming temperatures will likely allow more exploration for oil, gas, and minerals. Warming that causes permafrost to melt could pose challenges to onshore exploration activities. Increased oil and gas exploration and tourism (cruise ships) in the Arctic increase the risk of pollution in the region. Cleaning up oil spills in ice-covered waters will be more difficult than in other areas, primarily because effective strategies for cleaning up oil spills in ice-covered waters have yet to be developed.

Large commercial fisheries exist in the Arctic. The United States is working with other countries regarding the management of Arctic fish stocks. Changes in the Arctic could affect threatened and endangered species, and could result in migration of fish stocks to new waters. Under the Endangered Species Act, the polar bear was listed as threatened on May 15, 2008. Arctic climate change is also expected to affect the economies, health, and cultures of Arctic indigenous peoples.

Current & Relevant Information:

Commercial Sea Transportation

Background

The search for a shorter route from the Atlantic to Asia has been the quest of maritime powers since the Middle Ages. The melting of Arctic ice raises the possibility of saving several thousands of miles and several days of sailing between major trading blocs. If the Arctic were to become a viable shipping route, the ramifications could extend far beyond the Arctic. For example, lower shipping costs could be advantageous for China (at least its northeast region), Japan, and South Korea because their manufactured products exported to Europe or North America could become less expensive relative to other emerging manufacturing centers in Southeast Asia, such as India. Melting ice could potentially open up two trans-Arctic routes.

- The Northern Sea Route (NSR, a.k.a. the “Northeast Passage”), along Russia’s northern border from Murmansk to Provideniya, is about 2,600 nautical miles in length. It was opened by the Soviet Union to domestic shipping in 1931 and to transit by foreign vessels in 1991. This route would be applicable for trade between northeast Asia (north of Singapore) and northern Europe. In recent summers, less than a handful of large, non-Russian-flagged

cargo ships have transited the NSR. Russia reportedly seeks to reserve carriage of oil and gas extracted along the NSR to Russian-flagged ships.

- The Northwest Passage (NWP) runs through the Canadian Arctic Islands. The NWP actually consists of several potential routes. The southern route is through Peel Sound in Nunavut, which has been open in recent summers and contains mostly one-year ice. However, this route is circuitous, contains some narrow channels, and is shallow enough to impose draft restrictions on ships. The more northern route, through McClure Strait from Baffin Bay to the Beaufort Sea north of Alaska, is much more direct and therefore more appealing to ocean carriers, but more prone to ice blockage. The NWP is potentially applicable for trade between northeast Asia (north of Shanghai) and the northeast of North America, but it is less commercially viable than the NSR. Cargo ship transits have been extremely rare but cruise vessel excursions and research vessels are more common.

Destination Traffic, Not Trans-Arctic Traffic

Most cargo ship activity currently taking place in the Arctic is to transport natural resources from the Arctic or to deliver general cargo and supplies to communities and natural resource extraction facilities. Thus, cargo ship traffic in the Arctic presently is mostly regional, not trans-Arctic. While there has been a recent uptick in Arctic shipping activity, this activity has more to do with a spike in commodity prices than it does with the melting of Arctic ice. Even so, fewer ships ply the Arctic seas now than in the past. The NSR continues to account for the bulk of Arctic shipping activity.

Unpredictable Ice Conditions Hinder Trans-Arctic Shipping

Arctic waters do not necessarily have to be ice free to be open to shipping. Multiyear ice can be over 10 feet thick and problematic even for icebreakers, but one-year ice is typically 3 feet thick or less. This thinner ice can be more readily broken up by icebreakers or ice-class ships (cargo ships with reinforced hulls and other features for navigating in ice-infested waters). However, more open water in the Arctic has resulted in another potential obstacle to shipping: unpredictable ice flows. In the NWP, melting ice and the opening of waters that were once covered with one-year ice has allowed blocks of multiyear ice from farther north and icebergs from Greenland to flow into potential sea lanes. The source of this multiyear ice is not predicted to dissipate in spite of climate change. Moreover, the flow patterns of these ice blocks are very difficult to forecast. Thus, the lack of ice in potential sea lanes during the summer months can add even greater unpredictability to Arctic shipping. This is in addition to the extent of ice versus open water, which is also highly variable from one year to the next and seasonally.

The unpredictability of ice conditions is a major hindrance for trans-Arctic shipping in general, but can be more of a concern for some types of ships than it is for others.

For instance, it would be less of a concern for cruise ships, which may have the objective of merely visiting the Arctic rather than passing through and could change their route and itinerary depending on ice conditions. On the other hand, unpredictability is of the utmost concern for container ships that carry thousands of containers from hundreds of different customers, all of whom expect to unload or load their cargo upon the ship's arrival at various ports as indicated on the ship's advertised schedule. The presence of even small blocks of ice or icebergs from a melting Greenland ice sheet requires slow sailing and could play havoc with schedules. Ships carrying a single commodity in bulk from one port to another for just one customer have more flexibility in terms of delivery windows, but would not likely risk an Arctic passage under prevailing conditions.

Ice is not the sole impediment to Arctic shipping. The region frequently experiences adverse weather, including not only severe storms, but also intense cold, which can impair deck machinery. During the summer months when sea lanes are open, heavy fog is common in the Arctic.

Commercial ships would face higher operating costs on Arctic routes than elsewhere. Ship size is an important factor in reducing freight costs. Many ships currently used in other waters would require two icebreakers to break a path wide enough for them to sail through; ship owners could reduce that cost by using smaller vessels in the Arctic, but this would raise the cost per container or per ton of freight. Also, icebreakers or ice-class cargo vessels burn more fuel than ships designed for more temperate waters and would have to sail at slower speeds. The shipping season in the Arctic only lasts for a few weeks, so icebreakers and other special required equipment would sit idle the remainder of the year. None of these impediments by themselves may be enough to discourage Arctic passage but they do raise costs, perhaps enough to negate the savings of a shorter route. Thus, from the perspective of a shipper or a ship owner, shorter via the Arctic does not necessarily mean cheaper and faster.

Basic Navigation Infrastructure Is Lacking

Considerable investment in navigation-related infrastructure would be required if trans-Arctic shipping were to become a reality. Channel marking buoys and other floating visual aids are not possible in Arctic waters because moving ice sheets will continuously shift their positions. Therefore, vessel captains would need to rely on marine surveys and ice charts. For some areas in the Arctic, however, these surveys and charts are out of date or not sufficiently accurate. To remedy this problem, aviation reconnaissance of ice conditions and satellite images would need to become readily available for ship operators. Ship-to-shore communication infrastructure would need to be installed where possible. Refueling stations may be needed, as well as, perhaps, transshipment ports where cargo could be transferred to and from ice-capable vessels at both ends of Arctic routes. Shipping lines would need to develop a larger pool of mariners with ice navigation experience. Marine

insurers would need to calculate the proper level of risk premium for polar routes, which would require more detailed information about Arctic accidents and incidents in the past.

The U.S. Army Corps of Engineers, along with the state of Alaska, has studied the feasibility of a “deep-draft” port in the Arctic (accommodating ships with a draft of up to 35 feet). The northern and northwestern coastlines of Alaska are exceptionally shallow, generally limiting harbor and near-shore traffic to shallow-draft barges. Coast Guard cutters and icebreakers have drafts of 35 to 40 feet while NOAA research vessels have drafts of 16 to 28 feet, so at present these vessels are based outside the Arctic and must sail considerable distances to reach Arctic duty stations. Supply vessels supporting offshore oil rigs typically have drafts over 20 feet. A deep-draft port could serve as a base of operations for larger vessels, facilitating commercial maritime traffic in the Arctic. The study concluded that the existing harbors of Nome or Port Clarence on Alaska’s west coast may be the most suitable for deepening because of their proximity to the Bering Strait and deeper water. However, at a July 2016 hearing, the Coast Guard indicated its preferred strategy was to rely on mobile assets (vessels and aircraft) and seasonal bases of operation rather than pursue a permanent port in the Arctic.

The U.S. Committee on the Marine Transportation System, a Cabinet-level committee of federal agencies with responsibilities for marine transportation, identified a list of infrastructure improvements for Arctic navigation in a 2013 report. The report prioritizes improvements to information infrastructure (weather forecasting, nautical charting, ship tracking) and emergency response capabilities for ships in distress.

Regulation of Arctic Shipping

Due to the international nature of the shipping industry, maritime trading nations have adopted international treaties that establish standards for ocean carriers in terms of safety, pollution prevention, and security. These standards are agreed upon by shipping nations through the International Maritime Organization (IMO), a United Nations agency that first met in 1959.

Key conventions that the 168 IMO member nations have adopted include the Safety of Life at Sea Convention (SOLAS), which was originally adopted in response to the Titanic disaster in 1912 but has since been revised several times; the Prevention of Pollution from Ships (MARPOL), which was adopted in 1973 and modified in 1978; and the Standards for Training, Certification, and Watchkeeping for Seafarers (SCTW), which was adopted in 1978 and amended in 1995. It is up to ratifying nations to enforce these standards. The United States is a party to these conventions, and the U.S. Coast Guard enforces them when it boards and inspects ships and crews arriving at U.S. ports and the very few ships engaged in international trade that sail under the U.S. flag.

Like the United States, most of the other major maritime trading nations lack the ability to enforce these regulations as a “flag state” because much of the world’s merchant fleet is registered under so-called “flags of convenience.” While most ship owners and operators are headquartered in major economies, they often register their ships in Panama, Liberia, the Bahamas, the Marshall Islands, Malta, and Cyprus, among other “open registries,” because these nations offer more attractive tax and employment regulatory regimes. Because of this development, most maritime trading nations enforce shipping regulations under a “port state control” regime—that is, they require compliance with these regulations as a condition of calling at their ports. The fragmented nature of ship ownership and operation can be a further hurdle to regulatory enforcement. It is common for cargo ships to be owned by one company, operated by a second company (which markets the ship’s space), and managed by a third (which may supply the crew and other services a ship requires to sail), each of which could be headquartered in different countries.

New Arctic Polar Code

While SOLAS and other IMO conventions include provisions regarding the operation of ships in ice-infested waters, they were not specific to the polar regions. To supplement these requirements, a new IMO polar code went into effect on January 1, 2017. The code applies to passenger and cargo ships of 500 gross tons or more engaged in international voyages. It does not apply to fishing vessels, military vessels, pleasure yachts, or smaller cargo ships. The polar requirements are intended to improve safety and prevent pollution in the Arctic, and they include provisions on ship construction, ship equipment related to navigation, and crew training and ship operation. The code requires ships to carry fully or partially enclosed lifeboats. The code requires that the crew have training in ice navigation. Nations can enforce additional requirements on ships arriving at their ports or sailing through their coastal waters. For instance, U.S. Coast Guard regulations largely follow IMO conventions but mandate additional requirements in some areas. U.S. coastal states can require ships calling at their ports to take additional safety and pollution prevention safeguards. Canada and Russia have additional pollution regulations for Arctic waters exceeding MARPOL. The U.S. Coast Guard has studied and has recommended a specific vessel traffic separation scheme for the Bering Strait between Alaska and Russia, which experiences over 400 transits per year. The U.S. Coast Guard is seeking IMO approval of this routing scheme.

Oil, Gas, and Mineral Exploration

Decreases in summer polar ice may alter options for oil, gas, and mineral exploration in Arctic offshore and onshore areas. Offshore of Alaska, the U.S. outer continental shelf (OCS) covers more than 1 billion acres, including some areas with high oil and gas potential. Even with warmer temperatures, exploration and development in the Arctic are still subject to harsh conditions, especially in winter. This makes it costly and challenging to develop the infrastructure necessary to

produce, store, and transport oil, gas, and minerals from newly discovered deposits. Severe weather poses challenges to several ongoing offshore operations as well as to new exploration.

Offshore oil and gas exploration are affected by efforts to map the margins of the U.S. OCS. Shrinking sea ice cover in the Arctic has intensified interest in surveying and mapping the continental margins of multiple countries with lands in the Arctic. Delineating the extent of the continental margins beyond the 200 nautical mile Exclusive Economic Zone (EEZ) could lead to consideration of development on substantial amounts of submerged lands. Mapping projects are underway, by individual countries and through cooperative government studies, to support submissions to the Commission on the Limits of the Continental Shelf, including for areas that may contain large amounts of oil, natural gas, methane hydrates, or minerals.

With respect to onshore development, shrinking glaciers could expose land containing economic deposits of gold, iron ore, or other minerals previously covered by glacial ice. At the same time, warming that causes permafrost to melt could pose challenges to oil, gas, and mineral activities because ground structures, such as pipelines and other infrastructure that depend on footings sunk into the permafrost for support, could be compromised. In addition, warmer temperatures shorten the ice road transport seasons for oil, gas, and mineral development, creating transportation challenges.

Offshore Oil and Gas Exploration

The shrinking Arctic ice cap, or conversely, the growing amount of ice-free ocean in the summertime, has increased interest in exploring for offshore oil and gas in the Arctic. Reduced sea ice in the summer means that ships towing seismic arrays can explore regions of the Arctic Ocean, Chukchi Sea, Beaufort Sea, and other offshore regions for longer periods of time with less risk of colliding with floating sea ice. Less sea ice over longer periods compared to previous decades also means that the seasonal window for offshore Arctic drilling remains open longer in the summer, increasing the chances for making a discovery.

In addition to the improved access to larger portions of the Arctic afforded by shrinking sea ice, interest in Arctic oil and gas was fueled by a 2008 U.S. Geological Survey (USGS) appraisal of undiscovered oil and gas north of the Arctic Circle. The USGS stated that the “extensive Arctic continental shelves may constitute the geographically largest unexplored prospective area for petroleum remaining on Earth.” In the report, the USGS estimated that 90 billion barrels of oil, nearly 1,700 trillion cubic feet of natural gas, and 44 billion barrels of natural gas liquids may remain to be discovered in the Arctic (including both U.S. and international resources north of the Arctic Circle). This would constitute approximately 13% of the world’s undiscovered conventional oil resources and 30% of natural gas, according

the U.S. Energy Information Administration. In terms of U.S. resources specifically, DOI's Bureau of Ocean Energy Management (BOEM) estimated in 2017 that the Alaska portions of the U.S. OCS contain undiscovered, technically recoverable resources of approximately 27 billion barrels of oil and 132 trillion cubic feet of natural gas (although not all of these resources may be economically viable to recover).

Despite the warming trend in the Arctic, severe weather and sea ice continue to pose challenges to exploration. In addition, any discovery of new oil and gas deposits far from existing storage, pipelines, and shipping facilities could not be developed until infrastructure is built to extract and transport the petroleum.

Some have expressed interest in expanding America's ocean energy portfolio in the region. Currently, among 15 federal planning areas in the region, the Beaufort Sea and Cook Inlet are the only two areas with active federal leases, and only the Beaufort Sea has any producing wells in federal waters (from a joint federal-state unit). The Trump Administration has stated its interest in promoting offshore development in the region. In January 2018, the Administration issued a draft 5-year offshore oil and gas leasing program for 2019-2024 that would schedule lease sales in all 15 Alaska planning areas, including three sales in the Beaufort Sea and three in the Chukchi Sea. Current lease sales on the Alaska OCS are governed by the Obama Administration's leasing program for 2017-2022, which includes one lease sale in the Cook Inlet (scheduled for 2021) and none in other Alaska planning areas.

Offshore oil and gas activities in the region have fluctuated as industry weighs changing oil prices, development costs, and regulations. For example, in 2015, Shell Oil Company announced its decision to cease exploration in offshore Alaska for the foreseeable future. Shell cited several reasons for the decision, including insufficient indications of oil and gas at its Burger J well in the Chukchi Sea, the high costs associated with Arctic exploration, and the "challenging and unpredictable" federal regulatory environment. BOEM also reported that, between February and November 2016, companies relinquished more than 90% of leases they had held in the Beaufort and Chukchi Sea planning areas, in the midst of a slump in oil prices. While there were 450 active leases in the Chukchi Sea planning area at the end of 2015, as of November 2019 there were none. In the Beaufort Sea, active leases dropped from 77 at the end of 2015 to 40 in November 2019. Despite these changes, some activities have indicated ongoing industry interest in the region. For example, in November 2017, the Trump Administration approved an application for permit to drill (APD) on a lease in the Beaufort Sea held by the Eni U.S. Operating Company. In October 2018, BOEM issued conditional approval to Hilcorp Alaska LLC for an oil and gas development and production plan in the Beaufort Sea, which would be the region's first production facility entirely in federal waters. Recent discoveries onshore and in state waters on Alaska's North Slope have contributed to ongoing interest in the region.

The evolving federal regulatory environment for Arctic offshore activities has been shaped by concerns about industry's ability to respond to potential oil spills, given the region's remoteness and harsh conditions. The section of this report on "Oil Pollution Implications of Arctic Change" discusses this issue in greater detail. In July 2016, BOEM and the Bureau of Safety and Environmental Enforcement (BSEE) released final safety regulations for Arctic exploratory drilling that include multiple requirements for companies to reduce the risks of potential oil spills—for example, the requirement that companies have a separate rig available at drill sites to drill a relief well in case of a loss of well control. Some Members of Congress and industry stakeholders opposed the regulations as overly prescriptive and unnecessarily burdensome, while other Members and environmental organizations asserted that the rules did not go far enough in protecting the region from potential environmental damage and addressing the potential contributions of Arctic oil and gas activities to climate change. In a 2017 executive order, President Trump directed the Secretary of the Interior to review the Arctic regulations, and in 2018 the Department of the Interior announced work on rule revisions. Legislation was introduced in the 115th Congress both to repeal the Obama Administration's version of the Arctic rule and, conversely, to codify it in law.

Concerns about the impacts of oil and gas activities have led in the past to bans by both Congress and the President on leasing in certain Arctic Ocean areas deemed especially sensitive. For example, congressional and presidential moratoria since the 1980s effectively banned federally regulated planning and permitting in the Bristol Bay area of the North Aleutian Basin. Congress allowed most statutory bans in the region to expire in 2004. President Obama reinstated the moratorium in the North Aleutian Basin, indefinitely withdrawing acreage located in Bristol Bay from eligibility for oil and gas leasing. Also, in December 2016, President Obama indefinitely withdrew from leasing disposition other large portions of the U.S. Arctic, including the entire Chukchi Sea planning area and almost all of the Beaufort Sea planning area. President Obama separately withdrew from leasing consideration planning areas in the North Bering Sea. In April 2017, President Trump issued Executive Order 13795, which modified President Obama's withdrawals so as to open all of these areas for leasing consideration except for the North Aleutian Basin. However, in a March 2019 court decision, the U.S. District Court for the District of Alaska vacated this provision in President Trump's executive order, ruling that the Outer Continental Shelf Lands Act gives the President the authority to make withdrawals, but not to revoke prior presidential withdrawals.

Extent of the Continental Margin

Increased interest in developing offshore resources in the Arctic has sparked efforts by Arctic coastal states to map the extent of their continental margins beyond the 200-mile EEZ limit. As discussed earlier, under Article 76 of UNCLOS, nations can make a submission to the Commission on the Limits of the Continental Shelf

(hereinafter referred to as the Commission) concerning the extent of their continental shelves. Under Article 76, the extent of the continental margin beyond the 200-mile limit depends on the position of the foot of the continental slope, the thickness of sediments, and the depth of water. Also, the continental margin could include geologic features that extend from the continent out to sea, which may include undersea ridges continuing for hundreds of miles offshore.

Arctic coastal states have conducted complex investigations needed to support submissions to the Commission for an extended continental shelf in the Arctic. Submissions regarding Arctic waters have been made to the Commission by four of the Arctic coastal states, including the Russian Federation, which made its initial UNCLOS submission to a portion of the Arctic continental shelf in 2001. Russia's 2001 submission included the Lomonosov Ridge, an undersea feature spanning the Arctic from Russia to Canada, as an extension of its continental margin. The submission demonstrated Russia's bid to extend activities in Arctic regions. The Russian Federation presented a revised submission in 2015 to the Commission that included not only the Lomonosov Ridge but also the Mendeleev Rise—another subsea feature claimed by Russia to be a natural part of its continental margin—as components of the extended Russian continental shelf. The Commission has not rendered a decision on the revised Russian Federation submission as of late 2019. (For additional information on extended continental shelf submissions to the Commission, see Appendix E.)

The United States has started to gather and analyze data for a potential submission through an initiative called the Extended Continental Shelf (ECS) Project. The U.S. ECS project has also assisted more than 30 countries with their efforts to delineate their extended continental shelves worldwide. Canada and the United States share overlapping regions of the seabed as part of the extended continental margin of both nations. Much of the data to delineate the ECS for both countries was collected in a two-ship operation involving the U.S. Coast Guard Cutter Healy and the Canadian Coast Guard ship Louis S. Saint Laurent. The two-ship operation collected more than 13,000 linear kilometers (about 8,078 miles) of seismic data over four field seasons in the Arctic beginning in 2007. The data collected will help each country delineate the extent of its own ECS, which should then enable the countries to determine the amount of overlap in the seabed and ultimately establish a maritime boundary in the Arctic.

The United States also has potentially overlapping ECS areas with Russia. Russia (then the Soviet Union) and the United States agreed to a maritime boundary in 1990, and so far, Russia has not asserted its ECS in any areas that might be considered part of the U.S. ECS.

Onshore Mineral Development

A warming Arctic means new opportunities and challenges for mineral exploration and development onshore. Receding glaciers expose previously ice-covered land that could host economic mineral deposits that were previously undetectable and unmineable below the ice. Longer summers also would extend exploration seasons for areas that are not currently ice-covered, but are only accessible for ground surveys during the warmer months. In some parts of the Arctic, less sea ice allows ships to transport heavy equipment to remote locations, and to convey ore from mines to the market further south. Some railway and mining operators are considering developing railroads and other infrastructure to transport ore year-round. As with onshore oil and gas development, however, mining infrastructure that depends on footings sunk into permafrost could become unstable if the permafrost melts in response to warmer temperatures. Also, mineral deposits that may be technically recoverable with current technology may not be economically profitable.

Some industry commentators suggest that mining might offer better long-term economic development opportunities compared to oil and gas development because of a larger permanent workforce and project lifetimes of several decades. Similar to oil and gas, however, industry observers note that uncertainties and knowledge gaps exist in the understanding of environmental change in the Arctic, and how to deal with the risks associated with significant Arctic industrial activity.

One important part of the current infrastructure in the Arctic that supports oil, gas, and mineral development is the construction and use of ice roads—built and used during the winter, but not passable during the warmer months. Warmer temperatures are shortening the ice road transport seasons and creating transportation challenges. For example, the opening date for tundra roads in northern Alaska usually occurred in early November prior to 1991 and has shifted to January in recent years.

“Foundation and Development of the Economic Interest of the United States in the Arctic Ocean in the Age of Global Warming,” Karl Fisher, *Ocean and Coastal Law Journal*, January 2020 [167]

<https://digitalcommons.maine.gov/mainelaw/cgi/viewcontent.cgi?article=1386&context=oclj>

Abstract:

The United States’ sustained economic and geopolitical interest in the Arctic is dependent on Congressional funding and Executive support for icebreaking vessels and improved infrastructure in United States arctic territory. The United States has an interest in the Arctic and it is demonstrated by The Arctic Research and Policy Act of 1984 (amended 1990). Through the Act, the United States initiated research and policy development, with the supposition of potential economic benefits in the future. Due to verifiable and anticipated changes in ice density in the Arctic, the region is accessible like never before, and international competition for natural

resources and commercial shipping lanes in the Arctic offer enormous economic benefits. The United States is woefully behind its international competitors due to a small and decrepit fleet of icebreaking vessels and crumbling arctic infrastructure. In examining The Arctic Research and Policy Act of 1984 and multiple Arctic Strategy Plans that were published by federal agencies operating in the Arctic, it is clear — attention from Congress and the Executive must be redirected towards advancement. The first step to advancing the United States interest in the Arctic is by funding and procuring icebreaking vessels and improving arctic territory infrastructure.

Current & Relevant Information:

The Arctic Economy

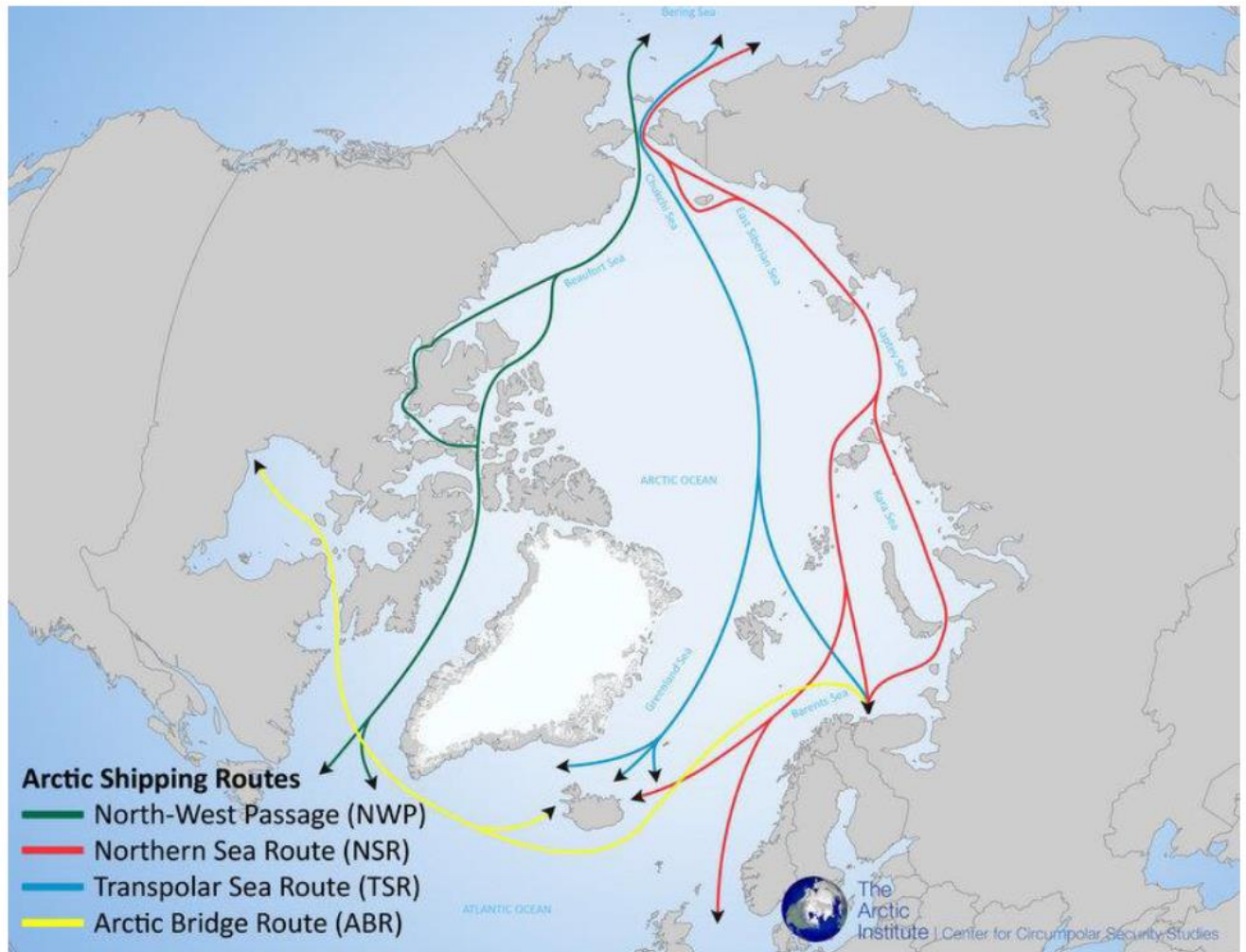
The Arctic economy is comprised of an abundance of natural resources, the commercial benefits and cost savings of maritime Arctic commerce, and foreign investment by countries like China and Russia, which have already begun to invest in the Arctic's future.

1. Natural Resources

The U.S. Geological Survey estimates that “the Arctic holds about thirteen (13) percent of the world’s undiscovered oil, thirty (30) percent of the undiscovered natural gas and twenty (20) percent of the undiscovered natural gas liquids.” That is approximately ninety (90) billion barrels of oil and forty-seven (47) trillion cubic meters of natural gas. The Arctic seabed also contains some of the world’s largest nickel, coal, and zinc deposits. In addition to natural minerals, the Arctic region also offers a fishing economy that will also develop as ice density is reduced. The natural commodities located in the Arctic are substantial to say the least.

2. Commercial Shipping

The driving forces of the Arctic economy can be attributed not only to its natural resources, but also to its geography, which lends itself to advantageous commercial shipping because of shorter and deep-water shipping routes by way of the NWP, NSR, and Transpolar Passage. Approximately ninety percent of all goods are shipped by sea. That is because shipping is “the cheapest form of transport[,]” and there is no indication that that will change in the near future. Moreover, because the “vast majority of active industrial production in the world . . . is concentrated . . . north of the [thirtieth] parallel[,] and about [seventy percent] of the world’s urban metropolitan areas are located north of the [twenty-third] parallel in the northern hemisphere[,]” the Arctic region is well-situated to advance the world’s supply and demand chain.



Illustrative of the economy of shipping in the Arctic is the case of the Nordic Orion, which, in 2013, was the first commercial bulk carrier to sail through the Northwest Passage. By traveling through the Northwest Passage, as opposed to the Panama Canal, the Nordic Orion saved eighty thousand dollars in fuel cost, traveled one thousand nautical miles less, and the ship could carry about twenty-five percent more coal because the water was not as shallow as the Panama Canal. The Northwest Passage proved to be both advantageous and cost-effective.

3. Investing Countries

As previously noted, Russia and China are beating “the U.S. in the [t]rillion-[d]ollar [r]ace to [c]ontrol the Arctic.”. Despite significant investment by other countries, such as Canada and some Nordic countries, Russia and China are the clear leaders. Russia has conducted commercial Arctic shipping since the first half of the twentieth century through the NSR as a way of connecting Russia’s isolated north to the rest of the country. Now, the NSR is “experiencing a renaissance.” This is in part because of China, which predicted that fifteen percent of its “annual trade would

travel along Russia's Northern Sea Route by 2020." Given China's rhetoric, and the fact that it is currently constructing an icebreaking vessel, there is no doubt that China will utilize the NSR.

Despite China's investment, which includes the new icebreaker, Russia is the world leader in icebreaker capability and subsequently, access to the Arctic Ocean. In Russia, icebreakers are used for many purposes, one of which is commercial. Russia has a fleet large enough "to reliably escort other [ships] through still periodically frozen waters, and that gives it massive influence over regional shipping patterns." Russia also installed and revitalized ports along its NSR. In fact, Russia invested three hundred billion dollars "in potential projects either completed, in motion or proposed, [which makes] Russia . . . the clear leader in Arctic infrastructure development."

China, even without a territorial claim in the Arctic, is also heavily invested in the Arctic Ocean's economic future. China's president, Xi Jinping, announced China's "ambitions to develop a 'Polar Silk Road' through the region as warming global temperatures open up new sea lanes and economic opportunities at the top of the world." China is using its economic strength to influence the region by "underwriting Arctic development projects." Xi Jinping's rhetoric indicates that China has "a keen interest in what the Arctic has to offer in terms of global shipping, fishing stocks, energy security and other mineral resources." By incorporating the Arctic into their Belt and Road initiative, the Chinese government has taken "what is arguably the longest view in the region, using its financial might to secure access to resources it cannot obtain through territorial claims."

Based upon aforementioned developments in the Arctic region, the Arctic is a focus of financial investment and anticipated returns. The Arctic Ocean is poised for a flurry of new activity in the coming decades because natural resources, which were not available thirty to forty years ago, can now be extracted; additionally, commercial shipping and international competition are at the forefront of the Arctic economy in a manner that is drastically different than when the Act was passed. As one of the great nations of the world, the U.S. should have a significant role in the Arctic. The economic prospects offered in the Arctic should encourage Congress to advance U.S. interest in the Arctic economy. This is especially true because increasing commercial activity will only strain the already minimal resources the U.S. has available in the Arctic.

The Act envisioned a sustainable long-term approach to the Arctic region through research, data collection, and policy development. Now is the time for Congress to capitalize on these earlier efforts and recognize that the U.S. has an interest in the financial and geopolitical advancement of the Arctic region. However, without icebreaking vessels and improved infrastructure, the goals set out in the Act, which harken to sustainability and mitigation of long-term challenges, will not be achieved. The Act even acknowledges that the U.S. is inadequately equipped compared to

other Arctic nations. While it was urgent for Congress to enact legislation pertaining to the Arctic in 1984, it is considerably more urgent that Congress reinvigorate U.S. interest in the Arctic.

CONCLUSION

There is undisputed evidence that global warming is deleteriously effecting ice coverage in the Arctic Ocean. As a result of this environmental cataclysm, the Arctic economy is expanding. Natural resources that were once unavailable are now accessible, and commercial shipping through the Arctic Ocean's three main routes is more viable and more cost effective than traditional commercial maritime routes. Because the Arctic economy promises economic advantages, the Arctic is seeing billions of dollars in investment money. It is important that the U.S. contribute to the Arctic economy, but currently, however, U.S. involvement is limited.

The U.S. interest in the Arctic was codified in the Arctic Research and Policy Act, which focused on long-term development in the Arctic, with the intention of realizing an economic benefit therein. The Act mandated continuous research and policy initiatives through a network of federal agencies. That research and policy culminates in a regularly produced plan that includes goals that further advance U.S. interest in the Arctic. The degree in which the Arctic environment has changed since the Act was implemented is immense, and the opportunities presented by the Arctic economy seem to be greater than what Congress originally envisioned. The U.S. is now in a position where it cannot adequately compete with other countries that are investing in the Arctic economy because U.S. agencies are not equipped with the necessary resources. The U.S. only has one fully operational heavy polar icebreaker and the infrastructure in its Arctic territory is deficient. These resources will continue to be stressed because of increasing human activity in the Arctic, which is a result of the expanding Arctic economy. This assertion is substantiated by data from both the Plan, and the four federal agencies examined above. The human activity is a challenge to maintaining effective and essential operations in the Arctic. There is now an immediate need for icebreaking vessels and improved infrastructure to not only support operations, but to reinvigorate sustained U.S. interest in the Arctic region.

Congress must act now if the U.S. is to compete with other world powers such as China and Russia, which are expanding their interests in the Arctic economy at a rapid pace. While acquisition of the three heavy polar icebreakers is a crucial first-step, more must be done. Congress should initiate the procurement of additional icebreakers, and begin infrastructure improvement projects as identified in Senator Murkowski's proposed legislation. These steps are necessary if the U.S. is to capture the original intent of the Act, which is long-term, sustained, development for the purpose of capturing economic benefits in the Arctic.

“U.S. Arctic Interests,” U.S. Government Accountability Office [168]
https://www.gao.gov/key_issues/us_arctic_interests/issue_summary#t=0

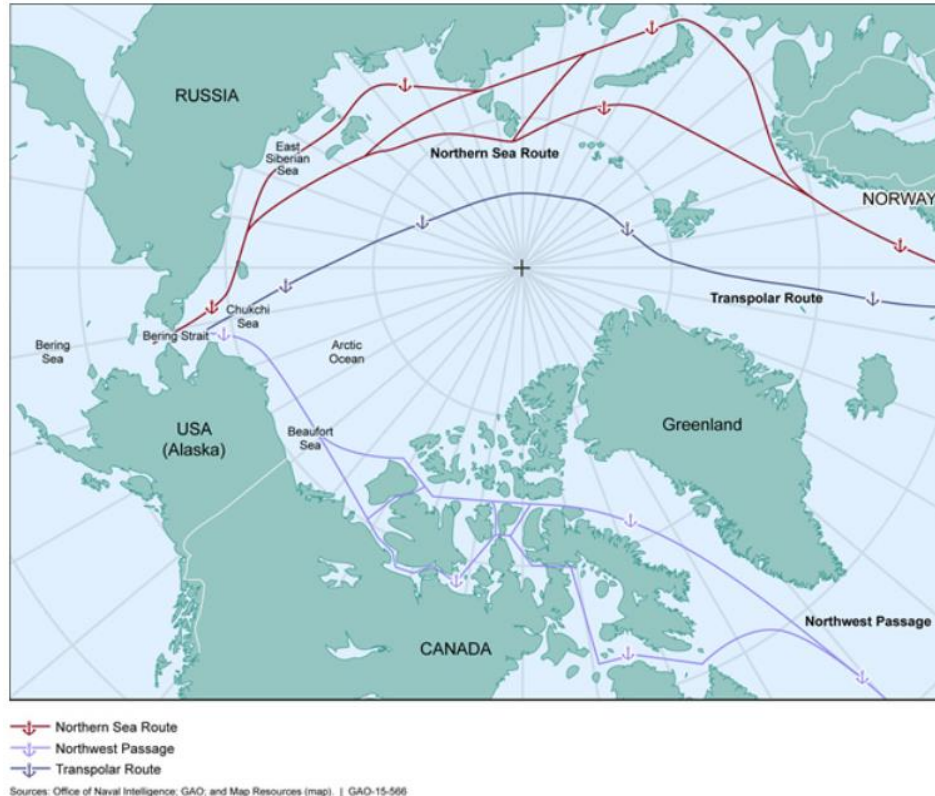
Overview:

The recent retreat of sea ice in the Arctic is expected to expose billions in economic opportunity. With nations’ interests in the region growing, the United States has implemented an Arctic strategy focusing on security, stewardship, and international cooperation.

Current & Relevant Information:

Numerous scientific studies, assessments, and government reports have documented the environmental changes occurring in the Arctic, which can create both economic opportunities and environmental challenges. As Arctic waterways become more accessible with the declining extent in sea ice coverage, the region has attracted greater global attention for its economic opportunities. It contains an estimated 13 percent of the world's undiscovered oil, 30 percent of undiscovered gas, and some \$1 trillion worth of gold, zinc, nickel, and platinum. Melting sea ice could also increase the use of three trans-Arctic routes—the Northern Sea Route, Northwest Passage, and Transpolar Route—saving several thousands of miles and several days of sailing between major trading blocs (figure 1).

Figure 1: Trans-Arctic Sea Routes



At the same time, recent environmental changes have created challenges for the people living in the Arctic and the ecosystem upon which many of them rely for culture and sustenance. For example, coastal erosion has threatened many Arctic Alaska Native villages, forcing a number of villages to consider relocating. In addition, Alaska Natives have observed changes in the health or availability of many of the plant and animal species important for their subsistence way of life.

In response to these changes, the President issued the National Strategy for the Arctic Region in May 2013. The document articulates the administration's strategic priorities for the Arctic, including efforts to advance U.S. security interests, pursue responsible Arctic stewardship, and strengthen international cooperation. In addition, the administration released the Implementation Plan for the National Strategy for the Arctic Region in January 2014, which sets forth the methodology, process, and approach for executing the strategy, including a framework to guide federal activities in the region. Further, in January 2015, the President issued an executive order that established an Arctic Executive Steering Committee to enhance coordination of national efforts in the Arctic. The United States coordinates with other Arctic countries—Canada, Denmark, Finland, Iceland, Norway, Russia, and Sweden—and indigenous organizations through the Arctic Council, a voluntary intergovernmental forum focused on environmental and economic development issues. A wide variety of federal stakeholders have Arctic roles and responsibilities, ranging from scientific research to resource development.

“Arctic Imperatives: Reinforcing U.S. Strategy on America’s Fourth Coast,” Thad W. Allen and Christine Todd Whitman, Council on Foreign Relations, 2017 [169]
https://www.cfr.org/content/publications/attachments/TFR75_Arctic.pdf

Overview:

The Arctic is a crossroads of international politics and a forewarning for the world. The United States, through Alaska, is a significant Arctic nation with strategic, economic, and scientific interests. As sea ice continues to melt, countries inside and outside the Arctic region have updated their strategic and commercial calculations to take advantage of the changing conditions stemming from the opening of the region. The United States needs to increase its strategic commitment to the region or risk leaving its interests unprotected.

The rate of warming in the Arctic region is significantly faster than scientists expected—almost twice that of the rest of the world—and is opening the once-inaccessible region to commerce, transport, resource extraction, and numerous benefits and ills. The warming in the Arctic also affects far-flung areas; Arctic ice loss and melting of the Greenland ice sheet raise sea levels and threaten coastal communities around the globe. The thawing permafrost also releases carbon and methane, which in turn contribute to the rise in global temperature.

Against this backdrop, the United States is chairing the Arctic Council—the intergovernmental forum that addresses issues related to the Arctic—from 2015 to 2017, allowing U.S. policymakers to set the agenda for regional cooperation and advance U.S. interests in the region. The opening of the Arctic offers economic and commercial opportunities, such as new shipping routes and potentially sizeable oil and gas resources, but also exposes local populations and ecosystems to climate-related risks. At the same time, an increased presence and pace of activities by Russia and growing interest from China raise concerns for the United States and other Arctic nations about Russian and Chinese intentions.

To complement its long-term, integrated strategies across the Atlantic, Asia Pacific, and Western Hemisphere, the United States should commit to a more comprehensive approach to the Arctic, which is effectively its fourth sea coast. As security concerns diminished after the end of the Cold War, U.S. Arctic policy focused on scientific, energy, and environmental issues. These topics remain important, but increased activity by other countries necessitates a more strategic approach to U.S. policy in the region while continuing to uphold the cooperative vision of the Arctic Council.

The Council on Foreign Relations convened this Independent Task Force to assess challenges and opportunities for the United States in the Arctic region in the face of changing conditions there. The Task Force finds that the Arctic is of growing economic and geostrategic importance and seeks to highlight specific actions U.S. officials should take to improve the United States' strategic presence in the Arctic region.

The Task Force has identified six main goals for the United States in the Arctic:

- securing U.S. rights to perhaps more than 386,000 square miles (1 million square kilometers) of subsea resources on the extended continental shelf by ratifying the UN Convention on the Law of the Sea (UNCLOS)
- funding up to six icebreakers operated by the U.S. Coast Guard and having at least three operational in the polar regions at any one time
- improving telecommunications, energy, and other infrastructure in Alaska to support a sustained security presence and economic diversification
- deepening work with all Arctic states, including Russia, on confidence building and cooperative security measures through the Arctic Council
- supporting sustainable development for the people of the Arctic and further consulting with Alaska Natives to improve their well-being
- sustaining robust research funding to understand the ongoing profound changes in the region and their impact on the globe

The United States needs to bolster its infrastructure and assets in the Arctic to safeguard its strategic interests, defend its national borders, protect the environment, and maintain its scientific and technological leadership.

Current & Relevant Information:

Economic, energy, and environmental issues are entwined in the Arctic. Energy and natural resource extraction are the primary economic activities, and tourism is a growing sector. U.S. economic interests in the Arctic include both activities in the region and passage through it, with economic possibilities including maritime transportation, energy, mining, fisheries, and the development of Alaskan communities. Given the region's burgeoning potential, the Arctic Economic Council was created in 2014 as a venue for international business-to-business cooperation to promote prosperity and sustainable development.

Building on U.S. strengths in technology would help the United States bolster its economic potential across these activities. It would also bring benefits on the state and local level because the state of Alaska needs economic diversification and Alaska Native subsistence hunters need protected spaces. Although most of the region's economic development will come from private efforts, the Task Force recommends that the U.S. government focus public funds on infrastructure development and additional scientific evaluation that would benefit many residents and several industries, and on improving the integrity and well-being of disadvantaged communities, which do not have ample resources to grapple with changing conditions.

OIL AND GAS

The Arctic is rich in natural resources, and oil and gas in the region are part of the strategic assets available to the United States. Although these resources are potentially substantial, they would need to be proven via further exploration activities.

Containing an estimated 13 percent, or 90 billion barrels, of the world's undiscovered conventional oil resources and 30 percent of its undiscovered conventional natural gas resources, the Arctic offers significant energy opportunities. Half of these energy resources are located in Alaska, and of those, the U.S. Geological Survey estimates thirty billion barrels of oil and 181 trillion cubic feet of gas may be technically recoverable.

Yet the economic drivers of the oil and gas industry have shifted. A 2015 National Petroleum Council report to the Department of Energy, which had requested a comprehensive study on the research and technology opportunities that would enable prudent development of U.S. Arctic oil and gas resources, detailed these changes. Production from other large oil sources, such as shale oil, and the discovery of large Brazilian offshore pre-salt deposits, have reduced the demand for more challenging hydrocarbon resources such as those in the Arctic. The current low-price stage of the commodity cycle further reduces the economic incentives to pursue these resources now.

Thus, the more distant, Arctic offshore resources are not needed now and do not need to be pursued immediately. But the United States should recognize it possesses these strategic resources in the event that supply and demand or geopolitical events create the conditions for them to be developed. In this context, it is important to consider two factors. First, production from these resources is a long-term proposition, and considering the physical development and regulatory requirements, meaningful supply into the market could take fifteen to twenty years, following a sustained exploration program. This prospect gives the United States time to further develop its technologies for oil and gas extraction and environmental protection. Second, nearly all of the recommendations in this report—including on environmental science, infrastructure, and response capabilities, among others—would support these efforts if development of these resources were to occur in the future.

For decades, Alaska has been a major source of oil and gas, and the Trans Alaska Pipeline System (TAPS) has carried petroleum from the North Slope to the Valdez Marine Terminal since 1977. Depletion of previously discovered resources (mainly Prudhoe Bay) has resulted in reduced flowrates via TAPS. TAPS is one of the world's largest pipeline systems, and at its peak, the pipeline contributed significant revenue to the state. Pipeline throughput peaked in 1988 at more than two million barrels a day, and TAPS was delivering 25 percent of all U.S. oil production. By 2016, the pipeline was moving less than five hundred thousand barrels a day, only a quarter of its highest rate. Earlier in the year, TAPS provided about 8 percent of U.S. oil production, which dropped to 6.4 percent in September 2016. Further reducing throughput will increase operational challenges as it becomes harder to keep the pipeline warm and functioning properly in very cold weather. If the TAPS throughput were discontinued, it would likely be difficult to restart, and the United States could lose a critical piece of energy supply infrastructure. The Trump administration should reflect on this possibility and ensure the appropriate studies for options to maintain TAPS are being executed.

In 2015, after drilling the first well in Alaska's outer continental shelf since the early 1990s, Royal Dutch Shell, the company most active in exploring offshore drilling, discontinued operations, citing high costs, shifting global opportunities, and regulatory uncertainty. Several other major oil and gas firms have abandoned most of their leases in the Arctic. The Obama administration subsequently canceled the auction of Arctic offshore drilling leases for the next two years. The Department of the Interior's 2017 to 2022 lease sale schedule includes ten sites, with one in Alaska's Cook Inlet but none offshore in the Arctic Ocean.

The United States will need to assess how and to what extent it might use Arctic assets to meet energy needs while protecting vulnerable areas. In November 2016, an Alaska Native corporation, the Arctic Slope Regional Corporation, purchased the lease areas that Shell had vacated. In December 2016, the Obama administration

banned drilling for oil in the majority of the Chukchi and Beaufort Seas. However, the ban remains in effect only in federally controlled Arctic waters and does not affect drilling in state-controlled waters.

Risks of catastrophic environmental damage from oil spills are numerous. Although U.S. companies operating offshore drilling rigs follow high standards for the industry, accidents can still happen. The TAPS also claim a long history of careful management, but risks remain. The AESC has tasked the Department of Homeland Security and U.S. Coast Guard with developing more extensive plans to prevent and respond to oil spills in the Arctic region.

Moreover, adherence to high industry standards is not uniform across the Arctic, despite recent efforts. In 2013, via the Arctic Council, the ministers of the Arctic states signed the Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic, a legally binding measure. Similarly, the 2016 U.S.-Canada joint statement included commitments to enhance cooperation on clean energy. The recently created Arctic Offshore Regulators Forum, a suborganization of the Arctic Council, met in 2015 and again in 2016 to discuss safety in the oil industry. The Task Force finds that these are useful frameworks, but strong safety enforcement by national governments will be needed for such agreements to be effective. The United States should be a leader in setting the standard for development in the Arctic, giving full consideration for protecting the environment and the people who rely on it.

In addition to furthering efforts in science and technology related to protecting the Arctic environment from risks such as oil spills, alternative sources of energy for regions in the Arctic, including Alaska, remain critical to resolving energy challenges. Many Alaskan communities currently use expensive and environmentally taxing sources of fuel to provide the power they need. For instance, an extensive riverine fuel delivery system involves lightering or hoses to bring diesel fuel to Alaska Native communities in the Northwest Borough and the North Slope. The delicacy of the environment and the difficulty of energy delivery in the harsh conditions make the Arctic region a prime candidate for renewable energy.

In recent years, U.S. Arctic strategy has included clean energy measures, such as increased solar and wind generation, to displace some diesel demand in remote communities. The Task Force supports these measures but is concerned that implementation and funding will lessen over time. Although it would take years to recoup the investment costs, this burden is an inherent part of shifting to a more sustainable economic platform. Further, Alaska has become a leader in developing innovative, off-grid renewable energy technologies—the Alaska Center for Energy and Power and the Alaska Renewable Energy Project being prime examples—and could become an exporter of knowledge and know-how. The Task Force finds that the Arctic could serve as an incubator for energy innovation. Greater use of renewables would reduce dependence on costly diesel fuel, which produces harmful

emissions and has detrimental effects on health. New technological developments in nuclear energy, such as small modular reactors, also offer an opportunity for economic development in the region while reducing dependence on fossil fuels.

“Is the United States Having an ‘Arctic Moment’ on Icebreaker Acquisition?”

Heather A. Conley, Center for Strategic & International Studies, 12 June 2020 [170]

https://www.csis.org/analysis/united-states-having-arctic-moment-icebreaker-acquisition?gclid=Cj0KCQjw9IX4BRCcARIsAOD2OB27a9C61sU3Bf61wBVWBgd1Wnb0z2VEmE-QY_g4g9jM8YMVdoLWP7EaAkGGELw_wcB

Overview:

In a surprising move on June 9, the White House released a memorandum directed to the secretaries of defense, commerce, energy, and homeland security (in addition to the Office of Management and Budget) calling for a review of the United States’ icebreaking capacity in the Arctic and Antarctic regions.

Current & Relevant Information:

High-level calls for a modernized and strengthened U.S. icebreaking fleet are not new. What is new in this memorandum is the Trump administration’s spotlight on the woefully unacceptable lack of U.S. capabilities in the polar regions—and specifically in the Arctic. Today, the United States struggles to maintain a fully operational presence in both the Arctic and Antarctic regions. It is reliant on one lone, 44-year-old heavy icebreaker, the Polar Star, to survive at least four more years or longer (after suffering multiple breakdowns, including a “near-catastrophic” mechanical failure in 2016) to resupply the U.S. McMurdo Research Station in Antarctica, and one medium icebreaker, the Healy, which is normally dedicated to polar scientific research. Over the last several years, government studies have recommended, and the Coast Guard has concurred, that the United States needs three heavy and three medium ice-strengthened icebreakers, or polar security cutters (PSCs), to ensure a persistent presence in the polar region.

The Trump administration announced in April 2019 that it was moving forward with a \$746 million contract with Mississippi’s VT Halter Marine for the construction of the first heavy icebreakers, which should undergo sea trials by 2024 if current timetables hold. The Coast Guard’s FY 21 budget submission, now with Congress, requests funding to complete construction of a second heavy icebreaker. But the United States could find itself without a heavy icebreaker for several years should the Polar Star suddenly become unseaworthy. Publicly recognizing this current vulnerability is a significant and important shift. To address the shortfall, the White House is calling for a 60-day analysis of the possibility of leasing operational vessels to conduct specified missions during FY 22-FY 29, until the new PSCs are operational. Canada, Sweden, and Finland, as well as private sector resources, are all viable options that have excess icebreaker capacities, although they would not necessarily meet U.S. legislative provisions.

The United States has previously leased the Swedish icebreaker Oden to conduct missions to McMurdo—however this method is unreliable, as the Oden was recalled by the Swedish government to provide icebreaking services in the Baltic Sea. Recent studies determined that leasing polar icebreakers is not viable for the Coast Guard due to limited availability and inability to conduct multiple missions. In fact, the Coast Guard’s 2019 environmental impact study for the polar security cutter concluded that there are no existing vessels available for lease that “substantially meet” the service’s icebreaking needs. While some of the Coast Guard’s posturing on leasing was due to fears that a leasing option would preclude procurement, it appears that although the White House may have overruled the Coast Guard on the leasing question (though the assessment itself does not predispose an outcome), the Coast Guard is getting a new icebreaker fleet.

What is also new is the White House specifying (or perhaps dictating) that future medium-strength PSCs will be designed for “the full range of national and economic security missions”—and not simply for breaking ice for scientific and other related operations. The memorandum calls for the aforementioned agencies to assess the feasibility of implementing unmanned aerial vehicle capabilities (both air and sea) and other requirements to maintain maritime domain awareness upon potential vessels not already on contract, which may impact the design of the new PSC. The memorandum also calls for a study to identify four basing locations—two domestic and two international—for the planned U.S. icebreakers. Pressed by the Alaska congressional delegation, last year’s National Defense Authorization Act mandated the Department of Defense assess possible locations for a deep-water “strategic” port in the Arctic. An obvious choice for Arctic-based operations would be on the Alaskan coastline as its proximity to the Bering Strait and Central Arctic Ocean is crucial for protecting U.S. territorial waters, exclusive economic zone, and coastline. It is presumed that Seattle, Washington, currently home to the Polar Star, would remain a preferred domestic port.

The memorandum’s call for two international basing locations is a more challenging proposition. Presumably, the United States will identify one international base near each pole, with Australia and New Zealand as potential locations in the south and perhaps Norway, Iceland, or the Kingdom of Denmark in the north. (Thule Air Base in Greenland, the U.S. armed forces’ northernmost installation and a deep-water port, would be a natural basing option.) However, set against the politically difficult backdrop of President Trump’s comments about purchasing Greenland, the Nordic countries and Canada’s fears of U.S. militarization of the Arctic, and U.S. congressional concerns about a spike in U.S. funding requirements for basing construction and maintenance, this initiative may be a tough sell on both sides of the Atlantic.

This competition is what brings us to the “why now?” question.

Over the past year, the Trump administration has framed the Arctic in terms of great power competition. Addressing Russia and China's growing military and economic presence in the region, Secretary of State Pompeo in a May 2019 speech in Finland described the Arctic as taking on a new strategic significance. This speech was followed several months later by President Trump's enthusiasm related to a potential U.S. purchase of Greenland from the Kingdom of Denmark. Perhaps the timing of the memorandum was also meant to coincide with the formal June 10 reopening of the U.S. consulate in Nuuk, Greenland, and a \$12 million Greenlandic economic development aid package, which remains politically controversial in Denmark.

But this competitive environment is real. Russian submarine and long-range bomber activity have significantly increased over the last several months, which is of increasing concern to U.S. allies, including the United Kingdom and Norway. On June 10, Russian long-range bombers flew within eight miles of U.S. airspace in Alaska—the closest flight in decades. Russia will also conduct a recently announced military exercise in the Arctic at the end of June. The United States reasserted its navigation rights in the Arctic last month when a joint U.S. Navy-UK Royal Navy freedom of navigation operation was conducted in the Barents Sea for the first time in over three decades. Russia and China are both expanding and modernizing their icebreaker fleets—Russia has announced it will place weapons on its newest icebreakers, and China has announced it will construct its first nuclear-fueled icebreaker.

Though icebreakers are not a substitute for a robust, well-resourced, and consistent whole-of-government U.S. Arctic policy, they do provide a critical capability that protects the United States and assures U.S. access to both polar regions. This is a welcome recognition of a severe lack of U.S. capabilities and a rapid assessment to enhance this deficit. The one—and perhaps most important—issue the memorandum is silent about is identification of the budget resources to pay for this important capability in an increasingly strained fiscal environment. Let's hope this "Arctic moment" is not lost.

“United States Coast Guard Arctic Strategic Outlook,” United States Coast Guard, April 2019 [171]

https://www.uscg.mil/Portals/0/Images/arctic/Arctic_Strategy_Book_APR_2019.pdf

Summary:

The United States is an Arctic Nation, and the United States Coast Guard has served as the lead federal agency for homeland security, safety, and environmental stewardship in the Arctic region for over 150 years. Since Revenue Cutters first sailed to Alaska in 1867 to establish U.S. sovereignty, the Service's role has expanded, including representing American interests as a leader in the international bodies governing navigation, search and rescue, vessel safety, fisheries enforcement, and pollution response across the entire Arctic. As the region

continues to open and strategic competition drives more actors to look to the Arctic for economic and geopolitical advantages, the demand for Coast Guard leadership and presence will continue to grow.

Since the release of the Coast Guard Arctic Strategy in 2013, the resurgence of nation-state competition has coincided with dramatic changes in the physical environment of the Arctic, which has elevated the region's prominence as a strategically competitive space. America's two nearest-peer powers, Russia and China, have both declared the region a national priority and made corresponding investments in capability and capacity to expand their influence in the region. Russia and China's persistent challenges to the rules-based international order around the globe cause concern of similar infringement to the continued peaceful stability of the Arctic region. As the only U.S. Service that combines both military and civil authorities, the Coast Guard is uniquely suited to address the interjurisdictional challenges of today's strategic environment by modeling acceptable behavior, building regional capacity, and strengthening organizations that foster transparency and good governance across the Arctic.

The Arctic's role in geostrategic competition is growing, in large part because reductions in permanent sea ice have exposed coastal borders and facilitated increased human and economic activity. The warming of the Arctic has led to longer and larger windows of reduced ice conditions. From 2006 to 2018, satellite imagery observed the 12 lowest Arctic ice extents on record. This has led to greater access through Arctic shipping routes. While the near-term future of these routes is uncertain, a polar route has the potential to reduce transit times of traditional shipping routes by up to two weeks. Russia's establishment of a Northern Sea Route Administration, along with the use of high ice-class Liquefied Natural Gas (LNG) tankers built specifically to export natural gas from its Yamal LNG facility, have contributed significantly to the increase in commercial shipping traffic in the Arctic. In addition, opportunities for potential resource extraction and expanding Arctic tourism offer new prospects for some of the Nation's most isolated communities and broader benefits to America. However, changing terrain and subsistence food patterns, as well as the impacts of increasingly frequent and intense winter storms, continue to challenge the communities and increase risk in the maritime domain.

The Coast Guard will adhere to the following principles as it manages these risks and seizes the opportunities created by these changes:

Partnership. The Arctic is an exceptional place that demands collaboration across national boundaries. The Coast Guard will partner with the Arctic Nations, as well as partners and allies with Arctic interests, to contribute to keeping the Arctic a conflict-free region. The Service will continue to dedicate resources to forums, such as the Arctic Council, and to combined operations and exercises to safeguard and secure the Arctic domain.

The unique and valuable relationship the Coast Guard has established with tribal entities builds mutual trust and improves mission capacity and readiness. We will continue to incorporate lessons-learned from engagements with Alaska Native communities, as well as industry and other Arctic residents, in the development and implementation of policy and strategy.

Unity of Effort. The Coast Guard will advance the Nation's strategic goals and priorities in the Arctic and exercise leadership across the Arctic community of federal, state, and local agencies. As a military Service, the Coast Guard will strengthen interoperability with the Department of Defense and complement the capabilities of the other military services to support the National Security Strategy and the National Military Strategy.

Current & Relevant Information:

1,000,000 Square miles of U.S. territorial waters and exclusive economic zone in the Arctic.

\$3 billion economic impact of Alaska's Arctic seafood industry.

90 billion barrels of undiscovered oil reserves in the Arctic and an estimated 30 percent of the world's undiscovered natural gas.

\$1 trillion value of the Arctic's rare earth minerals, such as zinc, nickel, and lead.

“United States Arctic Policy: The Reluctant Arctic Power,” Rob Huebert, Research Gate, May 2009 [172]

https://www.researchgate.net/publication/292257748_United_States_Arctic_Policy_The_Reluctant_Arctic_Power

Abstract:

Although the United States is an Arctic nation, the Arctic has seldom figured prominently in US policy. In January 2009 the US released its new Arctic policy. Arctic Region Policy signals that the US is beginning to understand that the Arctic is changing in a manner that concerns its vital national interests. The core Arctic issues facing the US are resource development and international circumpolar relations. The development of oil and gas reserves in Alaska is discussed in the context of sustainable development and US domestic energy security, which are often at odds with each other. In regards to circumpolar relation, the US has traditionally been a reluctant Arctic power. It has been unwilling to take the initiative in the area of international Arctic policy. Now, the United States also must act to improve its participation in the main Arctic institutions in order to strengthen cooperation among the Arctic nations. But at the same time, the US must now face a geo-political environment that is becoming more complicated and possibly dangerous than was the case in the last decade. Thus, their new policy also emphasizes the priority the US places on security by maintaining a strong military presence in the Arctic. All of

these actions are already having an impact on their Arctic neighbors including Canada. This will continue to be the case as American activity increase in the region. Now that the Arctic is transforming due to climate change, resource development, globalization, and geopolitical factors, the United States can no longer ignore the Arctic.

Current & Relevant Information:

The heart of US Arctic resource policy and actions is Alaska. The US view of its most northern state tends to focus on its abundant resources. From its extensive oil and gas reserves, both on land and offshore, to its fisheries and natural beauty, Alaska is seen as a wilderness to be used. But how this is to be done is a question Americans have grappled with for a long time.

Alaska's attraction to outsiders has always been in terms of its natural resources. Prior to the US purchase of Alaska, the Russians had come to its northern shores in search of fish and whales. The subsequent discovery of gold in Canada's neighboring Klondike region created a gold rush that still resonates in both the Yukon and Alaska. Other resources also drew outsiders to the state. The main point is that certain themes developed then that still exist today. The discovery of substantial amounts of natural resources brought to Alaska a large number of outsiders who had to deal with the challenge of a formidable climate, a challenge exacerbated by the considerable distance between Alaska and the continental United States. The United States then had to pay attention to its relations with Russia, Canada, and the United Kingdom, which still controlled Canadian foreign and defense policy at the time. When considered in this light, it should be apparent that the "new" Arctic reflects the old Arctic despite the changes that are occurring.

The largest economic issues facing Alaska pertain to the development of oil and gas reserves and the means to transport these resources to southern markets. While both the 1994 and 2009 US Arctic policy documents state that any such development should take place in a sustainable fashion, neither says anything about the tempo of development. This is perhaps because of the ongoing political debate in Alaska, and in the United States in general, about how those resources should be exploited. Debate rages over development of the Arctic National Wildlife Refuge (ANWR) and the offshore regions of the Chukchi Sea and the Beaufort Sea, and typically focuses not on how to proceed in a sustainable fashion but on whether or not drilling should occur at all.

The ANWR was made a Federal Protected Area in 1960 and given further protection under the 1980 Alaska National Interests Land Conservation Act, which stipulated that drilling could occur on these lands only with the approval of the US Congress. While incentives to drill in the region diminished with the fall in oil prices in the 1980s, the issue took on an international dimension in 1987 when the United States and Canada signed an agreement regarding the conservation of the Porcupine

caribou herd — whose calving grounds are located in the ANWR — that requires each party to notify the other if it plans to engage in economic activity that could affect the herd. In fact, much of the opposition to drilling in the area — especially on the part of Canada — is based on fears of the negative impact it could have on the herd.

In the offshore areas, Aboriginal, local, and environmental groups have challenged a planned drilling program by Shell Oil despite the company's assurances to mitigate environmental damage. Even though Shell had received approval from the necessary federal agencies to begin drilling, a November 2008 court decision temporarily halted the company's plans, ruling that the US government should have undertaken a more thorough environmental study of the ramifications of the proposed drilling. Exploratory drilling now will not proceed until the court decision is appealed or a more comprehensive environmental study is completed. From a political perspective, this might give the Obama administration some breathing space on the issue of Arctic drilling.

This debate is driven by concerns about the sustainable development of oil and gas in the Arctic. The issue has developed into an argument between two fundamentally opposed groups. One side takes the position that opening Arctic lands and waters for oil and gas exploitation is a means to ensure domestic US energy security — that the development of the resources in the ANWR will reduce US American dependence on Middle Eastern supplies. The other side is dominated by those who argue that the contribution of oil and gas in these regions to satisfying US demand is insufficient to justify the risk to the local environment.

Going beyond the concerns of strong vested interests, however, the cornerstone of the debate is the amount of oil and gas that actually exists in Alaska and its offshore regions. Extensive exploration of these areas in the 1960s and 1970s led to the discovery of the North Slope fields that now currently fuel the entire Alaskan production, but no other finds of that magnitude were made. Then, in the 1980s, the price of oil fell and almost all Arctic exploration ceased. Interest in exploration renewed at the beginning of 2000, driven by three factors.

First, the continuing conflict in the Middle East, combined with the hostility of states such as Iran, meant that US dependency on Middle Eastern oil remained part of the core of US foreign policy debates; the prospect of northern sources of oil offered at least a partial solution to this dependency. Second, the rising price of oil meant that Alaskan oil and gas was becoming more economically viable; some analysts suggest, off the record, that Alaskan oil deposits are viable above about \$80 per barrel for offshore deposits and about \$55 per barrel for land-based sources. (These prices were reached and exceeded, but have recently collapsed.) Third, there is growing evidence that the Arctic region might contain very large unexploited supplies of both oil and gas. The US Geological Survey, the best-known source of current speculation, suggests that more than 30% of the world's undiscovered gas and 13%

of undiscovered oil reserves may be in the Arctic, with by far the largest estimated deposit (some 30 billion barrels) to be found in the waters immediately off the north coast of Alaska. Of course, only drilling will determine the accuracy of these estimates. Moreover, it is easy to be confused about what such figures mean. Recently, Governor Sarah Palin was severely criticized for allegedly not understanding Alaska's energy production when she was quoted as saying that the state accounts for 20% of US domestic energy production — in fact, Alaska's share is only about 3.5%, but even if she had actually meant to say oil, rather than energy, Alaska's total production in 2007 was only 14% of the US total.

“Why Alaska and the Arctic are Critical to the National Security of the United States,” Michael J. Forsyth, Army University Press, January 2018 [173]
<https://www.armyupress.army.mil/Journals/Military-Review/English-Edition-Archives/January-February-2018/Why-Alaska-and-the-Arctic-are-Critical-to-the-National-Security-of-the-United-States/>

Overview:

Over the past five years, Russia has moved aggressively to build its Arctic military capabilities, apparently in an effort to secure its claims and interests in the region. Increasingly, human activity is occurring in the Arctic as the sea ice recedes and economic opportunity opens to nations via new shipping lanes. Characteristically, in any geographical area, with the rise in human activity there is also the corresponding possibility that friction will occur as people compete to exploit the natural resources and corresponding economic possibilities. Such friction—and potential conflict—in the Arctic is highly likely at some point unless preparations are made to mitigate it.

Alaska makes the United States an Arctic nation, and its location places the state and country at the center of this fast-evolving region. Thus, Alaska is critical to the national security of the United States; however, we are not, as a nation, keeping pace with the rapidly changing security situation in the Arctic. Lagging here could also have an enormous impact on our economy. To change this dynamic, there are several things that the U.S. military can do to ensure the future security of the region.

Current & Relevant Information:

Alaska's Geostrategic Importance

While Alaska is critical to intercontinental shipping now, emerging routes due to shrinking ice impediments could raise the state's economic stature to even greater heights. The retreat of ice coverage in the Arctic Ocean has opened up the potential for shipping along the Northern Sea Route and the fabled Northwest Passage. The Northern Sea Route parallels Russia's Arctic coastline, as much of it is within the country's exclusive economic zone. In the past few years, shipping along this route has increased, topping out with seventy-one passages in 2013. Moving goods along

this route cuts off thousands of miles, saving money on fuel costs and insurance (since there are no pirates along this route). Moreover, Russia is facilitating passages through the use of its large icebreaker fleet, making her an indispensable player in shipping through the High North while profiting from such transit by charging fees for services akin to a toll.

Thus, the emerging Northwest Passage has recently become a possibility for shippers. For centuries, explorers and adventurers sought a route from Europe to Asia across Canada's High North. Most of these individuals failed in this attempt, but now the dream is nearing reality. In 2017, the luxury cruise liner *Crystal Serenity* made a trip through the Northwest Passage starting from Seward, Alaska, and terminating in New York City. While much of the Northwest Passage remains difficult to navigate due to remaining heavy ice pack, continued ice retreat could make this route feasible in the future. Alaska's position on the east side of the Bering Strait places the state in a central position on the choke point of both routes. However, with increasing human activity, it is inevitable that disagreements among nations making claims in the area will arise as competition heats up. Again, Alaska's location thrusts her to the forefront of strategic calculations that the United States must make to deal with emerging geopolitical and geoeconomic circumstances.

Arctic Natural Resources

In addition to the great potential for shipping through the Arctic, there is considerable capacity for economic expansion based on the abundant natural resources in the region. There are across the entire Arctic oil, gas, coal, rare-earth metals, and fisheries. It is estimated that 13 percent of the undiscovered oil and 30 percent of the gas worldwide is in the region, along with a host of other resources. As a result, Arctic nations are very interested in tapping into these to facilitate economic growth and generate revenue. The retreat of sea ice and glacial melt is making these resources more accessible to Arctic and interested near-Arctic nations like China.

The desire to obtain this mineral and energy wealth is stimulating competition among these countries. All of the Arctic nations have made claims beyond their exclusive economic zones on the outer continental shelf so that they have exclusive right to exploit these resources. Claims are made under the auspices of the United Nations (UN), which then adjudicates them according to the UN Convention on the Law of the Sea. The problem is that many of these claims overlap, complicating the UN's ability to judge in a manner satisfactory to all the claimants. This in turn gives rise to friction among the nations as they increasingly confront each other. Herein lies the potential for conflict in the Arctic region, which has heretofore been known for regional cooperation and peace.

Conclusion

The U.S. position in the Arctic because of Alaska is of enormous strategic significance. The United States has vital interests in the Arctic region that are

unfortunately often overlooked because turbulence in other areas of the world often draw more attention. In time, these interests will come to be seen as both critical and vital to our own long-term economic interests as well as security. Consequently, there is a need to ensure our interests in the Arctic are sufficiently secured to ensure resolutions to territorial and resource claims remain peaceful.

To effect protection of our interests, the United States has to assert leadership using critical elements of national power, including the military. We must rebuild long-ignored Arctic military capabilities to provide a credible deterrent to any nation that may want to expand its territory outside of recognized international norms to exploit the tremendous resources of the Arctic. As human activity continues to increase in the Arctic, it will become more and more important for the United States to demonstrate its strength in the region. Failure to do so could allow the friction of human interaction to grow into needless regional confrontation with global implications. This is preventable with a commitment to leadership and peace in the region that stems from sufficient investment and preparation.

B. Military and Security:

“Changes in the Arctic: Background and Issues for Congress,” Congressional Research Service, 18 June 2020 [174] <https://fas.org/sqp/crs/misc/R41153.pdf>

Summary:

The diminishment of Arctic sea ice has led to increased human activities in the Arctic, and has heightened interest in, and concerns about, the region’s future. The United States, by virtue of Alaska, is an Arctic country and has substantial interests in the region. The seven other Arctic states are Canada, Iceland, Norway, Sweden, Finland, Denmark (by virtue of Greenland), and Russia.

The Arctic Research and Policy Act (ARPA) of 1984 (Title I of P.L. 98-373 of July 31, 1984) “provide[s] for a comprehensive national policy dealing with national research needs and objectives in the Arctic.” The National Science Foundation (NSF) is the lead federal agency for implementing Arctic research policy. Key U.S. policy documents relating to the Arctic include National Security Presidential Directive 66/Homeland Security Presidential Directive 25 (NSPD 66/HSPD 25) of January 9, 2009; the National Strategy for the Arctic Region of May 10, 2013; the January 30, 2014, implementation plan for the 2013 national strategy; and Executive Order 13689 of January 21, 2015, on enhancing coordination of national efforts in the Arctic. The office of the U.S. Special Representative for the Arctic has been vacant since January 20, 2017.

The Arctic Council, created in 1996, is the leading international forum for addressing issues relating to the Arctic. The United Nations Convention on the Law of the Sea (UNCLOS) sets forth a comprehensive regime of law and order in the world’s oceans, including the Arctic Ocean. The United States is not a party to UNCLOS.

Record low extents of Arctic sea ice over the past decade have focused scientific and policy attention on links to global climate change and projected ice-free seasons in the Arctic within decades. These changes have potential consequences for weather in the United States, access to mineral and biological resources in the Arctic, the economies and cultures of peoples in the region, and national security.

The geopolitical environment for the Arctic has been substantially affected by the renewal of great power competition. Although there continues to be significant international cooperation on Arctic issues, the Arctic is increasingly viewed as an arena for geopolitical competition among the United States, Russia, and China. Russia in recent years has enhanced its military presence and operations in the Arctic. China's growing activities in the Arctic have become a matter of increasing curiosity or concern among observers.

U.S. military forces have begun to pay more attention to the Arctic in their planning and operations. The Department of Defense (DOD), the Navy, and the Coast Guard have all issued Arctic strategy documents in recent years. Whether DOD and the military services are adequately resourcing these strategies and taking appropriate and adequate actions for defending U.S. interests in the Arctic has emerged as a topic of debate and congressional oversight. The Coast Guard has two operational polar icebreakers and has received funding for the procurement of the first of three planned new polar icebreakers.

The diminishment of Arctic ice could lead in coming years to increased commercial shipping on two trans-Arctic sea routes—the Northern Sea Route close to Russia, and the Northwest Passage close to Alaska and through the Canadian archipelago—though the rate of increase in the use of these routes might not be as great as sometimes anticipated in press accounts. International guidelines for ships operating in Arctic waters have been recently updated.

Changes to the Arctic brought about by warming temperatures will likely allow more exploration for oil, gas, and minerals. Warming that causes permafrost to melt could pose challenges to onshore exploration activities. Increased oil and gas exploration and tourism (cruise ships) in the Arctic increase the risk of pollution in the region. Cleaning up oil spills in ice-covered waters will be more difficult than in other areas, primarily because effective strategies for cleaning up oil spills in ice-covered waters have yet to be developed.

Large commercial fisheries exist in the Arctic. The United States is working with other countries regarding the management of Arctic fish stocks. Changes in the Arctic could affect threatened and endangered species, and could result in migration of fish stocks to new waters. Under the Endangered Species Act, the polar bear was listed as threatened on May 15, 2008. Arctic climate change is also expected to affect the economies, health, and cultures of Arctic indigenous peoples.

Current & Relevant Information:

U.S. Military Forces and Operations

Overview

U.S. military forces, particularly the Navy and Coast Guard, have begun to pay more attention to the Arctic in their planning and operations. The Department of Defense (DOD), the Navy, and the Coast Guard have all issued Arctic strategy documents in recent years. Whether DOD and the military services are adequately resourcing these strategies and taking appropriate and adequate actions for defending U.S. interests in the Arctic—such as establishing a strategic port in Alaska’s north or building ice-hardened ships other than icebreakers—has emerged as a topic of debate and congressional oversight.

During the Cold War, the Arctic was an arena of military competition between the United States and the Soviet Union, with both countries, for example, operating nuclear-powered submarines, long-range bombers, and tactical combat aircraft in the region. The end of the Cold War and the collapse of most elements of the Russian military establishment following the dissolution of the Soviet Union in December 1991 greatly reduced this competition and led to a reduced emphasis on the Arctic in U.S. military planning.

Renewed tensions with Russia following its seizure and annexation of Crimea in March 2014, combined with a significant increase in Russian military capabilities and operations in the Arctic in recent years, have led to growing concerns among U.S. officials and other observers that the Arctic is once again becoming a region of military tension and competition, and to concerns about whether the United States is adequately prepared militarily to defend its interests in the region.

As noted earlier, Russia since 2008 has adopted a series of strategy documents outlining plans that call for, among other things, bolstering the country’s Arctic military capabilities. Russia has reactivated and modernized military bases that fell into disuse with the end of the Cold War, and in December 2014 established a new Arctic Joint Strategic Command at Severomorsk, the home of the Russian navy’s Northern Fleet.

U.S. military officials, military officials from other Arctic states, and other observers have stressed the cooperative aspects of how the Arctic states have addressed Arctic issues, and have sometimes suggested that the competitive aspects of the situation have been exaggerated in some press accounts. Some observers argue that that Russia’s recent military investment in the Arctic is being exaggerated, or reflects normal modernization of aging capabilities, or is intended partly for domestic Russian consumption. Even so, U.S. military forces (and U.S. intelligence agencies) are paying renewed attention to the Arctic. This is particularly true in the case of the Navy and Coast Guard, for whom diminishment of Arctic sea ice is opening up new operating areas for their surface ships. The U.S. Air Force, Army, and Marine Corps, too, are now focusing more on Arctic operations. Canada, the UK, and the Nordic

countries are taking or contemplating steps to increase their own military presence and operations in the region.

“National Interests and Security Policies in the Arctic Region Among Arctic States,” Hilde-Gunn Bye, University of Denver, June 2018 [175]

<https://digitalcommons.du.edu/cgi/viewcontent.cgi?article=2444&context=etd>

Abstract:

The United States, Canada, Russia, and Norway are all Arctic states. However, they prioritize the Arctic region to different degrees in terms of investments of security assets and military presence. What explains why some Arctic countries prioritize the Arctic more than others? This thesis explores this question through using an issue-based approach, which looks at the salience of issues as having implications for foreign policy tools and measures. This thesis finds that having interests and stakes in the region of high overall salience contribute to an explanation of why some countries prioritize the region more, while low overall salience is linked to less prioritization of the region. By having assessed how national interests in the region drives security policies towards the Arctic, this thesis also provides an understanding of why the U.S. is not prioritizing the Arctic in a time when others are increasingly directing their attention to the region.

Current & Relevant Information:

Air, Land and Naval Military Presence and Assets in the U.S. Arctic

While the geostrategic importance of the Arctic has faded after Cold War, the U.S. still has fundamental national security interests in the region as set out in President George W. Bush’s policy document from 2009, National Security Presidential Directive (NSPD-66)/ Homeland Security Presidential Directive (HSPD)-25 (US White House 2009).

The Directive recognizes that human activity in the region is growing and will continue to increase, which also will require the U.S. to be more present in the region to protect its interests (US White House 2009). While this document suggests increased interests towards the Arctic, the region remains distant from the U.S. foreign and security agenda (Åtland 2014, 154). With regards to the U.S. military presence in Alaska, there are two large U.S. air bases located in the state; Elmendorf Air Force Base near Anchorage and Eielson Air Force Base near Fairbanks (Wezeman 2016, 18). The Alaskan Command (ALCOM) under which US forces in Alaska fall, consists of approximately 3,700 National Guard and reserve personnel as well as 16,000 regular personnel, and is incorporated in the United States Pacific Command (USPACOM) (Wezeman 2016, 17-18). However, there is no separate command for military operations in the Arctic region, and responsibilities are being split between the Northern Command, the Pacific Command and the European Command (ibid., 17). The US Army Alaska (USARAK), which is the army

component of ALCOM also has bases near Fairbanks and Anchorage, both located south of the Arctic circle (ibid., 19). USARAK, while calling itself 'America's Arctic Warriors' is not specifically earmarked for Arctic operations, and in mid-2015 there was a proposal to cut almost 3000 of the 4000 troops (ibid.). In terms of US air and missile defenses, the Arctic region is important, and the North American Aerospace Defense Command (NORAD) controls US interceptor aircraft in the Alaska NORAD region and operates radars for air surveillance in Alaska and Canada (ibid., 18). The U.S. Navy also has a role in the Arctic in implementing US Arctic policy, and it is the U.S. Navy and the Department of Defense's mission to ensure "freedom of navigation in the world's oceans and providing security and protection for the United States and its allies" (Conley et al. 2013, 7). However, the Navy's surface fleet in the region has limited operational experience in the Arctic environment and few surface vessels which have the capabilities of operating here (Conley et al. 2013, 7, Åtland 2014, 154). However, it should be noted that the U.S. military has valuable Arctic undersea capabilities, and it operates several nuclear submarines which performs missions in the region (Åtland 2014, 154-155). The U.S. submarine fleet which has a long history of performing missions and exercises under the Arctic ice cover, and the ability to operate nuclear submarines in the region is considered important to national security (Conley et al. 2013, 7, Åtland 2014, 154-155). US nuclear attack submarines participated in Arctic exercises in 2011, 2014 and 2016, operating together under the ice and establishing a camp on the Arctic ice (Wezeman 2016, 20).

However, while U.S. submarine forces tracked and prepared to engage Soviet submarines under the Arctic ice during the Cold War, the importance of the task has greatly diminished in a new security environment through the 90s (Huebert 2009, 19). "Indeed, the composition of its current submarine force reflects the US perception that the Arctic is not of high strategic importance, although the US Navy is known still to deploy a submarine in Arctic waters at least once a year" (Huebert 2009, 19). There are however indicators that U.S. Arctic actors are starting to assess the situation in the north more closely. The Navy has created its Arctic Roadmap which guides policy in the region in the context of a changing Arctic environment in order "to ensure its own readiness and capability in the region" (Tittley and St. John 2010, 42). Potential investments and capabilities in the region were assessed in a report to Congress in 2011 in The Department of Defense's "Report to Congress on Arctic Operations and the Northwest Passage". This concluded that "additional evaluations of the future Arctic operating environment are needed before significant investments in infrastructure are made" (Conley et al. 2013, 7-8). This may indicate that while budget requirements for U.S. investment in the Arctic is needed, the current economic situation is a constraining factor (ibid., 8). However, it may also suggest that the current environment in the region is considered stable with regards to the Navy's ability to secure a maritime presence and navigation rights.

Another important actor in the Arctic is the U.S. Coast Guard (USCG) under the Department of Homeland Security. Of all U.S. government security actors, the Coast Guard has the largest set of authorities with regards to the Arctic Ocean and it has responsibility to protect the Alaskan maritime region of District 17, one of 17 regional Coast Guard commands, entailing 33,000 miles of coastline (Conley et al. 2013, 9-10). At the same time, this also entails several challenges for the Coast Guard with regards to maritime operations due to harsh climate, infrastructure and the geographic area that has to be covered (ibid., 10). In addition to operational challenges, budget challenges are also prominent here, as the Department of Homeland Security often prioritizes fighting terrorism as well as protecting America's southern land and sea border (ibid.). Moreover, the U.S. has in practice only one icebreaker for operations in the Arctic environment. Polar Star began its service in the late 1970s and has thus been in service longer than its "intended 30-year service life" (O'Rourke 2018, 3). Icebreakers have crucial abilities to operate in the Arctic climate and to cut through several meters of ice. They can thus function as vessels to, on the one hand, assert sovereignty in maritime areas, and on the other hand, support economic and industrial activities in ice-covered areas. In other words, investments in icebreakers can thus be seen as a "symbol" of prioritization of the Arctic region. The lack of investments in icebreakers particularly indicates that the Arctic is not a prioritization in the U.S. As such, while the U.S. has undersea capabilities, the lack of surface vessels and icebreaking capacity to operate in the harsh climate which characterize the North American Arctic is worth noting.

"Arctic Imperatives: Reinforcing U.S. Strategy on America's Fourth Coast," Thad W. Allen and Christine Todd Whitman, Council on Foreign Relations, 2017 [176]
https://www.cfr.org/content/publications/attachments/TFR75_Arctic.pdf

Overview:

The Arctic is a crossroads of international politics and a forewarning for the world. The United States, through Alaska, is a significant Arctic nation with strategic, economic, and scientific interests. As sea ice continues to melt, countries inside and outside the Arctic region have updated their strategic and commercial calculations to take advantage of the changing conditions stemming from the opening of the region. The United States needs to increase its strategic commitment to the region or risk leaving its interests unprotected.

The rate of warming in the Arctic region is significantly faster than scientists expected—almost twice that of the rest of the world—and is opening the once-inaccessible region to commerce, transport, resource extraction, and numerous benefits and ills. The warming in the Arctic also affects far-flung areas; Arctic ice loss and melting of the Greenland ice sheet raise sea levels and threaten coastal communities around the globe. The thawing permafrost also releases carbon and methane, which in turn contribute to the rise in global temperature.

Against this backdrop, the United States is chairing the Arctic Council—the intergovernmental forum that addresses issues related to the Arctic—from 2015 to 2017, allowing U.S. policymakers to set the agenda for regional cooperation and advance U.S. interests in the region. The opening of the Arctic offers economic and commercial opportunities, such as new shipping routes and potentially sizeable oil and gas resources, but also exposes local populations and ecosystems to climate-related risks. At the same time, an increased presence and pace of activities by Russia and growing interest from China raise concerns for the United States and other Arctic nations about Russian and Chinese intentions.

To complement its long-term, integrated strategies across the Atlantic, Asia Pacific, and Western Hemisphere, the United States should commit to a more comprehensive approach to the Arctic, which is effectively its fourth sea coast. As security concerns diminished after the end of the Cold War, U.S. Arctic policy focused on scientific, energy, and environmental issues. These topics remain important, but increased activity by other countries necessitates a more strategic approach to U.S. policy in the region while continuing to uphold the cooperative vision of the Arctic Council.

The Council on Foreign Relations convened this Independent Task Force to assess challenges and opportunities for the United States in the Arctic region in the face of changing conditions there. The Task Force finds that the Arctic is of growing economic and geostrategic importance and seeks to highlight specific actions U.S. officials should take to improve the United States' strategic presence in the Arctic region.

The Task Force has identified six main goals for the United States in the Arctic:

- securing U.S. rights to perhaps more than 386,000 square miles (1 million square kilometers) of subsea resources on the extended continental shelf by ratifying the UN Convention on the Law of the Sea (UNCLOS)
- funding up to six icebreakers operated by the U.S. Coast Guard and having at least three operational in the polar regions at any one time
- improving telecommunications, energy, and other infrastructure in Alaska to support a sustained security presence and economic diversification
- deepening work with all Arctic states, including Russia, on confidence building and cooperative security measures through the Arctic Council
- supporting sustainable development for the people of the Arctic and further consulting with Alaska Natives to improve their well-being
- sustaining robust research funding to understand the ongoing profound changes in the region and their impact on the globe

The United States needs to bolster its infrastructure and assets in the Arctic to safeguard its strategic interests, defend its national borders, protect the environment, and maintain its scientific and technological leadership.

Current & Relevant Information:

U.S. National Security

The United States needs to bolster its infrastructure and assets in the Arctic to safeguard its strategic interests, including defense of its national borders, the safety of Alaska, and relations with important countries such as Canada, China, and Russia. U.S. strategic choices guide its diplomacy in international organizations and its military deployments in the global commons, especially ocean navigation. The United States has a long-standing national security interest in the freedom of navigation and maritime domain control. The Task Force finds that a strengthened U.S. position in the Arctic—including increased presence, domain awareness, and capabilities—is an important national security imperative.

During the Cold War, the United States and Soviet Union watched each other across this region, and the United States, Canada, Denmark, and Iceland maintained a system of radar stations across the Arctic called the Distant Early Warning (DEW) Line. Today, Russia's actions in the Arctic require close scrutiny, and rising U.S.-Russia tensions in other regions may affect relations in the Arctic. In the early twenty-first century, though territorial defense remains important, U.S. security concerns have widened to include issues such as access to energy and environmental security.

Regardless of the mandate of the Arctic Council, which excludes military security, U.S. allied defense commitments include the Arctic. Five Arctic countries—Canada, Denmark, Iceland, Norway, and the United States—are North Atlantic Treaty Organization (NATO) allies; Finland and Sweden are partner countries but not formal allies. Norway leads the annual NATO Cold Response winter warfighting exercises, which in 2016 included twelve NATO members along with Finland and Sweden. Although not a major issue at the 2016 NATO Summit, the Arctic, like the Atlantic Ocean and the Baltic and Mediterranean Seas, will certainly remain an area of interest for the alliance. The alliance commitments among the five Arctic states that are NATO members can have beneficial spillover into their preparedness in the Arctic. For example, as part of efforts to move closer to the alliance commitment of spending 2 percent of gross domestic product (GDP) on defense issues, Norway is bolstering its expenditures, including in Arctic defense.

The Arctic region has enjoyed a refreshingly cooperative spirit largely insulated from political tensions in the rest of the world. However, disputes over Russian actions in Crimea, Ukraine, and elsewhere hover at the edge of Arctic amity. The United States has been concerned about Russian military activity in the region, and Russia has been alarmed by the expansion of NATO, the European Union's association agreement with Ukraine, and fears of a Western effort to gain control over Russia's resources. The Trump administration has signaled a new, more transactional

approach to Russia, and a lessening of tensions in other areas may help U.S.-Russia relations in the Arctic.

RUSSIA

The countries in the Arctic region remain at peace and cooperation among them is significant, especially on scientific and safety issues, but historical collaboration in the region is threatened by U.S.-Russia tensions elsewhere. The United States faces one of its most critical and difficult strategic challenges in interpreting Russia's intentions in the Arctic, and tensions from Russia's activities in Ukraine and other geopolitical contests have seeped into the region's politics. For instance, Russia no longer participates in the Arctic Security Forces Roundtable, a forum sponsored by the United States European Command (EUCOM). In addition, U.S. officials' participation in multilateral conferences with Russian counterparts now requires higher-level political approval. Nevertheless, Russia joined Canada, Denmark, Finland, and Norway in observing the U.S. Coast Guard and Northern Command (NORTHCOM) Arctic Chinook search and rescue simulation exercise in the summer of 2016.

Despite reemerging rivalries, collaboration in the Arctic recalls another extreme environment, outer space. Even with heightened tensions during the Cold War, the United States and the Soviet Union worked together in space and even concluded an agreement to rescue each other's astronauts. The Task Force finds that the same principles should apply in the Arctic.

For Russia, the Arctic is an important component of its economy. Before sanctions were imposed on Russia following its 2014 intervention in Ukraine, products from the Arctic Circle accounted for 20 percent of its GDP and 22 percent of its exports. The Arctic remains central to Russia's strategy for economic growth because a large proportion of the next generation of oil and gas production is expected to come from Arctic development, both onshore and offshore. Ninety-five percent of Russia's natural gas and 75 percent of its oil is produced in this region. Most of Russia's petroleum reserves are offshore. Drilling underwater requires more advanced technology than extraction on land, and the recent economic sanctions have already slowed Russian producers' access to the technology and capital needed for Arctic development. In 2014, the International Energy Agency estimated Russia would need to invest \$100 billion a year for twenty years to modernize its energy sector.

During the Soviet period, government policy encouraged people to move north and work in the oil and mining industries, thus Russia accounts for a large percentage of the Arctic population, many of whom live in industrial centers. Like many other parts of the country, Russia's Arctic region has suffered a drop in population since the end of the Cold War, but is still relatively populated compared to parts of the North American Arctic. Although the industrial economy of the Russian Arctic is not as robust as it was previously, Russian strategy for the long term includes eventual

development of resources, as well as the construction of necessary port and security infrastructure to allow shipping of commodities to markets east and west. Escorting this traffic is a major rationale for Russia to increase the number of its icebreakers. Russia may also be reinforcing its capabilities in the Arctic in expectation of greater activity in the region by non-Arctic powers, especially China.

Some experts support direct U.S.-Russian military-to-military contact, though the gravity of geopolitical strains may currently preclude such contact. Another option would be to discuss sub-regional, multilateral issues (rather than bilateral U.S.-Russia issues) in the NATO-Russia Council. However, the Task Force finds that, for now, the newly formed Arctic Coast Guard Forum provides a practical, operationally focused context for confidence-building with Russia on Arctic issues. The Arctic Coast Guard Forum should also address cooperative maritime law enforcement issues. However, decision-makers should be aware that misunderstandings are more likely to arise from air and maritime military maneuvers beyond the current scope of this forum.

A mechanism within the Organization for Security and Cooperation in Europe (OSCE) could provide a model for introducing more confidence-building security measures into the Arctic Council. Borrowing from the OSCE's predecessor, the Conference on Security and Cooperation in Europe, the Arctic Council could concentrate on "baskets" of issues, enabling it to address several topics of varying degrees of political sensitivity. One of these "baskets" could be security issues in which participants can exchange announcements of exercises.

The Task Force believes that the United States should begin military-to-military talks with Russia on Arctic issues and recommends that the U.S. government develop benchmarks for what military contacts on Arctic issues would be appropriate and under what conditions. Russia's actions in Ukraine and elsewhere have strained the international fabric, and the United States, the European Union, and others maintain economic sanctions on certain Russian entities. The Task Force recommends that the United States, while preserving the tradition of nonpolitical cooperation in the Arctic, continue to monitor Russian military expansion in the region and evaluate Russia's intentions in that regard. Military-to-military talks would not be a concession, but instead would offer a practical channel to accomplish needed tasks while providing a window for U.S. interlocutors to gain a better understanding of Russian intentions in the Arctic.

CHINA

In recent years, China has begun staking a claim in the Arctic. China has invested in mines in Greenland and is now negotiating a free trade deal with Iceland. China is also enhancing its maritime presence and capabilities by building ice-breaking research vessels, extending its fishing fleets, and increasing maritime transportation. For instance, in September 2015, Chinese naval ships sailed around the Bering Sea.

Although such a voyage is considered an innocent passage under UNCLOS, it was of interest to U.S. observers because of concerns about China's expanding naval activity in the Pacific. Additionally, China has encouraged its commercial shippers to try Arctic routes. The Chinese military has also made progress in building its own fleet of icebreakers, including the Xue Long and the newly unveiled Haibing 722, and is now building a third.

The Task Force finds that there is scope for greater inclusion of China, an increasingly important player in the Arctic, in regional cooperative mechanisms. The National Science Foundation (NSF) and the Chinese Arctic and Antarctic Administration are exploring areas of further scientific collaboration. China was among the twenty-five countries that participated in the September 2016 White House Arctic Science Ministerial and signed the joint statement on scientific cooperation. The Task Force finds that though China is not yet a significant power in the Arctic, its ambitions in the region merit careful attention.

CANADA

As a neighbor and close ally, Canada is well placed to work with the United States on Arctic affairs. The Task Force finds that cooperation with Canada provides an opportunity to enhance U.S. policy in the Arctic. The two countries are integral to each other's security and collaborate often, for example, through the deeply integrated North American Aerospace Defense Command (NORAD) and search and rescue efforts. Although U.S.-Canada relations remain close, the two countries disagree on the status of the waters of the Arctic Archipelago. What the United States labels as the international seas of the Northwest Passage, Canada considers to be within its sovereignty. Nevertheless, these friendly neighboring countries have been able to manage this long-standing, bilateral disagreement in peaceful and practical ways. Although U.S. policymakers have legitimate concerns about setting a precedent for coastal countries to close international straits to maritime traffic, the Task Force believes that the United States and Canada should seek to resolve their border dispute in the Beaufort Sea. Resolution of this border issue through peaceful negotiation would have a worldwide demonstration effect and also reinforce both countries' shared interests in cooperation in the North American Arctic.

U.S. MILITARY

Within the broader context of national security, U.S. national military defense includes the protection of Alaska and passage of naval vessels in—and often under—the ice-covered Arctic Ocean and important straits such as the Bering Strait. U.S. military forces also protect U.S. economic activities and facilities in the Far North, including the Alaska pipeline and large mining sites such as the Red Dog Mine. The United States has operated submarines under the Arctic since the passage of the USS Nautilus in 1958. Both the U.S. Navy and Coast Guard operate in the region, the latter leading federal law enforcement in the region and focused on

safety, security, coastal resupply, and fisheries enforcement in the Bering Sea and the U.S. EEZ in the Arctic Ocean. The Navy completed a force structure assessment in December 2016. The United States needs to determine which military forces to array in the region and how to interpret the actions of others in the region, including North Korea, whose long-range missiles may be able to strike Alaska.

The intersection of Arctic and transatlantic issues highlights how the remits of the Pacific, Northern, and European Commands converge in the Arctic region. The U.S. Department of Defense should ensure that the seams between Pacific Command (PACOM), Northern Command, and European Command are not gapping. Under the Unified Command Plan (UCP), NORTHCOM is designated the advocate for the Arctic, but shares the responsibility of defense with EUCOM. However, the majority of forces in Alaska come under the operational control of PACOM. When NORTHCOM activates Joint Task Force–Alaska, it sources its manpower from those PACOM units. This possible conflict in control has the potential for tension between combatant commanders and should be resolved in the UCP. Other than Russia’s, foreign military presence in the Arctic is quite small. For the foreseeable future, most of the threats in the Arctic are derived from resource extraction activities (mining and oil and gas), illegal fishing, search and rescue challenges, and the presence of foreign commercial shipping, which may not be suitable for the harsh Arctic environment. Because this is mostly a homeland defense type of mission, NORTHCOM should be tasked with overall area responsibilities given its current domestic and homeland defense focus.

“Report to Congress Department of Defense Arctic Strategy,” United States Department of Defense, June 2019 [177]

<https://media.defense.gov/2019/Jun/06/2002141657/-1/-1/1/2019-DOD-ARCTIC-STRATEGY.PDF>

Summary:

The 2019 Department of Defense (DoD) Arctic Strategy updates the previous 2016 DoD Arctic Strategy as requested by Section 1071 of the John S. McCain National Defense Authorization Act for fiscal year (FY) 2019. This update includes a classified annex.

Specifically, the 2019 DoD Arctic Strategy updates DoD’s strategic objectives for the Arctic region, in light of DoD’s renewed assessment of the evolving Arctic security environment and the release of the 2018 National Defense Strategy (NDS). Anchored in NDS goals and priorities, this updated Arctic strategy outlines DoD’s strategic approach for protecting U.S. national security interests in the Arctic in an era of strategic competition.

DoD’s desired end-state for the Arctic is a secure and stable region in which U.S. national security interests are safeguarded, the U.S. homeland is defended, and nations work cooperatively to address shared challenges. Protecting U.S. national

security interests in the Arctic will require the Joint Force to sustain its competitive military advantages in the Indo-Pacific and Europe, identified in the NDS as key regions of strategic competition, and to maintain a credible deterrent for the Arctic region.

DoD must be able to quickly identify threats in the Arctic, respond promptly and effectively to those threats, and shape the security environment to mitigate the prospect of those threats in the future. The 2019 DoD Arctic strategy outlines three strategic ways in support of the desired Arctic end-state:

- Building Arctic awareness;
- Enhancing Arctic operations; and,
- Strengthening the rules-based order in the Arctic.

Current & Relevant Information:

Increasing Military Activity: Russia views itself as a polar great power and is the largest Arctic nation by landmass, population, and military presence above the Arctic Circle. Russia's commercial investments in the Arctic region have been matched by continued defense investments and activities that strengthen both its territorial defense and its ability to control the NSR. Russia formed the Northern Fleet Joint Strategic Command in December 2014 to coordinate its renewed emphasis on the Arctic. Since then, Russia has gradually strengthened its presence by creating new Arctic units, refurbishing old airfields and infrastructure in the Arctic, and establishing new military bases along its Arctic coastline. There is also a concerted effort to establish a network of air defense and coastal missile systems, early warning radars, rescue centers, and a variety of sensors. China's operational presence in the Arctic is more limited. It includes China's icebreaking vessels, the Xuelong and newly-constructed Xuelong 2, and civilian research efforts, which could support a strengthened, future Chinese military presence in the Arctic Ocean, potentially including deployment of submarines to the region.

U.S. National Security Interests in the Arctic

The United States has three broad, interlocking sets of national security interests related to the Arctic region. These interests are derived from DoD's assessment of how U.S. national security interests, as defined in the 2017 National Security Strategy, apply to the Arctic region. They include:

- 1) The Arctic as the U.S. homeland: The United States is an Arctic nation with sovereign territory and maritime claims in the region. Its interests include defending U.S. sovereignty and the homeland, including through early warning and missile defense; protecting U.S. critical infrastructure; and achieving domain awareness to protect U.S. security interests in the region.

2) The Arctic as a shared region: The Arctic includes a domain of shared interests whose security and stability depend on Arctic nations constructively addressing shared challenges. Regional cooperation – built on a bedrock of internationally recognized principles like national sovereignty – is in the U.S. interest⁸ and contributes to a secure and stable Arctic. This is strengthened by the U.S.-led alliance and partnership network in the Arctic and by maintaining activities in the region in line with international norms.

3) The Arctic as a potential corridor for strategic competition: The Arctic is a potential avenue for expanded great power competition and aggression spanning between two key regions of ongoing competition identified in the NDS — the Indo-Pacific and Europe — and the U.S. homeland. U.S. interests include maintaining flexibility for global power projection, including by ensuring freedom of navigation and overflight; and limiting the ability of China and Russia to leverage the region as a corridor for competition that advances their strategic objectives through malign or coercive behavior.

Protecting U.S. national security interests in the Arctic requires a holistic approach that recognizes the relationship between these three sets of interests. As DoD examines both the United States' and other nations' interests and activities in the Arctic, DoD will prioritize risks and opportunities at the intersection of these three sets of interests. Additionally, DoD activities to protect U.S. national security interests in the Arctic will be in support of broader whole-of-government efforts.

Risks to U.S. National Security Interests

Trends in the Arctic security environment present specific risks across the three sets of U.S. national security interests:

Homeland: The Arctic is strategic terrain as a potential vector for an attack on the U.S. homeland. China and Russia pose discrete and different challenges in their respective theaters, but both are also pursuing activities and capabilities in the Arctic that may present risks to the homeland. In addition to the challenge posed by strategic competitors, coastal erosion and permafrost thaw pose risks to DoD Arctic installations. Increased economic activity in the Arctic raises the probability of a mass casualty incident in the Arctic where DoD assistance may be requested. Natural disasters or other contingencies, such as an oil spill, may severely affect Alaska, requiring DoD support to civil authorities. These events may also inhibit DoD's ability to project power from the homeland.

Shared Region: In different ways, Russia and China are challenging the rules-based order in the Arctic. Russia regulates maritime operations in the NSR, contrary to international law, and has reportedly threatened to use force against vessels that fail to abide by Russian regulations. Russia has generally followed international law and procedure in establishing the limits of its extended continental shelf. Russia could choose to unilaterally establish those limits if the procedures prove unfavorable and

could utilize its military capabilities in an effort to deny access to disputed Arctic waters or resources. China is attempting to gain a role in the Arctic in ways that may undermine international rules and norms, and there is a risk that its predatory economic behavior globally may be repeated in the Arctic.

Potential Corridor for Strategic Competition: Developments in the Arctic have the potential to directly or indirectly constrain DoD's ability to flow forces globally, and more broadly to affect U.S. strategic objectives related to competition with China and Russia in the Indo-Pacific and Europe. The Arctic remains vulnerable to "strategic spillover" from tensions, competition, or conflict arising in these other regions.

DoD Arctic Objectives

The 2018 NDS provides the overarching strategic guidance for framing DoD's Arctic Strategy. The NDS establishes DoD's goals and priorities for defending the homeland and protecting U.S. and allied interests globally by regaining the Joint Force's competitive military edge against China and Russia. Anchored in this strategic aim and supporting NDS tenets, and informed by DoD's assessment of risks to U.S. national security interests, this strategy sets forth the following prioritized DoD objectives for the Arctic region:

1. Defend the homeland: The NDS affirms defense of the homeland as the first priority for DoD. The Department must be prepared to defend U.S. sovereignty in the Arctic. The Arctic is also strategic terrain because it constitutes the northern approaches to the United States; DoD must defend the homeland against threats emanating from these approaches.
2. Compete when necessary to maintain favorable regional balances of power: The Arctic is a potential corridor – between the Indo-Pacific and Europe, and the U.S. homeland – for expanded strategic competitions. Strategic competitors may undertake malign or coercive activities in the Arctic in order to advance their goals for these regions. DoD must be prepared to protect U.S. national security interests by taking appropriate actions in the Arctic as part of maintaining favorable balances of power in the Indo-Pacific and Europe.
3. Ensure common domains remain free and open: The Arctic is a shared region comprising the territories of the eight circumpolar nations and including the Arctic Ocean. DoD, in partnership with other Federal departments and agencies and our Arctic allies and partners, should ensure continued access to the Arctic for legitimate civilian, commercial, and military purposes.

These Arctic objectives are not mutually exclusive; they are interdependent and will need to be achieved in concert with one another. Close collaboration across and between DoD components in support of these strategic objectives will ensure consistent implementation of this strategy. Additionally, this prioritization of objectives should not be interpreted to mean that all DoD activities, presence, and

investments related to a particular objective are a higher priority than those related to another objective. Rather, this framing offers a broad, relative scheme of prioritization based on risks to U.S. national security interests, relevance to and consequences for NDS priorities, and the mandate of established DoD roles and missions.

DoD's Strategic Approach for the Arctic

DoD's strategic approach for the Arctic is to protect U.S. national security interests and prudently address risks to those interests in ways that uphold the region's rules-based order, without fueling strategic competition. Competitive behavior in the Arctic must not distract from or undermine broader NDS priorities; the Department must remain vigilant to how developments in the Arctic affects these priorities. A stable and conflict-free Arctic benefits the United States by providing favorable conditions for resource development and economic activity, as well as by contributing to upholding the international order and regional cooperation on challenges that affect all Arctic nations. DoD will seek to shape military activity in the Arctic region to avoid conflict, while ensuring that the Joint Force is postured and prepared to deter strategic competitors from threatening our interests.

U.S. Allied and Partner Network: Cooperation with allies and partners is the cornerstone of this strategic approach. U.S. allies and partners share a deep, mutual interest in the existing rules-based order. Our network of allied relationships and capabilities is the United States' greatest strategic advantage in the Arctic region. Our defense ties extend and amplify the credibility of our collective deterrent against shared challenges; enhance our ability to contend with strategic competition; and form the basis for a mutual approach to maintaining a secure and stable Arctic region. DoD will pursue a collaborative approach with allies and partners, including both Arctic nations and like-minded non-Arctic nations, in working across the ways and means identified in this strategy.

Deterrence in the Arctic: To ensure a credible deterrent for the Arctic, DoD must be able to quickly identify threats in the region, respond promptly and effectively to these threats, and shape the security environment to reduce or mitigate the prospects of these threats manifesting in the future. The United States must be able to deter strategic competitors from aggression in the Arctic by ensuring the Joint Force has the proficiency to respond to regional contingencies, both independently and in cooperation with allies and partners. The U.S. Arctic deterrent will require agile, capable, and expeditionary forces with the ability to flexibly project power into and operate within the region, as the Joint Force must be able to do elsewhere globally. As DoD examines the attributes of Joint Force capabilities, posture, operations, and activities necessary for deterrence in the Arctic, it will do so in a strategy-driven and resource-informed way. Determinations will be made on the basis of U.S. interests, NDS goals and priorities, DoD's Arctic objectives, and emerging threats in the Arctic and other key theaters of competition, rather than by a

parity-based approach that seeks to approximate competitors' capabilities and numbers of units, systems, or bases.

Support to other U.S. Department, Agency, and Community Roles: Other Federal departments and agencies play critical roles in protecting U.S. national security interests in the Arctic; DoD will work closely with other Federal departments and agencies in support of their efforts. These departments and agencies have lead responsibilities for key aspects of the Arctic security environment, including from a diplomatic and homeland security perspective. DoD will work with other Federal departments and agencies by identifying and communicating the effects of strategic competitors' activities, engagements, and interests in the region, and supporting wider U.S. Government engagement within Arctic multilateral forums. DoD will continue to coordinate and collaborate with interagency partners on research and development activities to build Arctic capabilities through the Interagency Arctic Research and Policy Committee. DoD will also seek to provide support as appropriate to wider U.S. Government responses to contingencies in the Arctic, such as natural disasters.

DoD will also continue to recognize the importance of working with Alaska Natives in the Arctic. DoD engages closely with local communities in Alaska and recognizes their equities as part of DoD activities in the region. DoD has instituted specific programs to ensure regular communication with Alaska Natives and to incorporate their views on regional developments into DoD activities.

“Polar Icebreakers in a Changing World: An Assessment of U.S. Needs: Chapter 2: U.S. Strategic Interests and Missions in the Polar Regions,” The National Academies of Sciences Engineering Medicine, 2007 [178]
<https://www.nap.edu/read/11753/chapter/5>

Overview:

The United States is one of eight nations that have territory and citizens in the Arctic. Thus, the nation has obligations to the population of Alaska as well as a range of international responsibilities, treaty obligations, and policy interests in the region. New opportunities for Arctic cooperation arose in the late 1980s (shortly before the dissolution of the former Soviet Union) and “environmental cooperation was identified as a first step in promoting comprehensive security in the region” (www.arctic-council.org). The eight Arctic nations (Canada, Denmark [including Greenland and the Faeroe Islands], Finland, Iceland, Norway, the Russian Federation, Sweden, and the United States) adopted an Arctic Environmental Protection Strategy in 1991, and in 1996 the Arctic Council was formed. The United States is a founding signatory and member state of the Arctic Council, a regional intergovernmental forum whose purpose is to address all aspects of sustainable development—environmental, social, and economic—addressing issues and challenges shared by the Arctic nations.

Current & Relevant Information:

THE U.S. ARCTIC PRESENCE

The most recent National Security Council policy review of U.S. Arctic policy, undertaken in 1994, lists “national security and defense” as among the key principal interests in the Arctic. Typically, U.S. national security and foreign policy concerns in the Arctic involve sovereignty and jurisdictional issues within the Arctic Ocean. Since the Arctic Ocean is treated like other oceans for purposes of sovereignty and jurisdictional claims, issues typically focus on freedom of access to ice-covered boundary areas as well as international straits and waterways in the Arctic, such as the Bering Strait and the Northwest Passage.

In addition, obligations under international agreements, such as the United States-Denmark bilateral agreement regarding airbases in Greenland and the multilateral agreement concerning the North Atlantic Ice Patrol, must be fulfilled. At present, resupply of the U.S. Thule Air Force Base in Greenland is achieved through an agreement between the Canadian and U.S. Coast Guards. The Canadian Coast Guard is responsible for resupplying the base in exchange for icebreaking services provided by the U.S. Coast Guard in the western Arctic. Reciprocal support for Canadian icebreaking requirements is routinely offered. In practice, this has consisted mostly of joint science program support, and operational support, such as resupply of the Surface Heat Budget of the Arctic Ocean (SHEBA) project in 1998.

Asserting a national presence in the Arctic requires access to the region, and icebreaker support is the preferred way of ingress into ice-covered boundary areas. Although U.S. Navy submarines and Air Force aerial assets are present in the Arctic region, the U.S. Coast Guard is the principal government agency that is capable of year-round operations in Arctic surface waters. The U.S. Coast Guard, through use of the HEALY and the Polar class vessels, is the main—and visible—federal presence in the waters of this region. Although devoted primarily to oceanographic research, the HEALY is available for other missions ranging from national defense, to law enforcement, search and rescue, and support of U.S. commerce (shipping, tourism, fishing, and resource exploration).

“The Arctic and U.S. National Security,” Wilson Center, 4 December 2018 [\[179\]](https://www.wilsoncenter.org/event/the-arctic-and-us-national-security)
<https://www.wilsoncenter.org/event/the-arctic-and-us-national-security>

Overview:

The United States is an Arctic nation, and national security challenges extend to the far North. At the Wilson Center, the commandant of the U.S. Coast Guard and officials from the Navy and Air Force joined experts from the research community, industry, and the State of Alaska to inform U.S. strategy in the face of new polar risks.

Current & Relevant Information:

The Polar Institute's "The Arctic and U.S. National Security" symposium provided a timely and important opportunity to explore and promote Arctic security discussions at a critical time for the region. The symposium included policy leaders currently drafting branch-specific Arctic strategies, solicited insight from senior Department of Defense, Department of Homeland Security, and Department of Commerce leadership, and elicited guidance and perspective from individuals representing the State of Alaska, industry, and research communities. The resulting dialogue provided productive policy and operational insight at the dawn of the 116th United States Congress.

Selected Quotes

Michael Pawlowski

"It is impossible for the United States to project sea power in the Arctic with a polar ice-breaking fleet composed of only one operational heavy ice breaker – the Polar Star, which is more than 40 years old, a decade past its intended 30-year service life – and one medium ice breaker... A fleet of polar security cutters would provide assured year-round access in the polar regions. They will allow us to continue to engage with our fellow Arctic nations, our allies, and our strategic competitors."

"We need a government-wide approach to the Arctic to make the Arctic a national priority. We need a greater physical presence in the Arctic, both military and civilian, and we need infrastructure in the Arctic to support that presence."

"All of us, working together, can help Americans understand that it is not just about the Arctic, but it is about our Arctic – the American Arctic – and whether the United States wants to be a leader in the region or cede that position to other Arctic, and more importantly, non-Arctic, nations."

Admiral Karl L. Schultz

"China is committed to a future in the Arctic. Their influence is only going to expand. Watching China's behavior across the globe, it's hard to not see its activities and interests in the Arctic as anything but an overt claim to power, pure and simple. Facing the surge in global strategic competition with increasingly sophisticated resource adversaries, the Coast Guard finds itself weighing the words of Secretary Mattis... 'cooperating where we can, and vigorously competing where we must, to promote American values and influence around the globe.' For the Coast Guard, the Arctic is certainly on the 'vigorously competing' end of the continuum."

"Without presence, diplomacy and cooperation are absent, or empty. Without presence, our regulatory roles, our governance, and international agreements become hollow policies. In the Arctic region, presence equals influence. The truth is, if we aren't present, if we don't know the environment today, our competitors will."

“While we focus our efforts on creating a peaceful and collaborative environment in the Arctic, we’re also responding to the impacts of increased competition in this strategically important region... Our continued presence will enable us to reinforce positive opportunities and mitigate negative consequences today and tomorrow.”

Admiral Paul F. Zukunft

“The one thing we need to do is apply relentless pressure to the Arctic that can survive one political administration to the next.”

“We need to deal with the consequences of a changing climate and the patterns that are developing. How do we think long-term for a change in climate? We have a number of areas that are vulnerable to a rising sea level, and what investments are being made now to address these long-term consequences?”

“A big challenge right now is how do you model ice-melt in Antarctica? There are some areas that are accumulating snow pack and others that are losing it. We have a bit of a data void right now in terms of what the model is, what is the impact, and how soon that might be.”

“US security starts in the Arctic,” Mike Sfraga and Lawson Brigham, The Hill, 11 June 2020 [180] <https://thehill.com/opinion/national-security/502270-us-security-starts-in-the-arctic>

Overview:

President Donald Trump’s June 9, 2020 [Memorandum on Safeguarding U.S. National Interests in the Arctic and Antarctic Regions](#) is welcome news to those who have long called for a more robust U.S. presence in the Arctic.

The memorandum calls upon five federal agencies to review, assess and execute a “polar security icebreaking fleet acquisition program that supports our national interests in the Arctic and Antarctic regions.”

Although the United States Coast Guard has [detailed their needs](#) to better serve and assert U.S. interests in the polar regions, the president’s affirmation that current U.S. maritime capabilities and related infrastructure is woefully lacking should spur further development and implementation of a new comprehensive Arctic strategy for the United States.

Current & Relevant Information:

On May 29, retired Rear Admiral Kenneth Braithwaite, former U.S. ambassador to Norway, was confirmed as the 77th secretary of the Navy. During the secretary’s confirmation hearing, U.S. Sen. Dan Sullivan (R- Alaska), highlighted the lack of a U.S. Arctic deep-water port and asked Braithwaite if he could commit to advocating for one should he be confirmed. Braithwaite’s answer was succinct, “Yes, sir.” Regarding the transformation of the Arctic Ocean, he stated, “As it begins to become

more navigable on the surface, we also need to make sure that our presence is noted...it will be a priority of mine..."

On the same day Braithwaite was sworn into office, the city of Nome, located on Alaska's Seward Peninsula along the Bering Strait, announced the U.S. Army Corps of Engineers decision to advance to Congress for action the Port of Nome, Alaska Modifications Report. The report calls for the U.S. to "provide shore-side support for research vessels, cruise ships, oil tankers, and most importantly, U.S. Coast Guard icebreakers and national security cutters, as well as U.S. Navy vessels."

The U.S. was a lead country, with Canada and Finland, in the Arctic Council's Arctic Marine Shipping Assessment (AMSA) approved by the Arctic Ministers in April 2009. AMSA determined that Arctic states cannot achieve enhanced security without robust marine infrastructure. This includes the development of ports, communication systems, aids to navigation, hydrography and charts, search and rescue (SAR) capacity, environmental response capacity, intermodal access to ports, environmental observation networks, marine domain awareness capacity, icebreakers, icebreaking commercial cargo carriers and scientific research stations.

President Trump's memorandum, steps to advance an Arctic port in Nome and Braithwaite's commitment to an Arctic port, are three significant and timely developments to bolster U.S. national and economic security in the Arctic and address the lack of U.S. maritime presence in the region. But action is needed.

This basic Arctic infrastructure deficit presents serious economic, social, political, national and environmental security implications in Alaska and the United States. The lack of a deep-water port from Dutch Harbor in the Aleutian Islands, to the U.S.-Canada boundary in the Beaufort Sea, is a critical gap that limits America's sea power and constrains the economic development of our Arctic region. We urgently call for funding to establish the country's first Arctic deep-water port in Nome. However, it will not be enough to have an Arctic port without the essential complementary connections to the rest of Alaska. Nome should be connected to Fairbanks by a new, strategic rail thoroughfare where a seamless connection can be made to the existing Alaska Railroad system south to Anchorage.

Federal funding for basic infrastructure in Alaska is vital to respond to a profoundly changing Arctic with greater marine access, potential natural resource development and concerns for increased Russian and Chinese bilateral Arctic investments, engagement and military activities.

We identify nine key recommendations for agency funding, including: Fund the Army Corps of Engineers to dredge and build a suitable Arctic port in Nome capable of mooring a large vessel, such as a Coast Guard icebreaker, naval combatant or commercial ship.

Fund NOAA's National Ocean Service for a 20-year program to conduct hydrography and chart the U.S. Arctic Exclusive Economic Zone; this action is consistent with the Presidential Memorandum of November 2019 focused on ocean mapping of the U.S. EEZ and the shoreline and nearshore of Alaska.

Fund NOAA's National Weather Service and National Ocean Service to enhance the operational marine and terrestrial observation operational network in Alaska.

Fund the Department of Homeland Security and the Coast Guard to build and commission a third Polar Security Cutter and additional ships as deemed required for enhanced U.S. Arctic and Antarctic operations.

Fund the Departments of Transportation, Interior and Defense to construct a railway corridor linking a new, deep-water Arctic port in Nome to Fairbanks, Alaska.

Fund the Departments of Defense and Homeland Security (Coast Guard), NASA and NSF to build a High Arctic Research Center (HARC) near Prudhoe Bay. The HARC would conduct advanced environmental and tactical research central to our understanding of a changing Arctic security domain.

Fund the Departments of Defense and Homeland Security to develop and construct an enhanced communications system for military and civilian use in Alaska; the system must include submarine fiber-optic cables connecting coastal communities, industrial facilities and vital defense locations.

Fund enhanced maritime domain awareness systems that improve marine information to Arctic coastal communities and aligns with the Marine Exchange of Alaska.

Fund the Department of Defense to establish the Ted Stevens Arctic Center for Security Studies to inform and advance the nation's interests throughout the region.

The nearly complete lack of U.S. Arctic marine infrastructure remains a critical vulnerability for Alaska and the nation. Congressional funding is imperative if the U.S. wishes to respond seriously to the many security challenges of a changing Arctic Ocean and capitalize on the potential economic opportunities that await greater access to this region. Continued lack of investment in our Arctic infrastructure will be a strategic shortcoming with negative, long-term consequences.

“The Implications of U.S. Policy Stagnation toward the Arctic Region,” Heather A. Conley and Matthew Melino, Center for Strategic & International Studies, 3 May 2019 [181] <https://www.csis.org/analysis/implications-us-policy-stagnation-toward-arctic-region>

Abstract:

The United States' strategic position near Russia and neighboring Canada allows the U.S. access to the Beaufort Sea, the Chukchi Sea, and the Bering Sea and

requires the United States to manage a lengthy maritime border with Russia that extends through the Bering Strait and Chukchi Sea into the Arctic Ocean as far as permitted under international law. The U.S. government has articulated its fundamental interest in the Arctic for more than 40 years in a series of government strategies: beginning with President Nixon's 1971 National Security Decision Memorandum (NSDM-144), to Ronald Reagan's 1983 National Security Decision Directive (NSDD-90), to President George W. Bush's National Security Presidential Directive 66 and Homeland Security Presidential Directive 25, signed in 2009, and the 2016 Report to Congress from the Department of Defense on Strategy to Protect United States National Security Interests in the Arctic Region. Each document established broad guidelines for U.S. policy in the region that aligned with the geostrategic realities at the time.

Today, there are three major drivers that are shaping the Arctic:

1. Geopolitical drivers of great power competition with the largest Arctic coastal state Russia and a self-proclaimed "near Arctic state," China;
2. Environmental drivers, which are simultaneously transforming the Arctic maritime and terrestrial space at rates that confound scientists while fueling the development of flexible governance structures; and,
3. Economic drivers that are highly correlated with global commodity prices.

U.S. policy toward the Arctic is driven by these factors as well as Alaska's important domestic economic role providing vital energy, mineral, and fishery resources. The Alaskan North Slope contains some of the country's largest oils fields and natural gas fields; the 2016 value of its mineral industry was \$2.83 billion; and fisherman landed \$5.4 billion of fish and shellfish in 2017. Alaska's economic activity has been subdued for the past several years due to lower global energy prices. The state must respond to increased coastal erosion necessitating village relocation, permafrost thaw, and fresh water scarcity which is dramatically altering traditional livelihoods.

The challenge for an overarching U.S. Arctic policy is that it must address all of these cross-cutting issues simultaneously: protect the homeland, pursue environmental adaptation and resilience, and address global economic and security dynamics while engaging in anticipatory policymaking. U.S. government strategies and documents for the Arctic are largely descriptive in nature, and they have yet to alter resource allocations (with the exception of recent congressional funding for one heavy-icebreaker, which will be predominantly used in Antarctica) or establish new organizational structures that can more efficiently address these cross-cutting issues. They also do not offer a clear set of priorities.

Current & Relevant Information:

The Stagnation of U.S. Arctic Policy under the Obama and Trump Administrations

Despite the relentless pace of the three major drivers, U.S. policy toward the Arctic has remained largely stagnant over the past decade with a continued emphasis on science and international collaboration. In other words, the United States “makes do” by “making it work.” This has been particularly true for the U.S. Coast Guard, the lead U.S. agency with responsibilities for protecting the American Arctic and securing maritime waterways. Despite over a decade of studies and assessments, the U.S. Coast Guard continues to rely on outdated capabilities and thinly resourced budgets, which equates to a seasonal U.S. Coast Guard presence (July-October) in the American Arctic. Should an incident occur in the American Arctic, it is hoped that it happens during this season and preferably near a pre-positioned U.S. maritime asset. Years of underinvestment now leaves the United States ill-prepared as other nations prioritize the region as one of future geostrategic value.

One of the most significant moments in the Arctic’s geopolitical development occurred in 2013 when China was invited to become a permanent observer to the Arctic Council. This decision, combined with the emergence of Chinese President Xi Jinping as China’s leader and the implementation of the Belt and Road Initiative, gave China greater impetus to be more economically, diplomatically, and scientifically visible in the Arctic. This occurred at the same moment when the Obama administration was preparing in earnest for its chairmanship of the Arctic Council (2015-2017).

Since 2009, the Obama administration largely viewed the Arctic region as an alarming and persuasive example of the need to elevate climate change as a national security imperative. The U.S. administration created new administration positions (e.g., a U.S. special representative to the Arctic Region and an executive director of the Arctic Executive Steering Committee) largely to manage its Arctic Council Chairmanship to give the Arctic issue greater public visibility and engage more closely with the state of Alaska. The Obama administration also increased the size of federally protected lands and waters in the American Arctic to minimize development that could adversely impact its environmental protection efforts. Much of this work built up to August 2015 when President Obama became the first president to visit the Alaskan Arctic in part to chair the Global Leadership in the Arctic Cooperation, Innovation, Engagement, and Resilience (GLACIER) conference, which brought together 20 foreign ministers, including those from Arctic nations and Arctic Council observer nations, to call for immediate international action to tackle climate change. China and Russia did not sign the GLACIER declaration.

President Obama’s three-day Arctic visit formed the basis of the U.S. priorities during its chairmanship of the Arctic Council (2015-2017): improving economic and living conditions in Arctic communities; Arctic Ocean safety, security, and stewardship; and addressing the impacts of climate change. But as a reminder of the growing geopolitical dynamics in the region, President Obama’s Alaskan visit occurred simultaneously with a large Sino-Russian naval exercise off the coast of

Vladivostok, Russia in which Alaskans were greeted by 5 Chinese naval vessels off the Aleutian Islands.

The Trump administration concluded the U.S. Arctic Council chairmanship without significant change, but the administration began to disassemble the Obama administration's Arctic-specific administrative structures, emphasized economic development, and dismissed climate impacts in the region. The U.S. budget dedicated to Arctic science and research has remained largely intact due to bipartisan congressional support, and U.S. secretaries of state continue to attend Arctic Council ministerial meetings. The Trump administration has re-opened onshore and offshore areas in the American Arctic for development such as the Arctic National Wildlife Refuge (ANWR) to oil and gas drilling with expedited environmental review although judicial review has slowed this process. New offshore leases in the Chukchi Sea have been made available, and the administration is working to promote oil exploration beneath ANWR's coastal plain along the Beaufort Sea in what is thought to be the largest untapped onshore oil deposit in North America. In 2017, the governor of Alaska signed a Joint Development Agreement with China worth an estimated \$43 billion to develop Alaskan liquified natural gas (LNG) for export to China.

Despite this greater desire for and receptivity to Arctic economic development, U.S. Arctic infrastructure remains very limited and will inhibit economic development. The closest U.S. deep-water port is Dutch Harbor in the southern Bering Sea, which is over 800 miles from the Bering Strait. The lack of icebreaking capabilities is one of the most glaring of U.S. capability gaps, but the U.S. Coast Guard recently selected a firm to construct a polar security cutter which should be in service by 2024. As transits through the Bering Strait have more than doubled over the past decade, there is also an urgent need for greater communications assets and maritime domain awareness capabilities, particularly through the narrow Bering Strait.

One consistent success for U.S. policy in the Arctic is the question of governance. The United States has quietly and effectively engaged with the Russian government to introduce to the International Maritime Organization (IMO) a Vessel Traffic Management System for the Bering Strait, which took effect on December 1, 2018. It is the first internationally recognized ship routing measure approved by the IMO for polar waters. The United States also worked diligently at the IMO to secure a mandatory Polar Code, which came into force in January 2017. Finally, the United States, working closely with the other four coastal states, negotiated a preemptive fisheries moratorium for the high seas of the Central Arctic Ocean and brought together four other fishing nations (China, Korea, Japan, and Iceland) and the European Union to join that agreement (the CAOFA 5+5 Agreement).

Geopolitical Competition in the Arctic – the U.S. View

The greatest failing of U.S. policy has been its reluctance to understand the strategic implications of great power competition in the Arctic. While the United States believes the Arctic will remain of limited strategic value and that its current minimalist posture is sufficient, its two near-peer competitors, Russia and China, have taken dramatically different and long-term views of the region and have expanded their military and economic footprints. The United States has now begun to question whether its current posture is sufficient, but there is no government-wide consensus on what future steps should be taken.

RUSSIA:

The last several years have seen a significant uptick in Russian and NATO military activities and large exercises in the Arctic. Both entities have repositioned military forces in the region, approaching levels not seen since the Cold War. In September 2017, Russia conducted its Zapad 2017 military exercise, which involved an estimated 60,000-70,000 troops, approximately 70 aircraft, and 680 pieces of military equipment including 250 tanks and 200 rocket and artillery systems. Much of the exercise included Russia's Northern Fleet, which is based on the Kola Peninsula in the Arctic Ocean, and included simulated missile strikes from sea. In October 2018, NATO responded with its own military exercise centered around Northern Norway—Trident Juncture 2018, its largest since the end of the Cold War. It included around 50,000 participants from NATO and partner countries, 250 aircraft, 65 ships, and up to 10,000 vehicles. Nearly 20,000 U.S. troops were involved, and it was the first time in nearly 30 years that a U.S. aircraft carrier and strike group ships crossed the Arctic Circle.

Much of Russia's military modernization focuses on its sea-based nuclear deterrent and the introduction of a new hypersonic cruise missile, most of which are also based on the Kola Peninsula. In 2019, Russia announced it would formally withdraw from the Intermediate Nuclear Forces (INF) agreement after the United States announced it was suspending its participation due to repeated Russian treaty violations. But despite these growing tensions, the United States and Russia also work constructively in the Arctic Council, through the Arctic Coast Guard Forum, and bilaterally. The U.S. Coast Guard District 17 and its Russian FSB counterpart work to promote maritime safety and fisheries law enforcement in the Bering Strait along the U.S.-Russian Maritime Boundary Line (MBL) in the Bering Sea, respond to distress calls at sea, and protect the maritime environment.

In addition to its military footprint, Russia also has ambitious economic plans for the Russian Arctic, which center on LNG production on the Yamal Peninsula and creating a viable international transit route through the Northern Sea Route.

CHINA:

With its January 2018 Arctic White Paper and the incorporation of the Arctic into its Belt and Road Initiative, a Chinese "Polar Silk Road" includes the potential

construction of airports, railroads, ports, undersea cables as well as the exploitation of the Arctic's energy and mineral resources. China also opened its first scientific research station in 2004 on the island of Svalbard and has since launched the China-Iceland Arctic Science Observatory (CIAO) in Northern Iceland. Chinese economic and scientific investments as well as Chinese diplomatic presence in a variety of multilateral forum that deals with the Arctic translate into more significant physical presence in the circumpolar Arctic.

Between 2012 and 2017 China invested some \$154 million into the Icelandic economy, after the country became the first European nation to sign a free trade agreement with China in 2008. Chinese investments center on energy resources including oil and gas shelf sites Dreki and Gammur. In Greenland, officials regularly travel to China to encourage investment in key sectors. In September 2016, Shenghe Resources bought a stake in Greenland Minerals and Energy with an eye on developing rare earth elements as well as uranium and zinc. Additionally, four mining sites in Greenland have attracted serious interest from Chinese companies; two of which are likely to come online in the short term. Once in operation, they would make Chinese state-owned enterprises (SOEs) the top foreign investors in Greenland's natural resources. Keenly interested in trans-Arctic shipping, China has completed construction of its second icebreaker and has announced plans to develop a nuclear icebreaker. For the moment, the focal point of Chinese economic investment is the Yamal LNG project on the eastern coast of the Yamal Peninsula in Russia. Chinese companies own 29.9 percent of the \$27 billion project, an "anchor" investment that can translate into future "cluster" infrastructure investments such as port, rail, and telecommunications projects.

Despite these developments and U.S. government strategies describing a return to great power competition, future relations between the United States and China in the Arctic will likely follow a similar trajectory to the U.S. position on Russia's activities in the Arctic: one of growing concern and suspicion about their ultimate ambitions and projects but a lack of new or adjusted policy direction. In the absence of direction, the same U.S. policies apply: focus on maritime security cooperation, scientific collaboration, and low-level cooperation in the Arctic Council.

The Future of U.S. Arctic Policy: Watching yet Still Waiting

To date, the United States does not have a meaningful policy response to either Russia's or China's increased economic and military ambitions in the region. For now, Washington is acknowledging Russia and China's growing footprint in the Arctic, but it is allowing both nations to largely shape the region's future. With the exception of the construction of a polar security cutter, there are no other significant infrastructure initiatives on the horizon. Secretary Pompeo will attend the Arctic Council ministerial in May 2019 in Finland, but the United States may either dilute or delete meaningful mention of climate change from the ministerial conclusions. In response to Russian military actions, the U.S. military is placing a greater focus on

the region and is increasing its presence in Iceland, Norway, and Alaska. The White House is also examining more closely Chinese presence in the Arctic but again, studying the actions of others is not constructing its own policy.

One hopes that the eventual U.S. policy response to great power competition in the Arctic does not fall into the “too little, too late” category.

C. Geopolitical:

“Changes in the Arctic: Background and Issues for Congress,” Congressional Research Service, 18 June 2020 [182] <https://fas.org/sqp/crs/misc/R41153.pdf>

Summary:

The diminishment of Arctic sea ice has led to increased human activities in the Arctic, and has heightened interest in, and concerns about, the region’s future. The United States, by virtue of Alaska, is an Arctic country and has substantial interests in the region. The seven other Arctic states are Canada, Iceland, Norway, Sweden, Finland, Denmark (by virtue of Greenland), and Russia.

The Arctic Research and Policy Act (ARPA) of 1984 (Title I of P.L. 98-373 of July 31, 1984) “provide[s] for a comprehensive national policy dealing with national research needs and objectives in the Arctic.” The National Science Foundation (NSF) is the lead federal agency for implementing Arctic research policy. Key U.S. policy documents relating to the Arctic include National Security Presidential Directive 66/Homeland Security Presidential Directive 25 (NSPD 66/HSPD 25) of January 9, 2009; the National Strategy for the Arctic Region of May 10, 2013; the January 30, 2014, implementation plan for the 2013 national strategy; and Executive Order 13689 of January 21, 2015, on enhancing coordination of national efforts in the Arctic. The office of the U.S. Special Representative for the Arctic has been vacant since January 20, 2017.

The Arctic Council, created in 1996, is the leading international forum for addressing issues relating to the Arctic. The United Nations Convention on the Law of the Sea (UNCLOS) sets forth a comprehensive regime of law and order in the world’s oceans, including the Arctic Ocean. The United States is not a party to UNCLOS.

Record low extents of Arctic sea ice over the past decade have focused scientific and policy attention on links to global climate change and projected ice-free seasons in the Arctic within decades. These changes have potential consequences for weather in the United States, access to mineral and biological resources in the Arctic, the economies and cultures of peoples in the region, and national security.

The geopolitical environment for the Arctic has been substantially affected by the renewal of great power competition. Although there continues to be significant international cooperation on Arctic issues, the Arctic is increasingly viewed as an arena for geopolitical competition among the United States, Russia, and China.

Russia in recent years has enhanced its military presence and operations in the Arctic. China's growing activities in the Arctic have become a matter of increasing curiosity or concern among observers.

U.S. military forces have begun to pay more attention to the Arctic in their planning and operations. The Department of Defense (DOD), the Navy, and the Coast Guard have all issued Arctic strategy documents in recent years. Whether DOD and the military services are adequately resourcing these strategies and taking appropriate and adequate actions for defending U.S. interests in the Arctic has emerged as a topic of debate and congressional oversight. The Coast Guard has two operational polar icebreakers and has received funding for the procurement of the first of three planned new polar icebreakers.

The diminishment of Arctic ice could lead in coming years to increased commercial shipping on two trans-Arctic sea routes—the Northern Sea Route close to Russia, and the Northwest Passage close to Alaska and through the Canadian archipelago—though the rate of increase in the use of these routes might not be as great as sometimes anticipated in press accounts. International guidelines for ships operating in Arctic waters have been recently updated.

Changes to the Arctic brought about by warming temperatures will likely allow more exploration for oil, gas, and minerals. Warming that causes permafrost to melt could pose challenges to onshore exploration activities. Increased oil and gas exploration and tourism (cruise ships) in the Arctic increase the risk of pollution in the region. Cleaning up oil spills in ice-covered waters will be more difficult than in other areas, primarily because effective strategies for cleaning up oil spills in ice-covered waters have yet to be developed.

Large commercial fisheries exist in the Arctic. The United States is working with other countries regarding the management of Arctic fish stocks. Changes in the Arctic could affect threatened and endangered species, and could result in migration of fish stocks to new waters. Under the Endangered Species Act, the polar bear was listed as threatened on May 15, 2008. Arctic climate change is also expected to affect the economies, health, and cultures of Arctic indigenous peoples.

Current & Relevant Information:

Shift to Era of Renewed Great Power Competition

Overview

A principal factor affecting the geopolitical environment for the Arctic is the shift that has occurred in recent years from the post-Cold War era that began in the late 1980s and early 1990s, also sometimes known as the unipolar moment (with the United States as the unipolar power), to a new international security environment that features, among other things, renewed great power competition with China and Russia and challenges by these two countries and others to elements of the U.S.-led

international order that has operated since World War II. This shift in the international security environment, combined with the diminishment of Arctic ice and the resulting increase in human activities in the Arctic, has several potential implications for the geopolitical environment for the Arctic, which are discussed in the following sections.

Arctic Tradition of Cooperation and Low Tensions

The renewal of great power competition has raised a basic question as to whether the Arctic in coming years will continue to be a region generally characterized by cooperation and low tensions, as it was during the post-Cold War era, or instead become a region characterized at least in part by competition and increased tensions, as it was during the Cold War. Although there continues to be significant international cooperation on Arctic issues, the Arctic is increasingly viewed as an arena for geopolitical competition among the United States, Russia, and China. In this regard, the renewal of great power competition poses a potential challenge to the tradition of cooperation, low tensions, peaceful resolution of disputes, and respect for international law—sometimes referred to as the “Arctic spirit”—that has characterized the approach used by the Arctic states, particularly since the founding of the Arctic Council in 1996, for managing Arctic issues.

Some observers argue that the Arctic states and other Arctic stakeholders should attempt to maintain the region’s tradition of cooperation and low tensions, and work to prevent the competition and tensions that have emerged in Europe, Asia, and elsewhere in recent years from crossing over into the Arctic. These observers argue that the Arctic tradition of cooperation and low tensions has proven successful in promoting the interests of the Arctic states and other Arctic stakeholders on a range of issues, that it has served as a useful model for other parts of the world to follow, and that in light of tensions and competition elsewhere in the world, this model is needed more now than ever.

Other observers could argue that, notwithstanding the efforts of Arctic states and other Arctic stakeholders to maintain the Arctic as a region of cooperation and low tensions, it is unreasonable to expect that the Arctic can be kept fully isolated from the competition and tensions that have arisen in other parts of the world. As a consequence, these observers could argue, the Arctic states and other Arctic stakeholders should begin taking steps to prepare for increased competition and higher tensions in the Arctic, precisely so that Arctic issues can continue to be resolved as successfully as conditions may permit, even in a situation of competition and increased tensions.

Still other observers might argue that a policy of attempting to maintain the Arctic as a region of cooperation and low tensions, though well-intentioned, could actually help encourage aggressive behavior by Russia or China in other parts of the world by giving those two countries confidence that their aggressive behavior in other parts

of the world would not result in punitive costs being imposed on them in the Arctic. These observers might argue that maintaining the Arctic as a region of cooperation and low tensions in spite of aggressive Russian or Chinese actions elsewhere could help legitimize those aggressive actions and provide little support to peaceful countries elsewhere that might be attempting to resist them. This, they could argue, could facilitate a divide-and-conquer strategy by Russia or China in their relations with other countries, which in the long run could leave Arctic states with fewer allies and partners in other parts of the world for resisting unwanted Russian or Chinese actions in the Arctic.

Still others might argue that there is merit in some or all of the above perspectives, and that the challenge is to devise an approach that best mixes the potential strengths of each perspective.

In a May 6, 2019, speech in Finland that was given prior to the start of formal discussions at an Arctic Council ministerial meeting, Secretary of State Michael Pompeo stated:

For reasons I'll explain in a moment, the region [i.e., the Arctic] has become an arena for power and for competition. And the eight Arctic states must adapt to this new future.

In its first two decades, the Arctic Council has had the luxury of focusing almost exclusively on scientific collaboration, on cultural matters, on environmental research—all important themes, very important, and we should continue to do those.

But no longer do we have that luxury of the next hundred years....

To leverage the Arctic's—the Arctic continental, all nations, including non-Arctic nations, should have a right to engage peacefully in this region. The United States is a believer in free markets. We know from experience that free and fair competition, open, by the rule of law, produces the best outcomes.

But all the parties in the marketplace have to play by those same rules. Those who violate those rules should lose their rights to participate in that marketplace. Respect and transparency are the price of admission.

And let's talk about China for a moment. China has observer status in the Arctic Council, but that status is contingent upon its respect for the sovereign rights of Arctic states. The U.S. wants China to meet that condition and contribute responsibly in the region. But China's words and actions raise doubts about its intentions.

Beijing claims to be a "Near-Arctic State," yet the shortest distance between China and the Arctic is 900 miles. There are only Arctic States and Non-Arctic

States. No third category exists, and claiming otherwise entitles China to exactly nothing.

That's not to say Chinese investment is unwelcome—indeed, quite the opposite. The United States and Arctic nations welcome transparent Chinese investments that reflect economic interest and national security ambitions. Between 2012 and 2017, China invested in the Arctic nearly \$90 billion. It's planning to build infrastructure from Canada, to the Northwest Territories, to Siberia.

Just last month, Russia announced plans to connect the Northern Sea Route with China's Maritime Silk Road, which would develop a new shipping channel from Asia to northern Europe. Meanwhile, China is already developing shipping lanes in the Arctic Ocean.

This is part of a very familiar pattern. Beijing attempts to develop critical infrastructure using Chinese money, Chinese companies, and Chinese workers—in some cases, to establish a permanent Chinese security presence.

Our Pentagon warned just last week that China could use its civilian research presence in the Arctic to strengthen its military presence, including our deployment of submarines—including deployment of submarines to the region as a deterrent against nuclear attack.

We need to examine these activities closely, and we need—and we keep the experience we have learned of other nations in mind. China's pattern of aggressive behavior elsewhere in the—excuse me—aggressive behavior elsewhere should inform what we do and how it might treat the Arctic.

Let's just ask ourselves: Do we want Arctic nations broadly, or indigenous communities specifically, to go the way of former government in Sri Lanka or Malaysia, ensnared by debt and corruption? Do we want crucial Arctic infrastructure to end up like Chinese-constructed roads in Ethiopia, crumbling and dangerous after only a few years? Do we want the Arctic Ocean to transform into a new South China Sea, fraught with militarization and competing territorial claims? Do we want the fragile Arctic environment exposed to the same ecological devastation caused by China's fishing fleet in the seas off its coast, or unregulated industrial activity in its own country? I think the answers are pretty clear.

Then there's Russia. As a fellow Arctic Council member, Russia – the other Arctic states have fruitfully cooperated in a number of areas—expansive conservation efforts. Those are to be applauded. We want cooperation to continue. But we can't have one side cooperate, and the other side derogate its duties.

We're concerned about Russia's claim over the international waters of the Northern Sea Route, including its newly announced plans to connect it with

China's Maritime Silk Road. In the Northern Sea Route, Moscow already illegally demands other nations request permission to pass, requires Russian maritime pilots to be aboard foreign ships, and threatens to use military force to sink any that fail to comply with their demands.

These provocative actions are part of a pattern of aggressive Russian behavior here in the Arctic. Russia is already leaving snow prints in the form of army boots. Russia formally announced its intent to increase its military presence in the region in 2014, when it re-opened a Cold War Arctic military base.

Since then, thanks in part to its large icebreaker fleet, Russia has been able to renovate old bases and infrastructure. It claims to have built 475 new military sites, including bases north of the Arctic Circle, as well as 16 new deep-water ports. It secures this presence through sophisticated new air defense systems and anti-ship missiles.

No one denies Russia has significant Arctic interests. We recognize that Russia is not the only nation making illegitimate claims. The U.S. has a long-contested feud with Canada over sovereign claims through the Northwest Passage.

But Russia is unique. Its actions deserve special attention, special attention of this Council, in part because of their sheer scale. But also, because we know Russian territorial ambitions can turn violent. 13,000 people have been killed due to Russia's ongoing aggressive action in Ukraine.

And just because the Arctic is a place of wilderness does not mean it should become a place of lawlessness. It need not be the case. And we stand ready to ensure that it does not become so.

On April 23, 2020, a senior State Department official provided a background on the Trump Administration's strategy for the Arctic. The State Department official stated the following at the opening of the briefing:

I want to state a couple principles right up front, which is we have a very clear set of goals and objectives in the Arctic, and they're quite straightforward. We want a secure and stable Arctic where U.S. interests are safeguarded, our homeland—the American homeland—is protected, and the Arctic states are working cooperatively to address shared challenges. And the department—Department of State—is working in collaboration with other agencies across the United States Government to ensure that the Arctic remains a region free of conflict as well as characterized by respect for national sovereignty, a rules-based order, constructive engagement among Arctic states to address our shared economic, scientific, and environmental challenges.

We have—we are working closely with our Arctic partners through the Arctic Council, which is the premier recognized forum for matters of Arctic governance, and as folks know, it's made up of the eight Arctic states: the United States,

Canada, the Kingdom of Denmark, Finland, Iceland, Norway, the Russian Federation, and Sweden. Now, our principal focus since the—that's been our principal focus. The work of the Arctic Council, since its formation in 1996, has been on promoting this coordination and cooperation among Arctic states and working, of course, with Arctic indigenous communities and other inhabitants on the issues that I identified.

But we also are in the process of adjusting our Arctic policy to today's new strategic realities, and those are characterized by the return of geopolitics, if I can put it that way, not just to the Arctic but generally across the globe. And it's a change that's driven by the desire of Russia and the People's Republic of China to challenge the United States and the West. We see this playing out in other parts of the world. The Arctic is not immune from the implications of these changes and we can expect, as you all probably know, the rapidly changing Arctic system to create greater incentives for the Kremlin and the PRC to pursue agendas that clash with the interests of the United States and our allies and partners.

... I want to be clear that the United States recognizes that Russia has legitimate Arctic interests. It's an Arctic Council member. It's cooperated with the United States and other Arctic states in a number of areas, including oil spill response, search and rescue, pollution issues. That work is continuing; it's ongoing; it's welcome. We have no concerns about it or no objections to it, and we want it to continue.

But we also have concerns about Russia's military buildup in the Arctic. Its presence has grown dramatically in recent years with the establishments of new Arctic commands, new Arctic brigades, refurbished airfields and other infrastructure, deep water ports, new military bases along its Arctic coastline, an effort to establish air defense and coastal missile systems, early warning radars, and a variety of other things along the Arctic coastline. We've seen an enhanced op [operations] tempo of the Russian military in the Arctic, including last October one of the largest Russian military exercises in the Arctic since the end of the Cold War. So, there is some genuine and legitimate concern there on the part of the United States and our allies and partners about that behavior in the Arctic.

China is a bit of a different challenge. It claims that its interests in the Arctic are focused on access to natural resources and the opportunities offered by Arctic sea routes for shipping. And as you all probably know, it outlined plans in 2018 to develop a Polar Silk Road, claimed it was a near-Arctic state, and signaled its intention to play a more active role in Arctic governance. We have found this disconcerting because [in] the PRC's behavior outside the Arctic, it often disregards international norms, as it has in the South China Sea, for example. And if I can quote Secretary Pompeo, he said this last year in May of 2019 in Finland: "There are only Arctic states and non-Arctic states." There are — "No

third category exists,” so we do not accept Beijing’s claims to be a near-Arctic state.

And we’ve also seen across the globe that China’s soft-power tools often have a soft edge when deployed by the PRC. It’s weaponized its state capitalism in an effort to secure control of critical infrastructure such as ports and telecommunications networks. It’s demonstrated a willingness to use coercion and influence operations and other methods to get what it wants, including in the Arctic. The recent experience of the Faroe Islands over the threats to drop a trade agreement because the Faroese did not sign a 5G contract with Huawei is just one example. So, their behavior, the PRC’s behavior over the last decade, underscores that we can’t necessarily assume its good intentions with regards to its activities in the Arctic.

Now having said all that, I want to go back to what I said at the beginning of my brief because I think it often gets lost. In acknowledging that we have to moderate our posture because of global geopolitical changes, we are not saying and have not said — in fact the Secretary has said the exact opposite — that the work we are doing with Arctic states, the work that we are doing collaboratively internationally on environmental challenges, on sustainable development, on search and rescue, on clean-up of oil spills, all of that is continuing, should continue, and is an important and critical part of our Arctic policy and Arctic agenda. And it’s in that context, the work that we’re doing in those areas and of course the challenges we see emerging in the geopolitical scene, that we are seeking to enhance our engagement and our work right across the Arctic, not just in Greenland but in other parts — in other Arctic states as well.

“Arctic Imperatives: Reinforcing U.S. Strategy on America’s Fourth Coast,” Thad W. Allen and Christine Todd Whitman, Council on Foreign Relations, 2017 [183]
https://www.cfr.org/content/publications/attachments/TFR75_Arctic.pdf

Overview:

The Arctic is a crossroads of international politics and a forewarning for the world. The United States, through Alaska, is a significant Arctic nation with strategic, economic, and scientific interests. As sea ice continues to melt, countries inside and outside the Arctic region have updated their strategic and commercial calculations to take advantage of the changing conditions stemming from the opening of the region. The United States needs to increase its strategic commitment to the region or risk leaving its interests unprotected.

The rate of warming in the Arctic region is significantly faster than scientists expected—almost twice that of the rest of the world—and is opening the once-inaccessible region to commerce, transport, resource extraction, and numerous benefits and ills. The warming in the Arctic also affects far-flung areas; Arctic ice loss and melting of the Greenland ice sheet raise sea levels and threaten coastal

communities around the globe. The thawing permafrost also releases carbon and methane, which in turn contribute to the rise in global temperature.

Against this backdrop, the United States is chairing the Arctic Council—the intergovernmental forum that addresses issues related to the Arctic—from 2015 to 2017, allowing U.S. policymakers to set the agenda for regional cooperation and advance U.S. interests in the region. The opening of the Arctic offers economic and commercial opportunities, such as new shipping routes and potentially sizeable oil and gas resources, but also exposes local populations and ecosystems to climate-related risks. At the same time, an increased presence and pace of activities by Russia and growing interest from China raise concerns for the United States and other Arctic nations about Russian and Chinese intentions.

To complement its long-term, integrated strategies across the Atlantic, Asia Pacific, and Western Hemisphere, the United States should commit to a more comprehensive approach to the Arctic, which is effectively its fourth sea coast. As security concerns diminished after the end of the Cold War, U.S. Arctic policy focused on scientific, energy, and environmental issues. These topics remain important, but increased activity by other countries necessitates a more strategic approach to U.S. policy in the region while continuing to uphold the cooperative vision of the Arctic Council.

The Council on Foreign Relations convened this Independent Task Force to assess challenges and opportunities for the United States in the Arctic region in the face of changing conditions there. The Task Force finds that the Arctic is of growing economic and geostrategic importance and seeks to highlight specific actions U.S. officials should take to improve the United States' strategic presence in the Arctic region.

The Task Force has identified six main goals for the United States in the Arctic:

- securing U.S. rights to perhaps more than 386,000 square miles (1 million square kilometers) of subsea resources on the extended continental shelf by ratifying the UN Convention on the Law of the Sea (UNCLOS)
- funding up to six icebreakers operated by the U.S. Coast Guard and having at least three operational in the polar regions at any one time
- improving telecommunications, energy, and other infrastructure in Alaska to support a sustained security presence and economic diversification
- deepening work with all Arctic states, including Russia, on confidence building and cooperative security measures through the Arctic Council
- supporting sustainable development for the people of the Arctic and further consulting with Alaska Natives to improve their well-being
- sustaining robust research funding to understand the ongoing profound changes in the region and their impact on the globe

The United States needs to bolster its infrastructure and assets in the Arctic to safeguard its strategic interests, defend its national borders, protect the environment, and maintain its scientific and technological leadership.

Current & Relevant Information:

Over the past decade and across presidential administrations of both political parties, the United States has rekindled an interest in the Arctic as part of its national strategy, working to address scientific, technological, cultural, energy, and environmental issues in the region. Recent years have witnessed increased presidential attention to the Arctic, and the confluence of changing conditions and the U.S. chairmanship of the Arctic Council from 2015 to 2017 have occasioned a concerted effort to craft an ambitious U.S. policy.

Interest in the Arctic is and has been bipartisan. In January 2009, President George W. Bush issued an Arctic region policy just before leaving office. National Security Presidential Directive 66 (also known as Homeland Security Presidential Directive 25) declared an enduring theme: “The United States is an Arctic nation, with varied and compelling interests in that region.” In 2013, President Barack Obama issued a National Strategy for the Arctic Region, which elevated three goals for the United States: advancing U.S. security interests, pursuing responsible Arctic region stewardship, and strengthening international cooperation; it was followed by an implementation plan in 2014.

The Arctic Council is an important venue for U.S. diplomacy. Chartered in 1996 as an intergovernmental forum, the Arctic Council is the leading organization in the region. Composed of eight Arctic countries—Canada, Denmark (Greenland), Finland, Iceland, Norway, Russia, Sweden, and the United States—the Arctic Council is a consultative body that operates by consensus.¹⁸ In addition to the eight national governments, six indigenous groups are “permanent participants”: the Aleut International Association, Arctic Athabaskan Council, Gwich’in Council International, Inuit Circumpolar Council, Russian Association of Indigenous Peoples of the North, and Saami Council. Included as the council’s observers are twelve non-Arctic states, nine intergovernmental and interparliamentary organizations, and eleven nongovernmental organizations (NGOs).

During its Arctic Council chairmanship from 2015 to 2017, the United States has been an active chair, giving higher political priority to this region than it had previously. Under the rubric “One Arctic: Shared Opportunities, Challenges and Responsibilities,” the Obama administration outlined three priorities for U.S. chairmanship of the Arctic Council: “improving economic and living conditions in Arctic communities; Arctic Ocean safety, security and stewardship; and addressing the impacts of climate change.” The Task Force finds that these priorities are a good first step, but they should be sustained by the new administration of President Donald J. Trump if they are to have a lasting effect.

The United States can capitalize on strong relations with Canada and with the Nordic countries. The 2016 summit meeting between President Obama and Canadian Prime Minister Justin Trudeau resulted in the “U.S.-Canada Joint Statement on Climate, Energy, and Arctic Leadership,” with cooperation in the Arctic embedded in this latest expression of U.S.-Canadian amity. New Arctic initiatives include partnering with indigenous peoples, setting aside wilderness space, and protecting fisheries. The Task Force agrees that U.S.-Canada cooperation should include these areas in addition to national security. At the U.S.-Nordic Leaders’ Summit in May 2016, the United States and the five Nordic countries issued a joint statement affirming the importance of the region and their commitment to maintaining the Arctic as a “zone of peace and stability . . . based on universally recognized principles of international law including those reflected in the United Nations Convention on the Law of the Sea.” In December 2016, the United States and Canada jointly announced a ban on oil drilling in their neighboring Arctic waters. The Task Force agrees with the U.S. State Department’s International Security Advisory Board that Russia and other countries should be encouraged to associate with this agreement “to apply strict environmental standards and climate goals to commercial activities in the Arctic.”

The United States benefits from a rules-based international order that enhances economic well-being, respects human rights and human dignity, and supports mechanisms for the peaceful resolution of disputes while providing for territorial integrity and defense of the United States and its allies. In the Arctic, which is in rapid flux due to the changing climate, no one country can manage the coming challenges alone. A collective approach is needed to mitigate and adapt to changing realities, advance scientific understanding, and build resilience and capacity; the UN Convention on the Law of the Sea is part of this rule-based order.

LAW OF THE SEA

Under UNCLOS, the United States is entitled to an area twice the size of California—more than 386,000 square miles—of possibly resource rich Arctic seabed along its extended continental shelf (ECS). However, the United States is first required to ratify UNCLOS to secure its claim to the oil, gas, and other resources that may be present. Absence from this international mechanism impedes the ability of the United States to defend its legal claims to the Arctic seabed. Even though it is not eligible to submit its claim, the United States has been developing its case with the UN Commission on the Limits of the Continental Shelf. Although the United States is not a treaty party, U.S. military forces adhere to the tenets of UNCLOS because the treaty enhances U.S. assertion of freedom of navigation.

More than 160 countries have ratified the treaty, but the United States remains an outlier. The Bush and Obama administrations both supported approval of the convention, but opposition in the U.S. Senate remains. Opponents charge that UNCLOS accession is unnecessary for defending U.S. interests in the Arctic and

would require the United States to cede sovereignty to an international body. Yet without the treaty, the United States cannot claim and use resources beyond its two-hundred-nautical-mile exclusive economic zone (EEZ), and other countries could have their overlapping claims substantiated by the Commission on the Limits of the Continental Shelf.

Recognizing the political obstacles, the Task Force strongly urges the U.S. Senate to provide its advice and consent for the ratification of UNCLOS and recommends that the Trump administration make this a high priority for its work with the Senate. The Task Force finds that the convention would serve U.S. national security, economic, and environmental interests. It would also codify U.S. legal rights to exploit oil and gas resources on the ECS off the coast of Alaska, mine valuable minerals on the deep seabed, and lay and service submarine telecommunications cables. The United States should secure these resources to retain economic and strategic choices in the future. Even friendly neighbors are moving to claim these resources; the United States should not lose out.

“U.S. Strategic Interests in the Arctic,” Heather A. Conley and Jamie Kraut, Center for Strategic & International Studies, 27 April 2010 [184]
<https://www.csis.org/analysis/us-strategic-interests-arctic>

Overview:

During the height of the Cold War, the Arctic region was considered a geostrategic and geopolitical playground for the United States and the Soviet Union, as strategic bombers and nuclear submarines crossed over and raced below the polar cap. Following the dissolution of the Soviet Union, the region diminished in strategic importance to the United States. Now, 20 years later, senior U.S. military and diplomatic officials have turned their attention once again to the Arctic but in a far different way than during the Cold War.

Current & Relevant Information:

The effects of climate change have launched the Arctic Circle to the forefront of geopolitical calculations, potentially transforming the region into a commercial hub fraught both with environmental concerns and complex challenges that have direct implications for U.S. national security. According to the U.S. Department of Defense’s 2010 Quadrennial Defense Review, climate change acts as an “instability accelerant” that will play a significant role in “shaping the future security environment.” The melting of the northern polar ice has dramatically altered this once static geographic and oceanic region and is responsible for the new-found profitability and geostrategic relevance of the region. Access to oil, gas, minerals, fish, and transportation routes, formerly locked in by thick ice, are for the first time becoming accessible and viable sources of profit.

With greater accessibility to the Arctic region and its abundant resources come both new opportunities for multilateral cooperation and the potential for regional competition and dispute, particularly conflicting territorial claims and managing maritime resources. Protracted disagreement among the Arctic littoral states could cause individual Arctic nations to become increasingly assertive in their resource and territorial claims, which has the potential to lead to the militarization of the Arctic. Although this scenario would appear to be unlikely, it is critical to articulate U.S. strategic interests in the Arctic region and develop a plan of action to ensure U.S. leadership in this evolving region to both anticipate challenges and offer multilateral and transparent resolution to these challenges. This report will identify the most pressing U.S. interests in the Arctic region; describe the United States' current policy and engagement in the Arctic region; analyze the current Arctic institutional construct and its relevance to future challenges; assess the diplomatic and security postures of the other Arctic littoral states; and finally, provide both short- and long-term recommendations for future U.S. policy in the Arctic.

Download: [U.S. Strategic Interests in the Arctic](#)

“US Policy Towards the Arctic: Adapting to a Changing Environment,” Richard Weitz, International Centre for Defence and Security, 24 October 2019 [185]
<https://icds.ee/us-policy-towards-the-arctic-adapting-to-a-changing-environment/>

Overview:

Regardless of the reasons for US president Donald Trump's mercurial cancellation of his planned state visit to Denmark earlier this year—whether due to the Danish refusal to sell Greenland to the United States or his wariness of another lengthy foreign trip—his interest in expanding the US presence in the Arctic is understandable.

The United States has important strategic interests in the area, especially if one considers the Russian and growing Chinese presence in the region. Yet neither the US nor NATO has been sufficiently active in the Arctic given its rising importance.

The Arctic region encompasses the seas and land north of latitude 66.33° N. The Arctic Ocean is the smallest of the world's oceans but is transforming due to its melting ice. Eight countries possess territories there: Canada, Denmark (through possession of Greenland), Finland, Iceland, Norway, Russia, Sweden and the US. They have often cooperated well in the past, but developments such as shrinking ice flows are challenging old patterns of behavior and collaborative norms. In particular, the melting polar ice allows easier access to mineral resources and opens previously frozen maritime sea routes. The Arctic's year-round sea ice is melting at a faster rate than in recorded history. The melting could adversely impact regional societies and infrastructure. The conflict between Moscow and the West is spilling over into the Arctic, as are economic tensions between China and Western countries. Some worry about a great-power scramble for control of the region, in the way leading

world powers struggled for control over Africa in the 19th century. Today, there is no consensus regarding what Arctic resources can be developed, under what conditions, and by whom.

Though hydrocarbons are plentiful in the Arctic, the extraction costs could be enormous, due to the high costs of drilling as well as environmental and safety protection. Climate change is likely to improve access to Arctic waters in the years to come, but meaningfully exploiting Arctic shipping and resources will require substantially more investment in infrastructure. Even as the Arctic's physical geography becomes more favorable, many of the region's natural resources require highly specialized equipment and complex logistical planning to acquire them, while only a few Arctic shipping lanes are presently viable for even modest use. The severe weather conditions of the Arctic environment necessitate the construction of expensive, custom-built equipment as well as the recruitment of skilled laborers who require extensive training and comparatively high salaries. The polar ice, a serious threat to normal vessels, is even more dangerous to drilling ships and platforms, which must maintain a precise position while operating to avoid damaging their equipment. All vessels and machinery that operate in the region must be adapted to deal with these conditions, requiring customized equipment capable of withstanding the frigid temperatures. Problematically, the lower temperatures affect the viscosity of oil and liquid gas, further increasing the implicit cost of fossil fuel extraction. Exploring and evaluating undersea resources—the first precondition for extraction—will prove difficult and expensive, and take years. The remoteness of the region is also a major liability when it comes to transporting hydrocarbons out of the Arctic. Profitable hydrocarbon extraction requires the use of tankers or pipelines to connect the region's oil and gas fields to refinery plants. The remoteness and severe climate of the region are major detriments to pipeline transportation: the costs of initial construction and maintenance of pipelines are markedly higher in frigid regions. Companies must either construct long pipelines, carefully plan to deal with the harsh conditions, or use tankers to travel between the drilling site and the mainland. If they use ships, they must also consider seasonal closure due to ice.

Current & Relevant Information:

Russia's Arctic Build-up

Moscow seeks to leverage its geographical and economic advantages in the Arctic to enhance its international power and influence. Russia has a larger territory, population and military presence in the Arctic than any other country. Notwithstanding demographic pressures throughout Russia in general, and the High North in particular, several million Russians live in the Arctic. Despite having the largest Arctic territory of all five littoral countries, Moscow has also laid claim to more Arctic lands and seas than any other country, including large sections of the ocean floor as part of its exclusive economic zone (EEZ). The region generates about one-fifth of the country's GDP, compared with only 1% of that of the United States.

Moscow aims to exploit control of Arctic sea lanes and other economic assets to extract resources and enhance leverage over other countries seeking commercial opportunities in the High North. Russia is committed to building new maritime infrastructure to support expanded Arctic shipping, energy drilling and other economic activities. The initial focus was on exploiting the Arctic's natural resources, especially hydrocarbons. For example, the Russian government wants the country to become a leading exporter of liquid natural gas (LNG). A more recent Russian economic and strategic priority has been development of the 5,000-km Northern Sea Route (NSR), a network of maritime transit passages through the melting ice above Russia's northern coast. The government is building modern navigation aids, port facilities and search-and-rescue capabilities to support expanded shipping and other economic activities. The NSR has the potential to substantially reduce travel time for goods transiting the Northern Hemisphere between North-east Asia and Northern Europe. It can also help generate regional employment to keep more Russians from moving to more temperate parts of the country.

To support passage through the NSR as well as other civilian and military missions, Russia has undertaken a sustained build-up of its fleet of ice-cutters, including nuclear-powered ice-breakers that have more power and better endurance than conventionally powered vessels. After the Cold War, many ice-breakers became inoperable or were loaned to foreign countries or private companies, but the Russian government has regained control over most ice-cutters in the country, using them to support both civilian and military operations. Russian firms need them to support oil and gas transportation, and for rescuing distressed vessels and escorting other ships through the frozen waters of the High North. In the Arctic, these ships are the military equivalent of aircraft carriers in other oceans—the main symbol of national power projection and presence. Altogether, Russia has some 40 ice-breakers—more than the rest of the world combined.

Besides controlling the Arctic's natural resources and shipping lanes, Moscow aims to develop power projection and defense options along Russia's northern borders, constrain a Western military presence and leverage Russia's Arctic assets for money and prestige. Russian official discourse no longer emphasizes the imperative of making the Arctic a "zone of peace". The Russian military has restored Soviet-era facilities, strengthened its Northern Fleet, and recently established new bases in the Arctic that include advanced air- and sea-defense systems to support Moscow's Anti-Access/Area Denial (A2/AD) strategy, which extends around Russia's periphery to include the Baltic and Black seas. The demand for such systems has increased due to the melting of the Arctic ice, which makes it easier for foreign navies to attack Russia's northern coast but also facilitates Russian power projection in the Arctic and onward to northern Europe. As in the Cold War, the Russian Navy still rehearses launching nuclear-armed ballistic missiles from under the Arctic Ocean against US targets, including in North America. Overall, the frequency and size of

Russian military exercises in the Arctic have grown in recent years even as Moscow self-servingly urges NATO to avoid militarizing the region.

China's Arctic Ambitions

China owns no territory above latitude 66.50° N, but Beijing claims to be a “near-Arctic” country with equal rights to develop the region’s resources, engage in scientific and other projects, and participate in regional governance. Fearful of being excluded due to its tenuous Arctic ties and its image as a potential spoiler to other countries’ regional ambitions, Beijing’s representatives claim that Chinese goals in the Arctic, as in other regions, are entirely peaceful and are only aimed at advancing international cooperation and achieving mutual gains. China has sustained a robust program of scientific research in the Arctic, with many projects conducted jointly with the littoral states. This benign rhetoric and activities helped Beijing secure observer status in the Arctic Council despite the initial opposition of some other Arctic states, including Russia.

To substantiate its “Polar Silk Road” vision, which sees Chinese activities in the Arctic as an extension of the Maritime Silk Road that encompasses most of Asia, China is also acquiring a fleet of ice-breakers for use in the Arctic as well as in Antarctica. Chinese experts have compared the importance of having ice-cutters for the Arctic with having aircraft carriers in other oceans. Indeed, the technologies and skills that the Chinese need to master to build large nuclear-powered ice-breakers could be applied to assist the construction of large nuclear-powered carriers for the PLA Navy.

Though Chinese officials have restrained their rhetoric about their country’s rights and privileges to share in the Arctic’s riches, Beijing has been leveraging Russia’s growing dependence on its economic ties with China to induce Moscow to support its Arctic aspirations. Russia relies on Chinese money, technology and other economic assets to develop its natural resources and build the infrastructure to support the NSR. Russian and Chinese companies are jointly exploring offshore Arctic territories for oil and gas, share ownership of the giant Yamal LNG project, are considering jointly developing the deep-water port of Arkhangelsk, and have launched the China-Russia Arctic Research Center to undertake joint research projects in the High North. Nevertheless, the focus of their joint efforts is expanding Chinese commercial navigation through the NSR, which allows some Chinese exports and imports to travel more rapidly and generate transit revenue for the Russian government.

Even so, the durability of Sino-Russian partnership in the Arctic over the long term is debatable given the tenuousness of the two states’ concurrent objectives. Though Chinese entities make use of the NSR and pay transit fees to the Russian government, they join other countries in refusing to formally recognize Russian claims of sovereignty over the NSR. Some Russian strategists probably share the

concern of their Western counterparts that China's economic and commercial presence in the region may provide a stepping-stone for the country to try to impart Chinese characteristics to regional institutions and bolster its strategic foothold. Chinese investments have flowed mostly to Russia, but could change direction should the Nordic countries adopt a more inviting approach to Chinese economic activities. Although China's ice-cutters and other capabilities have primarily civilian purposes, they could build the foundation for Chinese military activities in the region under the cloak of supporting non-military objectives. Though the Chinese presence in the Arctic is currently focused on scientific and commercial projects, Beijing might later use its expanding activity in the Arctic to justify a military presence to defend its interests there.

The Western Response

Since the Cold War, the United States has been the least active and least assertive of the littoral Arctic nations and has lacked a clear, comprehensive and consistent Arctic strategy for much of the post-Soviet era. US administrations have not treated the Arctic region as a US national security priority on a par with Europe, Asia and the Middle East or pursued comprehensive or well-resourced policies towards it. Until recently, US officials have sought to keep Russian-US frictions out of the Arctic and concentrate on addressing non-military issues like managing the warming weather and the resulting ice melt. However, since Moscow annexed Crimea and launched a proxy war in Ukraine, Western governments have suspended most dialogue with the Russian military.

The Trump administration has recently adopted a more prominent position regarding the region. The Pentagon's April 2019 Arctic Strategy commits the Department of Defense to work with allies and partners to counter unwarranted Russian and Chinese territorial claims and maintain free and open access to the region. The United States has begun building new polar ice-cutters for the Coast Guard—which has a stated requirement for six ice-breakers for both Arctic and Antarctic missions—and announced that it will conduct freedom-of-navigation operations in the Arctic to contest Russian claims that the NSR is an internal rather than an international body of water. The US Navy has relaunched its Second Fleet in the North Atlantic and expanded exercises in the Arctic Ocean.

In a speech in Finland in May 2019, Secretary of State Mike Pompeo described the Arctic as recently evolving into “an arena for power and for competition”. He ridiculed China's claims to be a “Near-Arctic State,” arguing that “only Arctic States and Non-Arctic States” are legitimate categories “and claiming otherwise entitles China to exactly nothing”. Although Pompeo welcomed Chinese investment in principle, he insisted that it needed to be transparent and constructive, and that Beijing must eschew its “pattern of aggressive behavior elsewhere”. He also expressed concern about Moscow's territorial claims, intensified military presence and plans to join the

NSR with Beijing's Maritime Silk Road. In response, Pompeo said, "Under President Trump, we are fortifying America's security and diplomatic presence in the area".

While the recent debacle between the Trump administration and Denmark over Greenland marks an unfortunate low point in bilateral relations, both parties can move forward productively. The Kingdom of Denmark has been an excellent US partner in promoting Arctic security, including by taking measures to limit large Chinese strategic investment in Greenland's airports. Issues involved in the Arctic are too important for either party to allow contretemps such as the recent Greenland issue to affect long-term mutual collaboration. When visiting Thule in September 2018, Under Secretary of Defense for Policy John Rood released a "Statement of Intent on Defense Investments in Greenland". The declaration affirmed the defense department's "interest in investments in Greenland that may strengthen regional security, improve situational awareness, maintain low tension in the region, and may serve dual military and civilian use". Though offering positive rhetoric, the declaration needs more concrete project funding and other support to realize its lofty intentions. The United States and Denmark also need to cooperate to augment their military capabilities in Greenland and elsewhere in the High North.

Norway has also been an outstanding contributor to NATO. Like Denmark, it has contributed troops to the US-led military missions Iraq and Afghanistan as well as air power to the NATO campaign in Libya. The Norwegians have invested extensively in Arctic defense capabilities and have regularly conducted large military exercise in the region. Norwegian officials, both military and civilian, want to see NATO playing a larger role in the Arctic. Norwegians have developed considerable expertise in operating in Arctic waters thanks to their own extensive offshore energy industry.

Like Norway, Canada has invested heavily in its Arctic defense and security capabilities. In the past, influential Canadians have not favored a major NATO role in the Arctic. Some Canadians have apparently feared that non-Arctic NATO countries favor an Alliance role in the Arctic to enhance their national influence in the region. However, long-standing Canadian reluctance for NATO to have a major role in the Arctic may be thawing. Though Canada has previously supported China's increased role in the region, the recent deterioration in Canada's relations with both Russia and China should offer greater opportunities for Canadian-US mutual defense initiatives regarding the Arctic. The United States considers the Northwest Passage an international route, while Canada claims it falls under its jurisdiction, but they should agree to set the dispute aside to address the greater long-term challenges to joint Canadian-US interests in the Arctic.

Europe's strained relations with Russia and China should likewise present opportunities for Washington to enhance its partnership with NATO and the EU on Arctic issues. Although NATO's 2010 Strategic Concept acknowledged new security challenges for the Alliance, such as cyber and energy security, intra-Alliance divisions and reluctance to impinge on the rights of the Arctic states have prevented

NATO from fully addressing Arctic security issues. However, elevated security concerns about Russia's growing military activities in the region have helped raise the Alliance's profile in the region. Recent NATO exercises saw a US carrier battlegroup operate north of the Arctic Circle for the first time in decades. The military exercise Trident Juncture 2018 was the largest Alliance drill in the Arctic since the Cold War, with 50,000 troops participating that included personnel from non-NATO Nordic countries Finland and Sweden.

Making further progress should become an important item on the transatlantic agenda since all NATO members and partners would benefit from greater information sharing (for example, the EU should make a greater effort to monitor the growing Chinese investment in its Arctic members), situational awareness (NATO members could conduct regular joint threat assessments of the region) and other Arctic-related cooperation. The NATO Defence Planning Process could help member states identify gaps in the capabilities they need to achieve the Alliance's goals in the region. Though not members of NATO, the Enhanced Opportunities Partners program would allow Finland and Sweden to participate in some of these activities. Meetings of the annual Nordic-Baltic-US Forum (whose members include representatives from Denmark, Finland, Iceland, Norway, Sweden, Estonia, Latvia, Lithuania and the United States) can also help identify mutual threats and capabilities gaps and promote military interoperability

Despite disputes over the causes and impact of the Arctic's changing climate, the United States benefits from being seen to promote environmentally responsible policies in the Arctic region. Secretary of State Pompeo struck the right note in his back-to-back May 2019 Arctic presentations, which emphasized the administration's commitment to environmentally responsible behavior, scientific research, improvement of the livelihood of indigenous peoples, and reduction of carbon dioxide emissions. In addition, the US and its allies in the region should devise a better legal framework to implement effective liability mechanisms that would cover the risks of oil or gas accidents in the Arctic. This would also increase incentives for countries and corporations to reduce the risks of such accidents. Chinese and other stakeholders should share the costs of such a mechanism given their growing hydrocarbon activities in the region. US political leaders should also follow the long-standing recommendation of Pentagon analysts and ratify the UN Convention on the Law of the Sea to strengthen the US ability to counter Russian and Chinese "lawfare" in the Arctic and other global regions.

"The Geopolitics of A Changing Arctic," Ekaterina Klimenko, Stockholm International Peace Research Institute, December 2019 [186]

https://www.sipri.org/sites/default/files/2019-12/sipribp1912_geopolitics_in_the_arctic.pdf

Summary:

The Arctic region is going through unprecedented changes in its physical, social, geo-economic and geopolitical realities. These rapid changes are having a considerable impact on Arctic security. The various security challenges in the Arctic are often examined in silos, assessing one problem at a time, but the complexity of the risks can best be understood when these challenges are looked at in connection with each other.

This paper aims to examine the complexity of Arctic security and explore the interconnectedness between various aspects of security in the Arctic. It also investigates the challenges in the Arctic that arise from changing geopolitical realities. The analysis is based on the discussions at the 'Geopolitics of a Changing Arctic' workshop organized by SIPRI, and on select scientific, academic and media materials that complement the workshop discussions.

Current & Relevant Information:

Increasing tensions in the Arctic region?

The strategic significance of the Arctic is increasing in the face of the changing climate and environment. The melting of the sea ice has opened up new economic opportunities in the region related to new transportation routes and the extractive industries, including oil and gas extraction. Although the economic potential is still being debated, interest in the region has been steadily growing for the past two decades. Along with the discussions on the economic potential of the Arctic, there are concerns regarding the possibility of conflict in the region, and even of military confrontation due to the competing interests and territorial claims of the Arctic coastal states. Despite alarmist predictions of a 'scramble for the Arctic', however, the region has remained a zone of 'low tension', due mostly to commitments made by the Arctic states to keep the Arctic a zone of peace and lasting engagement based on mutual interests and agreements.

Russia's growing military capabilities in the Arctic

For the past five years, however, there has been growing evidence of emerging tensions in the region. One major concern is emerging militarization. Although most of the Arctic states have been upgrading their military capabilities in the region, it is Russia's military build-up that is of primary concern. Russia has been increasing its military capabilities in the region for the past decade. Since 2011, Russia has reopened a number of its military bases and restored airfields and radar stations. It has also initiated a modernization of its sea-based nuclear forces and the large surface ships based with the Northern Fleet on the Kola peninsula. In December 2014 Russia established Joint Strategic Command North (JSC North) to consolidate the various military arms and branches under a single command. The increasing military presence in the Russian Arctic and the establishment of JSC North indicate a re-emergence of the Northern Strategic Bastion Defence concept pertaining to the

defense of Russia's nuclear-powered ballistic missile submarines (SSBNs) based with the Northern Fleet, and ensuring their access to the North Atlantic.

According to Russia's strategic military and naval documents, the reasons for the increasing military capabilities are twofold. First, Russia is responding to the changing environment in the Arctic and emerging security challenges related to the growth in shipping along the Northern Sea Route and the need to protect its longest coastline, which has been opening up due to melting sea ice. At the same time, the increase is related to the issue of seeking to maintain strategic parity with the United States and the North Atlantic Treaty Organization (NATO). Russia's Military and Maritime Doctrines and its National Security Strategy highlight US and NATO global activities as the primary security concern for Russia, and emphasize the importance of its military forces in the Arctic, primarily the Northern Fleet, as Russia's key capabilities for withstanding the security pressure posed by the USA and NATO.

Although the level of Russia's military capabilities in the region is still significantly lower than at the time of the cold war, the pace and the scale of the increase raise concerns among Russia's Arctic neighbors, particularly Finland, Norway and Sweden, as a large military presence is concentrated along their northern borders. Russia's submarine activity in the region is a major concern for its Arctic neighbors. Its military capabilities in the Arctic create opportunities for power projection into other regions, primarily the North Atlantic. There are also concerns that Russia's growing military presence will be used to deny access and to enforce different interpretations of the right to free passage along the Northern Sea Route.

China's economic interests in the Arctic

China's interests in the region also raise concerns among the Arctic states. On 26 January 2018 China's State Council Information Office published a white paper clarifying China's vision of the Arctic and its intentions, goals and objectives there. China's Arctic Policy Paper indicates respect for sovereignty rights and the Arctic states' stewardship of the Arctic, but it also emphasizes China's rights to 'scientific research, navigation, overflight, fishing, laying of submarine cables and pipelines in the high seas and other relevant sea areas in the Arctic Ocean, and rights to resource exploration and exploitation in the area'. Through its investments in Arctic mining in Greenland, the development of liquefied natural gas, the growth in shipping along the Ice Silk Road, and scientific research and diplomacy, among other things, China is demonstrating its intention to be an active Arctic stakeholder and to have a say on the questions of Arctic shipping, resource development and governance. There are also suggestions of an increasing security focus in China's Arctic policy.

Although it is unlikely that China's policies in the Arctic will take on any military dimension in the near future, there are reservations regarding the growing influence of China on smaller states and entities in the Arctic, increasing dependence on trade

and investment from China and increased exposure to fluctuations in the Chinese economy.

US–Russian–Chinese strategic competition

In relation to the above, strategic competition between Russia, China and the USA is another factor that is indicative of the rising tensions in the region. The USA has published a number of strategic documents highlighting its concerns regarding Russia's and China's policies. It could be just a matter of time before these strategic rivalries spill over into tensions in the Arctic.

The 2019 US Department of Defense Arctic Strategy highlights the increasing presence of China and Russia in the Arctic as a threat to US interests in the region. The document calls for increased US naval and icebreaking capabilities in the Arctic and North Atlantic in response to these concerns. Similar fears have been expressed by senior US officials. US Secretary of State Mike Pompeo has claimed that 'patterns of aggressive behavior' in other regions of the world are indicative of the risks of similar behavior in the Arctic in the future. The US Navy, Air Force and Army are now more closely focused on the Arctic region. The re-establishment of the US Navy Second Fleet, although primarily focused on countering Russian naval forces in the North Atlantic, is also seen as a possible response to increased Russian pressure in the Arctic. After many years of budget negotiations, the US Coast Guard is getting a new fleet of icebreakers.

Arctic cooperation in a changing geopolitical climate

It has often been argued that Arctic cooperation is immune to geopolitical turmoil. Despite speculation regarding conflict in the region as well as the tensions arising from outside the Arctic, cooperation has increased and achieved notable results over the past decade. The success of cooperation in the Arctic has even sparked a debate about 'Arctic exceptionalism'. However, in the past year there have been indications that tensions might be spilling over into the Arctic.

Arctic Council: an end of exceptionalism?

For two decades, the Arctic Council, the high-level intergovernmental forum of the Arctic, has succeeded in maintaining cooperation on a number of crucial issues through the work of its six working groups and a number of task forces and expert groups. Within the framework of the Arctic Council, the Arctic states have signed three legally binding agreements on addressing common challenges and promoting cooperation, in particular on search and rescue, oil spill prevention and scientific cooperation. Through the work of the council, two new platforms for cooperation have been established: The Arctic Coast Guard Forum, which is not formally affiliated to the Arctic Council, and the Arctic Economic Council.

It is argued that a key component of this success has been the exclusion of military security issues from the Arctic Council's mandate. However, the speech by Pompeo

on 6 May 2019 ahead of the Arctic Council Ministerial meeting in Rovaniemi brought hard security discussions into the council, albeit indirectly. His highlighting of the 'new threats' in the Arctic and to 'all of our interests in that region', and the specific naming of Russia, another Arctic Council member, and China, an observer, changed the political dynamics of the meeting. Although their commitment to 'maintain peace, stability and constructive cooperation in the Arctic' was reaffirmed by the Arctic states in the Joint Ministerial Statement, using the Arctic Council structure to raise other issues from around the globe has raised concerns that the changing geopolitical climate might disrupt Arctic cooperation.

The Ministerial meeting in Rovaniemi also caused concern among the representatives of the indigenous organizations that are permanent participants at the Arctic Council. In the absence of wider tensions in the Arctic, the indigenous peoples have been able to make their voices heard and raise issues of concern to their communities. The increasing tensions in the region, however, could reverse the positive dynamic of recent decades and push these questions into the background. Given that indigenous peoples are excluded from military security discussions within their states, the risk of their exclusion from similar discussions in intergovernmental forums is very high.

The Barents Euro Arctic Council: cooperation continues with some difficulties

Geopolitical tensions have affected other platforms for cooperation in the Arctic, particularly the BEAC, a forum for intergovernmental cooperation on issues concerning the Barents region. The BEAC covers a smaller geographical area than the Arctic Council. It also differs from the Arctic Council through its more practical and project-oriented work, as well as the inclusion of the Barents region at the local level. Work within the BEAC on emergency rescue is one example of successful and pragmatic cooperation to meet joint challenges in the Barents region, increasing the possibilities of joint cross-border assistance and response to emergencies, accidents and natural disasters. The Barents rescue exercise, which is held biennially, is an important trust- and confidence-building mechanism.

However, other areas of cooperation in the BEAC have become more difficult in recent years. For example, it is becoming increasingly difficult to promote projects on biodiversity. Cooperation on the issue of environmental hot spots has also become more challenging because of a lack of participation, especially by Russia, which leads to less interest in participation from the Nordic states. A significant part of the BEAC's work is based on cross-border cooperation and well-functioning people-to-people contacts. Increased tensions could put the trust built over many years at risk.

“The Nuances of Geopolitics in the Arctic,” Andreas Østhagen, The Arctic Institute: Center for Circumpolar Security Studies, 7 January 2020 [187]

<https://www.thearcticinstitute.org/nuances-geopolitics-arctic/>

Overview:

Few places have been the source of as much speculation, hype, and broad statements as the Arctic region at the start of the 21st century. Propelled to the agenda by flag-plantings and resource appraisals a decade ago, the Arctic continues to lure researchers and journalists to venture northwards to “the next great game”.

Fortunately, with more attention comes more knowledge as well. Several scholars have now debunked the notion of resource wars in the North, due to the sheer size of the areas in question and the fact that the Arctic states already have ownership over most of these areas, through the Law of the Sea regime. Moreover, the foreign ministries of the Arctic states have highlighted the cooperative traits of the region: “in the Arctic, we work together” to solve problems.

Nevertheless, notions of Arctic conflict and great power politics over the North Pole keep emerging on the political and news agenda. Why is this so, if all is well up in the High North?

Current & Relevant Information:

Arctic re-emergence

Recalling the Russia’s Northern Fleet is strategically located in the northwestern parts of the country and the Arctic.

Dynamics of the Cold War, the Arctic’s strategic importance has evolved primarily because Russia is intent on re-establishing its military power, and the Arctic is one domain where it can do so basically unobstructed. This comes not necessarily because of the Arctic itself, but because of Russia’s dominant position in the North, with its the Northern Fleet based in the Kola Peninsula, which houses strategic submarines essential to the country’s status as a nuclear power on the world stage. It is not the melting of the sea ice that has spurred Russia’s military emphasis on the Arctic—it is the importance of the Arctic for Moscow’s more general strategic plans and ambitions.

China in the Arctic

Unlike the case in the Cold War, China has now emerged as an Arctic actor. With Beijing continuing to assert its influence on the world stage, the Arctic will be only one of many regions where China’s presence and interaction are components of an expansion of power in both soft and hard terms. China has been noted as a “near-Arctic state,” a situation which demands involvement from Beijing.

However, China is not accepted as an Arctic state and has largely been excluded from regional politics. Despite the inaccuracies of US Secretary of State Pompeo’s warning in 2019 that Beijing’s Arctic activity risks creating a “new South China Sea,” such statements highlight how the USA sees the Arctic as yet another arena where the emerging systemic competition between the two countries is increasing.

Separating North America and Europe

On the systemic level, the USA can and will engage in regions like the Arctic as it sees fit. However, in North America, the Arctic does not play the same seminal role in national security considerations as it does in Russia or Northern Europe. Although the rhetoric might suggest otherwise, for the USA, the Arctic has served primarily as the location for missile defense capabilities, surveillance infrastructure, and a limited number of strategic forces. It is also of importance to the US Navy and Coast Guard, although the USA has yet to invest significantly in Arctic capabilities and infrastructure.

This brings us to the important difference between overarching strategic considerations, and those that concern the Arctic region specifically. First, security dynamics in the Arctic have remained anchored to the sub-regional level: the Barents area, the Bering Sea/Strait area, even the Baltic Sea region. Thus, it is futile to generalize about security interests and challenges across the whole northern circumpolar region. It makes more sense to discuss security in the different parts of the Arctic, not in the Arctic as a whole. Of these different parts, the European Arctic is undoubtedly the most active and the most challenging.

Cooperation and Conflict

Intra-regional cooperation on other issues has also flourished. Indeed, it has been argued that these low-level forms of interaction help ensure low tension in the North, on the regional level. The emergence of the Arctic Council as the primary forum for regional affairs in the Arctic plays into this setting.

The Arctic states have shown a preference for a stable political environment in which they maintain dominance in the region. This is supported by the importance attributed to the Law of the Sea and issue-specific agreements signed under the auspices of the Arctic Council. These developments benefit the Northern countries more than anyone else, while also ensuring that Arctic issues are generally dealt with by the Arctic states themselves.

Separating the wheat from the chaff

To sum up: On the international level, the Arctic has again risen to the forefront of strategic concerns among great/emerging powers (the USA, Russia, China). This has little to do with events in the Arctic (ice-melting, economic ventures, etc.), and everything to do with the strategic position of the Arctic between these actors. True, we find some intra-regional competition, as well as investments and cooperation. However, here it is difficult to generalize across the Arctic “region,” precisely because of the vastness and inaccessibility of the area itself.

The Arctic states have limited, if any, rationale for engaging in outright conflict (bilateral or regional) over resources or territory—although local rivalries, like that of Norway–Russia persist. However, the Arctic will not become any less important on

the strategic level, simply because the USA and Russia are already in the region, and China is increasingly demonstrating its (strategic) Northern interests.

Consequences for Arctic states

This has implications for the Arctic states. Although the Law of the Sea regime ensures primacy to offshore resources, the states themselves must be able to protect their sovereign rights at sea and be present in the Arctic maritime domain. They also need to understand how and why the region is attracting political and economic interest from afar, and must maintain the focus on the area in their national policies, linking security concerns with economic investments and active Northern policies. The rise of the Arctic on the agenda is no passing trend: it is here to stay.

Finally, despite sanctions and conflict in other parts of the world, security concerns (and cooperation) with all relevant actors in the Arctic must not only be debated: such discussions need to be instigated and prioritized by political leaders. The increase in military exercises and—at times—aggressive rhetoric must be examined, discussed and better understood, if we are to avoid missteps that might even lead to an Arctic arms race.

“U.S. Says Arctic No Longer Immune from Geopolitics As It Invests \$12m in Greenland,” Malte Humpert, High North News, 29 April 2020 [188]

<https://www.highnorthnews.com/en/us-says-arctic-no-longer-immune-geopolitics-it-invests-12m-greenland>

Overview:

The U.S. wants to become the “partner of choice” in the Arctic using “old-fashioned diplomatic tradecraft” to safeguard its interest in the region. It hopes an aid package will jumpstart its relationship with Greenland.

In a call with Arctic experts and journalists the U.S. State Department provided a detailed update of the current administration’s Arctic strategy. An unnamed senior state department official outlined the U.S.’ priorities in the Arctic, especially vis-à-vis Russia and China, and shared details on last week’s announcement to provide a \$12.1m aid package for Greenland.

In a continuation of previous policy documents and speeches on the Arctic under the Trump administration, the official failed to mention the impact and importance of climate change on the region. In fact, during a one-hour call the official did not use the word climate change, or an equivalent term, a single time.

Current & Relevant Information:

The return of geopolitics to the Arctic

The U.S. sees a new strategic reality in the Arctic with geopolitics returning across the globe and to the region. “The Arctic is not immune from the implications of these changes,” the official explained. According to the State Department, both Russia and China are driving this change as there are growing incentives for the two countries to challenge and clash with the U.S. in the region.

While the U.S. recognizes Russia’s legitimate interests in the region and appreciates the cooperation in the Arctic Council with regards to e.g. oil spill response and pollution issues, it rejects China’s status as a “near-Arctic state.”

Concerns about Russia’s military buildup

The U.S. has growing concerns about Russia’s Arctic military buildup, featured extensively in reporting by HNN. Russia’s military presence in the region has increased “dramatically in recent years” through the establishment of new and refurbished air bases, air and coastal defense missile systems, radar installations, deep water ports and new Arctic commands and brigades. Just last week, Russia conducted the first-ever high-altitude paratrooper jump over the Arctic. “There is some genuine and legitimate concern there on the part of the United States and our allies and partners about that behavior in the Arctic,” the State Department elaborated.

China outside and inside the Arctic

The State Department’s concerns about China’s involvement in the Arctic stem less from its activities in the region and more from its disregard and violation of international norms and law outside the region, e.g. in the South China Sea. “And you can see that in the way they’ve behaved in other parts of the world, whether it’s the South China Sea or Sri Lanka or Djibouti or elsewhere,” the U.S. official highlighted.

“We’ve also seen across the globe that China’s soft-power tools often have a sharp edge when deployed by the PRC. It’s weaponized its state capitalism in an effort to secure control of critical infrastructure such as ports and telecommunications networks.”

Even within the Arctic region China’s actions are already causing concern according to the U.S. “China has demonstrated a willingness to use coercion and influence operations and other methods to get what it wants, including in the Arctic,” the State Department asserted.

The official pointed to the recent experience of the Faroe Islands. China had issued threats to drop a trade agreement when the Faroe Islands did not sign a contract for the construction of a 5G network by Huawei.

Becoming the partner of choice in the Arctic

In light of these developments, the U.S. aims to increase its engagement across the region and “become the partner of choice for Arctic states.” It hopes that the \$12.1m aid package, developed in consultation with the Kingdom of Denmark and the Government of Greenland, will “jumpstart this new beginning.”

The official stressed that the funding package was in no way to be interpreted as the beginnings of an attempt to “purchase” Greenland as President Trump had suggested in 2019. “Our intentions here are to deepen the partnership that exists already between the Kingdom of Denmark, Greenland, and the United States,” the official explained.

Three areas of funding

The funding will be used in three areas: Energy and resource development, education capacity building, and rural sustainable development.

With regard to energy and resource development the U.S. hopes to “encourage competitive and transparent investment by companies, promote sound mining and energy sector governance” and promote renewable energy technologies.

Education capacity building will focus specifically on the tourism and hospitality sector as well as sustainable land and fisheries management. This aspect goes hand in hand with creating economic opportunities e.g. through sustainable and eco-tourism, in rural communities.

The funding will be administered not solely by the U.S. State Department but in cooperation with USAID, the United States Agency for International Development, and the Department of the Interior and Commerce.

Strategic importance of Greenland

The official highlighted the historical strategic role of Greenland and how it is becoming increasingly important again. The island played a critical part of the Greenland-Iceland-UK gap, which as a result of Russia’s buildup of military forces in the High North is reemerging as a strategic importance. “We need to be in a position with our allies to be able to ensure that we can cross the Atlantic in the event of a crisis,” the State Department representative pointed out. In this regard the briefing also pointed out the long history of cooperation at Thule Air Force Base in the northwest of Greenland.

The importance of Greenland also extends to foreign powers, namely China, acquiring critical infrastructure on the island. “[China] has tried in the past to [...] wiggle their way into Greenland in unhelpful ways by acquiring critical infrastructure that would be problematic for the United States and our NATO allies and, of course, the Kingdom of Denmark,” the official explained. As specific examples the briefing highlighted the 2016 attempt by China to purchase the old American naval base Gronnedal or its efforts to get involved in the construction of airports in Greenland.

The State Department official warned that “China has weaponized their state capitalism in an effort to secure control of critical infrastructure and dual-use infrastructure. China has demonstrated a willingness to use coercion and influence operations and other methods to get what it wants.”

“Geopolitics and International Governance in the Arctic,” Øyvind Østerud and Geir Hønneland, *Arctic Review on Law and Politics*, 2014 [189]

<https://site.uit.no/arcticreview/files/2015/01/Geopolitics-International-Governance.pdf>

Abstract:

The Arctic has been the object of heated political discussion in recent years as the region has evolved from a potential conflict zone during the Cold War to an arena for international cooperation immediately afterwards. Since the mid-2000s attention has once again focused on the conflict potential of the Arctic, this time related to its resources. This article looks at how the research literature balances its prospects. The literature on international relations (IR) in the Arctic has been mainly empirical in orientation, although framed in the major IR traditions of realism (traditional geopolitics), institutionalism and (to a lesser extent) constructivism. The English-language literature on Arctic politics, which naturally dominates the field globally, is by and large framed in institutional terms. The discussion is not whether institutions matter in Arctic politics, but how they best can be crafted in order to maintain peace and stability in the region. Speculations about a ‘scramble for the Arctic’ have more or less unanimously been refuted in the literature. The French literature, on the other hand, is largely framed in a geopolitical context. French geopolitics is less concerned with the global power game than with the rivalry between states for strategic resources. The institutions of cooperation are, however, downplayed.

Current & Relevant Information:

The Arctic after the Cold War

The strategic and military significance of the Arctic faded during the 1990s. After the dissolution of the Soviet Union, geostrategic confrontation was replaced by a more civilian agenda of climate change, research cooperation, and economic interests. U.S. forces abandoned the Keflavik base in 2006. Cooperation across national borders was institutionalized in the Arctic Council, the Conference of Parliamentarians of the Arctic region, the Northern Forum, and other interstate and non-state associations, including indigenous peoples’ organizations. Regional collaboration mechanisms were established, notably the Barents Euro-Arctic Region and the EU Northern Dimension. A few sources of tension during the Cold War period left unresolved problems, but they were conceived as less acute in the post-Cold War period. Some maritime boundary disputes have been resolved during the last couple of decades; others are still on the agenda. The geopolitics of the Arctic have changed from strategic confrontation to exploitation of natural resources, questions of jurisdiction, and prospects for new shipping routes. The reduced

tension after the Cold War has coincided with a shrinking ice cap and technological improvements in resource extraction. The Arctic, therefore, has regained a prominent place on the political map under these different circumstances.

The polar regions are in many ways mirror images of each other. While Antarctica is an uninhabited continent surrounded by the ocean, the Arctic is a semi enclosed ocean surrounded by sovereign states with various offshore claims and interests. Whereas the Antarctic treaty of 1959 sought to square territorial state interests with a regime for demilitarized cooperation and scientific research, the international settlement of the Arctic is less stable and comprehensive, even if the UN Convention of the Law of the Sea (UNCLOS) of 1982 provides an important legal framework.

Temperatures in the Arctic have been rising faster than the global average. If the climate trend during the last couple of decades continues, the reduction of ice in the summer season will open up new sea lanes of communication north of mainland Canada and north of Siberia. Transport lines between Asia and Europe will be substantially shorter and potentially cheaper than the present routes through the Panama and Suez canals or around the southern capes of Africa and the Americas.

These commercial prospects add to the potential for energy extraction. There are great reserves of oil, gas and minerals onshore and offshore in the circumpolar area, with new technologies making these reserves gradually more accessible and commercially profitable. The states with an interest in the Arctic are both rivals and partners in their northbound policies. One of the objectives of political research into these policies is to assess the balance points between conflict and cooperation.

New strategic environments

Several factors contribute to increased concern about the Arctic – the shrinking ice cap with new shipping routes and easier access to resources; technological advances in the extraction of resources from deep sea and under extreme weather conditions; legal developments that allow for an extension of sovereign rights into the polar basin. These developments have increased the economic and geopolitical stakes in the region. Generally political tension is low in the Arctic, since all parties comply with the UNCLOS. This means that most un-prospected resources are under national jurisdiction, with procedural agreement on the handling of claims. The U.S. has not ratified the convention, but has agreed to comply with it.

Military withdrawal may indicate an increased conception of stability or reduced geostrategic relevance. The NATO base on the Faroese Islands has been dismantled and the U.S. has abandoned Keflavik in Iceland. Most U.S. bases on Greenland are also deserted, with the Thule base in the north-west as an exception which is now basically a radar station in U.S. advanced rocket defense, on a par with corresponding bases in Alaska and northern Canada.

During the Cold War the principle of collective security also applied to the Arctic territories of NATO members. An attack or provocation against one member should be met by joint forces according to Article 5 in the treaty. NATO defense policy is now more selective, consisting of coalitions of the willing responding in case of crises, as a result of the aftermath of the intervention in Iraq. With the extension of NATO to the east, and the new variety of threats, this might even affect Article 5 operations. Security challenges in the Arctic are not mentioned in NATO's strategic concept of 2010. This is due to a transformed power game. There is now Western disagreement about questions of jurisdiction. Canada, for instance, regards the North-west passage as Canadian internal waters, while the U.S. claims that the passage is an international strait. The implications of the U.S. dismantling of the Keflavik base in 2006 are also uncertain. Iceland suggested a Nordic nuclear free zone, but met little enthusiasm in the other NATO countries. The scope for multilateral defense cooperation among Nordic countries increased, however.

Maritime and territorial disputes

The climate for stability and cooperation in the Arctic stands in contrast to the tense situation during the Cold War. Still there is a potential for disagreement and rivalry connected to unresolved questions of jurisdiction and crossed interests over transport routes and resources. The rich fishing grounds are fairly well known, while there is more uncertainty about the location of oil, gas and minerals. Exploitation will be costly even though the ice is receding. Furthermore, there are debates about security alertness, patrolling, and formal authority in many of the contested areas.

Some territorial questions have been resolved. The border conflict between Norway and Denmark concerning Jan Mayen and East-Greenland was decided in a compromise by the International Court of Justice in 1993. In late April 2010 there was an astounding negotiated settlement of the maritime border dispute between Norway and Russia in the Barents Sea. Norway had claimed that the contested area should be divided by a line extrapolated from the North-Eastern borderline on land, while Russia had argued that the border at sea should go from the seashore border point and directly towards the North Pole. In the agreement the contested area was divided closely down the middle. The agreement was particularly welcome in Norway since it was doubly significant – it solved a complicated problem, and it symbolized cooperation between equal parties in the Arctic. It is commonly believed that Russia entered into the agreement with Norway in order to show to the outside world that Russia is a 'civilized' state that can be counted on to follow the rules of the Law of the Sea in the Arctic.

Several jurisdictional questions remain unresolved. Norway obtained sovereignty over the Spitzbergen Archipelago – Svalbard – in the Paris treaty of 1920. All the other signatories, some forty countries, got equal rights to fisheries, commercial enterprise, and the exploitation of resources on land at Svalbard and within 12 nautical miles from the shores. With the establishment of 200-nautical-mile exclusive

economic zones (EEZ), Norway argues that it can also establish an EEZ around Svalbard. Most other signatories dispute this explicitly, with Britain the most vocal opponent. The main argument is that the non-discriminatory principle of the Svalbard Treaty must be applicable also to the 200-mile zone. Norway adheres to the literal interpretation of the treaty text, while other states argue that the wider ocean areas would have been included in the 1920 treaty if commercial activity outside the territorial waters had been an option at the time. To avoid conflict Norway did not establish an EEZ around Svalbard, but rather a so-called fishery protection zone. Fisheries management has by and large functioned well in the zone, but with eruptions of conflict from time to time. The French newspaper *Le Monde* made this comment 25 January 2013: “La bataille du Spitzberg relance les rivalités dans le Grand Nord alors que la hache de guerre semblait avoir été (un peu) enterrée”. The ultimate battle might, however, be a legal contest at the International Court of Justice. At present the contested zone is managed by Norwegian supervision since no other country has been prepared to let the situation become critical.

Another potential rivalry concerns the extended continental shelves beyond the EEZs of Denmark/Greenland, Canada and Russia. The treaty of the Law of the Sea has an opening for territorial claims of the continental shelf (but not of the ocean areas) beyond that range. Denmark has argued that the polar underwater ridges extend from the shores of Greenland, while both Canada and Russia dispute the Danish claim. The Russian view is that major submarine ridges, and in particular the Lomonosov ridge, extends from eastern Siberia. Increased accessibility to potential resources over and under the seabed will intensify the geopolitical rivalry in the polar basin. All Arctic countries, however, agree that the provisions of the Law of the Sea Convention shall be followed. According to these provisions, coastal states must submit scientific data to the UN Commission on the Limits of the Continental Shelf (CLCS) along with their entitlement to a specific stretch of the shelf.

Territorial land disputes are limited to one case. There is disagreement between Canada and Denmark over the small and barren Hans Island in the Nares strait between Greenland and Ellesmere Island. The island is 1.3 square kilometers, an uninhabited stretch of chalk stone, but the national delineation could gain significance in case of profitable oil and gas deposits in the area.

Greenland in transit

Geopolitical shifts may disturb the present order in the Arctic. One potential shift is spill-over into the High North from developments in the northern Atlantic and the northern Pacific. Tension between the U.S., Russia and China may increase in the quest for resources and control of sea routes. Increased military presence may lead to a higher risk for misconceptions and misinterpretations, even if international contacts in the Arctic are institutionally stabilized. Then there is the uncertain future role of Greenland, crucial to the link between the American and European Arctic. Geographically, Greenland is much closer to North America than to Europe. The

island is also the key to Denmark's future in the Arctic. As Danish sovereignty erodes, Denmark is on a slope from a great power in the High North towards a more marginal position.

Danish policy is ambiguous. On the one hand, the military position is strengthened with joint command with Greenland and the Faroese islands from 2009. On the other hand, Greenland has been subject to gradual decolonization. Home rule was established in 1979, and in a referendum 75% of Greenlanders voted for extended self-government from 2009. Extended self-government implies more control of resources, while Denmark continues to command foreign, defense, and financial policy. An overall budget grant of 3.5 billion Danish crowns a year will be reduced in proportion to an increased resource rent. For economic reasons there is internal disagreement about the range of self-government and the tempo towards full independence.

The Greenlandic Self-Government have not supported Danish claims for extended sovereignty along the Lomonosov ridge to the North Pole. Greenland's position has been that 'the North pole belongs to nobody', while Denmark perceives an abandonment of the claim as a free gift to Russia. The Self-Government try to rise above the geopolitical rivalry in the Arctic.

Nevertheless, crossed national interests are proceeding to Greenland proportionally with Danish withdrawal. U.S. and European companies are planning for offshore oil and gas explorations. The Chinese-controlled company London Mining is preparing for large-scale iron ore mining in the south-west, and offers infrastructure in return. Uranium deposits have been discovered in the south, and ALCOA has developed a prospect for large aluminum works on the west coast. These prospects are controversial in Greenland since economic gain and ecological costs are uncertain. They are also controversial in Denmark. Chinese mining would initially be based on cheap Chinese labor, and Denmark has kept the authority to regulate immigration to the island.

The development towards an independent Greenland is supported by the U.S., based on previous aspirations on the island. Cooperation with American companies is increasing, with prospects for support for new water-power energy, harbors, and airports. Geopolitically, the independence movement is a movement from North-western Europe towards North America. Denmark is squeezed between indigenous demands and international pressure. The long-term trend is that Greenland is moving towards the U.S. in security policy, possibly with Chinese interests as a rival force. International rivalry is intensified by better access to natural resources. The Thule base is an established bridgehead for the U.S., as a reconfirmed leftover from the vital U.S. presence during the Second World War and then throughout the Cold War.

Greenlanders try to extend the scope to maneuver under these new conditions by strengthening the Inuit link to peoples in Canada, Alaska, and Siberia. In geopolitical terms, the indigenous populations are encircled by strong great power interests around the entire polar basin.

Cooperation or conflict?

From another perspective, and beyond the case of Greenland, national interests in the High North have no clear boundaries. Denmark tried to limit national claims within an institutional framework by the Ilulissat Declaration in 2008. The five Arctic coastal states – Denmark, Norway, Russia, U.S. and Canada – declared that questions of jurisdiction and territorial claims should be solved by negotiations within the existing international legal framework. There should be no free ‘race towards the North Pole’. The declaration was met with some concern from actors outside the five Arctic littoral states, like Iceland, Finland and Sweden, which – if not contrary to the content of the Ilulissat Declaration – felt they were sidelined in the important decision on the future of the Arctic. The protracted discussions about observer status in the Arctic Council (from China and the EU, among others) show that the institutional framework of the Arctic took time to find a stable and uncontroversial form. The Council took a leap forward by mid-May 2013. Applications for observer status from China, Japan, South Korea, Singapore, India and Italy were all successful, while the Council temporarily stopped short of approving the application from the European Union. The major concern of many Asian countries is the implications of an Arctic sea lane from Asia to Europe.

A French expert on the Arctic, Richard Labévière, has outlined three alternative geopolitical scenarios in the area:

1. An Arctic dominated by the U.S., including Greenland’s independence, but with a stronger American presence on the island. New microstates will, paradoxically, strengthen the conditions for American dominance, not least economically.
2. A new regional cold war between the United States and Russia.
3. An Arctic space with stable partition of national sovereignty, respect for the Law of the Sea and strong cooperative institutions. This scenario is in accordance with the Norwegian slogan ‘High North, low tension’.

The balance between tension and stability will be subject to variation in time and space. China is expected to project power and interests in the eastern parts of the Arctic in particular. American concern will be adapted to this geopolitical shift. An order with a renewal of the American presence is also possible in the western parts of the High North, while the cooperative spirit of the Ilulissat Declaration may be preserved and extended to new parties beyond the coastal Arctic states.

4. “New Cold War” or “Race for the Arctic”:

“Rushing for the Arctic’s Riches,” Michael T. Klare, *The New York Times*, 7 December 2013 [190] <https://www.nytimes.com/2013/12/08/opinion/sunday/rushing-for-the-arctics-riches.html>

Overview:

While many existing oil and gas reserves in other parts of the world are facing steep decline, the Arctic is thought to possess vast untapped reservoirs. Approximately 13 percent of the world’s undiscovered oil deposits and 30 percent of its natural gas reserves are above the Arctic Circle, according to the United States Geological Survey. Eager to tap into this largess, Russia and its Arctic neighbors — Canada, Norway, the United States, Iceland and Denmark (by virtue of its authority over Greenland) — have encouraged energy companies to drill in the region.

Current & Relevant Information:

For Russia, which recently seized a Greenpeace ship and is prosecuting 30 of the group’s activists for attempting to scale an oil platform, the temptation to exploit the Arctic Ocean is especially powerful. Russia’s economy is heavily dependent on exports of oil and gas, and the government relies on these sales for much of its income. Until recently, the Russians could draw on reservoirs in western Siberia to satisfy their needs, but now, with many of these fields in decline, they are counting on Arctic supplies to maintain current production levels. “Our first and main task is to turn the Arctic into Russia’s resource base of the 21st century,” Dmitri A. Medvedev, then the president, declared in 2008.

The Russians have explored drilling options in several offshore areas of the Arctic. In the Pechora Sea, above northwestern Siberia, the Russian energy giant Gazprom has installed its Prirazlomnaya platform — the one protesting Greenpeace activists attempted to board. Further east, in the Kara Sea, the state-owned Rosneft is collaborating with ExxonMobil to develop promising deposits; Rosneft has also teamed up with Statoil of Norway and Eni of Italy to investigate prospects in the Barents Sea.

But Russia is hardly alone in seeking to exploit the Arctic. Norway, like Russia, derives considerable income from gas and oil exports and is under pressure to develop reserves in the Barents Sea to compensate for the decline of its existing fields in the North and Norwegian Seas. Other areas of the Arctic are also being eyed for development. Cairn Energy of Edinburgh has sunk exploratory wells in waters off Greenland, for example, while Royal Dutch Shell is attempting to develop fields off Alaska.

For all of its promise, however, the Arctic is not likely to surrender its resources easily. Sea ice covers much of the area in winter, and storms pose a constant danger. Global warming is likely to reduce the extent of sea ice in the summer and

fall, permitting extended drilling operations, but it could also produce unruly weather and other perils. Adding another layer of risk, many of the boundary lines in the Arctic remain to be fully demarcated, and various Arctic powers have threatened to use military force in the event that one or another intrudes on what they view as their sovereign territory.

The severe challenges of operating in the Arctic have already proved daunting for Shell, which has spent \$4.5 billion to exploit reserves off Alaska but has yet to drill a single producing well. Some of these challenges are legal — indigenous communities and environmentalists, fearing the contamination of local waters and a threat to wildlife, have filed lawsuits to prevent the company from drilling.

In addition, the Arctic itself has proved to be a formidable adversary: In the summer of 2012, during Royal Dutch Shell's first attempt to probe its Arctic deposits, shifting winds and floating ice halted drilling. Several months later, when one of its drilling rigs ran aground during an especially severe storm, Shell announced that it would suspend operations in Alaska's Arctic waters and that before it proceeded, it would bolster its capacity to operate there.

Shell's misfortunes have heightened concern that Arctic drilling poses an unacceptable threat to the region. Any major spill that occurs there is likely to prove far more destructive than the one produced in the Gulf of Mexico by the Deepwater Horizon disaster in April 2010, because of both the lack of adequate response capabilities and the likelihood that ice floes and sea ice will impede cleanup operations. As more companies push into the Arctic and accelerate their operations there, the risk of accidents and spills is bound to increase. The fact that Shell — one of the most technically advanced oil companies — has so far proved unable to overcome these risks should provoke intense concern over the prospect that other, less proficient firms will soon be operating in these perilous waters.

The risk of conflict over the ownership of contested territories is likely to grow. Five of the Arctic states have asserted exclusive drilling rights to boundary areas also claimed by one of the others, and control over the polar region itself remains contentious. In an area with the "potential for tapping what may be as much as a quarter of the planet's undiscovered oil and gas," Secretary of Defense Chuck Hagel warned recently, "a flood of interest in energy exploration has the potential to heighten tensions over other issues."

So far, not one of these disputes has provoked a military response, and the Arctic states have pledged to refrain from such action. However, most of the Arctic states have also asserted their right to defend their offshore territories with force and have taken steps to enhance their ability to fight in these areas. Russia, for example, recently announced plans to establish what it calls a "cutting-edge military infrastructure" in the Arctic.

None of this, however, is likely to deter other interested countries. With the demand for oil at an all-time high and existing fields incapable of satisfying global needs, the major energy firms are bound to pursue every conceivable source of supply. It is essential, then, that tough constraints be placed on Arctic drilling operations and that steps be taken to reduce tensions in the area. Some progress has been made by the Arctic Council, a consultative forum of Arctic nations. But much remains unresolved.

One way to impose formal restraints would be to devise and adopt an Arctic Treaty modeled on the Antarctic Treaty of 1959. Like that earlier measure, an Arctic compact would delineate the region's maritime boundaries and establish limits on military activities. It could also impose environmental protections and provide for the safe passage of civilian vessels through Arctic waters. In the end, no extra measure of oil and natural gas is worth the destruction of pristine wilderness or the onset of an Arctic arms race.

“The new cold war: The Arctic,” Terry Macalister, *The Guardian* [191]
<https://www.theguardian.com/environment/ng-interactive/2015/jun/16/drilling-oil-gas-arctic-alaska>

Overview:

A last great unprotected wilderness, safe haven for endangered species and home to native people whose subsistence lifestyle has survived in harmony with nature for thousands of years.

It is here that Shell plans to drill for oil, pulling the detonator on a carbon bomb which eventually could spray 150bn tons of carbon dioxide into the atmosphere.

The irony is that the drilling is only possible because manmade climate change is already causing this region to grow warmer twice as fast as the rest of the planet. The melting ice makes these huge reserves of oil and gas more accessible.

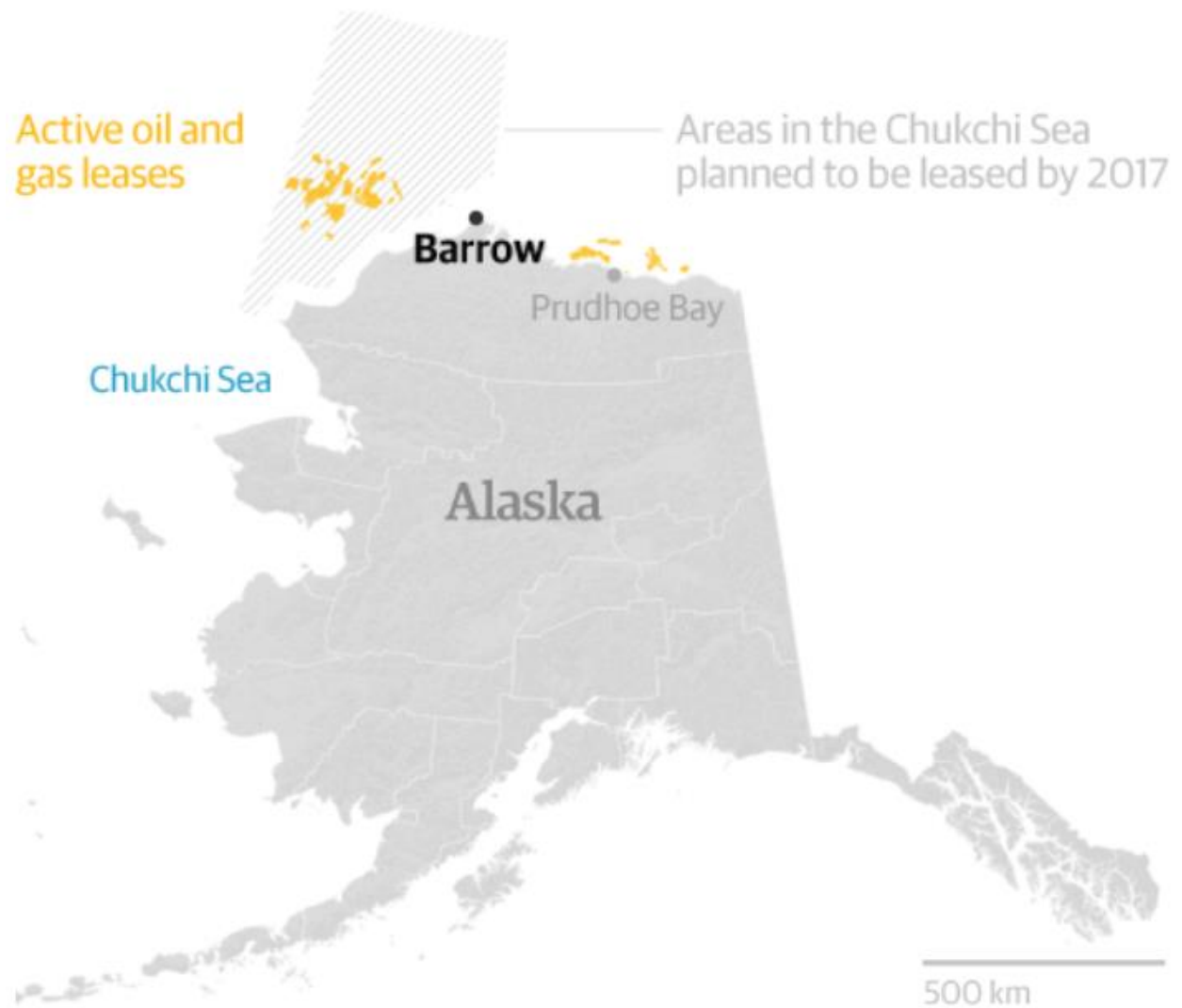
It could set major oil companies against each other but also superpower against superpower as they scramble to exploit the last untapped giant reserves in a part of the world where territorial boundaries remain unclear. No wonder some fear a new cold war.

Current & Relevant Information:

Ground Zero

Barrow, the most northerly city in the US, is ground zero for the world's most controversial oil drilling campaign. Less than 1,200 miles from the north pole, Barrow is also known as a base for climate change study.

Originally called Ukpeagvik, place where the snowy owls are hunted, the town of 4,500 residents was renamed in 1825 after Sir John Barrow of the British Admiralty by naval officers mapping the region for the UK.



Source: Bureau of Ocean Energy Management, Alaska Region

Now a new British presence is being established by the Anglo Dutch Shell and it is also not one which is welcome by all, especially some of those who live in the tumble of wooden homes that hug the shoreline.

Rosemary Ahtuanguak is one of them. She describes herself as an environmental justice adviser but is also a former mayor, trained health worker and stalwart defender of Inupiat culture.

“I work with non-profit organizations that want to protect the Arctic Ocean and wilderness areas. It’s about raising the importance of health, tradition and culture in

the venues of those (Shell and others) who want to change our lands and waters,” she says, one eye on three grandchildren she is minding.

“It’s about the (any future oil) spill. They cannot clear up in ice conditions which we have for eight or nine months of the year. The ecosystem renewal, which is needed for the many different animals that migrate here, is important because we are feeding our families from the ocean. We must keep this environment pristine.”

She says she has seen at close quarters what happens in a community that is subject to an oil rush. Although many outsiders presume that fossil fuel extraction is new to the northern shores of Alaska, the contrary is true.

BP and others have been producing oil at Prudhoe Bay down the coast east from Barrow for more than half century. But that is no reassurance to Ahtuanguaruak who worked as a health aide – and briefly as mayor of the small village of Nuiqsut, an Inupiat community right next door to Prudhoe Bay.

“I learned living in Nuiqsut there are some really serious health impacts that happen to our people living in the same area where this is happening (oil extraction): cancer rates have gone up ... acute sensitivity to chemicals and even suicides. I had to deal with the sick babies. That’s why I argue so hard now.”

The lure of the Arctic

Shell is exploring its own small section of the far north but the US Geological Survey has estimated there could be 412bn barrels of oil equivalents reserves in the wider Arctic region.

The combined onshore and offshore acreage stretching across the top of the globe from Alaska through Greenland and Russia would be far more likely to be sought if Shell gets a good result in the Chukchi.

A successful strike by Anglo Dutch energy group will trigger a black gold rush to the wider polar region which is believed to hold the last remaining giant reserves in the world.

The US Geological Survey has estimated there is 30% of the world’s undiscovered gas and 13% of oil waiting to be found inside the Arctic circle.

A drop in the price of oil from \$115 per barrel last summer to \$65 now has forced oil companies – including Shell – to slash their annual capital spending.

But such is the lure of the Arctic for Shell that it has ring fenced this operation despite having spent \$6bn on fruitless drilling so far.

And continuing interest in the mineral riches of the Arctic by Russia, Norway Greenland and others has brought sabre rattling: a significant build up in military spending and activity.

The Polish Institute of International Affairs (PISM) warned recently that Moscow is setting up a naval infantry brigade, an air defense division, and a coastal missile system, in outlying archipelagos in the Arctic Ocean.

The Ukraine crisis has ramped up tension – as has a provocative visit to the Svalbard archipelago in the Arctic by Russia’s deputy prime minister, Dmitry Rogozin.

All the states surrounding the Arctic Ocean are involved in a kind of land grab, applying for right to license oil and gas by making territorial claims under a UN Law of the Sea Treaty.

And the Russians have already signaled the importance they attach to the region by planting a flag on the bottom of the ocean at the north pole. The move by veteran Arctic explorer Artur Chilingarov in 2007 caused widespread protest from the rest of the world but Vladimir Putin laughed it off as a bit of theatre.

The Arctic Council of littoral states has been meeting regularly and played down any suspicions of a growing new cold war.

Rob Huebert, professor of political science at the University of Calgary, is worried: “The intrusions of unidentified submarine in Swedish and Finnish waters and aircraft incursions into Norwegian airspace demonstrates what they (the Russians) can do and it also demonstrates what the western nations now have to begin to prepare for.”

“The New Cold War: A Race for the Arctic,” Thomas O. Falk, Inside Over, 16 December 2019 [192] <https://www.insideover.com/war/the-new-cold-war-a-race-for-the-arctic.html>

Abstract:

The Arctic has been a theatre of conflict ever since World War II. Currently, it has become the epicenter of a Cold War 2.0, in which climate change could be the deciding factor.

Current & Relevant Information:

Since the Cold War, the Arctic has been militarized by the superpowers. In the latest episode of actions and reactions in the arctic region, Norway is opening Tromsø and its harbor for US submarines, Norway’s Defense Minister Frank Bakke-Jensen confirmed. Besides widespread criticism from the population, Russia uttered its criticism also. Nevertheless, it is Russia that has arguably caused these developments.

Despite Norwegian statements that there was no intention to establish a permanent American military base in Tromsø, Russia considers a further expansion of NATO powers to be “against the previous practice of neighborly relations,” which would not

remain without an answer, Russia's Foreign Ministry stated in February this year, when the idea was first communicated.

In response to Russia's concerns, Norwegian Defense Minister Bakke-Jensen stated that nothing had changed. The US mooring in Tromsø was a regular part of allied activities, and the international security regulations were complied with. The submarines that would be expected in Norwegian waters had no nuclear weapons, and the quay in Tromsø would only be needed 4-5 times a year. The 1975 Bratelli Doctrine, which prohibits the entry of warships with nuclear weapons on board, was therefore not being violated

The answer, the Russian Foreign Ministry referred to came in the form of what observers called the largest submarine operation in the North Atlantic since the end of the Cold War in October. At least ten submarines stationed on the Russian peninsula of Kola were involved in conduct that was continuously monitored by Norway and other NATO countries. Further Russian submarines had been discovered in the Norwegian Sea and the Barents Sea in what was not a mere military exercise but a demonstration of Russian strength. Moreover, it was meant to display the Russian capability of threatening the US coast via nuclear submarines.

And indeed, the Kremlin has significantly increased its activity in the Arctic. Abandoned bases from Soviet days have been reactivated, new bases have been built, and existing ones were expanded. In March 2017, Admiral Korolyov announced that Russia's submarines would have reached 3,000 days of patrol in 2016, the same level that the underwater fleet had during the Cold War.

Russia has not been making a secret of the region's relevance either. In Russia's Maritime Doctrine of 2015, the Kremlin even considers the Arctic as a region of military conflict in the future. In this case, a potential military conflict is not warranted by traditional *casus belli* but on current environmental developments that have led to two Russian objectives:

First, climate change suggests that temperatures in the Arctic have increased drastically, with the results that a permanent Northwest and Northeast passage from Asia to America and Europe might open, which could significantly shorten the transport route. Moreover, Russia, which has always claimed parts of the Arctic, aims to levy service fees here. Second, the Arctic is likely to contain large quantities of raw materials, particularly gas, which could become available in the near future.

NATO has been monitoring Russia's increased activity with concern and significantly expanded its scope of action in return. With the result that the total number of NATO nuclear submarines has decreased around the Arctic Circle also.

Moreover, NATO and its members, above all the United States, have set up new strategies that include increased military exercises and maritime patrols to counter the Kremlin's maritime operations. Utilizing Tromsø will not be the last attempt in a

Cold War 2.0 that is no longer just an arms race but a race for the Arctic and the future.

“The New Cold War: The ice race for claims in the Arctic oil and gas frontier,”
arcgis.com [193]

<https://www.arcgis.com/apps/Cascade/index.html?appid=3ce039924b4c46f59cc0537018c99466>

Abstract:

Amidst the recent melting in the Arctic ice, several countries are pushing to explore the new frontier of oil and gas within this region. With disputes over territorial borders and who has access to what, destabilization within this region has started to occur. The Arctic council consisting of the United States, Russia, Canada, Denmark, Finland, Iceland, Norway and Sweden gather privately to discuss future exploration. The lucrative amount of massive potential reserves within the Arctic has created serious debate over unclear boundaries. Economic proficiency of both the United States and Russia put the two states in the driver’s seat. The rising tensions and opportunity within the North have created the start of the New Cold War.

Current & Relevant Information:

The Ice Race is a dispute between the Arctic council who has rights for oil and gas exploration in the Arctic. This has created border conflicts not only between nations looking for the opportunity to explore, but indigenous people who claim historic stake to the land. International regulations have been ignored by companies in pursuit of the natural resources. Although green energy has made case for cheaper, cleaner energy, reliance on fossil fuels will still be around for decades to come. This new melt of the Arctic ice has spurred a rat race between countries attempting to exploit these natural resources. The previous inaccessibility of these resources led to relatively unclear borders as this region was once not accessible for this opportunity.



Dispute among territorial boundaries has emerged in the Arctic as desire to explore natural resources has increased

Sovereignty of surrounding countries extends 200 nautical miles from the respective coastline. Arguments have been made that rather than extending sovereignty 200 nautical miles from coastline, that it should be 60 nautical miles from the continental shelf. This has arisen much disagreement as it would provide an upper hand for certain countries. While this area has remained international waters for the time being, there has been much dispute. In a Russian expedition, the team planted a titanium flag of their country directly under the North Pole on the bed of the sea. On the other hand, Canadian teams have been said to fly around and drop Canadian flags onto trespassing voyagers.

Arctic oil deposits were discovered in the late 1920's near the Mackenzie River. Nearly 30 years after, BP became the first company to explore the Northern Slope with little luck and many dry holes. Less than a year later, oil deposits were found both off the coast of Alaska and Russia from exploration wells. In March of 1968, Prudhoe Bay was discovered, the largest discovery in the Arctic at the time. In 1989, Russia discovered the Priazlomnoye field as another commercial field. After several accidents in 1989, 1994 and 2012 exploration in the area began to slow. The discovery proving to be too expensive with many regulations, Shell backs out of leases in the Arctic frontier in fall of 2015. In December of 2016, president Obama bans drilling and pulls the United States out of several leases within the Arctic

region. In president Trump's first 100 days in office, he overturns president Obama's ban on offshore drilling.



The Arctic ocean has previously been declared international waters. Although this was a highly patrolled area among the Cold War, the Russian government has ramped up military presence within this region among new resource discoveries

As the ice melts in the Arctic, several new accessible oil and gas frontiers open. Military experts warn that rising seas from the melting ice will present risks to military readiness. Until recently, these deposits have been protected by the Arctic ice. As this frontier has opened up, Russia has expanded its Cold War Arctic fleet. Countries including the United States have responded to Russia increasing military presence in the Arctic to near Cold War levels. The circumpolar politics have been relatively stable with good relationships between countries since the Cold War, but the melting ice is fracturing these relationships. This has resulted in an increase in military bases and presence as it proves a very strategic position. In response to

Russia's presence in the north, the United States has begun to build fleets worthy of competing which could cost up to \$1 billion.

It is claimed that over a fourth of the world's remaining reserves lay beneath the Arctic Sea. In a 2008 study, it was estimated that there remains 240 billion barrels of oil and gas equivalent within this region. This included both the already produced and remaining reserves. Accounting for the undiscovered oil, it is said that an additional 90 billion barrels of oil remains untapped. Along with this, it is estimated that a collective 17 trillion cubic feet of gas remains undiscovered within the region. Although some of these fossil fuels may lay deep beneath the Arctic ocean, it is believed that most of these reserves are stored under less than 1500 feet of water.

As the ice continues melting within the Arctic, the territorial race continues to grow. Countries looking to tap into the natural resources once not available has started what is being referred to as the New Cold War. With Russia and the United States at the forefront of this race, Cold War tensions have begun to rise once again. Military presence within the area has increased as discovery of natural resources has proven to be commercial. The Arctic council has kept the peace in the area for the time being, but as time passes states are going to push harder to explore this new frontier.

“The race to conquer the Arctic – the world’s final frontier,” Kristina Spohr, NewStatesman, 12 March 2018 [194] <https://www.newstatesman.com/2018/03/race-conquer-arctic-world-s-final-frontier>

Abstract:

As the polar ice caps melt, Russia and China are leading the race to control the lucrative and strategically important shipping lanes and natural resources of the High North.

Current & Relevant Information:

In front of the world’s media at the Kremlin, Putin quoted the 18th-century Russian scientist and polymath Mikhail Lomonosov, who had said that Russia would expand through Siberia. Putin brought this line up to date for our age: “Now Russia should expand through the Arctic,” he said.

The Russians are constructing 15 new LNG supertankers, each with built-in ice-breaker capacity – to add to their existing fleet of 40 ice-breakers. And they aren’t the only ones. At the end of the 19th century the great powers engaged in a scramble for Africa. Now, in the 21st century, a scramble for the Arctic is unfolding. Across one of the bleakest landscapes of the world, the race is on for gas, oil and fish and to control the emerging shipping lanes of the High North.

The Arctic is at issue, above all, because nobody owns it. Unlike Antarctica – governed since 1959 by the Antarctic Treaty, which established the continent as a

scientific preserve and banned military activity – the polar region of the north is one of the least regulated places on earth. There are more rules even in outer space. All the Arctic states are now jockeying for position as the region literally opens up. And several non-Arctic states are seeking influence, with the big money and real strategic vision coming from Beijing. It's time for the West to pay attention.

Over the past decade, the Arctic Council has risen in political importance because the Arctic Ocean has been thawing at a record rate. The expanse of ice in September 2017 was 25 per cent smaller than in the end-of-summer averages between 1981 and 2010. Yet this geophysical calamity is also an economic opportunity for developed countries, opening up new prospects for fishing and shipping. As a result, more countries have sought entry to the Arctic Council. The eight founding states, which form the council's permanent members, have conceded observer status to several European and east Asian states. For instance, Britain – a permanent observer to the council since 1998 – has designated itself “the Arctic's nearest neighbor”, though it is not clear if there is substance behind the rhetoric. Not to be outdone, China, a permanent observer since 2013, calls itself a “near-Arctic” nation, even though its northernmost point is about 900 miles south of the Arctic Circle.

Russia has played it both ways – engaging in co-operative diplomacy in the Arctic Council and over territorial questions via the UN Law of the Seas, while constantly seeking to assert itself on the world stage. Putin's long-term strategy has been to rebuild Russia's international position since its humiliating crash at the end of the Cold War. Over the past decade, having restored political and economic stability at home, Putin has been testing the West – exploiting opportunities in Crimea, Ukraine and Syria. In 2009, the government's national security strategy until 2020 was proclaimed simply as “transforming Russia into a world power”.

The Arctic is a keystone of that policy, because only here – as Putin said last December – is there real scope for territorial expansion and resource acquisition. This builds on and deepens the main asset of Russia's unbalanced economy – its continued heavy reliance on the extraction and export of raw materials, especially oil and gas – which no modern leader of the country has been able to change.

The natural resources in Russia's Arctic region already account for a fifth of the country's GDP. The oil and gas under the North Pole open up the prospect of huge additional wealth but it will take time, money and technology to exploit, not to mention much international haggling. Somewhat easier pickings are opening up on the thawing northern rim of Siberia – 14,000 miles of coastline from Murmansk to the Bering Strait – both on land and in Russia's territorial waters.

De-icing opens up new opportunities for mining some of the world's most valuable minerals, including gold, silver, graphite, nickel, titanium and uranium, as well as

oil and gas. The thawing Northern Sea Route along Russia's shores also creates a lucrative shipping lane, which the Kremlin will be in a strong position to control. In November, Putin made a point of stating that only vessels under the Russian flag could use this trade route.

Complementing this economic scenario, Russia has developed a security policy for the Arctic, involving bases and ice-breakers. In December 2014, Russia announced that Moscow intended to station military units all along its Arctic coast, and began pouring money into airfields, ports, radar stations and barracks. The new infrastructure includes two huge complexes: The Northern Shamrock on Kotelny Island and the Arctic Trefoil on Franz Josef Land – a mere 620 miles from the North Pole.

Taken together, Russia's six biggest Arctic bases in the High North will be home to about a thousand soldiers serving there for up to 18 months at a time in constant snow, permanently sub-zero temperatures from October until June, and no daylight for nearly half the year. Moscow is now concentrating on making airfields accessible year-round. Under Gorbachev and Yeltsin, "our Arctic border areas were stripped bare", Professor Pavel Makarevich, a member of the Russian Geographical Society, said last year. "Now they are being restored."

No other country has militarized its Arctic North to anything like this extent. And none can match Russia's 40-strong ice-breaker fleet, which is used to clear channels for military and civilian use. Three nuclear-powered ice-breakers, including the world's largest, are now under construction to complement the six already in operation. Russia is also giving its naval warships an ice-breaking capacity. By 2020 the Northern Fleet, based near Murmansk, is due to get two ice-capable corvettes, armed with cruise missiles.

Still, to realize its ambitions, Russia has to crack the Potemkin problem. It still lacks the necessary technology and finance to open up the new Arctic, onshore and offshore. Deep-sea ports and supply stations need to be built along the Northern Sea Route, as well long-distance railway lines, motorways and undersea fiber-optic data cable networks. Because of US and EU sanctions since 2014, Russia cannot rely primarily on investment from the West. That is why it has begun to turn to China for money and markets.

To President Xi Jinping, Russia's Arctic ambitions present an opportunity for China to use its economic might to increase its global influence. Xi, like Putin, sees the Arctic as a crucial element of the country's geopolitical vision. Now that the People's Republic is no longer an introspective "developing state", Xi declared in his December 2017 New Year's Eve speech, it intends to become the "keeper of international order".

The Arctic has been described as the world's "last frontier," the "last white dot on the map". Now it is beginning to be colored in. As the climate changes, its ice-scape will

become a seascape. And a region that did not belong to anybody will be divvied up – through co-operation or conflict, or perhaps a mixture of both. What may prove to be the new world order – a new multipolar system of international politics – is taking shape there, as Russia and China seek to challenge an American hegemony that, in their view, has lasted for too long.

Both think big. But Xi's China has far deeper pockets and operates with much greater diplomatic shrewdness than Putin's Russia. This combination of vision, money and finesse is nowhere to be seen in the Western world – certainly not in Trump's Washington. As for Brexit Britain, supposedly entering a new global era, it seems barely able to raise its eyes beyond the power politics of Westminster.

“The New Cold War: Reviving the U.S. Presence in the Arctic,” Ariel Cohen, Jim Dolbow and Lajos F. Szaszdi, The Heritage Foundation, 30 October 2008 [195]
<https://www.heritage.org/environment/report/the-new-cold-war-reviving-the-us-presence-the-arctic>

Abstract:

The Arctic is quickly reemerging as a strategic area where vital U.S. interests are at stake. The geopolitical and geo-economic importance of the Arctic region is rising rapidly, and its mineral wealth will likely transform the region into a booming economic frontier in the 21st century. The coasts and continental shelf of the Arctic Ocean are estimated to hold large deposits of oil, natural gas, and methane hydrate (natural gas) clusters along with large quantities of valuable minerals.

With the shrinking of the polar ice cap, extended navigation through the Northwest Passage along the northern coast of North America may soon become possible with the help of icebreakers. Similarly, Russia is seeking to make the Northern Sea Route along the northern coast of Eurasia navigable for considerably longer periods of the year. Opening these shorter routes will significantly cut the time and costs of shipping.

In recent years, Russia has been particularly active in the Arctic, aggressively advancing its interests and claims by using international law and by projecting military might into the region.

Despite the Arctic's strategic location and vast resources, the U.S. has largely ignored this region. The United States needs to develop a comprehensive policy for the Arctic, including diplomatic, naval, military, and economic policy components. This should include swiftly mapping U.S. territorial claims to determine their extent and to defend against claims by other countries. With oil and gas prices recently at historic highs in a tight supply and demand environment, the rich hydrocarbon resources in the Arctic may bring some relief to consumers. These resources, especially the hydrocarbons, also have the potential to significantly enhance the economy and the energy security of North America and the world.

Current & Relevant Information:

U.S. Claims in the Arctic

The U.S. relies on its sovereign power and diplomacy when pursuing territorial claims in the Arctic. The United States is not a party to the United Nations Convention on the Law of the Sea Treaty (LOST) and therefore is not bound by any procedures and determinations concluded through LOST instruments. Instead, the U.S. is pursuing its claims "as an independent, sovereign nation," relying in part on Harry S. Truman's Presidential Proclamation No. 2667, which declares that any hydrocarbon or other resources discovered beneath the U.S. continental shelf are the property of the United States. The U.S. can defend its rights and claims through bilateral negotiations and in the multilateral venues such as through the Arctic Ocean Conference in May 2008, which met in Ilulissat, Greenland.

Many have argued, including the Bush Administration, that the U.S. will not have leverage or a "seat at the table" to pursue or defend its Arctic claims on condition that the U.S. is not a party to LOST. However, U.S. attendance at the conference in Ilulissat significantly weakened this argument. Even though the U.S. is not a LOST party, other Arctic nations "are unable to assert credible claims on U.S. territory in the Arctic or anywhere else in the world" because President Truman already secured U.S. rights to Arctic resources with his proclamation.

Yet to protect its rights, the U.S. needs to know how far its claims stretch into the Arctic Ocean. The U.S. has been mapping the bottom of the Arctic Ocean and the Outer Continental Shelf since 2003. Mapping is essential to determining the extent of the U.S. OCS and determining whether the U.S. has any legitimate claims to territory beyond its 200-nautical-mile exclusive economic zone. Despite ongoing U.S. efforts to chart the bottom of the Arctic Ocean, mapping efforts have been inadequate. According to a National Research Council report in 2007, the U.S. continental shelf and the Northwest Passage have not yet been entirely mapped. Mapping is also important for disputing any conflicting claims by other Arctic nations. For example, the U.S. and Canada have likely claimed some of the same parts of the continental shelf. Mapping data will also help to determine whether Russian claims conflict with U.S. and Canadian claims.

The expedition undertaken by the icebreaker USCGC Healy in the Chukchi Sea focused on surveying an area 400 to 600 miles north of Alaska and cost about \$1.2 million—a pittance compared to the billions of dollars of Arctic natural resources that are at stake. The survey indicated that the foot or lowest part of the Alaskan continental shelf stretches more than 100 miles beyond what was previously thought, thus expanding the U.S. claim.

The U.S. requires a modern flotilla of icebreakers to conduct mapping and to sustain U.S. claims. The U.S. currently has only three icebreakers that belong to the Coast Guard, of which only the Healy (commissioned in 2000) is relatively new. The other

two icebreakers, while heavier than the Healy and thus capable of breaking through thicker ice, are at the end of their designed service life after operating for about 30 years. Yet even if the U.S. begins now, it will be eight to 10 years before a new icebreaker can enter service, and no money has been allocated to build a new-generation heavy icebreaker.

Russian Claims

After its invasion of Georgia, Russia has clearly hardened its international posture and is increasingly relying on power, not international law, to settle its claims. Moscow has also intensified its anti-American policies and rhetoric and is likely to challenge U.S. interests whenever and wherever it can, including in the High North.

Russia takes its role as an Arctic power seriously. In 2001, Russia submitted to the U.N. Convention on the Law of the Sea a formal claim for an area of 1.2 million square kilometers (460,000 square miles) that runs from the undersea Lomonosov Ridge and Mendeleev Ridge to the North Pole. This is roughly the combined area of Germany, France, and Italy. The U.N. commission did not accept the claim and requested "additional data and information." Russia responded by sending a scientific mission of a nuclear-powered icebreaker and two mini-submarines to the area. During this meticulously organized media event, the mission planted the Russian flag on the ocean's floor at the Lomonosov Ridge after collecting soil samples that supposedly prove that the ridge is part of the Eurasian landmass. During the mission, Deputy Chairman of the Russian Duma Artur Chilingarov, the veteran Soviet explorer heading the scientific expedition, declared, "The Arctic is ours and we should demonstrate our presence." Such statements run counter to the spirit and potential of international cooperation and seem inappropriate for a scientific mission.

The U.S. has objected to these claims and stated that they have "major flaws." Professor Timo Koivurova of the University of Lapland in Finland stated that "oceanic ridges cannot be claimed as part of the state's continental shelf." Russia intends to resubmit its claim by 2009.

Russia is also moving rapidly to establish a physical sea, ground, and air presence in the Arctic. In August 2008, Russian President Dmitry Medvedev signed a law that allows "the government to allocate strategic oil and gas deposits on the continental shelf without auctions." The law restricts participation to companies with five years' experience in a region's continental shelf and in which the government holds at least a 50 percent share, effectively allowing only state-controlled Gazprom and Rosneft to participate. President Medvedev also featured the Arctic prominently in the new Russian Foreign Policy Concept, which states: "In accordance with the international law, Russia intends to establish the boundaries of its continental shelf, thus expanding opportunities for exploration and exploitation of its mineral resources."

During 2008, Russian icebreakers have constantly patrolled in the Arctic. Russia has 18 operational icebreakers, the largest flotilla of icebreakers in the world. Seven are nuclear, including the 50 Years of Victory, the largest icebreaker in the world. Russia is planning to build new nuclear-powered icebreakers starting in 2015. Experts estimate that Russia will need to build six to 10 nuclear icebreakers over the next 20 years to maintain and expand its current level of operations. Russia's presence in the Arctic will allow the Kremlin to take de facto possession of the underwater territories currently in dispute.

In addition to icebreakers, Russia is constructing an Arctic oil rig in the northern shipbuilding center of Severodvinsk, which will be completed by 2010. The rig will be the first of its kind, capable of operating in temperatures as low as minus 50 degrees Celsius (minus 58 degrees Fahrenheit) and withstand the impact of ice packs. The new rig was commissioned by the state-controlled Gazprom and demonstrates that Russia is serious about oil exploration in the Arctic.

Russia's Polar Saber Rattling

In August 2007, shortly after sending the scientific expedition to the Arctic ridge, then Russian President Vladimir Putin ordered the resumption of regular air patrols over the Arctic Ocean. Strategic bombers including the turboprop Tu-95 (Bear), supersonic Tu-160 (Blackjack), and Tu-22M3 (Backfire) and the long-range anti-submarine warfare patrol aircraft Tu-142 have flown patrols since then. According to the Russian Air Force, the Tu-95 bombers refueled in-flight to extend their operational patrol area. Patrolling Russian bombers penetrated the 12-mile air defense identification zone surrounding Alaska 18 times during 2007. Since August 2007, the Russian Air Force has flown more than 90 missions over the Arctic, Atlantic, and Pacific Oceans.

The Russian Navy is also expanding its presence in the Arctic for the first time since the end of the Cold War. Lieutenant General Vladimir Shamanov, head of the Defense Ministry's combat training department, said that the Russian Navy is increasing the operational radius of the Northern Fleet's submarines and that Russia's military strategy might be reoriented to meet threats to the country's interests in the Arctic, particularly with regard to its continental shelf. Shamanov said that "we have a number of highly-professional military units in the Leningrad, Siberian and Far Eastern military districts, which are specifically trained for combat in Arctic regions."

On July 14, 2008, the Russian Navy announced that its fleet has "resumed a warship presence in the Arctic." These Arctic naval patrols include the area of the Spitsbergen archipelago that belongs to Norway, a NATO member. Russia refuses to recognize Norway's right to a 200-nautical-mile exclusive economic zone around Spitsbergen. Russia deployed an anti-submarine warfare destroyer followed by a

guided-missile cruiser armed with 16 long-range anti-ship cruise missiles designed to destroy aircraft carriers.

The resumption of Cold War–style patrols and increased naval presence in the Arctic is in keeping with Moscow's more forward posture and is intended to increase its leverage vis-à-vis territorial claims. Moscow is taking a dual approach of projecting military power while invoking international law. Regarding the naval deployments near Spitsbergen, the Russian Navy stated:

Sorties of warships of the Northern Fleet will be made periodically with a necessary regularity. All actions of the Russian warships are fulfilled strictly in accordance with the international maritime law, including the UN Convention on the Law of the Sea.

At a meeting of the Russian government's Maritime Board in April 2008, Russian Foreign Minister Sergei Lavrov backed a policy of settling territorial disputes in the region with the countries bordering the Arctic through cooperation. First Deputy Prime Minister Sergei Ivanov, who is now deputy prime minister, stressed at the meeting that Russia observes the international law on the matter through adherence to "two international conventions": the 1958 Convention on the Continental Shelf, signed by Canada, Denmark, Norway, Russia, and the U.S., and the 1982 U.N. Convention on the Law of the Sea.

While paying lip service to international law, Russia's ambitious actions hearken back to 19th-century statecraft rather than the 21st-century law-based policy and appear to indicate that the Kremlin believes that credible displays of power will settle the conflicting territorial claims. By comparison, the West's posture toward the Arctic has been irresolute and inadequate.

“How the global battle for the Arctic became the new Cold War,” Atossa Araxia Abrahamian, *NewStatesman*, 28 August 2019 [196]

<https://www.newstatesman.com/culture/observations/2019/08/how-global-battle-arctic-became-new-cold-war>

Overview:

China has labelled itself a “near-Arctic state”; Norway, Denmark and Canada have all claimed ownership over the North Pole, while Russia has put in its bid too.

Current & Relevant Information:

In 2016 North Korea became a signatory to a century-old agreement governing Svalbard, a smattering of frozen fjords, glaciers and islands in the High Arctic. The Svalbard Treaty of 1920 is an unusual document: it recognizes Norwegian sovereignty over the territory, while granting citizens of member countries equal rights to live, work, fish, hunt and open businesses there.

What piqued Kim Jong-un’s interest in the frozen North? “It’s probably because he realized it’s easy and doesn’t cost any money,” a Norwegian diplomat told me earlier

this year. All Pyongyang had to do was write a letter to the Svalbard Treaty headquarters near Paris, where it has sat since the postwar negotiations at Versailles.

Given the permissive terms of the treaty, though, the DPRK's accession might have been indicative of another trend: everybody wants a piece of the Arctic. But as warming temperatures make the region more accessible – and crucially, more exploitable – it's not yet clear who will prevail.

China has labelled itself a “near-Arctic state” and is investing in icebreakers and scientific research in an effort to wield influence over the “polar silk road”. Norway, Denmark and Canada have all claimed ownership over the North Pole based on the size and location of their respective continental shelves – data on which the UN uses to rule on questions of territorial sovereignty.

Russia put in its bid, too, sending a submarine in 2007 to plant a flag on the ocean floor more than two miles under the sea, directly below the North Pole. Russia already controls plenty of northern territory – about a third of its land is above the Arctic Circle – but these days, even that's not enough. The USSR abandoned its right to claim the islands of Svalbard when the Bolsheviks signed the Svalbard Treaty in 1924 (the Soviet state was clamoring for diplomatic recognition, and hoped to get it by recognizing Norway's sovereignty). But subsequent administrations in the Kremlin have backtracked, at least rhetorically: in 2015 Dmitry Rogozin, then Russia's deputy prime minister, went so far as to imply that Russia's Arctic borders should be redrawn.

Not that proximity, or even a northern location, is all that important. Singapore, a decidedly non-Arctic state, has observer status on the Arctic Council, an intergovernmental body that shapes regional policy. It now offers indigenous Arctic people postgraduate scholarships to attend university in the tropical city-state, thousands of kilometers from their homes. Singapore is trying to avoid being pushed out of the shipping business: as polar ice supplies dwindle; companies may send their cargo westward along the much shorter Northern Sea Route instead of taking the Suez Canal through to the Malacca Strait.

Then there's the question of Greenland. On 16 August, the Wall Street Journal reported that Donald Trump was openly talking about buying the territory outright. Like Svalbard, Greenland has an odd arrangement with its sovereign: it is its own country and enjoys increasing degrees of political autonomy, but remains part of the kingdom of Denmark.

Trump is the third US president to suggest buying Greenland (Andrew Johnson considered it in the 1860s, and Harry Truman tried to purchase it in 1946) but he is almost definitely the first to be lauded for not trying to invade it by force. He seems amused with the prospect: after news of his plans came out, he tweeted a meme of a giant gold Trump tower looming over a quaint Arctic village with a pledge: “I

promise not to do this to Greenland!” The Danes did not see the humor in the situation, causing Trump to take offence in turn and postpone a state visit to the country.

With the Greenland affair turning into a battle over dignity and egos, it’s difficult as ever to parse the motivations of the raving 73-year-old president. Understanding the would-be acquisition in the same way other countries see their Arctic ambitions – as a strategic hedge against looming climate catastrophe – would mean first acknowledging that catastrophe, which Trump has been reluctant to do. Did he think Greenland was... green? And therefore, had potential for a golf course? Did flying over the icy expanse on the way back from Europe on Air Force One inspire in him Shackletonian fantasies of frontierism, adventure and domination? Or was it as simple as wanting access to Greenland’s rich mineral resources?

Without ruling out any of these options, it might make more sense to turn to Trump’s foundational and only consistent belief: that everything – whether a building, a business, or a porn star’s silence – can be secured for a price. Because if everything’s for sale, why would another country’s sovereignty over a piece of land be an exception – particularly in the rapidly changing and territorially ambiguous Arctic?

Trump is correct to think national sovereignty can be bought: it is purchased, sold, rented and negotiated around the world every single day. That’s the mechanism by which Australia detains refugees in Nauru, by leasing the island as an offshore depot for immigrants. It’s how Luxembourg has for years been a hub for tech companies looking to avoid specific European taxes. States from Malta to Mauritius make bald concessions to the private sector on a regular basis, passing corporate-friendly laws, indulging lobbyists on regulatory matters and selling passports and visas to the wealthiest individuals.

In their forthcoming book *The Triumph of Injustice*, the economists Gabriel Zucman and Emmanuel Saez examine how the “Big Four” global accounting firms – KPMG, Ernst & Young, Deloitte and PricewaterhouseCoopers – have taken advantage of small states’ propensity to “sell a key ingredient, a vital input, without which the scams peddled by the Big Four would be of little use: their own sovereignty”. Even Boris Johnson’s intention to create free ports to continue trading with the EU post-Brexit is a version of this ideology: “taking back control” – by carving out exceptions.

Like them or not, Trump’s insights into the profane underpinnings of our global economy are, even if inadvertently, rather profound. His mistake is to assume he doesn’t have competition.

“US rejects China's 'near-Arctic state' claim in new cold war,” Alex Fang, *Nikkei Asian Review*, 26 April 2020 [197] <https://asia.nikkei.com/Politics/International-relations/US-rejects-China-s-near-Arctic-state-claim-in-new-cold-war>

Overview:

The U.S. is extending \$12.1 million in economic aid to Greenland and setting up a consulate in the Danish territory this summer, looking to counter the growing presence of China and Russia in the Arctic.

Current & Relevant Information:

The package, revealed by the State Department this week, comes as a response to Russia's military buildup in the region and China's investment in the Arctic's natural resources and shipping routes.

Washington is "in the process of adjusting our Arctic policy," a senior State Department official told reporters on a briefing call. "And it's a change that's driven by the desire of Russia and the People's Republic of China to challenge the United States and the West."

The Arctic has traditionally been governed by an eight-nation governing body called the Arctic Council.

Those eight Arctic states -- Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden and the U.S. -- each have sovereignty over the lands within the Arctic Circle and have had the lone deciding power over policies that govern the polar region located at the northernmost part of Earth.

In January 2018, China issued its first ever Arctic white paper titled "China's Arctic Policy," in which it claimed that Arctic issues now go "beyond its original inter-Arctic States or regional nature," saying that what happens in the region has "a vital bearing on the interests of states outside the region and the interests of the international community as a whole."

It said the melting of ice and snow there opens up sea passages and allows new access to natural resources, thus elevating the strategic and economic values of the region.

It called itself geographically a "near-Arctic state," that was "an important stakeholder in Arctic affairs."

The U.S. official who briefed reporters dismissed this claim categorically. "There are only Arctic states and non-Arctic states," the official said. "No third category exists, so we do not accept Beijing's claims to be a near-Arctic state."

The official described China's intention to play a more active role in Arctic governance as "disconcerting," citing Beijing's expansionist behavior in the South China Sea.

China has tried to "wiggle their way into Greenland in unhelpful ways by acquiring critical infrastructure that would be problematic for the United States and our NATO allies and, of course, the Kingdom of Denmark," the official asserted.

U.S. President Donald Trump last year expressed interest in the idea of buying the autonomous Danish territory, a notion dismissed by Danish Prime Minister Mette Frederiksen as "absurd."

Though the financial package was embraced as good news by Greenland's leader and the Danish foreign minister, the American effort to build an alliance with the territory also has sparked an outcry in Denmark, with members of its parliament calling the financial aid "reprehensible" and saying the move "crossed the line."

Responding to such criticisms Thursday, the State Department official said, "I'm not sure what everyone is all worked up about or why people are upset."

Last year, the U.S. urged the Faroe Islands -- another Danish territory -- not to use equipment from China's Huawei Technologies in its 5G network.

Danish newspaper Berlingske reported that China's ambassador to Denmark offered to broker a free trade agreement with the Faroe Islands if Huawei won the 5G network assignment. A Chinese foreign ministry spokesperson denied that Beijing has applied any pressure on the territory.

U.S. Vice President Mike Pence warned Icelanders about Huawei on his visit to the Nordic country last year. Iceland was the first European nation to sign a free trade agreement with Beijing, which went into effect in 2014.

"[T]here's no question that China is becoming more active in the Arctic region, both economically and strategically," Pence said at a press gaggle in Reykjavik last fall. "So now is the time for us to strengthen our alliance, to strengthen our cooperation for security and [reject] the Belt and Road Initiative, as Iceland did recently."

Greenland and Iceland are "the epicenter of the U.S.-China competition in the Arctic," said Damien Degeorges, a Reykjavik-based consultant specializing in Greenlandic and Arctic affairs. It is "a soft competition so far, compared to the one ongoing in the South China Sea, but a very serious security issue" unfolding much closer to the U.S., he added

Greenland is home to Thule Air Base, the U.S. military's northernmost installation.

"Despite backlash at home, Denmark, which is a very close ally of the U.S., may certainly prefer to have to deal with a stronger U.S. influence in Greenland than a Chinese one," Degeorges said.

5. Environmental Issues:

"Changes in the Arctic: Background and Issues for Congress," Congressional Research Service, 18 June 2020 [198] <https://fas.org/sqp/crs/misc/R41153.pdf>

Summary:

The diminishment of Arctic sea ice has led to increased human activities in the Arctic, and has heightened interest in, and concerns about, the region's future. The United States, by virtue of Alaska, is an Arctic country and has substantial interests in the region. The seven other Arctic states are Canada, Iceland, Norway, Sweden, Finland, Denmark (by virtue of Greenland), and Russia.

The Arctic Research and Policy Act (ARPA) of 1984 (Title I of P.L. 98-373 of July 31, 1984) "provide[s] for a comprehensive national policy dealing with national research needs and objectives in the Arctic." The National Science Foundation (NSF) is the lead federal agency for implementing Arctic research policy. Key U.S. policy documents relating to the Arctic include National Security Presidential Directive 66/Homeland Security Presidential Directive 25 (NSPD 66/HSPD 25) of January 9, 2009; the National Strategy for the Arctic Region of May 10, 2013; the January 30, 2014, implementation plan for the 2013 national strategy; and Executive Order 13689 of January 21, 2015, on enhancing coordination of national efforts in the Arctic. The office of the U.S. Special Representative for the Arctic has been vacant since January 20, 2017.

The Arctic Council, created in 1996, is the leading international forum for addressing issues relating to the Arctic. The United Nations Convention on the Law of the Sea (UNCLOS) sets forth a comprehensive regime of law and order in the world's oceans, including the Arctic Ocean. The United States is not a party to UNCLOS.

Record low extents of Arctic sea ice over the past decade have focused scientific and policy attention on links to global climate change and projected ice-free seasons in the Arctic within decades. These changes have potential consequences for weather in the United States, access to mineral and biological resources in the Arctic, the economies and cultures of peoples in the region, and national security.

The geopolitical environment for the Arctic has been substantially affected by the renewal of great power competition. Although there continues to be significant international cooperation on Arctic issues, the Arctic is increasingly viewed as an arena for geopolitical competition among the United States, Russia, and China. Russia in recent years has enhanced its military presence and operations in the Arctic. China's growing activities in the Arctic have become a matter of increasing curiosity or concern among observers.

U.S. military forces have begun to pay more attention to the Arctic in their planning and operations. The Department of Defense (DOD), the Navy, and the Coast Guard have all issued Arctic strategy documents in recent years. Whether DOD and the military services are adequately resourcing these strategies and taking appropriate and adequate actions for defending U.S. interests in the Arctic has emerged as a topic of debate and congressional oversight. The Coast Guard has two operational polar icebreakers and has received funding for the procurement of the first of three planned new polar icebreakers.

The diminishment of Arctic ice could lead in coming years to increased commercial shipping on two trans-Arctic sea routes—the Northern Sea Route close to Russia, and the Northwest Passage close to Alaska and through the Canadian archipelago—though the rate of increase in the use of these routes might not be as great as sometimes anticipated in press accounts. International guidelines for ships operating in Arctic waters have been recently updated.

Changes to the Arctic brought about by warming temperatures will likely allow more exploration for oil, gas, and minerals. Warming that causes permafrost to melt could pose challenges to onshore exploration activities. Increased oil and gas exploration and tourism (cruise ships) in the Arctic increase the risk of pollution in the region. Cleaning up oil spills in ice-covered waters will be more difficult than in other areas, primarily because effective strategies for cleaning up oil spills in ice-covered waters have yet to be developed.

Large commercial fisheries exist in the Arctic. The United States is working with other countries regarding the management of Arctic fish stocks. Changes in the Arctic could affect threatened and endangered species, and could result in migration of fish stocks to new waters. Under the Endangered Species Act, the polar bear was listed as threatened on May 15, 2008. Arctic climate change is also expected to affect the economies, health, and cultures of Arctic indigenous peoples.

Current & Relevant Information:

Climate Change and Loss of Arctic Sea Ice

Record low extents of Arctic sea ice in 2012 and 2007 have focused scientific and policy attention on climate changes in the high north, and on the implications of projected ice-free seasons in the Arctic within decades. The Arctic has been projected by several scientists to be ice-free in most late summers as soon as the 2030s. This opens opportunities for transport through the Northwest Passage and the Northern Sea Route, extraction of potential oil and gas resources, and expanded fishing and tourism (Figure 3).

Figure 3. Arctic Sea Ice Extent in September 2008, Compared with Prospective Shipping Routes and Oil and Gas Resources



Source: Graphic by Stephen Rountree at *U.S. News and World Report*, <http://www.usnews.com/articles/news/world/2008/10/09/global-warming-triggers-an-international-race-for-the-artic/photos/#1>.

More broadly, physical changes in the Arctic include warming ocean, soil, and air temperatures; melting permafrost; shifting vegetation and animal abundances; and altered characteristics of Arctic cyclones. All these changes are expected to affect traditional livelihoods and cultures in the region and survival of polar bear and other animal populations, and raise risks of pollution, food supply, safety, cultural losses, and national security. Moreover, linkages (“teleconnections”) between warming Arctic conditions and extreme events in the mid-latitude continents are increasingly evident, identified in such extreme events as the heat waves and fires in Russia in 2010; severe winters in the eastern United States and Europe in 2009/2010 and in Europe in 2011/2012; and Indian summer monsoons and droughts. Hence, changing climate in the Arctic suggests important implications both locally and across the Hemisphere.

Like the rest of the globe, temperatures in the Arctic have varied but show a significant warming trend since the 1970s, and particularly since 1995. The annual average temperature for the Arctic region (from 60° to 90° N) is now about 1.8° F warmer than the “climate normal” (the average from 1961 to 1990). Temperatures in October–November are now about 9° F above the seasonal normal. Scientists have concluded that most of the global warming of the last three decades is very likely caused by human-related emissions of greenhouse gases (GHG, mostly carbon dioxide); they expect the GHG-induced warming to continue for decades, even if, and after, GHG concentrations in the atmosphere have been stabilized. The extra heat in the Arctic is amplified by processes there (the “polar amplification”) and may result in irreversible changes on human timescales.

The observed warmer temperatures along with rising cyclone size and strength in the Arctic have reduced sea ice extent, thickness, and ice that persists year-round (“perennial ice”); natural climate variability has likely contributed to the record low ice extents of 2007 and 2012. The 2007 minimum sea ice extent was influenced by warm Arctic temperatures and warm, moist winds blowing from the North Pacific into the central Arctic, contributing to melting and pushing ice toward and into the Atlantic past Greenland. Warm winds did not account for the near-record sea ice minimum in 2008. In early August 2012, an unusually large storm with low pressure developed over the Arctic, helping to disperse the already weak ice into warmer waters and accelerating its melt rate. By August 24, 2012, sea ice extent had shrunk below the previous observed minimum of late September 2007.

Modeling of GHG-induced climate change is particularly challenging for the Arctic, but it consistently projects warming through the 21st century, with annual average Arctic temperature increases ranging from +1° to +9.0° C (+2° to +19.0° F), depending on the GHG scenario and model used. While such warming is projected by most models throughout the Arctic, some models project slight cooling localized in the North Atlantic Ocean just south of Greenland and Iceland. Most warming

would occur in autumn and winter, “with very little temperature change projected over the Arctic Ocean” in summer months.

Due to observed and projected climate change, scientists have concluded that the Arctic will have changed from an ice-covered environment to a recurrent ice-free ocean (in summers) as soon as the late 2030s. The character of ice cover is expected to change as well, with the ice being thinner, more fragile, and more regionally variable. The variability in recent years of both ice quantity and location could be expected to continue.

“The Emerging Arctic,” Council on Foreign Relations [199]
<https://www.cfr.org/interactives/emerging-arctic#!/emerging-arctic>

Overview:

The remote latitudes of the Arctic have long been a province of natural beauty, high adventure, and untold riches. For centuries, mariners risked their lives plying the frigid waters and frozen expanses in search of new territory, trade routes, and treasure for king and country. Where a few, like Norwegian polar explorer Roald Amundsen, triumphed over uncommon challenges, many others, like British rear admiral Sir John Franklin, suffered tragedy and defeat. With rare exception, much of the promise of the Arctic remained out of reach, encrusted in the polar ice.

In the twenty-first century, many experts believe that climate change, technological advances, and rising global demand for resources may at last unlock the considerable economic potential of the Circumpolar North. The melting of Arctic sea ice to record lows in recent years has prompted many nations, principally those with Arctic Ocean coastlines—the United States, Canada, Russia, Norway, and Denmark (Greenland)—to reassess their commitments and interests in the icy reaches atop the globe.

Many forecast Arctic summers will be free of ice in a matter of decades, potentially opening the region up to hundreds of billions of dollars in investment, including energy production, shipping, and fishing. The thaw will also pose new security demands as greater human activity induces states to increase their military and constabulary presence. While most experts dismiss the prospects for armed aggression in the Arctic, some defense analysts and academics assert that territorial disputes and a competition for resources have primed the Arctic for a new Cold War.

Meanwhile, environmentalists are concerned that a new era of Arctic exploration and development could spoil one of the planet’s last great frontiers, a pristine habitat home to iconic wildlife and native communities that have subsisted there for thousands of years. Climatologists warn that the extraction of Arctic fossil fuels will contribute to global warming at a time when they believe nations should be paring back greenhouse-gas emissions and pursuing alternative energy sources.

But for many, the debate is less over whether the region should be developed, but rather if it can be done sustainably and peaceably. The Arctic is emerging on the world stage, and it is not yet settled whether businesses, governments, and other operators can fully manage the unique risks it poses.

Current & Relevant Information:

A Thawing Arctic

The Arctic, the roughly 8 percent of the earth above latitude 66° 33' north, is warming faster than many climate scientists expected—at nearly twice the rate of the rest of the planet. The extent of Arctic sea ice, which melts to its nadir each September, has steadily declined over the past three decades. The years 2007–2013 saw the six lowest levels since satellite imaging began in 1979. Overall, the ice cap has retreated about 40 percent over this period. The trend is likely unmatched in recent human history, reported a [UN panel on climate change](#) in 2013.

Although sea ice cover rebounded slightly in 2013, its extent remained well below the thirty-year average. Scientists expect some annual variability as weather patterns change, but predict the contraction will continue in the long term.

Beyond surface area, recent data indicates that Arctic sea ice is also becoming younger and thinner, and hence more inclined to melt every summer. Less white ice and more dark sea means that more solar radiation is absorbed, accelerating the thaw. If global greenhouse-gas emissions continue unabated, said the UN panel, “a nearly ice-free Arctic Ocean in September before mid-century is likely.” Although projections vary, most scientists believe sea ice will disappear for part of the summer by the end of this century at the latest.

“25 Years of Arctic Environmental Agency: Changing Issues and Power Relations,” **Andréa Finger-Stich and Matthias Finger, Arctic Yearbook, 2012** [\[200\]](https://arcticyearbook.com/ay2012/files/assets/downloads/publication.pdf#page=206)
<https://arcticyearbook.com/ay2012/files/assets/downloads/publication.pdf#page=206>

Abstract:

This paper proposes a retrospective of the changes in environmental policies and the various actors' positions and strategies concerning the Arctic since Mikhail Gorbachev, then the Soviet Union's General Secretary, visited Murmansk and gave a ceremonial speech in October 1987 – a speech that triggered a new global outlook on the Arctic. The Arctic environment, 25 years ago, was perceived mainly as a Far North affected by distant modern civilization. Environmental concerns included Arctic haze, the depletion of the stratospheric ozone layer, the accumulation of pollutants in Arctic mammals, sea acidification, concentration of radioactive pollution, and hazards related to the presence of armament and military activities in the Arctic. But twenty-five years later, the Arctic has moved to the fore, experiencing environmental changes, mainly due to climate warming, firsthand and at double the rate of the world's average. With climate warming, paradoxically, the Arctic is not only a victim

of change but has become a key actor in environmental change, with melting ice opening it up to intense fossil fuel and mineral resource exploitation. Who are the actors who will decide whether, to what extent and how these resources will be exploited? This article identifies the main periods and the main changes in the actors, their strategies and their power relations over the past 25 years in Arctic environmental agency. By doing so, it critically assesses these actors' constraints and potentials for mitigating and adapting to a rapidly warming climate.

Current & Relevant Information:

Shifting Issues Regarding the Arctic Environment

In our retrospective over the past 25 years, we identify four main phases of changing perceptions about Arctic-related environmental issues, namely (1) the phase of the Cold War, (2) the phase immediately after the Cold War, (3) the phase after the Rio Conference on Environment and Development, and (4) the most recent phase of the beginning of the 21st century.

Environmental Issues During the Cold War: Distant Pollution, Nuclear and Military Waste

During the Cold War, the Arctic was considered to be a remote and inhospitable place, sparsely populated, the backyard of the superpowers accumulating armament and testing defense strategies. This is for example the case in Novaya Zemlya, between the Barents and the Kara seas, where Russia conducted numerous atmospheric and subterranean atomic tests from 1955 until the 1990s and where much nuclear waste was dumped.

On the other hand, the Arctic continues to be portrayed as a wild sanctuary of mammals needing protection from regional hunters and international commercial interests. Among the global actors constructing this image are the International Whaling Commission, which was already set up under the International Convention on the Regulation of Whaling (1946), and later the (International Union for Conservation of Nature (IUCN) Species Survival Commission and its Polar Bear Specialist Group (1968). In 1973, the five polar bear Arctic states, Canada, US, Denmark (Greenland), Norway and Russia, signed the International Agreement on the Conservation of Polar Bears and their Habitat. According to the first Article of the Convention: "Parties shall protect polar bear habitat, especially denning areas, feeding areas, and migratory routes; ban hunting of bears from aircraft and large motorized boats; conduct and coordinate management and research efforts; and exchange research results and data." But the agreement allows for the taking of polar bears for scientific purposes, for preventing serious disturbances in the management of other resources, for hunting by local communities using traditional methods and exercising traditional rights, and for the protection of life and property. Following this agreement each nation has established its own regulations and conservation practices.

Since the early Sixties, the Arctic also became a “benchmark for global pollution” (Radke, Lyons, Hegg & Hobbs, 1984). Travelers by air, sea and land started to observe so-called ‘Arctic haze’, occurring regularly during the end of winter and spring. Geophysicists observed the concentration of airborne Arctic aerosols in layers above the ground. It was obvious that these pollutants came from distant sources. Because of reduced photochemistry and particular wind conditions in some Arctic places in early spring, these aerosols could persist for several weeks, reducing visibility in the lower troposphere (ibid). Pollution in the Arctic also stems from activities within the region, not only from mining, but also from extracting oil, starting with the Alaska North Slope field (Prudhoe Bay since 1968) and the Urengoy gas field in Russia, which went into production in 1978. But few other reserves of oil and gas resources had been identified in the Beaufort Sea and the Barents Sea before the end of the Cold War. Including mining (coal, gold and other metal mining), Arctic reserves had been exploited since the nineteenth century, such as on Svalbard Island (Anderson, 2009: 127).

Indeed, during the 1980s, the contaminants issue framed the Arctic image from outside as a common and global environmental concern. And indigenous peoples, in particular the Inuit, raised an alarm for impacts on their health in the wake of the Inuit Circumpolar Conference (ICC), which first met in Barrow, Alaska, in 1977 (Doubleday, 1996). However, the Arctic, during this period, was mostly seen from the South as another world or a world of others, where a few people struggle for survival, hunting mammals, seals, polar bears and whales. Whereas native peoples in some Arctic states – US, Canada, and Greenland – were gaining rights to self-determination and self-government in the 1970s (Osherenko and Young, 1989: 108-109)⁶, other inhabitants of the Arctic, including indigenous peoples from the USSR and numerous immigrants working in extractive industries, the military or scientific missions, were not part of the Arctic image as seen from Southern perspectives.

Environmental Issues at the End of the Cold War: Protection of Peace and Nature

Gorbachev’s speech acted like a springboard to an accelerating institutionalization of Arctic environmental agency. Some steps we may recall in this process are outlined below.

In September 1989, the Finnish government took the initiative to invite the eight Arctic governments to meet and discuss “cooperative measures to protect the Arctic environment” (AEPS, 1991: 1). In 1990, the Intergovernmental Panel on Climate Change (IPCC) published its first assessment, which would lead, two years later, to the establishment of the UN Framework Convention on Climate Change (UNFCCC). And in 1991, following the collaborative work started in 1989, Finland organized the first ministerial conference among the eight Arctic states committing to “the protection of the Arctic environment”. Subsequently the eight states signed the Rovaniemi Declaration, launching the Arctic Environmental Protection Strategy (AEPS, 1991). Its objectives were mainly to monitor pollution levels (oil acidification,

persistent contaminants, radioactivity) as well as to study the impacts of development activities. The strategy led to the constitution of the Arctic Monitoring and Assessment Program (AMAP), established in 1991 as a Task Force.

The Arctic continued to be associated with the protection of mammals during the early 1990s, with reported declines of fur seal populations ascribed to over-hunting, including indigenous communities' subsistence hunting. However similar depletion of fur seal populations, like those of sea lions, were also recorded in protected zones, which indicated that the decline in their populations may have rather been the fact of declining biomass in the Bering sea, in particular of declining fish on which these species feed (Osherenko & Young, 1989: 139). In 1992, the polar bear was listed under the Convention of International Trade in Endangered Species of Wild Fauna and Fauna (CITES), category II as "endangered species, likely to be threatened with extinction if not regulated" (CITES, 2010). And the US protects the polar bear under the Marine Mammals Protection Act (MMPA) and allows hunting only for Alaskan indigenous peoples who have permits and for subsistence purposes.

Environmental Issues after UNCED: Biodiversity and Sustainable Development

The end of the 1980s was marked by the World Commission on Environment and Development (WCED), also named the Brundtland Commission after the Norwegian former prime minister and chair of the commission Ms. Gro Harlem Brundtland. The WCED final report 'Our Common Future', was published in 1987, the same year Gorbachev pronounced his speech in Murmansk. It made no particular reference to the Arctic, but had an entire section on Antarctica: 'Towards Global Cooperation'. Five years later, the Rio Conference on Sustainable Development (1992) launched the three great environmental conventions on climate, biodiversity and desertification, the UNFCCC, the CBD (Convention on Biological Diversity) and the UNCCD (UN Convention to Combat Desertification), again with no particular mention to the Arctic.

The non-binding Agenda 21 was a soft law commitment of the Conference aimed at involving local and regional governments, as well as "major groups", defined as indigenous people (spelled without an "s" – see Article 26.1), youth and children, women, local authorities, workers and trade unions, non-governmental organizations, business and industry, the scientific community and farmers. These major groups were addressed without distinction of their particular claims and rights, not recognizing a particular status to indigenous peoples. It stated that "any policies, definitions or rules affecting access to and participation by non-governmental organizations in the work of United Nations institutions or agencies associated with the implementation of Agenda 21 must apply equally to all major groups" (UNESA, EarthSummit, Agenda 21, art. 23.3.). After the Rio conference, indigenous peoples organizations' involvement in international environmental processes increased, in particular on forest policies (the Intergovernmental Panel - and then Forum – on Forests, 1995-2000). Arctic indigenous peoples' involvement helped raise

awareness on deforestation and forest degradation, not only for tropical forests, but also for the tundra or boreal forests, in particular in Canada and Russia. Indigenous peoples' participation focused, at that time, mostly on the CBD, in particular Article 8(j) on knowledge, innovation and traditional practices of indigenous and local communities.

Taking "our common future" back home, the process of constructing the Arctic Council continued as the ministers of the eight Arctic States met in Nuuk, Greenland in 1993, and expanded the mission of the AEPS to deal with "sustainable development". It would take three more years before the Ottawa Declaration was signed in 1996, which formally established the Arctic Council, created the Working Group on Sustainable Development and Utilization (SDWG) and granted Permanent Participant status to indigenous peoples' organizations. The Declaration in its first article (a) mandates the Arctic Council to: "[p]rovide a means for promoting cooperation, coordination and interaction among the Arctic States with the involvement of the Arctic indigenous communities and other Arctic inhabitants on common Arctic issues in particular sustainable development and environmental protection in the Arctic". When it defines what these "common Arctic issues" are, the declaration states explicitly, in a footnote to this same article quoted above, that "the Arctic Council should not deal with matters related to military security" (Arctic Council, 1996; Berkman, 2012).

Environmental Issues of the Early 21st Century: Climate Change and Peak Oil

The Intergovernmental Panel on Climate Change (IPCC), in its third assessment report published in 2001, mobilized considerable scientific and political attention on the effects of global warming on Arctic sea and land ice (IPCC, 2001: 2.2.5.2.). It also modeled sea level rise, which was said to be sensibly higher for the Arctic Ocean than for other oceans (3 mm./yr., instead of 2mm). Other positive feedback mechanisms, such as induced albedo effect, melting permafrost with increasing carbon and methane emissions, and stratospheric ozone depletion were also highlighted (IPCC, 2001: 14.2.3.2; UNEP & GRID, 2007).

Further building on the 3rd IPCC Report's findings, in which scientists involved in the Arctic had taken part, the Arctic Council and the International Arctic Science Committee (IASC) presented the Arctic Climate Impact Assessment (ACIA, 2005) to the IPCC. This document raised global attention to climate warming in the region, which it was argued could suddenly accelerate and lead to possibly catastrophic events with irreversible repercussions, such as the break-up of a big ice shelf section leading to a rapid increase in sea level (UNEP, GRID, 2007). The metaphor and catchword used to describe this situation – when unleashed changes start to proceed – was the "tipping point". For instance, referring to the ice-melt of the summer 2007, Mark Serreze, scientist from the National Snow and Ice Data Center (NSIDC) in Boulder (Colorado), commented that climate models had underestimated the rate of sea-ice loss and that there was a tipping point under which sea-ice loss

could no longer recover from year to year. According to a model developed by Marika Holland from the National Center for Atmospheric Research, the critical sea ice thickness may be 2.5 m, and then “you kind of fall over the edge” (Serreze cit. in Emmerson, 2010: 150-151). The warning of IPCC had become an alert, with sea-ice loss occurring sooner than predicted.

There may be a more or less natural ‘Arctic oscillation’ factor contributing to this sudden change, adding to the warming trend induced by anthropogenic emissions. The IPCC leaves the relative importance of these factors open. But the fact was that in summer 2007 the Northwest Passage (NWP) was for the first time navigable without breaking ice, and the Northern Sea Route (NSR) was to a considerable extent as well (Roach, 2007). Climate models and scenarios of mitigation had to be corrected to reflect the accelerating trend, considering also variables of the climate system such as snow cover, permafrost, acidification of oceans, increase in coverage of Arctic tundra, and increasing occurrences of large forest fires. The impacts of the ‘Arctic amplification’ became visible, but varied greatly according to the places and the actors concerned. Many impacts were negative but some appeared to be economically positive, at least in the short or medium term, such as increasing fishing stocks for some species and in some places, extended agricultural growing seasons and cultivable areas, increasing accessibility of the seas for shipping shortening formerly longer intercontinental routes, and last but not least, accessibility to fossil and mineral resources of which extraction costs diminish with warmer temperatures.

One year after this Arctic climate event, the United States Geological Survey (USGS) released in 2008 estimates stating that about 25% of the world oil and gas reserves lie in the Arctic, most of it offshore in the Arctic Ocean (13% of world oil reserves and 30% of gas reserves). The Arctic paradox became obvious, as the Arctic is on one hand the place where effects of climate change are among the strongest, and on the other, the region where there are some of the greatest remaining reserves of hydrocarbons in the world. Furthermore, as the International Energy Agency (IEA) recognized that world peak oil was probably reached in 2006, the pressure to access the few remaining reserves that can be exploited efficiently (with positive energy return on energy and capital invested) became very acute. The Arctic Council has highlighted a further technical constraint, with moral implications bearing on the decision to drilling and shipping in the Arctic: polar ecosystems are particularly vulnerable to oil spills.

“Well-being and environmental change in the arctic: a synthesis of selected research from Canada’s International Polar Year program,” Brenda Parlee and Chris Furgal, Springer Link, 3 October 2012 [201]
<https://link.springer.com/content/pdf/10.1007/s10584-012-0588-0.pdf>

Abstract:

The social and cultural dimensions of arctic environmental change were explored through Canada's International Polar Year (IPY) research program. Drawing on concepts of vulnerability, resilience and human security, we discuss preliminary results of 15 IPY research projects (of 52) which dealt with the effects and responses of northern communities to issues of ecological variability, natural resource development and climate change. This paper attempts to determine whether the preliminary results of these projects have contributed to the IPY program goal of building knowledge about well-being in the arctic. The projects were diverse in focus and approach but together offer a valuable pan-northern perspective on many themes including land and resource use, food security, poverty and best practices of northern engagement. Case study research using self-reported measures suggests individual views of their own well-being differ from regional and territorial standardized statistics on quality of life. A large body of work was developed around changes in land and resource use. A decline in land and resource use in some areas and consequent concerns for food security, are directly linked to the effects of climate change, particularly in coastal areas where melting sea ice, erratic weather events and changes in the stability of landscapes (e.g., erosion, slumping) are leading to increased risks for land users. Natural resource development, while creating some new economic opportunities, may be compounding rather than offsetting such stresses of environmental change for vulnerable populations. While the IPY program has contributed to our understanding of some aspects of well-being in the arctic, many other issues of social, economic, cultural and political significance, including those unrelated to environmental change, remain poorly understood.

Current & Relevant Information:

Conclusions and directions for future research

Northern communities have long considered the lands and resources around them as key to their well-being. Many Inuit, Dene, Métis and other northern peoples recognize the importance of respectful and reciprocal relations between themselves and the water, fish, wildlife and other beings of their natural world which are imbued with sacred or spiritual significance. Beliefs that people and the animals are related like families, that the "land is alive" and cannot really be managed by people, are described in oral histories documented throughout the north, particularly in First Nations communities. In this context, research is irrelevant; the experience of environmental change is deeply personal and spiritual in nature and can really only be understood through lived experience and the development of long term respectful social and social-ecological relations.

Other aspects of well-being in the context of environmental change are more easily understood. For example, IPY research on contaminants, resource development and climate change have revealed specific changes in the condition of the land, water and wildlife which have implications for the food security and land and resource use.

The Canadian IPY program intended to fund research on this and other themes. More than 15 research projects in the regions and territories of Yukon, Northwest Territories, Nunavut, Nunavik, and Nunatsiavut contributed to our understanding of well-being through collaborative research with over 50 northern and Indigenous communities. These studies were structured around the concepts of vulnerability, resilience, and human security, leading to a dynamic understanding of well-being and the extent to which northern peoples are relating, responding and shaping their futures.

Many northern communities are faced with circumstances of poverty that are rooted in Canadian histories of colonialism and socio-political marginalization. Some social problems (e.g., poor housing, food insecurity) are likely to be exacerbated by contaminants, climate change, large scale resource development activities and the stresses they place on families, communities and environments. Despite this concern, local communities may have a different view of their own individual circumstances as well as the “threats” of environmental change. As an example, recent changes in caribou populations defined by some scholars as a significant environmental problem are perceived by some communities as part of the natural cycle of caribou “coming and going”. Similarly, climate change may be perceived as a benefit rather than a threat by some northern communities. Some northern organizations are concerned that the climate change adaptation discourse over-emphasizes and implies action on the part of those most affected rather than focusing on the causes of the environmental harms. “The message has to be conveyed to the rest of the world that, ultimately, what happens in the North will affect their lives and they too will have to adapt to climate change” (Nunavut Tunngiavik Inc. 2005).

Although there are many socio-economic and cultural factors which influence land and resource use, climate change may be a major compounding environmental factor, particularly in coastal areas of Nunavut and the Inuvialuit Settlement region where melting sea ice, erratic weather events and changes in the stability of landscapes (e.g., erosion, slumping) are leading to increased risks for hunting, fishing and travel as shown by research led by Aporta. Communities are not only observing and responding to indicators of physical changes in the environment but may also be responding to indicators of a spiritual nature. For example, irresponsible or disrespectful behavior towards the land as a result of resource development is of concern to many communities.

An important lesson of the IPY program surrounds best practices of community collaboration and engagement in both research and decision-making about issues of arctic sustainability. While some projects involved very successful collaborations, other collaborations were challenged by a variety of theoretical, methodological and administrative issues. Although the extent of northern engagement varied from project to project, knowledge translation was an essential component of all northern

projects. Further research is needed on many issues of well-being that are not explicitly related to issues of environmental change but may be viewed as more explicitly social, economic or political in nature. Research beyond the paradigm of TK that is more inclusive of Indigenous youth is also seen as critical given the increase of children and youth populations in northern communities.

Research during the IPY program advanced our understanding of well-being on select issues but there is more research needed. While important advances have been made, there continues to be a disproportionate investment in natural science versus social science research. Such an imbalance in knowledge available about the arctic may be unduly perpetuating perceptions of the arctic as an empty frontier of global interest rather than a homeland valued by northern peoples and Canadians. Further studies and efforts on the part of scientists to reconcile natural science research outcomes with socio-economic realities of northern communities will also contribute towards the capacity of communities to achieve well-being in the context of arctic environmental change.

“Governance and Environmental Change in the Arctic Ocean,” Paul Arthur Berkman and Oran R. Young, *Science and Government*, 17 April 2009 [202]
http://ees.bren.ucsb.edu/news/documents/Berkman_Young_Science.pdf

Overview:

The Arctic Ocean is crossing an environmental threshold expected to transform it from a perpetually ice-covered region to a seasonally ice-free sea within the next few decades. This environmental change has awakened global interests in Arctic energy, fishing, shipping, and tourism. The Arctic could slide into a new era featuring jurisdictional conflicts, increasingly severe clashes over the extraction of natural resources, and the emergence of a new “great game” among the global powers. However, the environment provides a physical and a conceptual framework to link government interests in the Arctic Ocean, as well as a template for addressing transboundary security risks cooperatively.

Current & Relevant Information:

The Arctic coastal states are collectively and individually reinforcing their sovereign rights and jurisdiction from their coastlines seaward, as stated in the May 2008 Ilulissat Declaration, the January 2009 Arctic Region Policy directive of the United States, and the March 2009 Arctic State Policy of the Russian Federation. Non-Arctic nations are seeking an enhanced role in the Arctic Council and asserting Arctic policy strategies of their own, as exemplified by the October 2008 Resolution of the European Parliament and the November 2008 Communication from the European Commission. Military interests in the Arctic Ocean are mounting as reflected by the Canadian decision to purchase ice-breaking patrol vessels, the rebuilding of Russia’s northern fleet, and the emerging interest in the Arctic on the part of the North Atlantic Treaty Organization.

At the same time, these developments present the international community with a historic opportunity to integrate science and diplomacy. As with the governance of other international spaces, such as Antarctica, science has a dual role: to interpret the dynamics of the Earth system (e.g., phenomena of stratospheric ozone depletion and climate change) and to carry out the monitoring, reporting, and verification needed to maintain trust in international cooperation. Success of science diplomacy in the Arctic will depend on knowledge-sharing and the steady generation of scientific findings ranging from climate feedbacks to human adaptations under conditions of rapid biophysical and socioeconomic change.

As the European Commission Communication points out, environmental changes are altering geostrategic dynamics of the Arctic, and these changes could have consequences for international stability. The resultant risk of political, economic, or cultural instability has become a matter of global security. However, an inclusive dialogue about security risks and responses relating to the Arctic Ocean has yet to emerge. The injunction in the 1996 Ottawa Declaration that the Arctic Council should not deal with matters related to military security is a serious constraint on efforts to address security and to come to grips with transboundary challenges. This has not precluded ad hoc measures directed toward specific concerns, like mitigating the impacts of radioactive waste associated with decommissioned nuclear submarines. But it has truncated efforts to design a coherent and inclusive approach to Arctic Ocean governance that prevents international discord.

“Economic and Strategic Implications of Ice-Free Arctic Seas,” Jessie C. Carman, Globalization and Maritime Power, 17 June 2009 [203]

https://d1wqtxts1xzle7.cloudfront.net/51107654/Economic_and_Strategic_Implications_of_I.pdf?1483026517=&response-content-disposition=inline%3B+filename%3DEconomic_and_Strategic_Implications_of_I.pdf&Expires=1595064692&Signature=ZKbHYf8nOo3RIhzMvwEfiXMfy1mS9laEMnCdbmnygNH8lUtawZjNTnEswMSEOpA7KEenO0eEMAFxjXzWpS0TIA9AYSJWJ0Dif9Nn94SG8Q9R6tSfmGKNSKquiNJVh0S0gH~ghVUSbLuBOCzw7N2pCE~g6hyw55w~pbYzFMINCI MfiKe7put4GMmlfA0WyLLS7cuSfYurJlwxeciFO070cPIv1JLXNWj5eEQ3wUNpVxZj5R3A1XjaiBmhUeahYihlqyu1pAyg6OEJVIGjeVpuSeXinTwFW5ZAa3OmNS1z4dIlgGDruF-pzkgB9igBrORi7z4kvm7UWZyAfoQc7WxFA &Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA

Abstract:

One of the principal public concerns about the globalization process is environmental degradation resulting in climatic changes. Aside from a multitude of effects on agriculture and human health, such changes hold other direct national security implications. Global climate predictions forecast the largest temperature change to be in the Arctic, and preliminary observations support the magnitude of Arctic change. National strategic scenario documents occasionally touch on global climate change as it pertains to such issues as disease, agriculture, or water

availability; however, they do not perceive the impact of an Arctic change. A reduction of Arctic ice will open Arctic sea routes to commercial shipping and fishing and Arctic regions to economic hydrocarbon removal, producing significant global strategic implications. Impediments to Arctic development arise from the Russian economic situation, bipolar military security issues, Law of the Sea issues, physical infrastructure, and the risk of environmental damage. These and other impacts of this major change are worthy of consideration in long-range U.S. policy and force planning. This chapter details such a climate change scenario from a military planning perspective, making recommendations for an appropriate naval response.

Current & Relevant Information:

Projection of Arctic Climate

An increasing accumulation of scientific evidence supports projections that Arctic ice will be dramatically reduced or possibly disappear during part of the summer as soon as 2050. The evidence comes from a variety of sources, such as changes in ice thickness as reported by U.S. and British submarines, satellite measurements of ice coverage, and climate modeling. Conservative estimates calculate a 12- to 40-percent reduction in summer ice extent has already occurred. Commercially viable Arctic sea lanes are anticipated to be opened for part of the year well before 2050, which could make the Arctic Ocean a major global trade route. The transit of the Northwest Passage by the Royal Canadian Mounted Police patrol ship St. Roch II in August 2000 without encountering ice supports this prediction. Additionally, technological progress in shipping indicates that the hydrocarbon industry will not wait for sea lanes to open for exploitation. Obviously, these trends have the potential to profoundly alter the international geopolitical and economic environment.

Current Intergovernmental Panel on Climate Change climate projections call for a global average temperature increase that ranges from 1.4 to 5.8 C over the next century. This temperature increase will be greater for areas over land than over water and greater in polar than in temperate regions. In particular, the projected increase for the northern high-latitude winter exceeds the projected average global increase by 40 percent. The projected Arctic warming is highly seasonal, with an increase by mid-century in summer temperature of only 1 to 2 C but of 8 to 9 C in winter. The variability in predictions is almost as large as the warming itself, with variabilities ranging from 1 to 2 C in summer to 5 to 6 C in winter.

An increase in global average water vapor concentration and precipitation by about 1 centimeter per month is projected to accompany this prediction, although the variability in precipitation predictions is wider than the variability in temperature predictions. Nevertheless, all projections hold that changes will be manifested first and with greatest magnitude in polar regions.

These temperature and precipitation projections translate into summer and winter Arctic weather conditions that remain harsh. A more ice-free ocean or longer ice-free

season would lead to an increase in heat and moisture transfer from the ocean into the Arctic air, producing more low cloudiness, poorer visibility, freezing mist, and drizzle. These conditions would also contribute to more localized low-pressure formation and hence increasing precipitation and high wind events. Freezing precipitation accompanied by high winds and seas implies significant ship superstructure and aircraft icing.

Exact ice conditions cannot be predicted, considering the range of variability in the climate conditions. However, model runs conducted by the Geophysical Fluid Dynamics Laboratory at the National Oceanographic and Atmospheric Administration show considerable loss of ice along the Arctic borders, although these results should be considered as suggestive for further research rather than as predictions of specific conditions. As ice coverage decreases, ice advection with wind and currents will cause considerable movement in non-landlocked ice, resulting in transit passages opening and closing on a scale of days.

Impacts on Non-Arctic Regions

During the early part of the 21st century, the impact of global warming will be less visible in other parts of the world than in the Arctic, since the climate change “signal” is largest in the Arctic, and the more dramatic changes will be seen later in the century. The environment and infrastructures of various world regions will be stressed in different ways. Two key problems will be reduced water availability due to salt water incursions into ground water, and increased concentrations of sewage waste and industrial effluents due to a projected drop of water level in dams and rivers. These changes could lead to an increase in water politics internationally.

In addition to these general pressures, most of the Arctic changes described so far will likely have negative consequences for the Middle East. Much of the Western motivation to support local regimes can be summed up in one word: oil. If—or when—effective competitors for providing resources arise, Middle Eastern regimes will have less Western support. This could mean, in turn, that existing demographic problems, social unrest, religious and ideological extremism, and terrorism already occurring will become more acute. Most Middle East regimes are change-resistant, buoyed by continuing energy revenues, and will likely find it difficult to make necessary reforms to change these trends.

The emergence of Arctic oil sources could decrease long-term dependence on Middle East sources, but due to the impediments, the shift in primary source will not occur overnight but will involve a transition period in which Middle East sources are still important but of decreasing criticality. This stress could trigger one of the Global Trends 2015 key uncertainties, by producing conflict among key energy-producing states, sustained internal instability in two or more major energy-producing states, or major terrorist actions leading to such a disruption. Such instability could drive

shippers to choose Arctic routes not only for their shorter length but also for their greater safety.

“How ‘Green’ is Canada’s Arctic Policy? The Role of the Environment and Environmental Security in the Arctic,” Petra Dolata, *Zeitschrift für Kanada-Studien*, 2012 [204]

<https://pdfs.semanticscholar.org/8f77/f3405c2e441a4a5951bcb91f46eaac043ca5.pdf>

Abstract:

This paper examines Canada’s Arctic policy in order to assess in how far it addresses environmental issues or is informed by environmental perspectives. For many non-Canadians climate change is intricately linked to the Arctic assuming that environmental matters play the dominant role. However, as will be argued this is not the case with respect to federal Canadian policy. Instead Arctic policy has been securitized prioritizing matters of sovereignty and security. Discussing the concept of security, which may also include environmental security, it will be shown that Canada’s response to security and environmental challenges in the Arctic is based on a traditional and conservationist understanding. However, such a reading needs to be put into perspective. Firstly, this verdict may only hold for recent governments and arguably there may have been past developments that contributed to a more environmentalist approach towards the Arctic. Secondly, there are policies introduced that do address environmental security, however these are initiated on the bureaucratic level and they remain difficult to disentangle from the traditional security discourse.

Current & Relevant Information:

Introduction

For some years now, popular depictions of the impact of climate change have resorted to iconic images of a changing Arctic. Polar bears stranded on floating ice, melting icebergs and glaciers have become a familiar sight for an environmentally conscious global audience. A photo shoot in the Arctic is an opportunity most politicians and celebrities, who claim to care for the environment, would hardly refuse. The Arctic has not only become “a climate change barometer” (Sheila Watt-Cloutier 2005) and “an early indicator of climate change for the rest of the world” (UN Economic and Social Council 2008, 20) but a powerful image and symbol of climate change itself. This is especially the case in Europe but Canadian audiences generally share this view of the Arctic (Paehlke 2008, 21). However, it is complemented by a distinctly national construction of the Arctic that makes environmental concerns less of a priority. The Canadian government has skillfully combined environmental rationale and territorial questions to securitize Arctic politics and successfully inscribed a meaning into the Arctic that is indebted to traditional understandings of security and sovereignty.

This explains why environmental policies in the Arctic are not necessarily a federal political priority in Canada. This is not to say that we have not seen policies decided and implemented that address various environmental issues in the Arctic. However, these are often the result of bureaucratic decisions and not the outcome of a pronounced political agenda of the executive. The current government's political vision for an Arctic policy is predominantly driven by security and not environmental concerns. This vision is not only limited to the party in power but also shared by most other federal parties. It is important to note that the Arctic does not figure prominently in terms of environmental party politics. Those parties who do campaign with a pronounced environmental platform do not link this agenda to Arctic matters. The NDP 2011 platform, which promises to "tackle climate change" and pledges to "play a lead role in achieving a new international agreement to avert catastrophic global warming and ensure that Canada meets its climate change obligations," (NDP 2011) does not mention the Arctic as a political issue once. Nor does the Green Party of Canada (Green Party of Canada, 2011). Only the Liberal Party specifically addresses environmental issues in the Arctic when it calls for a "stewardship for Canada's oceans" and promises to "halt all new leasing and oil exploration activities in Canada's Arctic waters pending an independent examination of the risks" (Liberal Party of Canada 2011, 48, 50). It even includes a separate section on "Canada's North and the international Arctic region", however like the Conservative platform (Conservative Party of Canada 2011, 37) it reiterates the importance of Arctic sovereignty for Canada's policy (Liberal Party of Canada 2011, 79).

This is not surprising. Canadian elections are won on domestic, economic and social issues. Rarely do environmental and foreign policy issues play a role. In addition, the parties merely reflect the general attitude of most Canadians who live far away from the Arctic. Everyone may be touched by images of polar bears stranded on floating ice sheets or starving for lack of food. As much as this may reinforce the resolve to do something about climate change, rarely does it translate into demands for a specific environment-oriented Arctic policy. Finally, as previous elections have illustrated the issue of Arctic sovereignty is not a partisan one, most parties agree on the necessity of protecting Canada's sovereignty in the high North even if they do not know or cannot articulate from what or from whom.

If not a principal one, what kind of role does the environment play in Canada's Arctic policy? Put differently, how "green" is Ottawa's policy toward the Arctic? In answering this question three interlinked arguments will be made. Firstly, since the late 1990s Canada's Arctic policy has predominantly focused on security and sovereignty making it a foreign policy issue. This characterizes policies of both Conservative and Liberal governments. Secondly, in terms of its role in circumpolar politics Canada has moved away from a multilateral approach championing environmental regimes to a more unilateral agenda. Thirdly, Canada's current international Arctic policy is a foreign policy that is based on the construction of a national interest that has not fully incorporated the global or common interest of

mitigating climate change. It reflects a particular threat perception of environmental change which owes to a traditional statist and realist understanding of security.

Conclusion

In answering the original question of how green Canada's Arctic policy is one may offer two responses: not visibly green and only of a particular shade of green. Environmental considerations do of course play a role in Canada's Arctic policy, however that role seems to be consistently trumped by the Arctic sovereignty discourse. Because Arctic policy has been securitized it is the executive who dictates the public and official discourse. The political leadership and not specialized bureaucracies define what constitutes environmental problems in the Arctic and how these threaten the nation's security. Environmental arguments (protection) and regulations (NORDREG, AWPPA) are used to justify a securitized Arctic policy but they are not at the center of that policy. At the same time, different levels of governance are involved in Arctic policy, but the federal state claims to be the most important actor. This is partly a result of the fact that constitutionally a number of powers still reside with Ottawa, especially in the case of Arctic resources, both offshore and subsurface.

Arguably, in the past, Canada's Arctic policy might have been green. However, even though one of the earliest responses to intrusions into the pristine polar ecological space was the imposition of an environmental law and despite Canada's instrumental role in the founding of the Arctic Council, whose mandate includes the protection of the Arctic environment, Canada's Arctic policy predominantly revolved around issues of national or North American security and sovereignty. This has not changed, despite the fact that today's globalized and interdependent world facilitates the complex interweaving of foreign and domestic policy areas. The current Arctic policy pays only lip service to the call for a comprehensive Arctic policy integrating issues of good governance (meaning social pro-grams and economic development), environmental stewardship, national security and sovereignty. Instead current Arctic policy exhibits a rather traditional and orthodox concept of environmental security. The way that environmental challenges are portrayed and discussed in Canada points toward a very specific understanding of environmental security, a particular shade of green. It is a reading of events that defines environmental problems in terms of pollution and intrusion from outside and mainly sees the state as a legitimate provider of security. Thus, environmental challenges are simply added to the traditional external threats to national security. Climate change plays a minor role in this threat construction.

However, for Canadian Arctic policy to be "green" it should be based on a more critical concept of environmental security. Climate change should be addressed as a direct threat to Canada's security, especially but not exclusively in the Arctic. The global public good of mitigating climate change should equally be seen as a national good (cf. Nye 2002, 236). In effect, it may not even make sense to differentiate

between national, circumpolar and global security. The question is whether that particular shade of green is creating problems for international environmental governance. The case of the 1970 AWPPA has raised a crucial dilemma: Is environmental unilateralism – even if implemented for a “green” cause – really helpful in addressing current environmental issues in the Arctic? Even if retrospectively adopted as international norm can it really contribute to multilateral cooperation in the long run and should Canada follow such a foreign-policy approach? Will it not compromise its reputation as champion of multilateralism?

In addition, should Canada not rather define its environmental stewardship in terms of finding adaptation and mitigation strategies for those challenges posed by climate change? Any kind of environmental stewardship in the Arctic should be conceptualized as meaning both global and northern governance. Such local governance practices would also tap into indigenous knowledge (Dolata-Kreutzkamp 2011). However, this will only happen if indigenous agency is acknowledged in this area and if Arctic policy is linked to climate change policies. For indigenous groups and actors to bring in their ideas of environmental stewardship there needs to be a “window of opportunity,” in this case a general realization that Arctic policy needs to address both environmental human security and global environmental security. One way of facilitating that ideational shift would be the inclusion of the concept of climate change. As long as this does not happen, indigenous actors will look for alternative ways of bringing their ideas to the table. The best example for this is the April 2009 “Circumpolar Inuit Declaration of Sovereignty in the Arctic” – a response to the 2008 Declaration of Ilulissat – which explicitly refers to the concept of global environmental security and emphasizes the “unique Inuit knowledge of Arctic ecosystems” and the “need for appropriate emphasis on sustainability in the weighing of resource development proposals.” Of course, this also means that territories such as Nunavut claim offshore and subsurface resource rights, rights that currently reside with Ottawa.

Another reason why a “greening” of Arctic policy is rather unlikely is the fact that the Canadian government likes to play the energy card in foreign policy. Stephen Harper’s mantra of Canada being an “energy superpower” (PM Harper, July 2007) sees a very different role for Canada in the world than the internationalist one it could play in terms of climate change policy. Combined with the fact that sovereignty and thus traditional perceptions of national security play such an important role in Arctic policy and Arctic politics, there is currently no room for new concepts of global environmental security or local responses to those threats. However, Canadian citizens may be complicit in this. While they may see combating climate change as a worthy cause they do not link Arctic policies to climate change policies. Most agree that Arctic policy should be about defending Canada’s sovereignty, its national interest, its identity and its values. But – what if one of these values were global or common environmental security? This is what Canadians and the Canadian government need to ask themselves.

“The Global Impacts of Rapidly Disappearing Arctic Sea Ice,” Peter Wadhams, Yale Environment 360, 26 September 2016 [205]

https://e360.yale.edu/features/as_arctic_ocean_ice_disappears_global_climate_impacts_intensify_wadhams

Abstract:

The top of the world is turning from white to blue in summer as the ice that has long covered the north polar seas melts away. This monumental change is triggering a cascade of effects that will amplify global warming and could destabilize the global climate system.

Current & Relevant Information:

The news last week that summer ice covering the Arctic Ocean was tied for the second-lowest extent on record is a sobering reminder that the planet is swiftly heading toward a largely ice-free Arctic in the warmer months, possibly as early as 2020.

After that, we can expect the ice-free period in the Arctic basin to expand to three to four months a year, and eventually to five months or more.

Since my days measuring the thickness of Arctic Ocean ice from British nuclear submarines in the early 1970s, I have witnessed a stunning decline in the sea ice covering the northern polar regions — a more than 50 percent drop in extent in summer, and an even steeper reduction in ice volume. Just a few decades ago, ice 10 to 12 feet thick covered the North Pole, with sub-surface ice ridges in some parts of the Arctic extending down to 150 feet. Now, that ice is long gone, while the total volume of Arctic sea ice in late summer has declined, according to two estimates, by 75 percent in half a century.

The great white cap that once covered the top of the world is now turning blue — a change that represents humanity’s most dramatic step in reshaping the face of our planet. And with the steady disappearance of the polar ice cover, we are losing a vast air conditioning system that has helped regulate and stabilize earth’s climate system for thousands of years.

Few people understand that the Arctic sea ice “death spiral” represents more than just a major ecological upheaval in the world’s Far North. The decline of Arctic sea ice also has profound global climatic effects, or feedbacks, that are already intensifying global warming and have the potential to destabilize the climate system. Indeed, we are not far from the moment when the feedbacks themselves will be driving the change every bit as much as our continuing emission of billions of tons of carbon dioxide annually.

So, what are these feedbacks, and how do they interact? The most basic stem from turning the Arctic Ocean from white to blue, which changes the region’s albedo —

the amount of solar radiation reflected off a surface. Sea ice, in summer, reflects roughly 50 percent of incoming radiation back into space. Its replacement with open water — which reflects roughly 10 percent of incoming solar radiation — is causing a high albedo-driven warming across the Arctic.

When covered almost entirely by ice in summer — which the Arctic was for tens of thousands of years — water temperatures there didn't generally rise above freezing. Now, as the open Arctic Ocean absorbs huge amounts of solar radiation in summer, water temperatures are climbing by several degrees Fahrenheit, with some areas showing increases of 7 degrees F above the long-term average.

Such changes mean that a system that was once a vast air conditioner has started to turn into a heater. Just how much extra heat are the dark waters of Arctic Ocean in summer adding to the planet? One recent study estimates that it's equivalent to adding another 25 percent to global greenhouse emissions.

To appreciate the complexity of these feedbacks and interactions, one need only look at the growing role played by waves and storms in the melting Arctic. With more of the Arctic Ocean becoming ice-free in summer, more waves are being generated. In summer, this increased wave action breaks up large ice floes into smaller fragments and hastens their melt. Then, in autumn, larger storms fed by open water cause wave-induced mixing of the Arctic Ocean, which brings up heat absorbed during the summer. This warms the water, making it harder for ice to form in the fall. I observed this phenomenon last September and October aboard the University of Alaska research vessel *Sikuliaq* in the western Arctic Ocean. After the warm summer of 2015, the advance of winter ice was slow and sporadic, apparently held back by the quantity of heat in the water column.

Yet another albedo-related effect with important global climatic repercussions is now unfolding in the Arctic. As ice-free Arctic waters have warmed, in turn warming the air above them, these rising temperatures have spread over land. This is an important factor in the increased melting of snow in Arctic terrestrial regions. Today, in midsummer, the Arctic land area covered by snow has decreased by several million square miles compared to five decades ago. These now-dark lands absorb more heat and further warm the Arctic — and the planet.

Also, as the tundra and boreal forests heat up, runoff from snowmelt and waterways runs through warmer land, increasing the temperature of the great Arctic rivers such as the Mackenzie in Canada and the Ob, Lena, and Yenisei in Siberia. The warmer waters of these north-flowing rivers discharge into the Arctic basin, injecting more heat into the polar ocean.

By my calculations, the terrestrial warming in the Arctic is roughly equivalent to a 25 percent boost in global CO₂ emissions. This, combined with the warming caused by the loss of Arctic sea ice, means that the overall ice/snow albedo effect in the Arctic could add as much as 50 percent to the direct global heating effect of CO₂.

Scientists can debate the potential magnitude of such increases. But there is no doubt that they will be significant — vividly illustrating how the Arctic can become a driver of, rather than just a responder to, global climate change.

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