



The Next Front?

Sino-Russian expansionism in the Arctic
and a UK response

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Forewords

In the wake of the recent AUKUS Agreement, the idea of a parallel UK, US, Canada (CAUKUS) arrangement would seem to have considerable merit. As a fellow Commonwealth country and key 'five eyes' partner, with strong shared interests in the Atlantic and the High North, creating closer defence ties between the UK and Canada, also incorporating the United States, must make sense, particularly in the face of a resurgent Russia and expansionist China in the Arctic. CAUKUS is an idea whose time has come, and I wish this report well.

Former UK Armed Forces Minister Rt. Hon. Mark Francois MP

The report's proposal of "CAUKUS" represents a step in the right direction towards global peace and security. It is a positive step towards a safer and more secure world. Recent developments have shown that the free world, as it has in the past, needs to come more tightly together if we are to face malign and rogue states who represent the antithesis of our shared values.

Canada, already a nuclear state, member of NATO, one of the five eyes and member of the Commonwealth, is a natural partner. This report convincingly argues this fact and makes a strong case for further defence engagement with other key players in the region.

Protecting our values, supply lines and access to resources will require many to look further afield than our traditional spheres of influence. "CAUKUS" would have the strategic flexibility to act multilaterally to protect our shipping lanes, rights of navigation and allies. With the Five Eyes the bedrock of global security "The Next Front" present the pragmatic proposals necessary to ensure peace in an increasingly unstable world.

Chair of the House of Commons Defence Committee and former Defence Minister Rt. Hon. Tobias Ellwood MP

Executive Summary

The Arctic is once again becoming a region of pivotal geostrategic importance, as it was during the Cold War.

As Arctic sea-ice levels fall, interest is growing in shipping routes which could slash journey times from Europe to East Asia. The Arctic also possesses huge natural resources including vast oil and gas reserves and rare-earth deposits.

This paper focuses on China's new expansion into the Arctic, and its relationship with and influence over Russia's own approach, as well as the ramifications for the United Kingdom and other NATO and European countries.

China's activity in the Arctic was minimal until the 1990s, but Beijing is now rapidly increasing its Arctic footprint, sending icebreakers and establishing research stations and observatories in European Arctic countries, including with possible 'dual-use' (military and civilian) purposes.

British interest in the Arctic is once more increasing because risks to the United Kingdom's (UK) national security are increasing. The Greenland-Iceland-United Kingdom (GIUK) gap is a vulnerable 'gateway region' that is crucial for the security of the UK and Northern Europe, and was an area of intense military competition during the Cold War.

Russia's intensive recent militarisation of the Arctic, previously known as a 'pole of peace', over the last decade, has perhaps led the Arctic to become the one region which Russia can plausibly claim to be the dominant power. Its invasion of Ukraine in February 2022 suggests that the associated risks cannot be dismissed. The UK Ministry of Defence's (MOD) recent Arctic Strategy echoes these concerns, and calls for greater British military involvement in the High North in order to combat a growing security challenge posed by the increasing Sino-Russian relationship.

China's developing interest and new claims

China has become more aggressive in its approach to the Arctic since Beijing's 2013 decision to invest in Russia's Yamal LNG development. China sees its presence in Arctic shipping lanes as crucial to address its so-called 'Malacca Dilemma'; the vulnerability of the main channel between the Indian and Pacific Oceans.

In 2018, Beijing's first official document focused exclusively on the Arctic described China as a 'near-Arctic' state, an unconventional description designed to imply legitimate interests – and a legitimate presence – in the region. China's northernmost point however is 1,500 kilometres from the Arctic Circle: by contrast, the United Kingdom is the nearest non-Arctic state to the Arctic, its northern most point only 400 kilometres from the Arctic Circle. In fact, Ireland, Estonia, Latvia, Lithuania, Belarus, Poland, Germany, and Kazakhstan are all closer to the Arctic Circle than China. To date, none have designated themselves 'near-Arctic'. To place this Chinese claim in a broader perspective, the UK is closer to Africa than China is to the Arctic.

The Arctic's main diplomatic forum is the Arctic Council, with eight full members (Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden, and the United States). The UK and France hold observer status, and since 2013 so does China, despite both the US and Russia delaying this, a position dropped by Russia around the time of Beijing's Yamal investment.¹

Although the Arctic Council's mandate excludes military affairs, following Russia's invasion of Ukraine the Council is effectively on hold and may continue without Russia; so too are the separate meetings of the Arctic Chiefs of Defence Staff.

China calls the Arctic a 'new strategic frontier'.² Its leading strategists have called these regions the 'most competitive resource treasures'³ and propose that China's share of their resources should match its share of the world's population. Its 2015 National Security Law outlined the vague protection of 'China's rights' in these spaces.⁴

China's emerging strategy

Chinese publications meant for foreign readers do not emphasise Arctic military competition, but focus instead on scientific collaboration. However, internal publications often take a different tone, describing a strategic 'game of great powers'⁵ which will 'focus on the struggle over and control of global public spaces'⁶ including the poles; one leading academic has said that a state that controls the Arctic can control 'the three continents and two oceans'.⁷ In 2017 Xi Jinping included the Arctic in the Belt and Road Initiative,⁸ giving Arctic shipping lanes a new collective title, the 'Polar Silk Road'. Leading naval strategists have described a need to transform China from a 'large polar country' to a 'polar great power';⁹ others call China's becoming a 'polar great power' part of 'building China into a maritime great power'.¹⁰ Yet the 2018 White Paper, intended for foreign readers, did not mention 'polar great power'. Academics at China's maritime and naval universities have declared that whoever controls the Arctic will 'likely have the strategic initiative of the world'¹¹ and that the PLA Navy must 'bravely assume the historical mission of pioneering the Arctic'.¹²

That scientific expeditions can expand a state's regional influence is a common view among Chinese scholars, who argue that the extent of a country's scientific research determines 'its right to speak in Arctic affairs'.¹³ They also create immediate practical benefits: research

¹ Sørensen, C., and Klimenko, E. (2017).

² Doshi, R., Dale-Huang, A., and Zhang, G. (2021).

³ Ibid (page 1, Head of the Polar Research Institute for China).

⁴ Ministry of National Defense of the People's Republic of China (2017) National Security Law of the People's Republic of China (2015).

⁵ Ibid (page 12, extract from the 2013 Science of Military Strategy).

⁶ Ibid.

⁷ Ibid (page 13, quoting Guo Peiqing of China's Ocean University).

⁸ Ibid (page 35).

⁹ Ibid (page 8, quoting Chen Lianzeng, Deputy Director of the State Oceanic Administration).

¹⁰ Ibid (page 9, quoting Liu Cigui, Director of the State Oceanic Administration).

¹¹ Ibid (page 13, quoting Li Zhenfu from Dalian Maritime University).

¹² Ibid (page 13, quoting Yang Zhirong, associate researcher at the Naval Military Academic Research Institute).

¹³ Ibid (page 14, quoting Guo Peiqing of the Ocean University of China).

voyages help develop navigation techniques and map future strategic routes. Chinese scholars describe China's scientific expeditions providing the foundation to 'explore and utilize'¹⁴ Arctic waterways.

China's strategy therefore increasingly utilises scientific collaboration with Arctic member states, in order to give China the most reliably legitimate and internationally credible reason to be present in the Arctic. This is especially important for a country with no geographic presence in the Arctic, whilst furthermore being used to make Arctic states accustomed to its presence, helping to legitimise a future presence of other kinds. We see this deeper Chinese collaboration with Iceland for instance.

China's alternative governance mechanisms and friendly organisations

China is establishing its own organisations with Arctic states 'to deepen relations with governments and sub-national actors'¹⁵ as it begins creating 'alternative governance mechanisms'. One independent organisation, the Iceland-based 'Arctic Circle', has a leading Chinese Arctic scholar and a former United Russia member of the State Duma on its boards, but no representatives of the governments of Canada, the US, Denmark, Norway, Sweden or Finland. Some describe the organisation as 'complicating, if not challenging, the primacy of the Arctic Council' and 'giv[ing] Canada political competition'.¹⁶ The Circle helps increase China's prominence in the region, hosting a 'China Forum' and China-sponsored events.

Denmark's intelligence services warned in 2022 that China, like Russia, aims to destabilise parts of the Kingdom of Denmark,¹⁷ including Greenland, in the service growing 'geopolitical ambitions in the Arctic' and that 'Chinese or Russian intelligence services [can] try to create tensions in or between the three parts of the kingdom', taken to refer to growing independence movements in Greenland and the Faroe Islands.

China's new 'near-Arctic' claim appears designed to induce policy-makers in the West to least debate the concept in the knowledge that some will advocate China being brought further into the Arctic fora as a result, its presence gradually becoming accepted as a *fait accompli*. One recent report claimed that the American view of China's 'near-Arctic power' claims will become 'less of a defensible criticism'.¹⁸

China's emerging Arctic military capabilities

Beijing has begun developing Arctic military capabilities. In September 2015, the PLAN sent a naval group including three surface combat ships, an amphibious warship, and a fleet oiler to international waters off Alaska after exercises with Russia off the Sea of Japan. The group went within 12 nautical miles of the US Aleutian Islands during a presidential visit by Barack Obama to Alaska,¹⁹ causing speculation about the prospects of Chinese warships or

¹⁴ Ibid (page 15, quoting Lin Shanqing, deputy director of the State Oceanic Administration).

¹⁵ Lanteigne, M. (2020).

¹⁶ Koring, P. (2013).

¹⁷ Buttler, M. (2022).

¹⁸ Jeremy Greenwood. 'The Polar Silk Road Will be Cleared With Chinese Icebreakers.' *High North News*. 19 November 2021.

¹⁹ Page, J. (2015).

submarines crossing the Arctic Circle in the near future. Just afterwards, PLAN Fleet Task Force 152 including the guided missile destroyer *Jinan* and guided missile frigate *Yiyang* visited Denmark, Sweden and Finland. The Pentagon warns that China's growing submarine fleet was 'moving closer' to Arctic deployment capability.²⁰

Denmark's intelligence services have also warned that the PLA was using scientific research as a way into the Arctic and scientific activities had a dual (military) purpose.²¹ China uses scientific expeditions to test apparently military-capable technology. China's infrastructure projects also appear to have potential 'dual-use'. One Chinese former propaganda official attempted to buy a large tract of land in Iceland on which to build a golf course, despite the climate making golf impossible. Chinese investors also tried to buy a large tract of Svalbard from Norway, a former naval base on Greenland, to buy and expand a Finnish air base for use by large Chinese aircraft, to build three airports in Greenland and Scandinavia's biggest port in Sweden. This 'pattern' shows Chinese projects that may have military purposes.

Norway and Sweden now host three Chinese facilities, including a satellite station, Sweden's first fully Chinese-owned research facility, which according to one Chinese scientist involved 'provides China with a formal way in' to Western Europe. China uses Arctic bases to test 'satellite coverage, fixed-wing aircraft, autonomous underwater gliders, buoys'.

Russia and its relationship to China's developing leverage

Vladimir Putin has said that, for Russia, the Arctic is the 'concentration of practically all aspects of national security – military, political, economic, technological, environmental [and] resources'.²² Moscow is carrying out a 'massive... stark and continuous... military build-up', including GPS jamming in Norway and Finland and simulating airstrikes on Norway's military assets, reopening dozens of military bases and testing hypersonic missiles and nuclear-warhead delivery vehicles.

China already uses economic influence to induce states to modify their behaviour, including softening the posture of the Philippines over China's behaviour in the South China Sea, as President Duterte went from confrontation with China to announcing a military 'separation' from the US. Chinese FDI increased 12-fold from 2016 to 2021.²³

Despite its deepening relationship with China, Russia's defence minister Sergei Shoigu has expressed irritation that some non-Arctic states 'obstinately strive for the Arctic'.²⁴ But following the invasion of Ukraine, Western sanctions – though clearly necessary – are liable to deepen Russia's dependency on China, and with it Beijing's leverage.

A slow shift in Western security posture

²⁰ Stewart, P., and Ali, I. (2019).

²¹ Reuters. (2019).

²² Kremlin. (2014). Meeting of the Security Council on state policy in the Arctic. 22 April 2014. <http://en.kremlin.ru/events/president/news/20845>

²³ [World Investment Report 2021: INVESTING IN SUSTAINABLE RECOVERY \(unctad.org\)](https://unctad.org/en/publications-and-publications/world-investment-report-2021-investing-in-sustainable-recovery.aspx)

²⁴ Sørensen, C., and Klimenko, E. (2017).

The Biden administration has not published an overarching US Arctic strategy, although the branches of the US armed forces are doing so independently. Canada's government signals that it sees Chinese investment in the Canadian Arctic as a 'security risk' and its defence minister calls this 'a threat'.²⁵ Meanwhile Canada's chief of the defence staff says that after Ukraine, it is 'not inconceivable that our sovereignty [may] be challenged' by Russia.²⁶

Denmark's security posture is also shifting, such as signing a Letter of Intent with the UK in 2022. The head of Denmark's foreign intelligence service says Denmark now sees China as the 'third player', with Russia and the US, in Arctic 'emerging great power competition'.

Arctic states have deduced that 'accommodating China's Arctic ambitions rarely produces enduring goodwill'.²⁷ Norway was the first country to sign a cultural agreement with China in 1963 and the first to give China Arctic access 40 years later, as China built a research base on Svalbard. Since then, Russia has landed Chechen special forces on the archipelago; the following year it reportedly tested a mock amphibious assault on Svalbard. After the Norwegian Nobel Committee awarded the Nobel Peace Prize to Chinese dissident Liu Xiaobo, Beijing blamed Oslo. Despite Norway attempting to pacify China by supporting its bid to become an Arctic Council observer, Beijing has imposed trade restrictions on Norway and refused attempts to normalise relations, despite a condition of Arctic Council membership being 'open and transparent' dialogue.

Despite Sweden allowing China to open a satellite station, after independent Swedish organisation Svenska PEN awarded a prize to a Chinese-born Swedish national Beijing had kidnapped from Thailand and apparently forced into a confession, Beijing's ambassador to Stockholm told the Swedes that 'for our friends we have fine wine' but 'for our enemies we have shotguns'.²⁸ Sweden has withdrawn Chinese access to antennae and warned that the station might be used by China's military. China's satellite remote sensing station in Iceland, billed as an 'aurora observatory', launched during the first visit of a Chinese Icebreaker to the country, has drawn warnings over Chinese motives for an observation site in NATO airspace²⁹.

The United Kingdom's approach

Ironically, the United Kingdom has a better claim to 'near-Arctic' status, with a genuinely close relationship with most Arctic countries. The UK has major security interests in the region, is an observer in the Arctic Council, and the UN's International Maritime Organisation is based in London. The 2021 Integrated Review described the UK as 'the nearest neighbour to the Arctic',³⁰ and the Defence Command Paper described investing to project UK forces for 'NATO's flanks' including 'the High North and Arctic', explaining how the 'High North and maintaining security in the defence of the North Atlantic remains of great importance, underlining the value of our strong relationship with Iceland and our Joint

²⁵ Oddleifson et al. (2021).

²⁶ Cecco, L. (2022).

²⁷ Doshi, R., Dale-Huang, A., and Zhang, G. (2021)

²⁸ Ibid.

²⁹ Thiesing, D., and Lawless, J. (2016).

³⁰ HM Government. (2021). P.64.

Expeditionary Force (JEF) partners, Denmark, Estonia, Finland, Latvia, Lithuania, the Netherlands, Norway, Sweden and from spring 2021, Iceland'.³¹ The UK-led Joint Expeditionary Force 'deliver[s] forces at high readiness' to reinforce NATO.

World War Two demonstrated the 'clear... strategic importance of the region to the UK',³² with the Nazi capture of Norway exposing Britain's northern flank to potential attack and the projection of naval power into the Atlantic. In the Cold War it was accepted that an adversary would send ships and submarines through the GIUK Gap to prevent the reinforcement and supply of Western Europe, making the protection of the High North 'a matter of existential importance':³³ had World War III come 'it would have seen combat of great ferocity'.³⁴ In 2018 the House of Commons Defence Committee urged the UK to resume the leadership it had shown, explaining that the 'domination of the Arctic' by any hostile power 'would put the security of the wider North Atlantic Ocean at considerable risk', while other leading analysts have outlined how the Arctic is 'likely to become even more important than it was during the Cold War'.³⁵

Summary of recommendations

We suggest that **the balance of power in the Russo-Chinese relationship may now shift away from Moscow and towards Beijing**. The UK and allies will need to **closely monitor cooperation between Russia and China 'in the High North in areas such as missile defence systems, early warning, communications and satellites.'** This is especially relevant and prudent in light of Russian state signalling surrounding nuclear escalation amid ongoing security concerns in Europe.

The UK and allies might in general seek to **broadly limit Chinese Arctic engagement to Track II fora** (meetings between private citizens and nonstate actors; Track I refers to official diplomatic meetings), to **demonstrate to China that aggressive behaviour generally to increase its power-projection into the Arctic or greater Atlantic region will not bear fruit**.

The UK will also seek to balance strengthened commitments to the Arctic with other commitments as Global Britain, including to the Indo-Pacific, sometimes **encouraging allies to act where the UK cannot commit resource**.

Due to the territorial concerns of partners such as Canada it will be **important to differentiate between appropriate instances for NATO-led, and more bilateral, cooperation**, as well as **developing the Northern Group and Joint Expeditionary Force (JEF)**.

The NATO 2030 report proposes increased 'situational awareness across the High North and the Arctic' and the creation of a proper Arctic strategy, which the UK must show strong leadership in. Related proposals include a **NATO Standing Maritime Group for the Arctic**

³¹Ministry of Defence. (2021). P.20

³² House of Commons Defence Committee (2018). p.12.

³³ Ibid. p.14.

³⁴ Ibid. p.15.

³⁵ Ibid. (page 3)

and possibly an Arctic Command, which would depend on shared willingness among NATO allies.

A NATO Arctic Command may become more desirable especially if Sweden and/or Finland become NATO members, which would help strengthen both NATO's Northern and Eastern flanks. The UK government and the UK's NATO Ambassador should support Finland and Sweden membership to NATO.

As arguably the only credible 'near-Arctic' state, **the UK should create a form of 'ambassador for the Arctic' – likely a Special Envoy for the Arctic**, and must now include a **specific Arctic Department at the FCDO** to better develop Arctic diplomacy with allies and partners in the region.

Other organisations which the UK may join or increase on which it may its presence include the **Arctic Economic Council (AEC)**, as well as the **Arctic Coastguard Forum** and the **Arctic Security Forces Roundtable**.

The UK should aim to improve **submarine** and **anti-submarine warfare** capabilities including **reviewing whether the nine P-8 Poseidon aircraft at RAF Lossiemouth are sufficient**, and consider how best to **utilise OneWeb** and new **Space Command** functions.

However, as we have seen, **meaningful renewal of UK defence commitment to the High North** requires **considerable increases in UK defence spending generally**.

One important focus will be on **strengthening the vital relationship with Canada**. One option to strengthen the British-Canadian alliance would be the creation of a **Canadian, UK, and US (CAUKUS) security and defence pact**, for the transfer and sharing of nuclear submarine technology for the Canadian military, which currently has only diesel submarines.

The UK should also **seek to join other Arctic exercises with US, Canadian, Danish, French, and other countries' soldiers**. The UK has an Arctic training agreement with Norway: **training agreements with other Arctic states** would help forge closer ties and consolidate the UK position in the Arctic. In particular with Canada and the US, providing a training and integration aspect to a proposed CAUKUS agreement.

Glossary

AC: Arctic Council

AEC: Arctic Economic Council

AGDC: Alaska Gasline Development Corporation

AGLNG: Alaska Gasline and LNG LLC

AIIB: Asia Infrastructure and Investment Bank

AKARNG: Alaska Army National Guard

AMF(L): Allied Command Europe Mobile Force (Land)

AMS: Academy of Military Science

ANWR: Arctic National Wildlife Refuge

ASFR: Arctic Security Forces Roundtable

AUKUS: Australia, United Kingdom, United States

AZRF: Arctic Zone of the Russian Federation

BCT: Brigade Combat Teams

BERC: Barents Euro-Arctic Council

BRI: Belt and Road Initiative

CAAA: Chinese Arctic and Antarctic Administration

CACPR: Chinese Advisory Committee for Polar Research

CAUKUS: Canada, United Kingdom, United States

CCP: Chinese Communist Party

CNARC: China-Nordic Arctic Research Centre

CNNC: China National Nuclear Corporation

CNOOC: China National Offshore Oil Corporation

CNPC: China National Petroleum Corporation

COOEC: China Offshore Oil Engineering Corporation

COSCO: China Ocean Shipping Company

CPEAC: China Polar Expeditionary Advisory Committee

CPOGLP: Coastal Plain Oil and Gas Leasing Program

CRSSNPG: China Remote Sensing Satellite North Polar Ground Station

CSIS: Center for Strategic and International Studies

CSUK: U.S. Commercial Service UK

DDIS: Danish Defence Intelligence Service

DG: Director-General

EEA: European Environment Agency

EEU: Eurasian Economic Union

EEZ: Exclusive Economic Zone

EO: Executive Order

FCDO: Foreign Commonwealth and Development Office

FEFU: Far Eastern Federal University

FTA: Free Trade Agreement

GIUK/GIUK-N: Greenland, Iceland and the United Kingdom-Norway

HPU: Harbin Polytechnic University

IMO: International Maritime Organization

IMUMR: Institute of Multipurpose Utilization of Mineral Resources

IPCC: Intergovernmental Panel on Climate Change

LNG: Liquefied Natural Gas

MoD: Ministry of Defence

NATO: North Atlantic Treaty Organisation

NF: Northern Fleet

NMARI: Naval Military Academic Research Institute

NORAD: North American Aerospace Defense Command

NSR: Northern Sea Route

NUPI: Norwegian Institute of International Affairs

NWP: North West Passage

OBOR: One Belt, One Road Initiative (aka BRI)

PLA: People's Liberation Army

PLAN: People's Liberation Army Navy

PRC: People's Republic of China

PRD: Polar Regions Department
PRIC: Polar Research Institute of China
RAF: Royal Air Force
RCAF: Royal Canadian Air Force
RCN: Royal Canadian Navy
REE: Rare-earth Elements
SCMP: South China Morning Post
SCO: Shanghai Cooperation Organisation
SCS: South China Sea
SDA: Swedish Defence Agency
SIA: Social Impact Assessment
SIPRI: Stockholm International Peace Research Initiative
SKLFSE: State Key Laboratory of Frozen Soil Engineering
SOA: State Oceanic Administration
SOE: State-Owned Enterprises
SSC: Sweden Space Corporation
SSD: Strategic Studies Division
SSN: Nuclear-powered attack submarine
TSR: Transpolar Sea Route
USAA: US Army Alaska

Introduction

The traditional theatres of geopolitical competition are changing. The future centres of great power interactions will include those now assuming greater importance, such as the Indo-Pacific, and those that currently do not receive a great deal of attention, such as the Arctic. The Arctic has, in recent history at least, become associated with scientific collaboration and expeditions, and become seen as a region in which geopolitics has played a relatively minimal role. However, in recent years the Arctic has begun emerging as an important arena for competitive geopolitical interaction.

There are several definitions of what exactly we mean by the Arctic, but this paper uses the most common definition, being the region north of the Arctic Circle at 66.34' North (the Arctic Circle is the southern limit of the area in which there is at least one annual period of 24 hours during which the sun does not set and one during which it does not rise).³⁶ The region includes the Arctic Ocean and the surrounding land, including Greenland and Spitsbergen, covering an area of roughly 6 million square miles³⁷ and is home to roughly 4 million inhabitants.³⁸

The Arctic's main diplomatic forum is the Arctic Council (AC), an intergovernmental organisation established in 1996 and headquartered in Tromsø, Norway.³⁹ The forum's goal is to promote 'cooperation, coordination and interaction' between the Arctic states and the inhabitants of the Arctic, including its indigenous people, on questions of importance to the region.⁴⁰ However the mandate of the AC, outlined in its founding document the Ottawa Declaration, explicitly excludes military security.⁴¹ There are currently eight full members of the AC: Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden, and the United States, and 13 states have 'observer status' including the UK, France and, since 2013, China.⁴² The forum's chairmanship rotates between full members every two years; the current chair of the Arctic Council is held by Russia (from 2021 to 2023).⁴³

One cause of the Arctic's growing geostrategic importance is climate change, with the region believed to be especially vulnerable to its effects.⁴⁴ Between 1971 and 2019, the Arctic's annual average near-surface air temperature increased by 3.1C, three times above the global average⁴⁵ and the extent of Arctic September sea ice declined 43 per cent.⁴⁶

These increasingly warm conditions and their impact on sea ice levels have led to growing interest in a potential 'polar route' – or, more accurately, routes – which could, by some

³⁶ U.S. Coast Guard. (2021).

³⁷ Woods Hole Oceanographic Institution (2020).

³⁸ National Snow and Ice Data Center (2021).

³⁹ Arctic Council (2020). *About Us*.

⁴⁰ Ibid.

⁴¹ Ibid.

⁴² Arctic Council (2019). Non-Arctic States.

⁴³ Arctic Council (2021). *Russian Chairmanship 2021-2023*.

⁴⁴ Clifford, R. *What Are the UK's Interests in the Arctic?* The Polar Connection, Polar Research and Policy Initiative, 11 May, 2017.

⁴⁵ Arctic Council (2021). *Arctic Climate Change Update 2021: Key Trends and Impacts*.

⁴⁶ Ibid.

estimates, reduce shipping times by two weeks between Western Europe and East Asia, leading to potentially huge savings.⁴⁷ For example, it is claimed that a ship using the Northern Sea Route (NSR) from Shanghai to Rotterdam would take on average 35 days, two weeks less than via the Strait of Malacca and the busy and vulnerable chokepoint at the Suez Canal.⁴⁸

The region also possesses vast natural resources, including supplies of increasingly important rare-earth elements, a potential 90 billion barrels of undiscovered oil reserves (around 13 per cent of global estimates),⁴⁹ and 30 per cent of the world's undiscovered natural gas.⁵⁰ Regional deposits of elements such as zinc, nickel and lead are worth an estimated \$1 trillion⁵¹ and Russia values Arctic mineral deposits as worth over \$30 trillion.⁵² These are among the factors that may soon transform the region into an area of great power competition.

China's first formal, modern interaction with the Arctic was likely in 1920 when, as the Republic of China, it signed the Svalbard Treaty, also known as the Spitsbergen Treaty,^{53 54} which recognised Norwegian sovereignty over Svalbard.⁵⁵ However China's interaction in the Arctic remained minimal until the 1990s, when Chinese researchers began conducting Arctic, as well as Antarctic, expeditions, beginning with a research mission by the icebreaker *Xue Long*, purchased from Ukraine in 1993 (China now has two icebreakers, with a nuclear-powered icebreaker in development).⁵⁶ China increased its Arctic footprint in the twenty-first century with the establishment in 2004 of a research station, the Yellow River Station, on Svalbard, the China Remote Sensing Satellite North Polar Ground Station in Sweden (CRSSNPG) in 2016, and, after China became an Arctic Council observer state in 2013, the China-Iceland Arctic Science Observatory in 2018.^{57 58}

The Arctic has at times been a central concern for UK strategic planning, especially during the Cold War, but this broadly ceased to be the case in the 1990s. During the Cold War the Greenland-Iceland-UK (GIUK) Gap especially was regarded as a strategically crucial area of the North Atlantic; much of the Russian nuclear arsenal was located in the Kola peninsula and the 'High North': the most powerful nuclear weapon ever tested was the October 1961 test off Severny Island in the Novaya Zemlya Archipelago of a c.50-megaton weapon known as 'Tsar Bomba', whose blast wave circled the globe three times.

⁴⁷ U.S. Coast Guard (2019).

⁴⁸ Ibid.

⁴⁹ US Geological Survey in Lino, M.R. (2020).

⁵⁰ Lino, M.R. (2020).

⁵¹ Ibid.

⁵² Nick Allen and Edward Malnick, 'Royal Navy could expand into the Canadian Arctic to support allies'. *The Telegraph*, 25 September 2021.

⁵³ The Treaty was signed in 1920 and came into force in 1925.

⁵⁴ Kopra, Sanna. 'China and Its Arctic Trajectories: The Arctic Institute's China Series 2020.' *The Arctic Institute*,

⁵⁵ Spitsbergen/Svalbard. *The Spitsbergen Treaty*, 12 February 2020.

⁵⁶ Kopra, Sanna (2020).

⁵⁷ Ibid.

⁵⁸ Ibid.

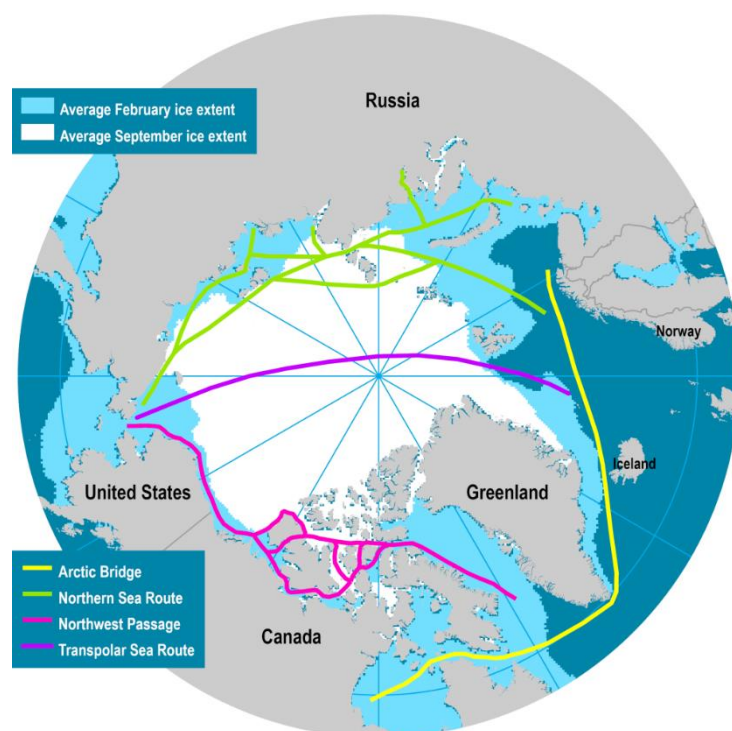
British interest in the Arctic is once more increasing, because risk to the United Kingdom is increasing. According to a recent Wilson Center study, 'Geographically, the potential for miscalculation, accident and confrontation is concentrated in the Greenland-Iceland-United Kingdom/Norway (GIUK/GIN) gaps, thereby increasing pressure towards the North Atlantic, the Barents Sea, and the Norwegian Sea. This area is a 'gateway region' where access and freedom of operation are key components, especially for Russia and NATO allies'.⁵⁹ The crisis in Ukraine suggests that these risks cannot be dismissed. Defence risks to the UK in the region are beginning to be better understood: for instance, while the UK is able to put only one submarine through the ice, Russia managed three simultaneously in 2021.⁶⁰

Furthermore, two major sea routes in the Arctic are likely to become more regularly navigable in the years ahead, with two other routes likely in the longer-term

- The Northwest Passage (NWP), which generally remains unpassable, especially in winter, though parts of the route became operational in summer 2007.
- The Northern Sea Route (NSR) is only passable in summer.

A third route, the Transpolar Sea Route (TSR), remains a more distant prospect, whilst a fourth route the Arctic Bridge route is only partially Arctic.⁶¹

Figure 1: Emerging polar shipping routes



⁵⁹ Boulègue, M. and Depledge, D. *It is Time to Negotiate a New Security Architecture for the Arctic*. Polar Points Blog No. 5. Wilson Center. 16 April, 2021.

⁶⁰ Maria Tsvetkova. 'Three Russian submarines surface and break Arctic ice during drills.' *Reuters*. 26 March, 2021.

⁶¹ Sharma, A. *China's Polar Silk Road: Implications for the Arctic Region*. Air University. 25 October, 2021.

- Once passable, the NWP alone will allow billions of dollars of savings for international shipping companies, drastically reducing maritime trading times whilst significantly cutting the maritime distance between East Asia and Western Europe, from the current 15,000 miles via the Panama Canal, to 8,450 miles via the NWP.⁶²
- However, it is expected that the NSR, which cleaves to the Arctic coast of Russia, will be the first Arctic Sea route to become sufficiently free of Arctic ice.⁶³ The NSR will cut the distance between East Asia and Western Europe to 8,000 miles from 13,000 miles (via the Suez Canal), taking 10–15 days off sea journeys. While the route was used at times for the Soviet military and for resource-extraction shipping, traffic fell drastically after the fall of the Soviet Union. Russia is now allocating resources to develop the route: in 2009, two German ships and a Russian icebreaker escort made the first commercial passage along the NSR between Busan in South Korea and Rotterdam, including stops *en route*.⁶⁴
- The TSR, which remains more hypothetical, would traverse the central region of the Arctic Sea, between the Bering Strait that separates Russia and the United States, and the Atlantic Ocean.⁶⁵
- While not strictly trans-Arctic, the so-called ‘Arctic Bridge’ route would connect the Russian port of Murmansk, or Narvik in northern Norway, to the Canadian port of Churchill, Manitoba on the western shore of Hudson Bay, thus connecting north-western Europe and the markets of the North American Midwest.⁶⁶

It is worth noting that increases in shipping would start from a low baseline: by 2030, two per cent of global shipping could transit through the Arctic by 2030, rising to five per cent by 2050, whilst obstacles to large-scale shipping will include costs and lack of (certainly initial) infrastructure. However, emerging technologies may help develop Arctic shipping, including artificial intelligence and robotics.⁶⁷

For the foreseeable future, shipping within the Arctic will require icebreakers, as well as ‘ice-class carriers’.⁶⁸ Russia currently has 46 icebreakers, with a further 11 being built and four more planned; the US has five with three planned; China has three and one under construction,⁶⁹ having launched its second icebreaker in 2018.⁷⁰ China also plans to develop a nuclear icebreaker, which so far only Russia has managed.

⁶² Sharma, A. (2021).

⁶³ Ibid.

⁶⁴ Ibid.

⁶⁵ Ibid.

⁶⁶ Ibid.

⁶⁷ Gaia Consulting (2017) in Jouan, N., Ogden, T., Black, J. Wood-Donnelly, C. and Coulson, S. (2021). *UK strategy for the High North: Policy levers to influence developments out to 2050*. RAND Europe.

⁶⁸ Sharma, A. (2021).

⁶⁹ Ibid.

⁷⁰ Luedi, J. (2019). ‘Are China’s Arctic ambitions a threat to Canada?’ *True North Far East*. 29 May, 2019.

A Chinese strategy for the development of the Arctic shipping lanes arguably dates from 2013 and China's decision to invest in Russia's Yamal LNG development⁷¹ (also supported by French investment through Total),⁷² since which time China has become more active in discussions on the future of the Arctic. In the middle of the same year, the MV Yong Sheng, a China Ocean Shipping Company (COSCO) cargo ship, made the first voyage from China to Rotterdam through the NSR (a year after the icebreaker *Xue Long* made its first Arctic voyage as a Chinese ship, from China to Iceland). China regards its presence in these routes as crucial if it is to address its so-called 'Malacca Dilemma'; the vulnerability of the Strait of Malacca, the main shipping channel between the Indian and Pacific Oceans.⁷³

The status of some of these emerging routes remains contested.⁷⁴ The NWP and NSR cross the 'territorial waters and Exclusive Economic Zones (EEZs) of Canada and Russia respectively'.⁷⁵ Russia asserts rights of regulation along the NSR via domestic legislation while its claim to the continental shelf around the 'resource-rich Lomonosov Ridge'⁷⁶ is under arbitration by a UN Commission which is considering competing claims from Canada and Denmark.

⁷¹ Ibid.

⁷² Lanteigne, M. (2019). 'The Changing Shape of Arctic Security.' *NATO Review*. 28 June, 2019.

⁷³ Sharma, A. (2021)

⁷⁴ House of Commons Defence Committee (2018). *On Thin Ice: Defence in the Arctic: Government Response to the Committee's Twelfth Report*. Thirteenth Special Report of Session 2017-19. 17 October, 2018.

⁷⁵ Canada's claim to internal territorial waters on the NWP is disputed by the US and others, who regard this area as "straits used for international navigation", while there are two low-level disputes relating to Canadian claims vis-à-vis the United States and Denmark.

⁷⁶ House of Commons Defence Committee (2018).

Chapter 1: Existing governance fora in the Arctic region

The term 'Arctic States' (or Arctic Eight) typically refers to eight countries – Canada, the United States, Denmark, Norway, Sweden, Finland, Iceland, and Russia – which possess territory within the Arctic Circle.⁷⁷ Around 4 million people live north of the Arctic Circle, approximately half being in Russia. Meanwhile, 'High North'⁷⁸ is generally taken to mean the European Arctic from the Norway-Russia border, including their maritime border in the Barents Sea, up to and including Greenland as a Danish possession. Five of the coastal countries on the Arctic Ocean also have EEZs whose territory includes parts of the Arctic Ocean.

Arctic Council

There is now a 'tapestry of Arctic international governance mechanisms' from the 'sub-regional to the pan-Arctic'. The most important intergovernmental forum for the Arctic is the Arctic Council.⁷⁹ The Council was launched in the Ottawa Declaration of 1996, including the 'A8' countries as well as representatives of the region's indigenous communities. However, following the Russian invasion of Ukraine in February 2022 the Council is now effectively on hold, with all its other national members issuing a joint statement in March 2022 advising that they would temporarily pause all participation.

The UK was represented at Ottawa as an observer and has held formal observer status since 1998, having been described as an 'engaged and influential participant in the Council's work'.⁸⁰ The Ottawa Declaration excludes 'military security' from the remit of the Arctic Council⁸¹ (however it has been suggested that the use of the words 'should not', instead of 'shall not', may allow future discussion of this area).⁸² The Arctic Council has been called a 'quasi-international organization'⁸³ but calls itself a 'high-level intergovernmental forum', not being an international organisation with independent legal character but a 'framework for state action'.⁸⁴ The United States and Russia have stated that they see the Arctic Council as 'the premier forum for intergovernmental cooperation'. Both 'were instrumental in delaying Chinese observer status from 2007 to 2013'.⁸⁵

The Council's eight Member States make all decisions of the Council by consensus. Below the Member States are the Council's Permanent Participants, six indigenous organisations with full consultation rights in Council negotiations; next are the Observers, the non-Arctic

⁷⁷ House of Commons Defence Committee (2018).

⁷⁸ Ibid.

⁷⁹ Nord (2016: 4) in Arctic Yearbook (2016).

⁸⁰ Jane Rumble OBE, Head of the Polar Regions Department (PRD) at the FCO, in House of Commons Defence Committee (2018). *On Thin Ice: Defence in the Arctic: Government Response to the Committee's Twelfth Report*. Thirteenth Special Report of Session 2017-19. 17 October, 2018.

⁸¹ Declaration on the Establishment of the Arctic Council, 1996.

⁸² House of Commons Defence Committee (2018).

⁸³ Nord (2016: 34) in Arctic Yearbook (2016).

⁸⁴ Rottem (2016: 169) in Arctic Yearbook (2016).

⁸⁵ Greenwood, J. *Is China worried about an Arctic choke point?* Brookings Institution, 22 September 2021.

states plus international and non-governmental organizations approved by Member States, able to participate to the degree the Member States allow.⁸⁶ As the Council itself describes, the Council carries research through subject-specific ‘task forces’ as well as ‘six working groups that research Arctic environmental and development matters’, whose reports are intended to help the Council formulate policy.⁸⁷ The Council’s recent binding international agreements have been the:

- Agreement on Cooperation and Rescue in the Arctic (2009);
- Agreement on Cooperation in Marine Oil Pollution Preparedness and Response in the Arctic (2011); and
- Agreement on Enhancing Arctic Scientific Cooperation (2017).

The Council was also central to the International Maritime Organisation’s binding International Code for Ships Operating in Polar Waters (2015).⁸⁸ Given the precluding of military discussions by the Council, the ‘Arctic 8’ have devised alternative fora to discuss military affairs, in particular the Arctic Security Forces Roundtable (founded in 2011) and the meetings of the Arctic Chiefs of Defence Staff (launched in 2012).⁸⁹ Russia, holding the Council chairmanship for 2021-23, had sought to resume meetings of the Arctic Defence Chiefs, which were put on hold in 2014 after Russia invaded Crimea.⁹⁰ The Council itself had been one of the few fora in which cooperation with Russia continued after its invasion of Crimea. Robert Huebert of the University of Calgary has said that the group might continue without Russia.⁹¹

Arctic Five

Another regional grouping, the Arctic Five, has also emerged, a looser group of the five Arctic Ocean littoral nations (not including Iceland), which, it has been suggested, may in future see positions emerge before discussion at the Arctic Council. However, the Arctic Five has no formal existence and discussions among these nations remain ‘*ad hoc*’.⁹² The Five can discuss, in principle, any issue. Their three most important gatherings have been at Ilulissat, Greenland (in 2008), Chelsea, Canada (2010), and Oslo (2015): non-binding declarations on the international legal regime applying to the Arctic and on the prevention of unregulated fishing emerged from Ilulissat and Oslo respectively.

Standing Committee of Parliamentarians of the Arctic Region

⁸⁶ Arctic Yearbook (2018).

⁸⁷ Ibid

⁸⁸ Ibid

⁸⁹ Boulègue, M. and Depledge, D. *It is Time to Negotiate a New Security Architecture for the Arctic*. Polar Points Blog No. 5. Wilson Center. 16 April, 2021.

⁹⁰ Peter B. Danilov. ‘Russia Wants to Resume Meetings Between Arctic Defence Chiefs.’ High North News. 19 January 2021.

⁹¹ Charlie Mitchell. ‘War in Ukraine: Moscow makes a move on Arctic.’ *The Times*. 14 March 2022.

⁹² Arctic Yearbook (2016).

Another forum, the Standing Committee of Parliamentarians of the Arctic Region, hosts the biennial Conference of Parliamentarians of the Arctic Region⁹³ for parliamentarians from the Arctic eight and European Parliament, plus Arctic indigenous peoples as permanent participants and observer governments and international organisations. The Standing Committee itself meets three to four times a year.⁹⁴ In its own words, the Committee also works ‘actively to promote the work of the Council and participates in the meetings of the Arctic Council as an observer’.⁹⁵ The Standing Committee hosted the 14th Conference in Oslo in 2021 (with representatives from Norway, Denmark, Sweden, Finland, Iceland, the US, Canada, Russia, and one from Germany representing the European Parliament).

Arctic Economic Council (AEC)

The AEC is an international business membership organisation, with members from all eight Arctic states. It has provided advice to the Arctic Council, but is independent of it. Member companies are also drawn from some non-Arctic states, including France and Germany.

Other bodies

Other organisations include:

Arctic Coast Guard Forum

This is currently the only forum for military cooperation that does not exclude Russia.⁹⁶ Its influence is regarded as limited compare to other groupings.

Arctic Security Forces Roundtable (ASFR)

Established by the US and Norway in 2010, the ASFR ‘facilitates chief of staff and working-level military exchanges’, and ‘without Russia the ASFR is essentially a NATO subcommittee’.⁹⁷

Barents Euro-Arctic Council (BEAC)

An intergovernmental forum for issues concerning the Barents Sea region. BEAC holds foreign ministers’ meetings every two years. Founded in 1993, its members are now Denmark, Finland, Iceland, Norway, Russia, Sweden and the European Commission. The UK is an observer. As of March 2022, activities involving Russia have been suspended.

⁹³ The Standing Committee of Parliamentarians of the Arctic Region (2021). (*Home*).

⁹⁴ Ibid.

⁹⁵ Ibid.

⁹⁶ Jouan, N., Ogden, T., Black, J. Wood-Donnelly, C. and Coulson, S. (2021). *UK strategy for the High North: Policy levers to influence developments out to 2050*. RAND Europe.

⁹⁷ Ibid.

Chapter 2: Chinese Strategy and Activities

China's aims, discourse, and strategic doctrine

In January 2018, the State Council of the People's Republic of China (PRC) released a White Paper entitled 'China's Arctic Policy', the first Chinese official document focused exclusively on the Arctic.⁹⁸ This Arctic strategy saw China declare itself a 'near-Arctic' state, outlining a 'Polar Silk Road' component within the wider BRI.⁹⁹

China's approach to the Arctic is developing because its aims in the Arctic have developed over the last generation, in line with greater expansionism generally. In the round, these aims can be described as, first, seeking to secure supplies of energy and mineral resources, which by implication is in competition with other states. Second, an Arctic presence would also generate greater control over and security for shipping lanes, for economic benefits and to mitigate the Malacca dilemma and create economic leverage: this could also result in greater control over shipping into the Western hemisphere. Third, seeking the capacity for potential power-projection into the North Atlantic – ergo, into the Western hemisphere – and potentially for access into the GIUK Gap in the manner of the USSR during the Cold War, and into Arctic states themselves (as demonstrated by China's construction of dual-use bases). Fourth, in investing in the Russian Arctic, China also seeks economic leverage over Russia, and potential future military leverage should China be able to covert current dual-use facilities into more fully operational military bases. The latter would become operational should China achieve sufficient economic leverage, so the one is designed to beget the other. Fifth, China seeks to be a presence in existing Arctic fora and to develop alternative Arctic fora: as it becomes a steadily greater influence over these fora it is liable to attempt to influence them to achieve the other aims described, and potentially to undermine the integrity of existing North Atlantic and Arctic states (western intelligence agencies are now beginning to warn that this is liable to be both China's and Russia's intention). Sixth, in the Arctic, including but not limited to Russia, China probably seeks to co-opt political actors to increase its influence generally. And seventh, in the Arctic as elsewhere, China seeks to increase its politico-economic and military power generally.

China's unconventional self-description as a 'near-Arctic state' is designed to imply legitimate interests – and a legitimate presence – in the region. However, it is useful to note that China's northernmost point is 932 miles from the Arctic Circle.¹⁰⁰ The United Kingdom is the nearest non-Arctic state to the Arctic Circle (the UK's most northerly point being Out Stack in the Shetlands, at 60°51'N), and therefore arguably has the best claim to being a "near-Arctic" state. But Ireland (55°23'4"N), Estonia (59°49'17"N), Latvia (58°05'N), Lithuania (56°27'N), Belarus (56°08'N), Poland (54°50'N), Germany (54°54'N), and Kazakhstan (55°43'N) are all closer to the Arctic Circle than China (53°33'39"N). To date, none of these

⁹⁸ State Council of the People's Republic of China (2018). *Full Text: China's Arctic Policy*.

⁹⁹ Lino, M.R. (2020). *Understanding China's Arctic activities*. International Institute of Strategic Studies (IISS).

¹⁰⁰ Kopra, Sanna. 'China and Its Arctic Trajectories: The Arctic Institute's China Series 2020.' *The Arctic Institute*. 17 March 2020.

states have designated themselves ‘near-Arctic’ (the United Kingdom is closer to Africa than China is to the Arctic).

Signifying Beijing’s new geostrategic emphasis on the region, China calls the Arctic a ‘new strategic frontier’ of the world.¹⁰¹ A recent head of its Polar Research Institute has described these regions as ‘most competitive resource treasures’: other officials have proposed that the PRC’s share of these resources should match its share of the world’s population, while China’s 2018 National Security Law created an unclear legal capability to protect ‘China’s rights’ in these spaces.¹⁰²

As Rush Doshi and others have discussed,¹⁰³ Chinese foreign policy texts intended for foreign consumption tend not to emphasise the role of military competition in the Arctic, instead focusing on scientific collaboration, but internal publications often have a different tone, including describing a strategic ‘game of great powers’ which will ‘increasingly focus on the struggle over and control of global public spaces’, including the poles. China, it is said, ‘cannot rule out the possibility of using force’. Chinese authors have suggested that control over such areas will create a ‘three continents and two oceans’ geographical advantage’ for China in the Northern Hemisphere.¹⁰⁴ As we discuss below, as it begins describing itself as a ‘near-Arctic’ state, China is also pursuing its own alternative fora and governance mechanisms in and for the region.¹⁰⁵

China’s White Paper, whose concepts were seen as unusual diplomatic manoeuvres, was not Beijing’s first incorporation of the Arctic into official goals. In 2017, Xi Jinping included the Arctic in his signature Belt and Road Initiative (BRI), launched in 2013 as a name for China’s large-scale infrastructure projects and associated initiatives worldwide, calling it one of the programme’s ‘blue economic passages’. Arctic shipping lanes were given a new collective title: the ‘Polar Silk Road’.¹⁰⁶

There is now an established bureaucracy within the CCP dedicated to Arctic policy. The primary managing agency is the Chinese Arctic and Antarctic Administration (CAAA), a Director-General (DG) level agency responsible, among other tasks, for developing China’s polar strategy and organising polar research.¹⁰⁷ The Chinese Advisory Committee for Polar Research (CACPR) sits within the CAAA, in charge of advising the Chinese leadership on polar matters as well as evaluating China’s overall performance in the region.¹⁰⁸ The Polar Research Institute of China (PRIC) was created for polar research, including marine biology and ecology.¹⁰⁹ In 2009 China established the Strategic Studies Division (SSD), whose tasks include analysing the polar environment and its impacts on regional politics, general

¹⁰¹ Doshi, R. et al. *Northern Expedition: China’s Arctic Activities and Ambitions*. Brookings Institution. April 2021.

¹⁰² Ibid.

¹⁰³ Ibid.

¹⁰⁴ Ibid.

¹⁰⁵ Ibid.

¹⁰⁶ Ibid.

¹⁰⁷ Sun, Yun. *The Intricacy of China’s Arctic Policy*. Stimson Center, 2018.

¹⁰⁸ Doshi, R. et al. *Northern Expedition: China’s Arctic Activities and Ambitions*. Brookings Institution. April 2021.

¹⁰⁹ Sun, Yun. *The Intricacy of China’s Arctic Policy*. Stimson Center, 2018.

economics and the security environment.¹¹⁰ Like the strategy behind major foreign policy decisions in China, Arctic strategy is also shaped by the wishes of the President, articulated in official documents and speeches.

Among internal-facing Chinese discussion of the strategic nature of the Arctic, in 2011 for example, Chen Lianzeng, the Deputy Director of the State Oceanic Administration (SOA), delivered a speech to the China Polar Expedition Advisory Committee (CPEAC) where he said that China's 12th Five-Year Plan (2011-2015) was intended to realise China's transformation from a 'large polar country' to a 'polar great power'.¹¹¹ In 2014, Liu Cigui, the former Director of the SOA, said that China's becoming a 'polar great power' would be a component of the coming Five-Year Plan, emphasising that this was a 'part of building China into a maritime great power'.¹¹² In these three instances, internal communications made by Chinese officials clearly outline its Arctic ambitions. Yet the 2018 White Paper, intended for foreign readers, made no mention of the term 'polar great power' at all.¹¹³

One of the most authoritative texts on Chinese strategy in the Arctic is the 2013 *Science of Military Strategy* published by the People's Liberation Army (PLA) Academy of Military Science (AMS) in Beijing.¹¹⁴ The paper should not be taken as an official explanation of China's military doctrine (although it does convey the views of strategists at an institute which includes some of the PLA's leading military thinkers).¹¹⁵ *Science of Military Strategy* mentions that future competition in the region is likely to be over strategic locations, emphasising that 'military preparation and pre-positioning' are important to secure these.¹¹⁶ Released the same year that China joined the Arctic Council as an observer, the document also discusses Western powers, explaining that if they constrain China's expanding interests, China may have no choice but to use military force: 'we cannot rule out the possibility of using force in a flexible way'.¹¹⁷ The *Science of Military Strategy* also asserts that a 'continuous expansion' of China's national interests into regions like the Arctic are important for the 'great rejuvenation' of Chinese society.¹¹⁸ The document strongly implies that the Arctic will be an arena for competition where military force may be required to protect interests, rather than simply a domain for scientific research.

Various Chinese academics echo this geostrategic view of the Arctic. During a discussion on strategic geography, Guo Peiqing from the Ocean University of China in Qingdao explained that a state that controls the Arctic can control 'the three continents and two oceans'.¹¹⁹ In

¹¹⁰ Doshi, R. et al. *Northern Expedition: China's Arctic Activities and Ambitions*. Brookings Institution. April 2021.

¹¹¹ Ibid.

¹¹² Ibid.

¹¹³ Ibid.

¹¹⁴ Ibid.

¹¹⁵ Ibid.

¹¹⁶ China Aerospace Studies Institute (2013). *In Their Own Words: Foreign Military Thought: Science of Military Strategy*.

¹¹⁷ Ibid.

¹¹⁸ Ibid.

¹¹⁹ Doshi, R. et al. *Northern Expedition: China's Arctic Activities and Ambitions*. Brookings Institution. April 2021.

addition, Li Zhenfu, a scholar at Dalian Maritime University has declared that whoever controls the Arctic will 'likely have the strategic initiative of the world in the future'.¹²⁰ Military scholars have also promoted the military dimension of China's engagement in the region. Yang Zhirong, an associate researcher at the Naval Military Academic Research Institute (NMARI) has said that the PLA Navy (PLAN) should 'bravely assume the historical mission of pioneering the Arctic'.¹²¹

China's Arctic strategy therefore consists of two broad parts. The first is the approach evident in documents such as the *Science of Military Strategy*, which emphasises the strategic nature of the Arctic and the measures China should take to maximise its advantage in future confrontations: 'new geopolitical struggles for control over... the polar regions... will tend to become intense'.¹²² The second is the less confrontational and more "diplomatic" approach which focuses on scientific endeavour and collaboration, but which China will need to employ to legitimise other approaches and increase its influence. Because scientific research gives China the most reliably legitimate reason to be involved in Arctic affairs, China's scientific activities are currently the most important element of its regional engagement. In essence, Beijing's strategy is China's scientific activity in the Arctic can be used as leverage for further engagement.

Scientific collaboration and the beginnings of deeper access

Scientific collaborations with Arctic states are all the more important strategically for a country with no geographical presence in the Arctic, as well as giving China a way to accustom Arctic states to its presence, helping legitimise a future presence of other kinds.

That scientific expeditions can expand a state's regional influence is a common view among Chinese scholars such as Guo Peiqing, who has argued that the extent of a country's scientific research determines 'its right to speak in Arctic affairs'.¹²³ Beyond increasing China's influence, scientific expeditions have practical benefits. For instance, research voyages help develop navigation techniques and map strategic shipping routes for future use.¹²⁴ In 2017, Lin Shanqing, then deputy director of the SOA, said that China's scientific expeditions provide the foundation for China to 'explore and utilize' Arctic waterways.¹²⁵

The China-Russia Arctic Forum and the China-Nordic Arctic Research Center are examples of how China uses the offer of scientific collaboration 'to deepen relations with governments and sub-national actors'.¹²⁶ China combines research with Arctic expeditions to build 'experience and access',¹²⁷ sending the *Xue Long* icebreaker on 10 Arctic scientific

¹²⁰ Ibid.

¹²¹ Ibid.

¹²² China Aerospace Studies Institute (2013). *In Their Own Words: Foreign Military Thought: Science of Military Strategy*.

¹²³ Ibid.

¹²⁴ Ibid.

¹²⁵ Ibid.

¹²⁶ Doshi, R. et al. *Northern Expedition: China's Arctic Activities and Ambitions*. Brookings Institution. April 2021.

¹²⁷ Ibid.

expeditions¹²⁸ and launching scientific and satellite bases in Norway, Sweden and Iceland. China's facility in Norway can 'berth more than two dozen individuals and provide resupply' and China uses the Arctic to test capabilities for 'satellite coverage, fixed-wing aircraft, autonomous underwater gliders, buoys'. In 2018 an unmanned ice research station was deployed during China's ninth North Pole expedition.¹²⁹

China also uses scientific endeavours for potential economic benefit. Beijing deemed its proposed location for an Arctic research facility in Canada desirable for proximity to energy resources.¹³⁰ As Jin Huijin, the deputy director of China's State Key Laboratory of Frozen Soil Engineering (SKLFSE), who was involved with the process said, 'we are interested not only in science, but also... markets like oil and gas'.¹³¹ Vice Foreign Minister Zhang Ming has argued that the changing natural environment of the Arctic has a 'direct impact on China's climate [and] environment'.¹³² But because China has no geographical presence in the Arctic, scientific presence is intended to justify a possible future presence of other types.

The first Chinese research station, the Yellow River Station on Svalbard, established in 2004, can sleep 25 people.¹³³ Sweden now hosts two major Chinese facilities: a ground-receiving satellite station opened in 2010 and the China Remote Sensing Satellite North Polar Ground Station in 2016, both near Kiruna.¹³⁴ The latter was an especially significant achievement for China, as the first fully Chinese-owned research facility in Sweden. But as one Chinese scientist told the *South China Morning Post* soon after it opened, the station 'provides China with a formal way in' to Western Europe.¹³⁵

China's 'alternative governance' approach and the Arctic: moral and material support for competing fora

China's scientific collaboration also involves research initiatives with foreign governments and universities located in the Arctic.¹³⁶ China joined the International Arctic Scientific Committee in 1996. In 2005 it became the first Asian country to host the Arctic Science Summit Week.¹³⁷ Following its admission as an observer to the Arctic Council, in 2013 China established the China-Nordic Arctic Research Centre (CNARC) in Shanghai, whose apparent aims are to promote greater understanding and research in the region through 'Track II' meetings (defined as meetings between private citizens and nonstate actors; Track I refers to official diplomatic meetings).¹³⁸ One of the primary funders of the CNARC is the Polar Research Institute of China: after the former's opening, the Institute's director Yang Huigen said that collaboration between China and Arctic countries would come 'naturally' as a

¹²⁸ Ibid.

¹²⁹ Ibid.

¹³⁰ Ibid.

¹³¹ Vanderklippe, Nathan. 'Chinese Scientists Look to Canadian Arctic for Research Outpost.' *The Globe and Mail*, 18 March 2015.

¹³² Ibid.

¹³³ Ibid.

¹³⁴ Ibid.

¹³⁵ Ibid.

¹³⁶ Ibid.

¹³⁷ Ibid.

¹³⁸ Ibid.

result of ‘widening economic cooperation’.¹³⁹ China has also sent high-level dignitaries to regional scientific fora.

During the inauguration of the 2015 China-Nordic Arctic Research Center symposium in Iceland, one source predicted that China ‘will play increasingly remarkable role in the future Arctic governance’.¹⁴⁰ Professor Yang Jian, Vice-President of the Shanghai Institute of International Studies, proposed that ‘China and other extra-regional actors should take full advantages of the multi-level structure of Arctic governance to realize the legitimate rights and bear related responsibilities’;¹⁴¹ Professor Guo Peiqing of the Ocean University of China suggested that ‘when one single power takes dominating power, Nordic countries’ interests are always threatened. Political influence of U.S. in Nordic states is shrinking and retreating, while China-Nordic cooperation could fill up the vacuum of power incurred by the U.S. decline in power’. Professor Valur Ingimundarson of the University of Iceland described his recent lecture at Shanghai’s Tongji University, ‘Forging National Narratives: Arctic Identity Politics in the Past and Present’¹⁴² on ‘historical narratives and myths used by the Arctic states to buttress their contemporary Arctic strategies and policies’.

This illustrates one of the fundamental challenges for China in its engagement with the Arctic. Not being an Arctic state, as Marc Lanteigne writes, if China is to succeed, it needs to present itself as a ‘legitimate stakeholder’ in the region without appearing to pursue a ‘dissenting agenda’ which might derail its efforts.¹⁴³ One aspect of China’s newly expansionist strategy elsewhere is creating ‘alternative governance mechanisms’.

As the Civitas paper *A Long March through the Institutions: Understanding and responding to China’s influence in international organisations* (2020) describes, within existing international institutions (such as UN bodies), China is attempting to influence and potentially co-opt bodies and appears to be beginning to subvert their institutional norms, such as the manner in which their directors are elected; elsewhere, Beijing is beginning to create ‘rival Chinese-dominated international institutions to propagate political norms’ and promote China’s aims generally. Some of China’s new ‘parallel’ institutions, like the Asian Infrastructure Investment Bank (AIIB) have been established to help build BRI-linked investment. Others, like the Shanghai Cooperation Organisation (SCO) are concerned with building China-centric dialogues about ‘hard security’.¹⁴⁴

Away from official intergovernmental fora, China is clearly using non-governmental associations to acclimatise others to its presence, encourage the view that its acceptance as

¹³⁹ Ibid.

¹⁴⁰ China-Nordic Arctic Research Center, 2015. P.5.

¹⁴¹ Ibid.

¹⁴² Of 9 December 2014 (in Ibid).

¹⁴³ Lanteigne, M. ‘Identity and Relationship-Building in China’s Arctic Diplomacy.’ *The Arctic Institute*. 28 April, 2020.

¹⁴⁴ Tylecote, R. and Clark, R. *A Long March through the Institutions: Understanding and responding to China’s influence in international organisations*. Civitas. August 2020.

a 'natural' player in Arctic affairs is inevitable, and seek out organisations where it will be treated as something like an equal partner.

However, some journalists in the Arctic region have suggested that criticism by the US and its allies of Beijing's claims to being a 'near-Arctic power' will become 'less of a defensible criticism of China'.¹⁴⁵ Dr Victoria Herrmann, President of the Washington DC-based Arctic Institute has called the US the 'weakest circumpolar nation' and suggested that the administration should focus on the threat of climate change instead of 'Chinese and Russian ambitions'.¹⁴⁶ However, Denmark's intelligence services recently warned that China, like Russia, aims to destabilise parts of the Kingdom of Denmark, including Greenland in the service of its growing 'geopolitical ambitions in the Arctic', warning in 2022 that 'Chinese or Russian intelligence services can... try to create tensions in or between the three parts of the kingdom',¹⁴⁷ a reference taken in Denmark to refer to the growing independence movements in Greenland and the Faroe Islands (also discussed below).

It will also be important to be mindful of the emergence of any future Chinese-backed organisations concerned with BRI development in the Arctic region, or with research. In September 2016, Russia's Far Eastern Federal University (FEFU) in Vladivostok and China's Harbin Polytechnic University (HPU) launched the Russian-Chinese Polar Engineering and Research Centre,¹⁴⁸ which conducts experiments for Arctic industrial development, such as ice-resistant platforms and concrete for polar regions¹⁴⁹ and examining the effects of ice loads on ships.¹⁵⁰

According to evidence given to the House of Commons Defence Committee¹⁵¹ China has become the 'most prominent actor' in the 'globalisation' of the Arctic. China's White Paper of 2018 has 'reinforced' its involvement, according to the Defence Committee, identifying the Northern Sea Route as a 'maritime highway of the 'Polar Silk Road'' within the wider BRI.¹⁵² The Defence Committee wrote that 'The general consensus of our evidence also supports the view that China's interests are currently primarily scientific and economic, rather than in pursuit of a 'hard power presence''.¹⁵³ Officials at the UK Ministry of Defence have suggested that 'Most of the activity appears to be economically motivated':¹⁵⁴ however we suggest that this view does not fully account for China's other ultimate aims.

¹⁴⁵ Jeremy Greenwood. 'The Polar Silk Road Will be Cleared With Chinese Icebreakers.' *High North News*. 19 November 2021.

¹⁴⁶ The Arctic Institute (2019).

¹⁴⁷ Buttler, M. (2022).

¹⁴⁸ Sørensen, C.T.N., and Klimenko, E. (2017).

¹⁴⁹ Ibid.

¹⁵⁰ Ibid.

¹⁵¹ Dodds, in House of Commons Defence Committee (2018).

¹⁵² Ibid.

¹⁵³ Ibid.

¹⁵⁴ Nick Gurr, Director of International Security Policy at the Ministry of Defence, in Ibid.

From shipping to naval activities

Driven by potential future shipping routes, Chinese companies are exploring investment opportunities in Arctic shipping. In 2013, the China Ocean Shipping Company Limited (COSCO) embarked on the first transit of the Northeast Passage to Europe via the Arctic by a Chinese merchant ship,¹⁵⁵ sending the *Yongsheng* from Europe to China in 2015 through the Northeast Passage and announcing that it was planning regular services through this route.^{156 157}

As the combined promise of access to resources and sea routes helps drive Chinese investments across the Arctic, and with the distance from Shanghai to German ports, for example, over 2,800 miles shorter through the Northern Route than via the Suez Canal,¹⁵⁸ new ice-capable carriers whose models were displayed at a recent trade fair in Shanghai¹⁵⁹ will become increasingly important investments for China. Xi Jinping launched a joint Sino-Russian - venture to manage ice-breaking LNG carriers on a 2019 visit to Russia (the joint venture consists of COSCO and Russia's Sovcomflot, with funding from Russian energy conglomerate Novatek and China's Silk Road Fund). Whilst this project is apparently still ongoing, there are now significant problems for Russia importing critically needed supplies and technology to help its Arctic infrastructure, and mineral extraction, due to ongoing sanctions over Russia's illegal invasion of Ukraine.

Between June and September 1999, China launched its first expedition into the Bering Sea (south of the Bering Strait between Alaska and Russia) and the Chukchi Sea (north of the Bering Strait), sending more than 50 Chinese scientists to study oceanic ice and geological conditions among other areas.¹⁶⁰ In 2003, China launched another expedition, with Canadian scientists, for "oceanic and meteorological research".¹⁶¹

It would be easy to cast doubt on China's involvement in the region simply as a self-described 'near-Arctic state', especially given the novel nature of the term and the lack of any particular diplomatic or official recognition it confers. But one of the purposes of China's scientific endeavours is to use apparently apolitical activity to create 'facts on the ground' – in essence, to make its 'near-Arctic' claim a physical fact, to allow China to involve itself in Arctic affairs to legitimise other activity in due course.

Indeed, beyond Chinese scholarship, there are already clear if quiet signals in Chinese behaviour that its posture has begun to shift. Beijing has begun investing in regional military

¹⁵⁵ Doshi, R. et al. (2021).

¹⁵⁶ Ibid.

¹⁵⁷ 'According to the Center for Strategic and International Studies (CSIS), between 2010 and 2018 Chinese shipping companies received approximately \$132bn in state support (direct subsidies and state financing), not including other informal help such as state fundraising and indirect subsidies. These practices have a major impact on western companies such as Maersk, whose CEO in 2018 called for governments to withdraw their support for domestic shipping industries, with support causing over-capacity and "profit-crushing" price reductions.' Paris, Costas. 'Maersk CEO Calls for End to Shipping Subsidies.' *MarketWatch*. 27 April 2018.

¹⁵⁸ Lino, M.R. (2020).

¹⁵⁹ Ibid.

¹⁶⁰ China.org (2020). *China's First Arctic Expedition*.

¹⁶¹ Doshi, R. et al. (2021).

capabilities. In September 2015, the PLAN sent vessels to international waters off the coast of Alaska, a naval group including three surface combat ships, an amphibious warship and a fleet oiler, all of which had just finished participating in a joint military exercise with Russia off the Sea of Japan.¹⁶² That the PLAN vessel group went within 12 nautical miles of the US Aleutian Islands – and did so during a presidential visit by Barack Obama to Alaska – led to ‘speculation about the prospects of Chinese warships or submarines crossing the Arctic Circle in the near future’.¹⁶³ Shortly afterwards, PLAN Fleet Task Force 152, including the guided missile destroyer *Jinan* and the guided missile frigate *Yiyang*, visited several Arctic countries including Denmark, Sweden and Finland,¹⁶⁴ demonstrating China’s growing naval capability in the region.¹⁶⁵ Other evidence of growing Chinese military activity includes warnings from the Pentagon that China’s growing submarine fleet was ‘moving closer to a deployment capability for the Arctic’¹⁶⁶ and while ‘there is no open source evidence that the Chinese military was directly involved in the Arctic component of [the Russian exercises named] Tsentr 2019, it is likely that it was monitoring the exercise carefully’.¹⁶⁷

China has also used scientific expeditions as a cover to test apparently military-capable technology. During one expedition in 2008, China deployed a group of underwater robots that would help predict changes in sea ice; in 2012, it deployed buoys to observe air-sea interactions in the Norwegian Sea.¹⁶⁸ A number of China’s infrastructure projects also appear to have potential ‘dual-use’. One Chinese former propaganda official attempted to buy a large tract of land in Iceland on which to build a golf course, despite the area’s wind speeds and extreme cold making golf impossible. Chinese investors also tried to purchase a 75-square mile area of Svalbard from Norway, a former naval base on Greenland, and to build three airports in Greenland, as well as to build Scandinavia’s biggest port in Sweden. While these projects did not come to fruition, China has succeeded in building a satellite station,¹⁶⁹ while a Chinese businessman acquired an inactive Swedish submarine base on the Swedish island of Fårösund in 2017;¹⁷⁰ China has also inaugurated a faster rail cargo link between China and Finland.

Shortly after China published its Arctic White Paper, Beijing attempted to ‘buy and greatly expand Finland’s Kemijärvi air base for use by large Chinese aircraft’, apparently for research. The offer was rejected, but it ‘fits a pattern’, of China building Arctic research stations and carrying out projects that may have geostrategic or military purposes, including oceanographic surveys, and analysts describing military potential in China’s bathymetric mapping.¹⁷¹

¹⁶² Ibid.

¹⁶³ Arctic Yearbook (2016).

¹⁶⁴ Doshi, R. et al. (2021).

¹⁶⁵ Ibid.

¹⁶⁶ Department of Defense, 2019a; 2019b, in Ibid.

¹⁶⁷ Buchanan and Bouléque, 2019, in Ibid.

¹⁶⁸ Ibid.

¹⁶⁹ Lino, M.R. (2020).

¹⁷⁰ Maritime Executive (2017). *Chinese Investor Acquires Port for Swedish Navy*. 12 April 2017.

¹⁷¹ David Auerswald. *A U.S. Security Strategy for the Arctic*. War on the Rocks, 27 May 2021.

Comparison of China's strategy in the Arctic and South China Sea

It has been argued that whilst China's strategy in the South China Sea involves '[d]istorting international legal norms' – such as using 'pseudo-legal arguments... inconsistent with UNCLOS', including claiming historic rights inside its 'nine-dash line' – Beijing's strategy in the Arctic Ocean is to cleave, for now, to international legal norms.¹⁷² Yet China's new 'near-Arctic' nomenclature could also be called an attempt to assign itself 'faux-rights', or at least to be a form of narrative-creation, whose purpose is to induce policy-makers in the West to at least debate the concept, knowing that some will propose that China is brought further into the relevant Arctic fora as a result. In this way its presence in the region is liable to gradually become accepted as a *fait accompli*.

Meanwhile in November 2019, Denmark's intelligence services also warned that the PLA was using scientific research as a way into the Arctic and that supposedly scientific activities in fact had a dual purpose.¹⁷³ China has alluded to at least some involvement in possible future military operations, such as in its 2017 'Vision for Maritime Cooperation under the Belt and Road Initiative'. This refers to Arctic shipping lanes as a 'blue economic passage', which would need the development of 'common maritime security for mutual benefits' that could include "joint development and sharing".¹⁷⁴ Much of the documents Chinese readership may take 'sharing' in this context to refer to encouraging other countries to accept a Chinese presence. Rear Admiral Yin Zhuo, for instance, has proposed that 'the Arctic belongs to all the people around the world, as no nation has sovereignty over it. China must play an indispensable role in Arctic exploration as we have one-fifth of the world's population.'¹⁷⁵

China also use economic influence to induce other states to modify their behaviour. An example of this process in the South China Sea has been the Philippines. While during his presidential campaign Philippine President Rodrigo Duterte promised to ride a jet ski waving the national flag to resolve the dispute with China over the Spratley Islands,¹⁷⁶ once in power, Duterte adopted a significantly softer tone; in his first trip to Beijing he announced a military and economic 'separation' from the United States. Manila and Beijing agreed to open negotiations over fishing waters in the South China Sea, and when referring to the landmark decision by a UN tribunal that China's regional maritime expansions had no basis in international law, Duterte proposed to 'throw it into the wastebasket'.¹⁷⁷ Between 2016

¹⁷² Elizabeth Buchanan and Bec Strating. 'Why the Arctic is not the 'next' South China Sea.' *War on the Rocks*. 5 November 2020. (Inc.: 'Beijing's claims to "historic rights" inside the nine-dash line, which would give China sovereignty over land features as well as sovereign rights to fishing, navigation, and exploration and exploitation of resources. This argument was rejected by an Arbitral Tribunal instituted under UNCLOS in 2016, which Beijing has refused to acknowledge as binding or legitimate.')

¹⁷³ Swee Lean Colin Koh. 'Frozen Pathways: China's strategic interest in the Arctic goes beyond economics.' *Defense News*. 12 May 2020.

¹⁷⁴ Ibid.

¹⁷⁵ Luedi, J. (2019).

¹⁷⁶ The Economist. 'Philippine President Duterte Has Shown How Not to Handle China.' 31 July, 2021.

¹⁷⁷ Ibid.

and 2021, Chinese direct investment into the Philippines increased 12-fold compared to the period between 2010 and 2016.¹⁷⁸

One of the similarities in China's approach to the Arctic Ocean and South China Sea is a concern over securing current or emerging shipping lanes, with the Arctic now 'eyed by Beijing as a key component of the Polar Silk Road aspect of their Belt and Road Initiative', especially the Northeast Passage, the most practicable route from Europe, but a major part of which consists of the Northern Sea Route, defined by Russia as largely within its EEZ.¹⁷⁹ China increasingly refers only to the Northeast Passage rather than the Northern Sea Route, while 'slowly starting to reject Russia's application of the same exceptionalism and historical argument for its Arctic exclusive economic zone'.¹⁸⁰ In sum, while China is using a thesis of territorial exceptionalism to project power in the South China Sea, it appears to be using the reverse argument in the Arctic, as Beijing helps internationalise a narrative of the Arctic Ocean as a shared resource or commons,¹⁸¹ in which a state's presence in general might broadly equate to its proportion of the global population and resource needs.

¹⁷⁸ Siga, Yuichi, and Kenji Kawase. 'Duterte Stresses Soft Approach toward China in Last Policy Speech.' *Nikkei Asia*. 27 July, 2021.

¹⁷⁹ Ibid.

¹⁸⁰ Ibid.

¹⁸¹ Elizabeth Buchanan and Bec Strating. 'Why the Arctic is not the 'next' South China Sea.' *War on the Rocks*. 5 November 2020.

Chapter 3: Russia and the opportunity and challenge of China

One of China's primary tools for increasing its influence within Arctic affairs is through bilateral relations. If China is to successfully integrate itself in the region it must for the foreseeable future maintain amicable relations with arguably the most important Arctic power: Russia.

The Arctic has traditionally held a central place within the political identity of Russia: Vladimir Putin has said that the Arctic is the 'concentration of practically all aspects of national security – military, political, economic, technological, environmental and that of resources'.¹⁸² As discussed below, the Arctic was prized for its natural resources by the Russian Empire, Soviet Union, and in modern-day Russia, as discussed in *Foundations of the Russian Federation's state policy in the Arctic until 2020 and beyond*, a 2009 Russian government document that emphasised the extraction of energy sources as one of the country's primary regional interests.¹⁸³

That more than 50 per cent of Russia's federal budget revenue comes from the export of energy resources¹⁸⁴ makes the Arctic especially crucial to the Russian economy. However, partly because most Russian energy companies have little experience developing offshore oil projects and the difficulty of the Arctic environment, only 20 per cent of the Barents Sea (at the western end of the Russian Arctic coast, to the west of the Novaya Zemlya archipelago) and 15 per cent of the Kara Sea (east of Novaya Zemlya) have been explored.¹⁸⁵ Russia has more experience in onshore development, with significant onshore deposits found at Vankor in Eastern Siberia, state-owned oil company Rosneft's largest field, and Novy Port in the Arctic, owned by state-owned Gazprom, from which China received its first cargo of the Russian Arctic crude grade in 2020.¹⁸⁶

Russia is keen to develop the Northern Sea Route,¹⁸⁷ including to help develop Russia's second-largest gas company Novatek's Yamal LNG and Gazprom's Net Novy Port deposits.¹⁸⁸ Russia's Administration of the Northern Sea Route, a federal public agency, is responsible for the administration of NSR shipping. Furthermore, Russia's 2013 law which stated icebreaker escorts had to fly the Russian flag¹⁸⁹ is due to be followed by legislation requiring Russian pilotage of all vessels on the Northern Sea Route, tolls, and a requirement for others to warn of their intention to use the route.¹⁹⁰ Russia is also discussing legislation to ban foreign ships from shipping Russian oil, gas, coal and condensate (light liquid hydrocarbons, typically separated from natural gas) along the route, as well as possibly any foreign

¹⁸² Sørensen, C.T.N., and Klimenko, E. 'Emerging Chinese–Russian Cooperation in the Arctic.' *SIPRI*. June, 2017.

¹⁸³ *Ibid.*

¹⁸⁴ *Ibid.*

¹⁸⁵ *Ibid.*

¹⁸⁶ *Ibid.*

¹⁸⁷ *Ibid.*

¹⁸⁸ *Ibid.*

¹⁸⁹ *Ibid.*

¹⁹⁰ Elizabeth Buchanan and Bec Strating. 'Why the Arctic is not the 'next' South China Sea.' *War on the Rocks*. 5 November 2020.

icebreaking and possibly even navigation along the regional coastline.¹⁹¹ Even so, the development of the NSR is contingent on the availability of the required infrastructure. Although the Russian government has launched initiatives such as the Russian Arctic Socio-Economic Development Strategy (2014), these projects appear to be yet to yield any major tangible results.¹⁹²

Beyond resource or commercial needs, the vast Russian Arctic region holds huge symbolic meaning for Russia's status, underscoring its position as a great power.¹⁹³ The Arctic is also of the utmost importance to the Russian military. In 1987 Mikhail Gorbachev declared that the Arctic should become a 'zone of peace', leading to gradual demilitarisation and increasing collaboration on questions such as the environment and ultimately to the creation of the Arctic Council in 1996.¹⁹⁴ This is now clearly in reverse, as Moscow 'adapt[s] Russia's force posture and revamp[s] its military capabilities',¹⁹⁵ as media report a 'massive... stark and continuous... military build-up',¹⁹⁶ including the declaration of an Arctic military district in January 2021.

A recent study describes the types of activity that Russia is carrying out as 'darkening', including 'unacceptable military activity at peacetime' such as GPS jamming in Norway and Finland and simulating airstrikes on Norway's military assets.¹⁹⁷ Russia's Arctic military strategy revolves around air and maritime early defence, which helps explain its reopening of 50 Soviet-era military posts including 13 air bases and 10 radar stations.¹⁹⁸ Russia has built dozens of Arctic military facilities of some kind since 2013, including airbases.¹⁹⁹ Robert Huebert of the University of Calgary has found that Moscow had extended and modernised airfields at 18 bases in the Kola Peninsula.²⁰⁰

Russia's Northern Fleet (NF), based at Severomorsk on the Kola Peninsula in the Western Arctic²⁰¹ oversees the northwest of Russia and the Arctic Ocean.²⁰² The fleet is intended to project power into GIUK-N (Greenland, Iceland, the United Kingdom and Norway),²⁰³ and is equipped with nuclear-powered missile and torpedo submarines, anti-submarine aircraft, and coastal troops.²⁰⁴ Russia has recently refurbished Nagurskoye air base, a Cold War

¹⁹¹ Anastasia Dmitrieva. 'Russia rescues ships in Arctic as it mulls Northern Sea Route ban for foreign vessels'. *SP Global*. 8 December 2021.

¹⁹² Sørensen, C.T.N., and Klimenko, E. (2017).

¹⁹³ Ibid.

¹⁹⁴ Boulègue, M. and Depledge, D. *It is Time to Negotiate a New Security Architecture for the Arctic*. Polar Points Blog No. 5. Wilson Center. 16 April, 2021.

¹⁹⁵ Ibid.

¹⁹⁶ Nick Paton Walsh, 'Satellite images show huge Russian military buildup in the Arctic'. CNN, 5 April 2021.

¹⁹⁷ Boulègue, M. and Depledge, D. (2021).

¹⁹⁸ Melino, M. and Conley, H.A. *The Ice Curtain: Russia's Arctic Military Presence*. Center for Strategic and International Studies.

¹⁹⁹ Sadat, M. *The US is unprepared to face the challenge in the Arctic: here's what it should do*. Atlantic Council. 31 January, 2021.

²⁰⁰ Charlie Mitchell. 'War in Ukraine: Moscow makes a move on Arctic.' *The Times*. 14 March 2022

²⁰¹ Melino, M. and Conley, H.A. *The Ice Curtain: Russia's Arctic Military Presence*. Center for Strategic and International Studies.

²⁰² Ibid.

²⁰³ Ibid.

²⁰⁴ Ibid.

communications post on the large Arctic island of Alexandra Land and Russia's most northerly military base, extending its runway to make it compatible with all types of military aircraft, including strategic bombers.²⁰⁵ Other new bases include Wrangel Island near the Chukchi Sea.²⁰⁶

Moscow has also tested technologies which may be deployed in the Arctic, such as hypersonic missiles (including testing in the Arctic of the new 3M22 Zirkon (or Tsirkon) anti-ship hypersonic missile)²⁰⁷ and which, according to the Commander of US Northern Command Air Force General Terrence O'Shaughnessy, constitute some of the 'biggest threats' in the Arctic region.²⁰⁸ Another major concern is the advanced testing of the Poseidon 2M39 torpedo, an unmanned nuclear-powered stealth vessel capable of delivering a nuclear warhead that would 'render swathes of the target coastline uninhabitable for decades', and which according to head of Norwegian intelligence Vice Admiral Nils Andreas Stensønes is part of a 'new type of nuclear deterrent weapons'.²⁰⁹

Bilateral relations between Russia and China in the Arctic are rooted in animosity towards the United States, where they view each other as a useful partner to counterbalance American influence.²¹⁰ The US pivot to Asia (which China views as its natural sphere of influence) and the expansion of NATO into the post-Soviet space (which Russia views as its traditional sphere of influence) have heightened this.²¹¹

China and Russia have already cooperated extensively in the Arctic oil and gas sector. In 2009, Rosneft signed a deal with the China National Petroleum Corporation (CNPC) whereby China would provide long-term loans, totalling \$25 billion, for Rosneft to repay with 300 million tonnes of oil.²¹² Two deals were signed in 2013: Rosneft and Sinopec signed a memorandum agreeing to export 100 million tonnes of oil between 2014 and 2024; Rosneft established a joint venture with China to develop energy resources in the East Siberian field of Srednebotuobinsk.²¹³ In 2014, Gazprom and CNPC signed a 30-year contract to supply natural gas through the Power of Siberia gas pipeline system, with deliveries expected to start at 5 billion cubic metres a year and eventually reach up to 38 billion cubic metres a

²⁰⁵ Nick Allen and Edward Malnick, 'Royal Navy could expand into the Canadian Arctic to support allies'. *The Telegraph*, 25 September 2021.

²⁰⁶ Melino, M. and Conley, H.A. *The Ice Curtain: Russia's Arctic Military Presence*. Center for Strategic and International Studies.

²⁰⁷ Thomas Nilsen. 'Two NATO Carrier Groups will Sail North for Exercise Cold Response.' *The Barents Observer*. 13 January, 2022.

²⁰⁸ Read, R. 'NORTHCOM Commander Warns the Arctic Is an 'Avenue of Approach' for Russia.' *Washington Examiner*, 22 July 2019.

²⁰⁹ Nick Paton Walsh, 'Satellite images show huge Russian military buildup in the Arctic'. *CNN*, 5 April 2021.

²¹⁰ Sørensen, C.T.N., and Klimenko, E. (2017).

²¹¹ Ibid.

²¹² Ibid.

²¹³ Ibid.

year.²¹⁴ The contract was estimated to be worth \$400 billion,²¹⁵ exporting 16.5 billion cubic meters of gas to China in 2021.²¹⁶

Yet, as with other projects, there has been financial difficulty from the beginning, with disputes about loan agreements between Gazprom and CNPC.²¹⁷ Research at the Stockholm International Peace Research Institute (SIPRI) argues that the tension between Russian and Chinese firms is partly because Russian companies have historically not felt an urgency to cooperate closely with China because they secured long-term deals at high prices in Europe,²¹⁸ while the Chinese see Gazprom and others as late to the negotiating table and lacking strong bargaining positions.²¹⁹

The most visible example of Sino-Russian cooperation in the Arctic is the Yamal LNG project, located on the Yamal Peninsula. This project is an operational liquefied natural gas plant that primarily ships gas to Asian markets, including China.²²⁰ In September 2013, following several rounds of negotiations, Novatek and CNPC signed a contract selling a 20 per cent stake in the project to the Chinese, and in September 2015, another 9.9 per cent was sold to the Silk Road Fund, a Chinese state-owned investment fund.²²¹ A year later the China Export-Import Bank and China Development Bank signed agreements to establish two 15-year credit lines for the project totalling €9.3 billion and RMB9.8 billion, respectively.²²² Chinese firms also have important roles in the second major natural gas project being developed in the Russian Arctic, Arctic LNG 2. The expense of Russia's planned network of ports and logistics centres is one reason President Putin has moved towards having Russia's NSR plans included in the 'Maritime Silk Road' element of the Polar Silk Road.²²³

While Xi Jinping has proposed that the BRI be merged with Russia's Eurasian Economic Union (EEU) initiative²²⁴ and in 2018 created a financial mechanism with a \$9.5 billion credit line to finance projects within the BRI and the EEU,²²⁵ China and Russia have inevitable differences over strategic direction in the Arctic. As Marc Lanteigne of the Norwegian Institute of International Affairs (NUPI) and Aglaya Snetkov at University College London have described, China does not yet indicate a wish to *directly* confront the United States in the Arctic, making the former the 'cautious partner' in the Sino-Russian Arctic relationship²²⁶ (the Kremlin however announced in 2017 that the Northern Fleet's nuclear capabilities were

²¹⁴ Ibid.

²¹⁵ Ibid.

²¹⁶ Aizhu, C. 2022.

²¹⁷ Ibid.

²¹⁸ Ibid.

²¹⁹ Ibid.

²²⁰ Hsiung, C.W. "The Emergence of a Sino-Russian Economic Partnership in the Arctic?" *The Arctic Institute*. 19 May, 2020.

²²¹ Sørensen, C.T.N., and Klimenko, E. (2017).

²²² Ibid

²²³ Swee Lean Colin Koh. (2020).

²²⁴ Sørensen, C.T.N., and Klimenko, E. (2017).

²²⁵ Hsiung, C.W. "The Emergence of a Sino-Russian Economic Partnership in the Arctic?" *The Arctic Institute*. 19 May, 2020.

²²⁶ Sørensen, C.T.N., and Klimenko, E. (2017).

being upgraded to 'phase NATO out of the Arctic').²²⁷ As Chinese diplomat Fu Ying has said, China has no 'formal alliance' with Russia and is not forming an 'anti-US or anti-Western' bloc.²²⁸ Even so, Russia has continued to securitise the region by building new military bases. One explanation for the apparent disparity between China's actions and rhetoric is that China is only beginning to test its military capabilities in the Arctic. To avoid appearing intrusive Beijing requires a softer apparent approach.

There is also a diverging view between China and Russia as to how the Arctic should be governed. As a claimed 'near-Arctic state', China's official policy has been that it respects the rights of Arctic states but advocates for recognition of the rights and concerns of non-Arctic states.²²⁹ On the other hand, Russia strongly believes in the privilege of Arctic states to establish norms of governance in the Arctic.²³⁰ This tension became clear in February 2015, when Sergei Shoigu, the Russian Defence Minister, said that it irritated him how some non-Arctic states 'obstinately strive for the Arctic'.²³¹ This may create difficulties in maritime sovereignty in particular. For example, China believes it has a right to explore parts of the Arctic Ocean that are in international waters, at times described as including the Northern Sea Route, which Russia views as within its internal waters.²³² According to Sørensen and Klimenko, although China is now 'generally in support' of Russia's perspective on the NSR, this could change 'as China builds up its Arctic capacity and presence'.²³³

As awareness is growing in the Kremlin of the risks of China's 'debt-trap diplomacy', a Russian policy of restricting the majority Chinese ownership of Russian Arctic companies has begun to emerge.²³⁴

While Russia will watch Chinese expansion into the Arctic closely, there are important areas where their countries will likely develop their relationship. Following the wave of sanctions imposed on Russian companies in 2014 in response to Russia's annexation of Crimea, then more drastically in 2022 after Russia's invasion of mainland Ukraine, Russian firms such as Novatek needed Chinese capital more than ever to develop major projects.²³⁵ Although joint Sino-Russian projects have a mixed track record of success, projects such as the Yamal LNG plant demonstrate that collaborations are possible. As rivalry in the Arctic with the major western countries continues, both states will be pushed to seek closer relations. Should they continue to do so, given Moscow's growing financial dependency on Sino-Russian cooperation in the Arctic would likely strengthen Beijing's position.

In 2014 Gazprom signed a \$400 billion deal with China National Petroleum Corporation (CNPC) to build the 'Power of Siberia' pipeline, of which 1,900 miles will be in Russia and

²²⁷ Brown, Daniel. 'Russia's Northern Fleet Beefs up Its Nuclear Capabilities to Phase 'NATO out of Arctic'. *Business Insider*. 1 June, 2017.

²²⁸ Sørensen, C.T.N., and Klimenko, E. (2017).

²²⁹ Ibid.

²³⁰ Ibid.

²³¹ Ibid.

²³² Ibid.

²³³ Ibid.

²³⁴ Elizabeth Buchanan and Bec Strating (2020).

²³⁵ Ibid.

3,100 miles in China.²³⁶ The deal, agreed after Western sanctions on Russia following its invasion of Crimea, is intended to provide China up to 38bcm of gas annually from 2025, is the first Russian project to take gas exclusively to China: 'Beijing is worried about reliance on importing gas by sea'.²³⁷

The Kremlin has also approved plans for the 'Power of Siberia 2' pipeline from Russia's largest gas reserves under the Yamal Peninsula, for up to 50 billion cubic metres extra gas per year and described as 'central to the relationship'.²³⁸ According to Anna Mikulska of the Center for Energy Studies at Rice University's Baker Institute for Public Policy,²³⁹ 'China didn't like the idea of arbitrage that Russia would have between China and Europe, and Russia ended up going with China's preference as the latter was in a stronger bargaining position after sanctions that were imposed on Russia', adding that 'apparently China got a great deal in terms of pricing — lower than what Germany was paying at that time'.

²³⁶ Hardy Graupner. 'Russian gas boost fuels Moscow's China pivot.' *DW*, 12 January 2022.

²³⁷ Chris Miller, assistant professor of International History, Tufts University, in *Ibid*.

²³⁸ Yuri Ushakov, Kremlin foreign policy adviser, in *Ibid*.

²³⁹ In *Ibid*.

Chapter 4: Outlines of other Arctic states' approaches to the region and China's engagement

Chinese SOEs and businesses have sought investment opportunities among several Arctic states and regions, including Greenland, Iceland and Canada. Despite various investments being unprofitable or ending in dispute between partners, each venture provides an opportunity for China to test methods of integration into the economies of the Arctic, with the apparent aim of using its economic presence to justify a presence on Arctic institutions and forums. Outlining China's approaches to the main Arctic states helps demonstrate how China combines these interests with a steadily more expansionist presence in general.

The United States

The years since the 2010s have seen growing concern in the United States over the geostrategic challenge of an increasingly assertive China.²⁴⁰ In relation to the Arctic, China has engaged the United States in Alaska with the aim of securing LNG supplies to satisfy future demand.²⁴¹ Chinese companies have been involved in developing Alaska's signature LNG project whose core component is an 800-mile pipeline from the North Slope to south-central Alaska.²⁴² In November 2017, during President Trump's visit to Beijing, three state-owned Chinese companies (Sinopec, China Investment Corporation and Bank of China) signed an agreement with the State of Alaska and the Alaska Gasline Development Corporation (AGDC) to invest up to \$43 billion to develop the project.²⁴³ However under Alaska's newly-elected Governor Mike Dunleavy two years later, the AGDC declined to renew its contract with the three Chinese firms to develop the LNG project.²⁴⁴ In late 2020, the Alaska Gasline & LNG LLC (AGLNG), led by Dunleavy's predecessor Bill Walker, expressed an interest in taking over the project and completing it by March 2028.²⁴⁵ In July 2021, the US Department of Energy announced a supplemental environmental review of the project, motivated partly by President Biden's focus on climate change and in response to a legal challenge by the Sierra Club.²⁴⁶

On the strategic level, Admiral Karl Schultz of the US Coast Guard has said that 'presence equals influence in the Arctic'.²⁴⁷ Given its now-annual deployments of icebreakers and other vessels, it has been suggested that China 'is in a position to have more presence in the Arctic than the United States will for some time'.²⁴⁸ The US currently has just one heavy icebreaker and one medium icebreaker, and neither of which can be used for 'year-round

²⁴⁰ Elizabeth Buchanan and Bec Strating (2020).

²⁴¹ Feng, Ashley, and Sagatom, Saha. 'China's Arctic Ambitions in Alaska.' *The Diplomat*. 20 April, 2018.

²⁴² Alaska LNG (2020). *Pipeline*.

²⁴³ White, Edward, and Emily Feng. 'China Signs on for \$43BN Alaska LNG Development.' *Financial Times*. 9 November, 2017.

²⁴⁴ The Associated Press. 'Alaska Plan to Partner with Chinese on Gas Line Scrapped.' *NEWS 1130*, 27 July 2019.

²⁴⁵ Reuters. 'Firm Led by Former Alaska Governor Seeks to Take over LNG Project.' 10 November, 2020.

²⁴⁶ Poux, Sabine. 'Environmental Regulators to Give Alaska LNG Pipeline Another Look.' *Alaska Public Media, PBS/NPR*. 9 July, 2021.

²⁴⁷ Greenwood, 2021.

²⁴⁸ *Ibid*.

Arctic icebreaking operations'.²⁴⁹ Compounding this issue is the fact that the larger vessel is mainly used in Antarctica. China has also announced plans to develop a new heavy icebreaker and heavy-lift semi-submersible vessel 'capable of salvaging and rescuing vessels in the Arctic', adding to two icebreakers and a nuclear-powered icebreaker reportedly in development.²⁵⁰

Almost all of the permanent US Army presence in the Arctic region is based in Alaska. The major US Army Alaska (USARAK) units include two brigade combat teams (BCTs), a combat sustainment support battalion, and two aviation battalions. The Alaska Army National Guard (AKARNG) also has just under 2,000 soldiers. Most of operational missions are under the administrative control of US Army Pacific.²⁵¹

The United States is developing a combined military response, including with the UK and other allies in the north Atlantic. The most important among these include:

- Confirmation at the 2018 NATO Summit of a new Joint Forces Command in Norfolk, Virginia, focused on the north Atlantic, and a 'co-located, revived US 2nd Fleet [also] focused on the Arctic.'
- The US Navy's Strategic Outlook for the Arctic of January 2019 described US purposes as including 'preserv[ing] the nation's strategic influence in the Arctic': this preceded the first Arctic exercises in decades;
- In 2018 and 2019 a US carrier strike group became the first force of its type to operate north of the Arctic Circle since 1991. The group also took part in NATO exercise Trident Juncture, hosted by Norway, the largest NATO exercise since the collapse of the Soviet Union;
- The US has now 'committed to the construction of a new class of icebreakers, the Polar Security Cutter (PSC)' (although there are questions over possible delays);²⁵²
- The US is reopening Air Force and Marines facilities in Keflavik in Iceland and carried out a large-scale freedom of navigation exercise in the Barents Sea in May 2020;²⁵³ and
- Other activities include US B1 bombers stationed at Norway's Orland air base recently completing missions in the eastern Barents Sea and US officials acknowledge that the US Seawolf stealth submarine has been deployed in the area.²⁵⁴

The United States remains the primary challenge to China in the Arctic. The Biden administration is yet to publish an overarching US Arctic strategy. Under the Trump

²⁴⁹ Ibid.

²⁵⁰ Ibid.

²⁵¹ U.S. Department of the Army (Headquarters). *Regaining Arctic Dominance: The U.S. Army in the Arctic*. Chief of Staff Paper #3. 19 January 2021.

²⁵² Greenwood, 2021.

²⁵³ Boulègue, M. and Depledge, D., 2021.

²⁵⁴ Nick Paton Walsh, 'Satellite images show huge Russian military buildup in the Arctic'. *CNN*. 5 April 2021.

Administration, the United States demonstrably viewed China's engagement in the Arctic as a direct challenge. In a May 2019 speech to the Arctic Council Ministerial Meeting in Finland, then-Secretary of State Mike Pompeo suggested that although China's observer status currently means that it must respect the sovereign rights of Arctic states, China's 'words and actions raise doubts about its intentions'.²⁵⁵ Pompeo turned to China's development of shipping lanes in the Arctic Ocean, calling it part of a 'familiar pattern' where China develops infrastructure using 'Chinese money, Chinese companies and Chinese workers',²⁵⁶ asking his audience whether they wanted 'crucial Arctic infrastructure' to become like Chinese-built roads in Ethiopia, for instance, that he called 'crumbling and dangerous after only a few years'.²⁵⁷ Secretary Pompeo's speech also targeted Russia, but its purpose was to single out China as the primary new challenger in the Arctic.

However on 5 January 2021, the US Department of the Navy's *A Blue Arctic: A Strategic Blueprint for the Arctic* described how the US Navy will project naval power as the Arctic becomes more 'navigable' in the coming decades ('blue' refers to changing geography as a result of melting sea ice, incorporating the Arctic Ocean within the sphere of 'blue-water navies', those able to operate globally).²⁵⁸ The paper states that without 'sustained American naval presence' in the Arctic, peace and prosperity will be challenged by Russia and China, with different 'interests and values'.²⁵⁹ It adds that Chinese actions, including increasing influence over Arctic states, threaten both Arctic states and people.²⁶⁰

The US Navy has three objectives for a Blue Arctic': an enhanced presence, strengthened cooperative partnerships, and building a more capable Arctic naval force generally.²⁶¹ As part of these goals, the report confirms that the US will continue to conduct military exercises, such as Exercise Dynamic Mongoose, in the region²⁶² (this brings together NATO surface ships, submarines and maritime patrol aircraft for ASW training off Iceland)²⁶³ and Operation Nanook, which tests US, Canadian, French and Danish warships in the North Atlantic above the Arctic Circle.²⁶⁴

Among US allies in the region, Denmark and the US have especially close relations: with Denmark a 'stalwart NATO ally' according to the State Department.²⁶⁵ Canada-US relations are naturally also close, with the world's longest international border and complex military cooperation such as through NATO and the North American Aerospace Defense Command (NORAD), the world's only binational military command.²⁶⁶

²⁵⁵ Boulègue, M. and Depledge, D., 2021.

²⁵⁶ Ibid.

²⁵⁷ Ibid.

²⁵⁸ U.S. Department of the Navy (2021).

²⁵⁹ Ibid.

²⁶⁰ Ibid.

²⁶¹ Ibid.

²⁶² Ibid.

²⁶³ Ibid.

²⁶⁴ Ibid.

²⁶⁵ U.S. Department of State (2020).

²⁶⁶ U.S. Department of State (2021).

Canada

Canada has by far the longest Arctic coastline of any state, at 162,000 kilometres, far longer than Denmark (by virtue of Greenland) at 44,000 kilometres, then Russia at 24,000 kilometres, followed by Norway at 14,000 kilometres. Canada's Arctic territory is vast and the region is possibly the most sparsely populated area on earth: Canada's northern region covers over 1.5 million square miles, an area larger than India but has only around 120,000 people (whereas the Arctic as a whole has around 4 million inhabitants).²⁶⁷ The limited population of the Canadian Arctic has helped create a dilemma for Canadian policy-makers, with a lack of infrastructure making extractive industries more expensive and Chinese investment easier to justify. Canada has been closely involved in all the main Arctic fora, but by 2011 a major opinion poll²⁶⁸ of the Arctic Council nations found Canadians the least willing to include new observer members. China's white paper on the Arctic was the country's first ever on a region outside Chinese territory,²⁶⁹ and having outlined its interest in spheres such as Arctic shipping, Canada Global Affairs Institute (CGAI) fellow Adam Lajeunesse stated: 'The message to Canada and other Arctic states is clear: China perceives a real interest in Arctic activity'.²⁷⁰

Despite the contested status of the emerging shipping routes discussed above,²⁷¹ the NWP and NSR cross Canadian (and Russian) territorial waters.²⁷² While some analysts have suggested that the Northern Sea Route via Russia to Europe is of more interest for China (China's Polar Research Institute predicts from five to fifteen percent of China's international shipping will use the Northern Sea Route by 2050, with infrastructure in the Russian Arctic more developed than in Canada),²⁷³ that the NWP would mean shorter steamings to the eastern seaboard of North America²⁷⁴ will likely lead to at least some interest.

Beijing has tried unsuccessfully to open a research facility in Canada, but the proposed site was close to energy resources (the main Chinese proposal was Tuktoyaktuk in the hydrocarbon-rich Mackenzie Delta).²⁷⁵ ²⁷⁶ As discussed, China generally tries to make 'scientific endeavours overlap with potential economic benefits'.²⁷⁷

²⁶⁷ *National Snow and Ice Data Center*.

²⁶⁸ The Ekos 2011 survey, in Luedi, J. (2019).

²⁶⁹ Luedi, J. (2019).

²⁷⁰ In Ibid.

²⁷¹ House of Commons Defence Committee (2018).

²⁷² Canada's claim to internal territorial waters on the NWP is disputed by the US and others, who regard this area as "straits used for international navigation", while there are two low-level disputes relating to Canadian claims vis-à-vis the United States and Denmark.

²⁷³ House of Commons Defence Committee (2018).

²⁷⁴ Ibid.

²⁷⁵ Vanderklippe, N. (2015).

²⁷⁶ Doshi, R. et al. (2021)

²⁷⁷ Vanderklippe, N. (2015).

China's considerable investment in commodities include Sinopec's 2012 purchase of a 49 per cent stake in Talisman Energy's North Sea arm and China National Offshore Oil Corporation (CNOOC) buying Canada's Nexen for \$15 billion in 2013.²⁷⁸

Mining projects have been the leading focus for Chinese investment in the Canadian Arctic, with investment of US\$19 billion in total in Canada's metals and minerals sector²⁷⁹ (including ventures in Arctic and 'Arctic-adjacent regions in and around Northern Québec, Labrador, Yukon, the Northwest Territories, and Nunavut').²⁸⁰ These include: SOE Jilin Jien Nickel Industry Co purchasing the copper and nickel miner Canadian Royalties for US\$192m in 2010; another SOE, Jinduicheng Molybdenum Group, buying zinc, copper and lead miner Yukon Zinc in 2008 for US\$113 million; state-owned Yunnan Metallurgical Group investing US\$100m in 2010 in a 50/50 zinc and lead mining joint venture with Selwyn Resources (of which it later took full control); and another SOE, Hebei Iron and Steel Group, took a 19.9 per cent stake in Alderon Iron Ore Corporation in 2013 (although their Kami iron ore project 'imploded' in 2020 despite prediction of a '\$5bn benefit over the 26-year life of the project [and] \$2.3bn in taxes').²⁸¹²⁸² But China's investments in Canada also have a 'patchy record of success'. Sinopec's Talisman investment ended badly, with the parties going into arbitration over Sinopec's claimed overpayment on the \$1.5 billion investment and demands for \$5.5 billion compensation.²⁸³ China's investments in commodities especially in the Arctic have a 'patchy record of success': a Chinese investor abandoned a Canadian zinc project and left the local government 'to clean up its pollution at its own cost'.²⁸⁴

While the 'failure of the Hebei-Kami project demonstrates that investment from a capital-rich Chinese firm does not necessarily guarantee success',²⁸⁵ in 2020 the Canadian government blocked the purchase of TMAC Resources by China's Shandong Gold Mining Co, despite the deal having the support of 97 per cent of shareholders and TMAC's fortunes having 'declined rapidly since 2016'. TMAC's Hope Bay facility in Nunavut has its own port and airstrips: Ottawa deemed the sale a national security risk,²⁸⁶ the Canadian Investment Review Bureau rejecting the acquisition 'for the purpose of safeguarding national security'.²⁸⁷ (TMAC was eventually purchased by Canadian firm Agnico Eagle.) The Canadian government 'has now signalled that it views Chinese investment in the Canadian Arctic as a security risk', making it more likely that foreign investment in Canada will remain dominated by US and European firms, even if 'the value of underdeveloped ore bodies in the Canadian North are lessened'.²⁸⁸

²⁷⁸ Doshi, R. et al (2021).

²⁷⁹ CIUA Investment Tracker data in Oddleifson, E., Alton, T. and Romaniuk, S.N. (2021).

²⁸⁰ Oddleifson, E., Alton, T. and Romaniuk, S.N. (2021).

²⁸¹ Ibid.

²⁸² Ibid.

²⁸³ Ibid.

²⁸⁴ Doshi, R. et al (2021).

²⁸⁵ Oddleifson, E., Alton, T. and Romaniuk, S.N. (2021).

²⁸⁶ Ibid.

²⁸⁷ Steven Nelson. 'Canada stops China from buying gold mine, cites national security.' New York Post. 22 December, 2020.

²⁸⁸ Oddleifson, E., Alton, T. and Romaniuk, S.N. (2021).

Canada's military posture is also shifting. Canada's Operation Nanook simulates the defence of Canada's northern regions.²⁸⁹ Deputy Defence Minister Jody Thomas warned that

'We should not underestimate at all that threat of resource exploitation in the Arctic by China in particular... China has a voracious appetite and will stop at nothing to feed itself, and the Arctic is one of the last domains and regions left, and we have to understand it and exploit it — and more quickly than they can exploit it.'²⁹⁰

More recently, Canadian policymakers have become concerned that President Putin may press territorial claims elsewhere beyond Ukraine, with news media reporting General Wayne Eyre, the chief of Canada's Defence Staff, as saying it was 'not inconceivable that our sovereignty [in the Arctic] may be challenged'.²⁹¹ Canadian Prime Minister Justin Trudeau and President Biden have discussed enhanced Arctic co-operation in light of Russia's new expansionism.

Then-Prime Minister Stephen Harper launched the renewal of Canada's Arctic military presence over a decade ago, including offshore patrol ships, a planned northern naval port (since downgraded to a refuelling station) and a new icebreaker.²⁹² Canadian analysts have also called for the modernisation of the North American Aerospace Defense Command (NORAD), headquartered in Colorado, which provides air security and aerospace early-warning for the US and Canada (including for hypersonic missiles), as the system does not yet cover most of the vast Canadian Arctic archipelago.²⁹³

Ottawa is analysing which submarines it will need from 2036 to 2042. Assistance on submarines is 'the number one capability' of interest from the UK.²⁹⁴ According to a Macdonald Laurier Institute (MLI) paper, Canada's dependence on diesel-electric submarines means it lacks 'crucial under-ice submarine capability'²⁹⁵ and 'nuclear submarines would be needed to properly counter Chinese and Russian Arctic capabilities given Canada's "vast maritime domain"',²⁹⁶ 'although the UK's recent signal to help Canada in the Arctic is a welcome gesture, it should further develop security partnership to provide its ally with the required technology to maintain dominance in the Arctic.'²⁹⁷

Denmark

China has been courting Arctic states with the goal of increasing its influence in Arctic affairs. Greenland, a possession and autonomous territory of the Kingdom of Denmark, is a notable case, having caught Beijing's attention for its strategic location and wealth of natural resources. It is also the hypothetical arrival point of the 'Polar Silk Road' through the Transpolar Passage. Greenland has extensive onshore and offshore hydrocarbon deposits

²⁸⁹ Government of Canada (2021). *Operation Nanook*.

²⁹⁰ Swee Lean Colin Koh. (2020).

²⁹¹ Charlie Mitchell. 'War in Ukraine: Moscow makes a move on Arctic.' *The Times*. 14 March 2022.

²⁹² Ibid.

²⁹³ Janet E. Silver. (2022).

²⁹⁴ Huebert, R. (University of Calgary), quoted on CBC, in Ibid.

²⁹⁵ Collins, J.F. (2021). *Deadline 2036: Assessing the requirements and options for Canada's future submarine force*. Macdonald Laurier Institute.

²⁹⁶ Ibid.

²⁹⁷ Ibid

and mineral basins; according to the US Geological Survey, the region surrounding Greenland has 25 per cent of the world's undiscovered hydrocarbon resources and 9 per cent of its coal and other materials,²⁹⁸ but lacks the infrastructure and capital required to properly exploit these resources.

The Chinese are not the first to note Greenland's strategic importance. Its location motivated the US to take control after the fall of Denmark to Nazi Germany in 1940²⁹⁹ and subsequently establish 13 army bases and four naval bases during the Second World War.³⁰⁰ The US military still operates Thule Air Base in Greenland, its northernmost military base, which provides missile early warning and space surveillance.³⁰¹

The Isua Project, based in south-western Greenland, is an example of Chinese investment in the region. This iron ore deposit was discovered in 1965. London Mining obtained a license in 2005, but following bankruptcy in 2014 the Hong Kong-based General Nice Development obtained an exploration license, marking the first fully Chinese-owned project in the Arctic.³⁰² (The company acquired the license two years after the Greenlandic government passed the Large-Scale Project Act which allowed companies to bring foreign workers into Greenland for the construction of large-scale mining projects.)³⁰³ The Greenlandic government has required General Nice to submit an exploration and closure plan, and to document the mine's financial capacity by the end of 2021 (the mine is due to begin operations in 2025).³⁰⁴

The Kvanefjeld/Kuannersuit region of Greenland is home to rare-earth element deposits, including neodymium, praseodymium and terbium,³⁰⁵ and the area is believed to have some of the largest volumes of uranium and zinc in the world.³⁰⁶ Rare-earth elements are becoming increasingly important for devices such as smartphones and renewable energy technologies, and interest in the Kvanefjeld/Kuannersuit deposit has increased in recent years.³⁰⁷

The Australian company Greenland Minerals acquired the project in 2007 and in 2016 announced a partnership with Chinese miner Shenghe Resources, with the latter buying 12.5 per cent of Greenland Minerals.³⁰⁸ Shenghe Resources is the second largest rare-earths company by output; its primary shareholder is the Institute of Multipurpose Utilization of Mineral Resources (IMUMR), a Chinese state institute.³⁰⁹ Investment in this project by a

²⁹⁸ Volpe, M. (2020).

²⁹⁹ Gjerstad, M., and Rogers, J. (2021).

³⁰⁰ Volpe, M. (2020).

³⁰¹ Hussein, Talal. "Thule Air Base: Inside the US's Northernmost Military Base in Greenland." *Airforce Technology*, Airforce Technology, 5 June 2019.

³⁰² Ibid.

³⁰³ Ibid.

³⁰⁴ Ibid.

³⁰⁵ Denton, Jenny. "'Red-Carded' Australian Miner Signals Intention to Play on in Greenland." *Mongabay Environmental News*, 12 July 2021.

³⁰⁶ Volpe, M. (2020).

³⁰⁷ Ibid.

³⁰⁸ Ibid.

³⁰⁹ Greenland Minerals Ltd (2020). One of the World's Most Significant Rare-earth Companies. STRATEGY.

Chinese company is of particular significance because China currently produces an estimated 80-90 per cent of the world's supply of rare-earth metals and the investment solidifies China's dominance in this vital industry.³¹⁰ Like the Isua Project, the Kvanefjeld/Kuannersuit project has faced opposition from environmental groups.³¹¹ Greenland experienced a nuclear accident in 1968, when a US Air Force B-52 carrying four hydrogen bombs crashed, causing contamination near Thule,³¹² leading to scepticism amongst the Greenlandic population about uranium mining (a by-product of mining operations at the site),³¹³ such that the government has considered a referendum on allowing uranium mining at all (according to WWF Denmark, the local population is roughly evenly split on the issue).³¹⁴ The future of the mine is uncertain. Disagreements on how to proceed led to the collapse of Greenland's government in early 2021, forcing a snap election in April 2021.³¹⁵ The winner of the election was the *Inuit Ataqatigiit*, an opposition party who won 37 per cent of the vote. Soon after being elected, its leader Múte Bourup Egede announced that the project would not go ahead.³¹⁶

In 2016, Denmark, with the support of the United States, prevented China acquiring a former military base in Greenland, while the US discouraged Denmark from allowing China to build international airports in Greenland by offering to invest, providing the airports could be used for civilian and military needs. (Denmark eventually decided to build the airports without outside help.)³¹⁷ Meanwhile two Chinese oil and gas SOEs, China National Petroleum Corporation (CNPC) and China National Offshore Oil Corporation (CNOOC), have reportedly expressed an interest in bidding for onshore blocks when these are opened.³¹⁸ In the wake of Russia's invasion of Ukraine, Denmark's security posture is shifting. In early 2022 Denmark and the UK signed a new Letter of Intent to strengthen military cooperation; Denmark also announced US troops may in future be stationed on Danish soil.

Denmark's intelligence service has warned that, like Russia, China is aiming to destabilise parts of the Kingdom of Denmark, including Greenland, with its 'geopolitical ambitions in the Arctic' growing. The Danish domestic intelligence service PET³¹⁹ warned in 2022 that threats from China include espionage and influence operations such as cyber-attacks, threatening authorities, firms and research organisations, including in the Faroe Islands and Greenland. It warned: '[t]he kingdom is particularly vulnerable in that regard as Chinese or Russian intelligence services can exploit controversial topics to try to create tensions in or between the three parts of the kingdom or complicate relations with allies, particularly the

³¹⁰ Volpe, M. (2020).

³¹¹ Ibid.

³¹² Ibid.

³¹³ "A Specialty Metal Project of Global Significance." *Greenland Minerals Ltd*, <https://ggg.gl/project/>

³¹⁴ Volpe, M. (2020).

³¹⁵ BBC News. *Greenland Election: Opposition Win Casts Doubt on Mine*. 7 April, 2021.

³¹⁶ Ibid.

³¹⁷ Lino, M.R. (2020).

³¹⁸ Ibid.

³¹⁹ Politiets Efterretningstjeneste, English name Danish Security and Intelligence Service (DSIS).

US',³²⁰ a reference which some will take to refer to the growing independence movements in Greenland and the Faroes.

The head of Denmark's foreign intelligence service the Danish Defence Intelligence Service (DDIS)³²¹ Lars Findsen also recently explained that Denmark now regards China as the 'third player', with Russia and the US, in the Arctic's 'emerging great power competition'. A DDIS paper outlined how the Arctic Ocean has been a formal part of China's overall strategic interests since it was first linked to the BRI in 2017.³²²

Norway

In 1950 Norway was one of the first countries to recognise the CCP government, and four years later one of the first to establish diplomatic relations.³²³ Norway became the first country to sign a cultural agreement with China in 1963. It was the first to provide China with permanent Arctic access forty years later.³²⁴

In 2004, Norway allowed China to build its first research base within the Arctic circle, the Yellow River Station on Svalbard³²⁵ (the base is run by the Chinese Arctic and Antarctic Administration).³²⁶ The Svalbard archipelago sits approximately halfway between Norway and the North Pole. While it is part of Norwegian territory, Norway exercises sovereignty in accordance with the 1920 Svalbard Treaty which grants equal access and commercial exploitation rights to its 46 contracting parties, but prohibits the construction of any naval base or other structures for 'warlike purposes'.³²⁷

In 2015, Norway demanded an explanation when the Russian Deputy Prime Minister flew into Svalbard: the following year Chechen special forces instructors landed on the archipelago before a parachute exercise over the polar ice cap, and a year later, Russia's Zapad 2017 exercise reportedly included a mock amphibious assault on Svalbard featuring electronic warfare. Also in 2017, Russia's Foreign Minister Sergei Lavrov attacked Norwegian policies towards the islands, linking these to the supposed NATO-led militarisation of the region.³²⁸ Norway's Defence Attaché to the United Kingdom Colonel John Andreas Olsen has emphasised that Svalbard 'is Norwegian territory and where Norwegian law applies... an attack on Svalbard would constitute an Article 5'.³²⁹ In the coming years, China is liable to take note of the tone of the western responses to these pressures.

Since the construction of the Svalbard research station, Beijing and Oslo have entered a period of increased tension. In 2010, the Norwegian Nobel Committee awarded the Nobel

³²⁰ Buttler, M. (2022).

³²¹ Danish name Forsvaret Efterretningstjeneste (FE).

³²² Mingming Shi and Marc Lanteigne. 'China's Central Role in Denmark's Arctic Security Policies.' *The Diplomat*. 8 December, 2019.

³²³ Ibid.

³²⁴ Ibid.

³²⁵ Swee Lean Colin Koh. (2020).

³²⁶ Sharma, A. (2021).

³²⁷ House of Commons Defence Committee (2018).

³²⁸ Ibid.

³²⁹ Ibid.

Peace Prize to Liu Xiaobo,³³⁰ a Chinese writer imprisoned for authoring a pro-democracy manifesto.³³¹ Despite the Nobel Committee's independent selection process, the Chinese government blamed Oslo and responded with a series of retaliatory measures.³³² Beijing summoned the Norwegian ambassador in China to express official displeasure at the decision and stopped all high-level contact between the two states.³³³ China also began boycotting Norwegian salmon, with Norway's share in the Chinese market dropping from 90 per cent in 2010 to 30 per cent in 2014.³³⁴

Oslo tried a variety of measures to ease tensions, including supporting China's bid to become an observer to the Arctic Council, thereby aiding its Arctic strategy, and joined China's Asia Infrastructure and Investment Bank (AIIB), giving the bank greater legitimacy.³³⁵ Norwegian leaders also refused to meet the Dalai Lama.³³⁶ This was not enough: in 2014, Beijing increased restrictions on Norwegian salmon, declaring them unsafe, and repeatedly refused attempts to normalize bilateral relations despite a condition of Arctic Council membership having been to pursue an 'open and transparent' dialogue with fellow Council member states.³³⁷

Sweden

In 1950, Sweden became the first Western nation to recognise the People's Republic of China, leading Mao Zedong to uncharacteristically receive the Swedish Ambassador to Beijing in person when he presented his credentials.³³⁸ Since relations were established, Sweden has welcomed Chinese investment. In 2011, the Sweden Space Corporation (SSC) gave China access to its antennas in Sweden, Chile, and Australia.³³⁹ In a world first, Sweden also allowed China to open a fully Chinese-owned satellite ground station in 2016, the China Remote Sensing Satellite North Polar Ground Station (CRSSNPGS), which Chinese policymakers recognised could have significant political benefits.³⁴⁰ Throughout this period, Sweden has appealed to China because of its history of neutrality.³⁴¹

Nonetheless, the relationship between Stockholm and Beijing is now also strained. In 2015, China sent agents to Thailand to kidnap Gui Minhai, a Chinese-born Swedish bookseller, taking him to China where he gave an apparently forced televised confession and was later imprisoned.³⁴² After two years, Gui was released and given limited freedom to move around China but was arrested soon afterwards and sentenced in February 2020 to 10 years in jail,

³³⁰ Doshi, R. et al (2021).

³³¹ Ibid.

³³² Ibid.

³³³ Ibid.

³³⁴ Ibid.

³³⁵ Ibid.

³³⁶ Ibid.

³³⁷ Ibid.

³³⁸ Depledge et al (2019).

³³⁹ Ibid.

³⁴⁰ Ibid.

³⁴¹ Ibid.

³⁴² Ibid.

having been charged with ‘illegally providing intelligence’ to overseas parties.^{343 344} In 2019, Svenska PEN, a non-governmental organisation of writers and journalists, awarded Gui its Tucholsky Prize, with the Swedish Minister for Culture in attendance, provoking a backlash from Beijing.³⁴⁵ Gui Congyou, the Chinese Ambassador to Sweden, said the award will bring ‘serious negative impacts’ on Swedish-Chinese relations and vowed that China will ‘take countermeasures’,³⁴⁶ adding that ‘for our friends we have fine wine’ but ‘for our enemies we have shotguns’, a comment far outside accepted diplomatic norms.³⁴⁷

The incident severely strained Sino-Swedish relations. The Sweden Space Corporation withdrew Chinese access to antennas, noting that ‘the geopolitical situation had changed’ since the contracts were signed in the early 2000s, whilst the Swedish Defence Agency (SDA) warned that the Chinese-owned satellite station might be used by the Chinese military given the militarised nature of the Chinese space programme.³⁴⁸ In 2020, Gothenburg ended its twin-city agreement with Shanghai, and Sweden closed all of its Confucius Institutes.³⁴⁹ As of 2022, relations between Sweden and China are at their frostiest for decades.

Iceland

China has made a considerable effort to involve itself in a number of European fora, including through its ‘five plus one’ with the Nordic countries.³⁵⁰ One of its members, Iceland, also a member of the Arctic Council, sees the Arctic Circle pass through its northernmost community, Grimsey Island, 25 miles off the north coast of the Icelandic mainland. The modern Sino-Icelandic relationship was forged in the 2008 financial crisis, when three of Iceland’s largest commercial banks defaulted, plunging its economy into recession.³⁵¹

In 2013, Iceland became the first European country to sign a free trade agreement (FTA) with China, intending to boost its domestic fishing industry and develop links between Iceland’s geothermal industry and China.³⁵² Iceland is one of the most tectonically active places on Earth, helping it pioneer geothermal energy, which uses the Earth’s internal heat to generate electricity.³⁵³ Several Chinese companies have invested and collaborated with Icelandic firms on a variety of projects. Orka Energy has collaborated with Sinopec on the joint venture Shaanxi Green Energy Geothermal Development, 51 per cent-owned by

³⁴³ Doshi, R. et al (2021).

³⁴⁴ Wong, Rachel. ‘Gothenburg Axes Twin City Agreement with Shanghai as Sweden Closes All Confucius Institutes.’ Hong Kong Free Press HKFP. 24 April, 2020.

³⁴⁵ Doshi, R. et al (2021).

³⁴⁶ Ibid.

³⁴⁷ Ibid.

³⁴⁸ Ibid.

³⁴⁹ Wong, Rachel. (2020).

³⁵⁰ Lino, M.R. (2020).

³⁵¹ Dams, T. et al. *China’s Arctic Strategy in Iceland and Greenland*. Clingendael- Netherlands Institute of International Relations. June 2020.

³⁵² Ibid.

³⁵³ UN Environment Programme (2020). *Iceland, a World Leader in Clean Energy, Supports Africa’s Push for Geothermal Power*. 24 June, 2020.

Sinopec.³⁵⁴ In 2018, Iceland's Arctic Green Energy Corporation and Sinopec received a \$250 million loan from the Asian Development Bank to develop geothermal resources in China.³⁵⁵

Chinese investments have not always been successful. In 2011, with the backing of the state-run China Development Bank, Huang Nubo attempted to purchase 100 square miles of Icelandic land with the intention of building a \$200 million luxury resort with a golf course, villas and a private airfield,³⁵⁶ despite the land being one of the windiest and remotest parts of the country, making it all but impossible to play golf.³⁵⁷ The plan was unsuccessful, but led to the China-Iceland Joint Arctic Science Observatory,³⁵⁸ initially designed as an 'aurora observatory', although it is also currently being used to research satellite remote sensing.³⁵⁹ This observatory occupies a 158-hectare site which has 'drawn warnings about what Chinese motives might be for building an observation site in NATO airspace'.³⁶⁰

Although Beijing has built a large foreign embassy in Reykjavik and committed considerable diplomatic resources, given Iceland's advantage in geothermal technology and China's treatment of intellectual property in other emerging industries, it is possible that Reykjavik will become more sceptical of China's interests in the sector.

Iceland's current Prime Minister, Katrín Jakobsdóttir, is opposed to NATO membership, although she says she respects the majority view in her country that Iceland remain a member³⁶¹ (albeit with no military of its own). It is not hard not to conclude that among Arctic states, Iceland appears to have been especially targeted by Beijing (however there is no suggestion that the Prime Minister's view is in any way related to this).

³⁵⁴ Ibid.

³⁵⁵ Ibid.

³⁵⁶ Doshi, R. et al (2021).

³⁵⁷ Ibid.

³⁵⁸ Ibid.

³⁵⁹ Dams, Ties, et al. (2020).

³⁶⁰ Vanderklippe, N. (2015).

³⁶¹ Megan Gibson. 'Iceland's prime minister: 'My opposition to Nato has not changed'. ' *New Statesman*. 9 February 2022.

Chapter 5: The United Kingdom and Arctic Strategy

China's activities in the Arctic should increasingly be a concern to the United Kingdom. UK economic interests will grow in the Arctic. In just one example, the UK has a strong ship brokering industry which is likely to become more important to the Arctic: ship brokers who are middlemen that match ships to cargoes, facilitate the sale and purchase of vessels and broke freight derivatives,³⁶² and UK-based ship brokering firms handle approximately 30-40 per cent of dry bulk and 50 per cent of tanker fixtures.³⁶³

Ironically, the United Kingdom has a better claim to being a 'near-Arctic state' than China. Merchants, sailors and scientists from the British Isles have visited the Arctic since at least the 15th century. The UK was an Arctic state until 1880 when it gave its remaining territories to Canada.³⁶⁴ Many Scottish towns and cities have regular transport links which facilitate socio-cultural bonds between Arctic communities and the United Kingdom.³⁶⁵ The UK has a genuinely close historic and working relationship with most Arctic countries including close historic and cultural connections to Denmark and Norway, having hosted the Norwegian Royal Family and resistance during the Second World War.³⁶⁶

The UK also has major security interests in the region. Five of the eight Arctic states are NATO members, whilst both Finland and Sweden may yet soon join. The development of the Northern Sea Route is also of future strategic importance to the global shipping industry, whilst the UK Government has an interest in the viability of potential Arctic shipping routes³⁶⁷ in the same manner that the UK has an interest in the Strait of Malacca between Singapore and Malaysia. The UK is also a member of Arctic-related diplomatic forums, including as an observer in the Arctic Council, whilst the UN's International Maritime Organization (IMO) is headquartered in London.

In 2021 the Integrated Review described the UK as 'the nearest neighbour to the Arctic region', stating that through the UK's 'role as a State Observer to the Arctic Council, we will contribute to maintaining the region as one of high cooperation and low tension. We will also maintain a significant contribution to Arctic science'.³⁶⁸

Echoing British strategic concerns regarding the Arctic, military planners are increasingly aware that conflict in eastern Europe has some capacity to move into the region: Russia's Kola Peninsula is the base for its hypersonic missiles and the naval element of its nuclear

³⁶² Maritime London. *UK Maritime Shipbroking Services*.

³⁶³ Ibid.

³⁶⁴ The Arctic Institute. *United Kingdom*. 19 June 2020.

³⁶⁵ Ibid.

³⁶⁶ The Royal House of Norway (2007). *World War II*. 8 January, 2007.

³⁶⁷ International Panel on Climate Change. *Climate Change Widespread, Rapid, and Intensifying*. 9 August 2021.

³⁶⁸ Cabinet Office (2021). *Global Britain in a Competitive Age: The Integrated Review of Security, Defence, Development and Foreign Policy*. 16 March 2021.

triad.³⁶⁹ This is even more significant considering Russian President Vladimir Putin's remarks on potential nuclear escalation during the Russian invasion of Ukraine in February 2022.³⁷⁰

The Defence Command Paper that shortly followed the Integrated Review described investments for the projection of UK forces for 'NATO's flanks', including 'the High North and Arctic'. It explained that '[t]he High North and maintaining security in the defence of the North Atlantic remains of great importance, underlining the value of our strong relationship with Iceland and our Joint Expeditionary Force (JEF) partners, Denmark, Estonia, Finland, Latvia, Lithuania, the Netherlands, Norway, Sweden and from spring 2021, Iceland' (the UK-led JEF 'deliver[s] forces at high readiness, across a range of roles' to reinforce NATO).³⁷¹ It noted that the UK's commitment to the High North would be strengthened, including by 'working through multilateral groupings, such as the Northern Group'³⁷² (with the Nordic and Baltic states, Germany, Poland, and later the Netherlands).

An outline of the United Kingdom's current approach

Historically, while the Royal Navy has had a leading role in Arctic exploration, World War Two 'provided a clear demonstration of strategic importance of the region to the UK'.³⁷³ Allied attempts to prevent the occupation – and, as it was not yet called, 'Finlandisation' – of Scandinavia did not succeed, partly due to a lack of units with sufficient cold weather-training.³⁷⁴ The occupation of Norway by Nazi Germany meant the risk of invasion of the UK from the north, exposing the northern flank of Britain (Scotland and the northeast of England) to potential sea and air attack, and subsequently a naval 'staging base' from which an adversary could project naval power by ship and submarine into the Atlantic.³⁷⁵ The Government recognised the 'unique hardship' faced by the men of the Arctic Convoys in the Arctic Star campaign medal.³⁷⁶

In the Cold War, as a founding member of NATO, Norway established a direct land border between a NATO state and the USSR on NATO's 'Northern Flank',³⁷⁷ as the north Atlantic once more became a zone of pivotal strategic importance. It was accepted that in a fighting war the Soviet Navy would send ships and submarines through the GIUK Gap and into the Atlantic to prevent the reinforcement and supply of Western Europe: 'preventing the Soviet Navy entering the North Atlantic from the High North thus became a matter of existential importance for NATO's position in Europe'.³⁷⁸ The UK contributed an army battalion to Allied Command Europe Mobile Force (Land) (AMF(L)), a NATO force for rapid deployment

³⁶⁹ Ibid.

³⁷⁰ Somerville et al. 2022.

³⁷¹ Ministry of Defence and Rt Hon Ben Wallace MP. (2021) *Defence Secretary affirms UK commitment to High North on visit to Denmark and Sweden*. 10 December, 2021.

³⁷² Ministry of Defence (2021). *Defence in a Competitive Age. Defence Command Paper 2021*. 23 March, 2021.

³⁷³ House of Commons Defence Committee (2018).

³⁷⁴ Ibid.

³⁷⁵ Ibid.

³⁷⁶ Ibid.

³⁷⁷ Ibid.

³⁷⁸ Ibid.

in case of confrontation including on NATO's northern or southern flank,³⁷⁹ but AMF(L) was disbanded in 2002.³⁸⁰

The UK has published two contemporary Arctic Policy Frameworks (in 2013 and an update in 2018), and the MoD published an Arctic Defence Paper in March 2022. The earlier Policy Frameworks outline a 'commitment to working cooperatively with the Arctic states [and] interested stakeholders to ensure the region remains stable and peaceful'.³⁸¹ In 2019 the MoD committed to publishing an Arctic Defence Strategy to make 'the Arctic and the High North central to the security of the United Kingdom',³⁸² as the UK 'emphasis[es] its role not just in NATO but also its own strategic concerns in what it increasingly terms the 'High North''.³⁸³ Yet while authors have described the promise of the Arctic for shipping – to 'relieve pressure on other geopolitical choke points such as Suez'³⁸⁴ – this will depend on resisting increased dominance of the region by potential challengers.

The 'UK's Defence Contribution in the High North' paper recognised that a number of potential threats exist within the Arctic. Reinforcing 2021's Integrated Review, the MOD paper recognises that the deteriorating global security environment poses the greatest threat to the security of the region, stating that 'the era of Arctic exceptionalism is ending'. The defence paper highlights that central to Britain's ability to deliver persistent effect in the Arctic is the commitment outlined in 2021's Defence Command Paper to establish a standing response force built around the Littoral Response Group (North). This will build on the Mountain and Cold Weather Warfare expertise of Britain's Commando Forces, comprising dedicated Commando Forces, ships, and helicopters optimised for operations in the High North. This Group will be able to operate alongside NATO and JEF Arctic partners across the region, with the ability to 'partner, operate, and fight wherever needed'.

Summarising the UK's defence contribution in the High North, the paper presented six aims for British defence in the region:

Protect critical underwater national infrastructure.

Ensure freedom of navigation in international seas and Exclusive Economic Zones in the Arctic region.

Increase UK training and operations in the area with Allies and international partners under ongoing NATO commitments.

³⁷⁹ Ibid.

³⁸⁰ Ibid.

³⁸¹ Depledge, 2012; Depledge, 2018 in Arctic Yearbook (2019).

³⁸² Ministry of Defence, 2018 in Ibid.

³⁸³ Depledge and Rogers, 2016 in Ibid.

³⁸⁴ Ibid.

Invest in research and development to build a sustainable and modernised Defence capability for the region.

Maintain a periodic Royal Navy presence in the High North. The strategy also reinforces support to Arctic Allies to preserve the stability and security of the Arctic region.

Contest malign and destabilising behaviour. The UK's defence contribution to both the High North and to Arctic security concerns can clearly be identified as reinforcing 2021's Integrated Review, which acknowledges that the changing international geopolitical environment as one now characterised by a return to great power competition and rivalry. Furthermore, whilst the Integrated Review clearly identified Russia as the nation's primary national security concern, and China as a systemic rival, the 2022 defence paper places an emphasis on the UK working closer with both Arctic and non-Arctic allies, in ensuring that the region does not become a contested geopolitical environment which will have the ability to threaten the UK's national interests, and those of its allies, in a similar manner in which the South China Sea has become, for instance.

It is becoming apparent to Arctic states that, as Rush Doshi has outlined, 'accommodating China's Arctic ambitions rarely produces enduring goodwill'. Norway backed China for observer status at the Arctic Council; Sweden was the first country to let China construct a completely Chinese-owned satellite station.³⁸⁵

The House of Commons Defence Committee 2018 report *On thin ice* proposed that the leadership the UK has previously shown in the defence of the region should broadly be rejuvenated, as '[t]he Arctic and High North are central to the security of the United Kingdom and history has shown that its domination by a hostile power would put the security of the wider North Atlantic Ocean at considerable risk.'³⁸⁶

Emerging UK responses to threats in the High North include the renewal of under-ice submarine capability (the Trafalgar class nuclear submarine HMS Trenchant surfaced through Arctic ice in 2018: the Royal Navy is understood to be 'working towards ensuring that the newer Astute-class nuclear-powered submarine will be similarly capable of under-ice missions').³⁸⁷ According to Depledge et al (2019):

'Combined with the UK-led battlegroup in Estonia (now part of NATO's enhanced forward presence in direct response to Russian actions against Ukraine), a chain of military cooperation stretching from North America to the Baltic is emerging, encompassing not just the High North, but the Wider North.'³⁸⁸

³⁸⁵ Doshi, R. et al (2021).

³⁸⁶ House of Commons Defence Committee (2018).

³⁸⁷ Ibid.

³⁸⁸ Duncan Depledge, Caroline Kennedy-Pipe and James Rogers (2019). *The UK and the Arctic: Forward Defence*. Arctic Yearbook. 2019.

Following the first patrol of Icelandic skies by Royal Air Force (RAF) Typhoons in 2019 (and the introduction in 2020 of new P-8 Poseidon ‘sub-hunter’ aircraft based in RAF Lossiemouth in Moray),³⁸⁹ expanded UK-Denmark cooperation could include activities focused on Greenland.³⁹⁰

Today, the Polar Regions Department (PRD) at the FCDO oversees the Antarctic as well as the Arctic: its director told the Commons Defence Committee that ‘the Antarctic occupies the greater part of the Department’s time, because of the UK’s obligations under the Antarctic Treaty, and the need to maintain the territorial claim to British Antarctic Territory and other territories in the South Atlantic.’³⁹¹ The PRD coordinates UK policy towards the Arctic but ‘policy leads are dispersed across different Government departments’ (the House of Lords Arctic Committee has also questioned the effectiveness of this arrangement and the adequacy of PRD resources).³⁹²

However, without significant increases to UK defence spending any deeper commitment to Arctic security is liable to be hamstrung to some degree: following Russia’s invasion of Ukraine there have been calls from high-profile UK politicians for defence spending to rise by at least 25 per cent. The RAF, for example, had over 800 fighter and bomber aircraft at the end of the Cold War: it now has barely over 100 Eurofighter Typhoons and 23 F-35s. In 1990 the Royal Navy had 13 destroyers, 33 frigates, 25 nuclear attack submarines, five ballistic missile submarines and three aircraft carriers. In 2022 it has six destroyers, 13 frigates, five nuclear attack submarines, four ballistic missile submarines and two aircraft carriers.³⁹³

While UK attention to the Arctic arguably began to be rejuvenated in 2013 with the release of the first Arctic White Paper, the Arctic Policy Framework, its focus was environmental and commercial,³⁹⁴ but the United Kingdom has since begun recreating its Arctic-oriented military capabilities. Despite successive cuts to defence spending in real terms, following the 2021 Integrated Review the UK is introducing the P-8 aircraft, having lacked any maritime air patrol capacity following the scrapping of the Nimrod aircraft in the 2010 Strategic Defence and Security Review. The Royal Navy and Royal Marines will retain the ability to deploy naval and amphibious forces to Norway if needed.³⁹⁵ After becoming Defence Secretary in 2010, Liam Fox ‘singled out Norway as one of the UK’s key defence partners’, partly due to its importance to UK energy supply, among other reasons, establishing the Northern Group

³⁸⁹ Ministry of Defence and Rt Hon Gavin Williamson (2018). *Defence Secretary announces new Defence Arctic Strategy*. 30 September, 2018.

³⁹⁰ Arctic Yearbook (2018).

³⁹¹ Ibid.

³⁹² Ibid.

³⁹³ Source: Ministry of Defence, Statista, Historic UK, UK Defence Journal, in Howard Mustoe, ‘More guided munitions and fighter jets: what higher spending will mean for Britain’s armed forces.’ *The Telegraph*, 13 March 2022.

³⁹⁴ Ibid.

³⁹⁵ Knack, A., Black, J. and Harris, R. (2020). *Standing Together on NATO’s North Flank: UK-Norwegian Defence Cooperation*. RAND Corporation. 9 December, 2020.

of Defence Ministers to discuss northern European defence and security cooperation, including the Arctic.³⁹⁶

However, the UK's relative proximity to the region informs its posture as the second NATO country in the Arctic and relative keenness to '[put] hardware into the High North'.³⁹⁷ One example, taking place mainly in March and April 2022, is the Norwegian-led NATO exercise Cold Response, which includes the aircraft carriers HMS Prince of Wales and USS Harry S Truman, and follows Russian Arctic tests of the new 3M22 Zirkon (or Tsirkon) anti-ship hypersonic missile.³⁹⁸ The new HMS Prince of Wales is the second Queen Elizabeth-class carrier, able to operate 24 to 36 F-35 fighters and 14 helicopters, including the Apache Attack Helicopter that Britain has trained with at Bardufoss air station in Norway since 2019.³⁹⁹ Cold Response is NATO's largest Arctic exercise since the 1980s, mimicking the reinforcement of northern Norway, with 35,000 soldiers from 28 countries participating in land, sea and air training.⁴⁰⁰

Recognising the return of the Arctic as a geostrategic theatre

During the Cold War, in 1958 the USS Nautilus became the first submarine to surface at the North Pole.⁴⁰¹ Since the SSN (a nuclear-powered attack submarine) HMS Dreadnought's⁴⁰² patrol to North Pole in 1970, the Royal Navy has also 'kept a close eye on the icy waters of the Arctic Ocean'⁴⁰³ and the Swiftsure class of nuclear-powered submarines were the first Royal Navy submarines designed for under-ice conditions. The United States placed acoustic arrays in the ice cover in the early 1970s, 'for scientific and operational intelligence that demonstrated that the Russians were deploying submarines under the ice', as the Arctic became 'an area of utmost importance to East and West'.⁴⁰⁴ The US and UK carried out combined under-ice exercises in 1979,⁴⁰⁵ but as Russia increased its naval assets in the Arctic, its 'operating areas became considerably more familiar to Soviet submariners than [to] NATO's'.⁴⁰⁶ Hennessey and Jinks explain that British and American SSNs had to:

'operate [far] from US and UK bases, where operating experience was relatively poor. The considerable advantage the US Navy and Royal Navy enjoyed in air and surface anti-submarine warfare also all but disappeared, as neither was effective in

³⁹⁶ Depledge et al (2019).

³⁹⁷ Lt Gen (rtd.) Richard Nugee, Non-Executive Director for Climate Change in Defence, op cit, in *Heating Up? The geopolitics of the Arctic*. Council on Geostrategy event, 1 February 2022.

³⁹⁸ Thomas Nilsen. 'Two NATO Carrier Groups will Sail North for Exercise Cold Response.' *The Barents Observer*. 13 January, 2022.

³⁹⁹ Ibid.

⁴⁰⁰ Ibid.

⁴⁰¹ Hennessey, P. and Jinks, J. (2015).

⁴⁰² Launched in 1960, this was one of the Valiant class submarines, powered by an S5W reactor, and is not to be confused with the new Dreadnought class of "successor" nuclear-powered ballistic missile submarines named in 2016 and due to be delivered in the early 2030s.

⁴⁰³ Ibid, p.367-8.

⁴⁰⁴ Ibid, p.367-8.

⁴⁰⁵ Ibid, p.367-8.

⁴⁰⁶ Ibid, p.560-1.

the new strategic environment under the ice. This had important implications for the region.⁴⁰⁷

The expanding Russian presence saw the Arctic 'transformed' from a 'natural scientific laboratory and region of occasional and exceptional activity into a possible battle-space on a par with the Northern Pacific or the GIUK Gap. Had World War III come it would have seen combat of great ferocity'. From the early 1980s, 'Royal Navy and US Navy SSNs were routinely deployed into Arctic waters to develop their battle plans and wartime capabilities.'⁴⁰⁸ The Allies' 'Maritime Strategy' that emerged for the North Atlantic helped push Soviet forces back into the Arctic itself. This suggests that, in the coming decades, an Arctic Strategy devised with allies can also help restrain potential adversaries in this strategic space.

As Hennessey and Jinks described, the Maritime Strategy 'showed that resolute responses could be effective', as from 1986 major Soviet fleet exercises stayed

'much closer to the Soviet mainland' and "switched dramatically to their home waters. According to J.F. Lehman (US Secretary of the Navy 1981-87), "[t]he net strategic result appears to us to be a Soviet fleet positioning and training to counter our new maritime strategy. That precisely was what we intended, to force them to shift from an offensive naval posture turned against our own vulnerabilities to a defensive posture to protect their own vulnerabilities.'⁴⁰⁹

The Arctic is 'likely to become even more important than it was during the Cold War', with a need to 'maintain an intimate knowledge of the area and the skills required to operate in it.' According to US Navy Chief of Naval Operations Admiral Jonathan Greenert,

'In our lifetime, what was [in effect] land and prohibitive to navigate and explore, is becoming an ocean, and we'd better understand it... we need to be sure that our sensors, weapons and people are proficient in this part of the world.'⁴¹⁰

There has been speculation that Russia and China may be collaborating on military submarine development, such as non-nuclear submarines, with China apparently having moved ahead in some related technological fields: Russian state news agencies have said that Sino-Russian collaboration in the field is being overseen by Russia's Federal Service for Military-Technical Cooperation.⁴¹¹ More generally, there is growing evidence of expansionist intent in the Arctic, not only by Russia but also by China, which merits strategic response from the United Kingdom and its allies.

⁴⁰⁷ Ibid.

⁴⁰⁸ Ibid.

⁴⁰⁹ Lehman in Ibid, p.560-1.

⁴¹⁰ Ibid, p.613-4.

⁴¹¹ RIA Novosti in H.I. Sutton, 'China and Russia in Mysterious New Submarine Project. *Forbes*. 27 August 2020.

Chapter 6: Conclusions and recommendations

It will be important to be mindful of the need to aim to maintain the Arctic, to the degree possible, as an area of low tension in line with the aims of UK strategy in the region as it has emerged over the last generation. Nonetheless, it is also important to acknowledge that through factors beyond UK control, the Arctic has already become an area of greater strategic importance and risk, and the UK and its allies will need to respond in a firm and timely manner in advance of further militarisation or expansionism by our competitors. UK policy should not take steps to increase tension, but will need to act for the crucial defence of strategic interests in the Arctic and North Atlantic.

A new UK strategy, Russia, and China

As we have discussed, the behaviour of various actors demonstrates the deep effect Arctic affairs are now likely to have on domestic political life in the UK. A new UK strategy for the Arctic will need to acknowledge Chinese Arctic activities: Government might begin by stating what it believes these are, and what future responses might be, moving on from the perception that China's activities are simply scientific or economic in intent.

UK strategic documents have so far made little mention of the future security implications of the Arctic, or of China's new ambitions in the region. In 2013, the Government published *Adapting to Change: UK policy towards the Arctic*, stating that the bedrock of UK policy towards the Arctic is that the region is 'peaceful, stable and well governed'.⁴¹² The paper did not mention the UK's defence interests. *Beyond the Ice: UK policy towards the Arctic*, published in 2018, emphasised the scientific and collaborative nature of UK engagement.⁴¹³ Its only mention of geopolitics was the statement that the Arctic 'appears to be geopolitically insulated at present, but there are risks that this could change'.⁴¹⁴ The paper only mentions China twice, once in reference to the South China Sea and the other when describing the Belt and Road Initiative (BRI), whereas Russia is mentioned 15 times but not in the context of strategic competition.⁴¹⁵ A new Arctic strategy will need to define regional interests. Our recommendations are therefore both general and relate to a UK approach to China especially in the Arctic, to the degree that its growing activities have not yet been fully taken into account.

UK aims in the Arctic

We suggest that UK aims in the Arctic will need to include the following needs:

- First, to work with allies, through both bilateral and NATO means, for the defence of those states in the region that share our values;
- Second, the UK will need to act to respond to and discourage the growing military build-up by Russia and associated Chinese expansionism;

⁴¹² HM Government (2013). *Adapting to Change: UK Policy towards the Arctic*.

⁴¹³ HM Government. *Beyond the Ice: UK Policy towards the Arctic*. 4 April, 2018.

⁴¹⁴ Ibid.

⁴¹⁵ Ibid.

- Third, the United Kingdom will need to act through and in the Arctic to protect the vital maritime security of the North Atlantic and GIUK Gap in particular, including through the means of defence resourcing and the fullest understanding of our interests in Arctic organisations and through nearby countries and territories including Iceland and Greenland;
- Fourth, the UK will seek to protect emerging Arctic shipping lanes;
- Fifth, the UK will aim to continue to protect the Arctic's natural environment, including through those cooperative scientific endeavours that match the UK national interest over the long-run; and
- Sixth, wherever compatible with the protection of the natural environment, the UK would be well placed as a commercial partner for the development of resources including energy sources in partnership with UK allies, especially as allies such as Canada and Denmark become more concerned by the risks involved in Chinese investment especially.

The shifting power balance between China and Russia

These aims will need to be informed by an awareness of the likelihood of increased leverage by the People's Republic of China over Russia, which will in turn likely lead to accelerated Chinese attempts to build a physical presence of all kinds in the Arctic: as we have seen, this has already included the development of satellite surveillance capacity, potential dual-use maritime technologies and the acquisition of former military facilities in the region. While some analysts have suggested that '[g]iven its own sovereign interests, Russia is unlikely to allow China to establish a significant military presence in the Arctic',⁴¹⁶ following the economic leverage China is likely to acquire over Russia following the necessary sanctions imposed on Russia after its invasion of Ukraine, we suggest that this is no longer certain. **It will be of central importance to consider that the balance of power in the Russo-Chinese relationship will now shift away from Moscow and towards Beijing.**

As other studies have suggested, the UK and allies will need to **closely monitor cooperation between Russia and China 'in the High North in areas such as missile defence systems, early warning, communications and satellites.'**⁴¹⁷

Restricting China to 'Track II' activities in the Arctic

Analysts have recently suggested 'Further leveraging science as an apolitical field to collaborate with Russia and China and maintain dialogue on shared multilateral interests in the High North',⁴¹⁸ but experience suggests that allowing China into Arctic fora, and countries meeting their requests for research bases has led to more, not less aggressive behaviour from Beijing. As the UK and allies might in general seek to **broadly limit Chinese Arctic engagement to Track II fora** (meetings between private citizens and nonstate actors; Track I refers to official diplomatic meetings), and seek to **demonstrate to China that** using

⁴¹⁶ Jouan, N., Ogden, T., Black, J. Wood-Donnelly, C. and Coulson, S. (2021).

⁴¹⁷ Ibid.

⁴¹⁸ Ibid.

leverage over Russia – or any entity in the Arctic region – and **aggressive behaviour generally to increase its power-projection into the Arctic or greater Atlantic region will not bear fruit.**

Balancing NATO and independent approaches

The United Kingdom will need to balance what it can do individually with what it can do with allies both bilaterally and through NATO, while reassuring Southern and Eastern European NATO members that increased resources for the Arctic will not lead to them being denied to other regions.

The UK will also seek to balance strengthened commitments to the Arctic with other commitments as Global Britain, including to the Indo-Pacific, sometimes **encouraging allies to act where the UK cannot commit resource.**

However, it is important that we draw the right conclusions from Russia's invasion of Ukraine. We should not conclude that strengthening NATO in the Arctic region will lead to more 'insecurity' or possible conflict, indeed the timely strengthening of the Western position in the region is likely to do the opposite.

This may include Swedish and Finnish membership of NATO, a move which the UK government should continue to support, and which members of both governments have recently expressed keen interest.⁴¹⁹ Under future NATO framework security agreements, Finland could contribute ground forces to NATO and Sweden could contribute Gripen fighter jets, submarines and fast patrol boats.⁴²⁰

That said, **due to the territorial concerns of partners such as Canada it will be important to differentiate between appropriate instances for NATO-led, and more bilateral, cooperation.**

Bilateral, non-NATO Arctic training and operations need to be enhanced, with the United States but also with Canada and Nordic partners, include to renew expertise in warfare in Arctic conditions.⁴²¹ The UK will need to **develop the capacities of the Northern Group and Joint Expeditionary Force (JEF)**, especially following the March 2022 'Letter of intent on enhanced defence cooperation between the United Kingdom and Denmark through the Framework of [the] Joint Expeditionary Force', signed by Ben Wallace and Danish Minister for Defence Morten Bødskov (so far the Letter commits Denmark to hosting the JEF command post exercise JOINT PROTECTOR 22, in which the UK's Standing Joint Force Headquarters will deploy to Denmark an exercise involving all ten JEF partner nations).⁴²²

⁴¹⁹ Bremmer, I. (2022).

⁴²⁰ Ibid.

⁴²¹ Ibid.

⁴²² 'Letter of intent on enhanced defence cooperation between the United Kingdom of Great Britain and Northern Ireland and Denmark, including through the Framework of Joint Expeditionary Force', signed by Ben Wallace and Danish Minister for Defence Morten Bødskov, Copenhagen, 4 March 2022.

The NATO 2030 report proposes increased ‘situational awareness across the High North and the Arctic’ and the creation of a proper Arctic strategy. Related proposals include a **NATO Standing Maritime Group for the Arctic and possibly an Arctic Command**.⁴²³ While an Arctic Command may go ‘against the spirit expressed by Arctic coastal states...in the Ilulissat and Chelsea Declarations, which emphasized national over multinational control and regulation of the majority of Arctic waters’,⁴²⁴ these are likely to become more seriously considered as the centre of gravity moves from the mothballed, explicitly non-military Arctic Council, and towards alternatives such as the Arctic Coastguard Forum.

One possibility is the development of the NATO Multinational Division North in charge of defence of the Baltic states into a **NATO Arctic Command HQ**, which among other things would delineate and simplify command should a crisis occur.⁴²⁵ This would depend on shared willingness among NATO allies, but this may become more desirable especially if Sweden and/or Finland become NATO members. The UK driving a new configuration of independent and NATO options in the Arctic can help achieve the simultaneous strengthening of NATO commitments to both its Northern and Eastern flanks.

Creating a UK Arctic Envoy and Arctic Department

As arguably the only credible ‘near-Arctic’ state, **the UK should create a form of ‘ambassador for the Arctic’ – likely a Special Envoy for the Arctic** – who would liaise with relevant UK missions abroad to countries and bodies in the region. The United States has an Arctic envoy, officially the US Coordinator for the Arctic Region.^{426 427} A UK Arctic envoy could lead UK diplomatic efforts in the region, facilitating more policy proposals to Arctic bodies.

However, today the Polar Regions Department (PRD) at the FCDO oversees Antarctic as well as Arctic policy, with the Antarctic region a priority in terms of the PRD’s resources. As the Arctic once again becomes a region of pivotal geostrategic importance, **a specific Arctic Department at the FCDO** might better coordinate Arctic policy from across Government. Meanwhile, it is worth considering that, since European Parliamentarians join the Standing Committee of Parliamentarians of the Arctic Region, UK Members of Parliament might do the same.

Other organisations which the UK may join or increase on which it may its presence include the **Arctic Economic Council (AEC)**, as well as the **Arctic Coastguard Forum** and the **Arctic Security Forces Roundtable (ASFR, for military collaboration)**.⁴²⁸

⁴²³ Boulègue, M. and Depledge, D (2021).

⁴²⁴ Auerswald, D. (2020).

⁴²⁵ Ibid.

⁴²⁶ U.S. Department of State. *Office of the U.S. Coordinator for the Arctic Region*.

⁴²⁷ U.S. Department of State. *Leadership: Bureau of Oceans and International Environmental and Scientific Affairs*.

⁴²⁸ Jouan, N., Ogden, T., Black, J. Wood-Donnelly, C. and Coulson, S. (2021).

Renewing navy, submarine, and associated commitments

As the House of Commons Defence Committee has discussed,⁴²⁹ the Government might outline in a new strategy how ‘the Arctic and High North has featured in the strategic analysis undertaken in the course of the National Security Capability Review and the Modernising Defence Programme’, especially highlighting ‘the challenge of **getting back to where we were in the Cold War, in terms of being a competent ASW [anti-submarine warfare] force**’.⁴³⁰ China is making ‘big investments’ in ASW capacity.⁴³¹ The Defence Command Paper (2021) announced investments in new-generation ASW frigates and ‘a focus on deep inter-operability with allies’ to help the UK keep its central role in ensuring freedom of operation in the North Atlantic.⁴³² The Government will likely continue to be pressed on **whether the nine P-8 Poseidon aircraft at RAF Lossiemouth are sufficient**.⁴³³

However, as we have seen, it is **hard to see how there can be any meaningful renewal of UK defence commitment to the High North without considerable increases in UK defence spending generally**, given the drastic falls in spending and hardware – including to the Royal Navy and Royal Air Force which will be central to the UK’s future Arctic commitments, not least because following the Russian invasion of Ukraine the British Armed Forces will also need to make greater commitments to Eastern Europe.

This concern notwithstanding, the Government will need to consider how a new strategic posture will address the risks of both China and Russia’s growing incursions into the Arctic, and plans to address the ‘**operational availability of a very limited number of submarines**’, which as Eric Grove⁴³⁴ told the Defence Committee, are ‘not enough [nuclear-powered attack submarines]... [t]here should be at least eight’.⁴³⁵ The Committee report added:

‘[T]here is no public evidence that the UK has designed or is designing its six new Type 45 Daring-class destroyers, two new Queen Elizabeth-class aircraft carriers and its next generation ASW frigate (the Type 26 Global Combat Ship) specifically with [Arctic] capability parameters in mind’.

And that:

‘[t]here [is] evidence that the Astute class submarines are not optimised for Arctic operations to the extent of the predecessor Trafalgar class. A brochure produced for visitors for the ICEX 2018 indicated that while the hardened sail and exterior components of the Trafalgar class allow it to surface through ice of at least 0.6 metres, Astute class submarines are unable to surface through ice more than two feet thick without risking damage to their superstructure’.⁴³⁶

⁴²⁹ House of Commons Defence Committee (2018).

⁴³⁰ Jinks, J. in Ibid.

⁴³¹ Ibid, p.634.

⁴³² Ministry of Defence (2021). *Defence in a Competitive Age. Defence Command Paper 2021*. 23 March, 2021.

⁴³³ Ibid.

⁴³⁴ Professor Eric Grove, former professor of naval history and senior fellow, Centre for Applied Research in Security Innovation, Liverpool Hope University.

⁴³⁵ House of Commons Defence Committee (2018).

⁴³⁶ Willet, L. (2011) in Ibid.

To contribute to Arctic satellite surveillance capacity the UK may also **consider how best to utilise OneWeb, and new Space Command functions.**⁴³⁷

The establishment of a Canada, UK, US (CAUKUS) defence and security pact

One particularly important focus will be on **strengthening the vital relationship with Canada** as it implements its Arctic strategy. Canada sees the Arctic as an integral part of its identity, prosperity, security, values, and interests.⁴³⁸ Forty per cent of Canadian territory lies within the Arctic.⁴³⁹ The Royal Navy's recent signal that it could 'expand into the Canadian Arctic' to 'contain strategic rivals' such as Russia and China is welcome.⁴⁴⁰ Former Chief of the Defence Staff General Sir Nick Carter has stated that the UK is 'keen to cooperate' with Canada, including for the UK to train for Arctic warfare.^{441 442} One way in which this closer cooperation has already taken place is increased submarine activity and cooperation between the Royal Navy and the Royal Canadian Navy (RCN). The UK is becoming increasingly keen to burden-share regarding both ongoing and future defence commitments, alongside our NATO and regional allies and partners. The ability to work further with the RCN is welcomed across both sides of the Atlantic, and will undoubtedly involve closer cooperation between the two navy's submarine fleets.

One option to strengthen the British-Canadian alliance into a broader regional partnership would be the creation of a Canadian, UK, and US (CAUKUS) defence and security pact, in a similar vein to 2021's AUKUS agreement. Many in Canada were concerned about its omission from the AUKUS group since, like Australia, it has only diesel-electric submarines (these operate for only relatively short periods under-ice, and are far more susceptible to detection by advanced Russian sonar and radar). Canada is looking at options for replacements which will be needed between 2036 and 2042, whilst Canadian analysts see UK submarines as 'the number one capability' they are currently interested in.⁴⁴³ Whilst the recent change in the Australian government may lead to ongoing unresolved nuclear-related issues concerning the AUKUS deal, the fact that nuclear-friendly Canadian Prime Minister Justin Trudeau won a third term in office only in 2021 ensures some domestic stability regarding such an important policy. Canada as an already civilian nuclear power affords an additional layer of security for such an arrangement regarding upscaling to nuclear powered submarines.

The UK's potential benefit to Canadian security is considerable. A recent paper from Canada's Macdonald Laurier Institute⁴⁴⁴ finds that with only diesel-electric submarines, Canada remains 'without the crucial under-ice sub-marine capability to help complement... planned underwater sensors [and modernised] patrol aircraft [etc.]'; Canada's 'vast

⁴³⁷ Jouan, N., Ogden, T., Black, J. Wood-Donnelly, C. and Coulson, S. (2021).

⁴³⁸ Government of Canada. *Canada and the Circumpolar Regions*. 23 June, 2021.

⁴³⁹ Ibid.

⁴⁴⁰ Nick Allen and Edward Malnick (2021).

⁴⁴¹ Brewster, Murray. 'Britain Offers Canadian Military Help to Defend the Arctic.' *CBC News, CBC/Radio Canada*, 24 September, 2021.

⁴⁴² Nick Allen and Edward Malnick (2021).

⁴⁴³ Huebert, R. (University of Calgary), quoted on CBC, in Janet E. Silver (2022).

⁴⁴⁴ Collins, J.F. (2021).

maritime domain’ means nuclear submarines are needed if Canada is to properly counter Chinese and Russian Arctic capabilities: ‘although the UK’s recent signal to help Canada in the Arctic is a welcome gesture, it should further develop security partnership to provide its ally with the required technology to maintain dominance in the Arctic.’⁴⁴⁵ Britain and Canada are also working closely together on Canada’s British-designed Type 26 Frigate, showcasing already deep involvement between the two nations’ defence procurement programs.⁴⁴⁶

Building Arctic experience and joint training missions

The UK could also **seek to join other Arctic exercises with US, Canadian, Danish, French, and other countries’ soldiers**,⁴⁴⁷ and including to help servicemen develop relevant skills, following the growing collaboration between the Royal Navy and Canadian Coast Guard to train British sailors on icebreakers,⁴⁴⁸ for example.

In particular, this should include closer defence engagement and training with both the US and with Canada, to be incorporated within an eventual CAUKUS framework to include British contributions to Canada’s annual Operation Nanook exercises held every August. As Dr. Jeffrey Collins, Adjunct Professor at Prince Edward Island University, and a Canadian maritime and submarine expert, confirmed to the author, there is a historical precedent here that provides a template for deeper British-Canadian Arctic cooperation. In the 1950s and 60s, Royal Navy diesel-electric submarines were attached to the RCN as a part of Canada’s anti-submarine warfare training capabilities in the North Atlantic. Located at the RCN’s main base in Halifax, Nova Scotia, British submarines featured mixed Canadian-UK crews, giving the former the skills and experience needed to re-acquire their own submarine capability lost four decades prior.⁴⁴⁹ For decades, through the Cold War until 2005, the RAF co-located fighter jets and transport aircraft at the RCAF base in Labrador for low-level flying training, mimicking the central and eastern European theatre of operations, in the event of a third world war.⁴⁵⁰

This new British-Canadian framework should be relatively easy to facilitate, with several British battlegroups annually rotating through an armoured warfare training facility in western Canada since 1972,⁴⁵¹ with the necessary infrastructure and military liaison is already in place.

Furthermore, the UK has made efforts to improve its soldiers’ ability to fight in Arctic conditions, with the Royal Marines the UK’s dedicated mountain and Arctic warfare specialists.⁴⁵² The UK should broaden these capabilities, including with other forces. The UK

⁴⁴⁵ Ibid.

⁴⁴⁶ Navy Lookout. (2018).

⁴⁴⁷ Clifford, R. (2017).

⁴⁴⁸ Sean Kilpatrick. ‘British Royal Navy, Canadian Coast Guard sign deal on Arctic cooperation, training’ *The Globe and Mail*. 8 October 2021.

⁴⁴⁹ Collins, J.F. (2021).

⁴⁵⁰ CBC News. (2005).

⁴⁵¹ British Army, 2022.

⁴⁵² Ibid.

also has an agreement with Norway whereby it may use some Norwegian Arctic military bases for training;⁴⁵³ **training agreements could be expanded to include other Arctic states, forging closer ties with host states and consolidating the UK position** in Arctic defence and security cooperation. Dr. Collins highlights how this could include partnership arrangements with the Canadian Rangers, a predominantly northern indigenous army reserve unit tasked with patrolling and training the Canadian military in Arctic survival.

⁴⁵³ Ibid.

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