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Hearing on "An Emerging China-Russia Axis? Implications for the United States in an Era of Strategic Competition"

China and Russia in the Arctic

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Summary:

The Arctic region is one area where Chinese and Russian interests converge, although they overlap rather than align. Arctic cooperation is an element of the broader PRC-RUS relationship.

There are several axes along which China-Russia cooperation in the Arctic can be measured. They can roughly be categorized as economic, military, and political. The economic dimension includes natural resources, energy foremost but also including minerals and fish. Questions here include the extent to which China is willing to pay to get these resources, and the level of willingness on the part of Russia to cede control to China in exchange for capital. At what point along the axis from low-high cooperation will Chinese WTP and Russian willingness to share intersect and overlap?

Another element of economics is shipping routes: although China is ultimately interested in trans-Arctic shipping, its ships will rely on Russian ports for refueling, resupplying, and emergency stops. To what extent will Russia grant China preferential access to the Northern Sea Route, and what role will China play in the infrastructure that is needed to develop the NSR? Can Moscow and Beijing find mutually satisfactory agreement on Chinese investment and the integration of the NSR into Belt and Road, or will cooperation founder over the terms of control?

The second broad dimension is national security: as China moves in the direction of great-power status and global military capabilities, it will field nuclear-powered submarines that will operate in the Arctic Ocean. Russia has profited from selling weaponry and expertise to China, although it has been wary of technology transfer for high-end platforms and systems. To what extent will Russia facilitate China's entry into the Arctic subsurface? The Russian navy has been hawkish on China: will this attitude persist and be influential?

The third dimension of the China-Russia relationship in the Arctic is political: China is building relationships with all the Arctic states in order to increase its influence over decisions about the future of the Arctic region. In this effort, Russia is made less vulnerable by its status as the Arctic superpower; however, the underdeveloped and brittle Russian economy acts as a constraint on Moscow's freedom of action. Russia has traditionally been jealously protective of its special position in the Arctic region. To what extent will Russia trade Arctic decision-making influence

for Chinese capital? How does Arctic cooperation fit into the broader pattern of Chinese and Russian grand strategy?

Taken together, these dimensions offer a roadmap for assessing Sino-Russian cooperation in the Arctic region, and for protecting the interests of the U.S. and its allies and partners. The three vectors of cooperation are economic (resources and shipping), military, and political. Across each of these dimensions, both China and Russia experience cross-cutting pressures. For China, Russia is a means to fulfilling economic, political, and military goals in the Arctic region and beyond. However, Russia is not an easy partner and Arctic projects are inherently difficult. For Russia, China is a useful counter to the Western strategy of isolation. Russia sees in China the capital and markets needed to fill the void created by U.S./E.U. sanctions, and to fund the development Russia needs to regain great power status. However, the constant fear of falling under Beijing's influence serves as a check on Moscow's enthusiasm, and drives efforts to diversify partners.

As a result, there appears to be more to this relationship on paper, and in joint statements, than in actual investment thus far. While some deals have been struck, others have foundered on differences between Chinese and Russian visions for their relationship in the Arctic.

In the immediate post-2014 aftermath, there appeared to be great enthusiasm for increased Sino-Russian cooperation in the Arctic on both NSR development and energy projects. By closing off American and European funds, the sanctions pushed Russia towards alternative sources and increased Chinese influence (although low oil prices played an important role as well). However, since 2014, less tangible progress has been made than might have been expected, given the level of rhetoric. Recent assessments suggest that a climate of retrenchment is developing, and each side is waiting to see what the future of western sanctions and global oil prices may hold. Will pressure on Russia ratchet up, forcing it to compromise and accede to Chinese demands? Or will pressure on Russia recede, enabling it to chart its own course on Arctic development and forcing China to invest on Russian terms?

A final point: with Putin's future uncertain, and Russia preparing to enter a transitional phase, the Arctic is likely to become wrapped up in Russian transition politics.

For the U.S. and its allies and partners, this analysis offers a route forward based on both raising the costs of China-Russia cooperation in the Arctic, and offering Russia alternatives to Chinese dependence. U.S. efforts should also include a focus on the small Arctic states that are vulnerable to Chinese influence.

Section 1. Economic Dimensions to China-Russia Relations

The primary dimension of Sino-Russian cooperation in the Arctic region is economic. Under this broad umbrella fall two linked objectives: first, the development of the Northern Sea Route, the great shipping lane across Russia's northern coast, which connects northeast Asian ports to northern ports in Europe and North America; second, the extraction of renewable and nonrenewable resources from the Russian Arctic Zone. While both Russia and China desire these objectives, differences may be found in the details. Achievement of these goals would not be acutely detrimental to U.S. interests as they are economic outcomes that might in some respects benefit the U.S., although a stronger Russian economy may provide it more freedom of action. The imposition of sanctions appears to have spurred Russia to more eagerly seek Chinese investment, although Russia remains a difficult partner and there are fewer tangible results than might be expected, given the level of rhetoric. One expert notes that European firms are using Chinese intermediaries to finance investments in Russia, bypassing the Western financial system altogether.²

1. Shipping through NSR

Shipping through the Arctic offers potentially significant time and fuel savings, through shortening the distance between Asia, northern Europe, and northern North America. In addition to the cost savings offered by trans-Arctic shipping, the development of an alternative route to Suez and through the Straits of Malacca is strategically valuable to China. There are three major shipping routes across the Arctic: the Northwest Passage, through the Canadian archipelago, the Trans-Polar route directly across the central Arctic Ocean, and the Northeast Passage, which runs through the Northern Sea Route of Russia. The Northern Sea Route (NSR) is the most-developed and most-trafficked shipping route at present. (For a map, please see Appendix 2.)

a. Regulations and Authorities

The management regime for the Northern Sea Route appears to lack stability, which may hamper development. Reports of interagency conflict over NSR control,³ as well as routine violations of the rules,⁴ contribute to the sense of unpredictability. In December 2018, the Russian government altered the distribution of responsibility regarding the Northern Sea Route, giving to the state corporation Rosatom the chief responsibilities regarding budget funds for the NSR, as well as responsibility for development and operation of the NSR, port infrastructure, and navigation and pilotage.⁵ Although the Ministry of Transport will retain legal authority for regulating traffic, safety of navigation, and compliance with international law, Rosatom clearly has been given the leading role. One expert has likened the complex and shifting management regime in the NSR to "the tail that wags the dog," concluding, "the emerging management and operational roles of the Ministry of Transport, Atomflot, and other private and state maritime enterprises, indicate a highly complex system that will challenge the effectiveness and economic viability of the NSR."

In March 2019, NSR regulations were further confused by reports of new Russian legislation that will restrict the passage of foreign warships and government ships, requiring them to request permission from Moscow 45 days in advance of their transit of the NSR and to take onboard Russian pilots.⁷

At a higher level, there is uncertainty about the status of the NSR under international law. In brief, Russia considers the NSR to be internal waters; the U.S. and others consider several key passages to be international straits. The Russian position on the NSR closely mirrors the Canadian position on the Northwest Passage, which the U.S. also disputes. China has not yet issued a clear statement on its interpretation of the legal status of either the NSR or NWP. However, experts argue that China may side with Canada and Russia on their claims. According to extensive analysis by Michael Byers, "China has practical and legally strategic reasons to side with Canada, especially because of similarities between the Northwest Passage and the Qiongzhou Strait." Similarly, Nengye Liu has pointed out that "China appears uninterested in challenging Russia's jurisdiction in the Northern Sea Route."

b. The Ice Silk Road: NSR in BRI

In 2018, it was announced that Russia's Northern Sea Route would be folded into China's massive Belt and Road Initiative (BRI). Sometimes called the 'Arctic Silk Road' or 'Ice Silk Road', this new crossover project has received widespread attention. According to an analysis by Yun Sun of the Stimson Center, contrary to widespread opinion, the Polar Silk Road was originally proposed by the Russians. Sun traces Russian proposals regarding the Polar Silk Road to 2015, with a follow-up proposal made by President Putin himself in 2017. Sun notes, "[t]he pre-2014 cold-shoulder by Russia forms a sharp contrast to its enthusiasm to cooperate with China on the Northern Sea Route after the Ukraine Crisis." In addition, Alexeevna and Lasserre (2018) note that China's BRI was perceived as a threat to Russian interests and influence in Central Asia previous to 2014, and "so the decision to officially link the Russian Arctic" to the BRI "marks an important change" and the recognition by Moscow of "the necessity to deepen Sino-Russian cooperation in the Arctic."

This interpretation contrasts with other observers, who describe China as initiating the Polar Silk Road concept. For example, one expert identified three assumptions on the Russian side, and those who perceived the Polar Silk Road initiative as coming from China: first, that "China will save Russia's stagnant north"; second, that "China has no alternative but to work with Russia"; and third, "China will be unable 'sideline' Russia."¹³

In June 2018, the China Development Bank and Russia's Vnesheconnombank (VEB) signed a deal intended to facilitate investment in Belt and Road initiatives and tie together the BRI with the Russia-led Eurasian Economic Union. The Northern Sea Route received special emphasis in the announcement of the banking agreement: while the partnership covers about 70 projects, the NSR was the only project discussed in the press release.¹⁴

c. Mixed Opinions

Expert opinion varies on the extent of Sino-Russian partnership regarding the NSR, and the integration of the NSR into the BRI. Yun Sun argues that Sino-Russian cooperation on the NSR has been held back by "divergent interests, conflicting calculations and vastly different cost-benefit analyses." While Chinese observers point to Russian recalcitrance, Russian commentary often pushes back as well. For example, writing in the Russian journal *Regions*, Alexander Vorotnikov argued that while there is shared interest in Arctic development and соорегаtion, "Russia takes a firm position here" (твердую позицию) and "priority must remain with Russia, since the Arctic is the most important region..." (Арктика является важнейшим регионом). ¹⁶

Some commentators call on Russia and China to resolve their differences and find mutually beneficial terms for development. Bai and Voronenko called for a bilateral long-term agreement between Russia and China that would "provide privileged terms for passing through the NSR for Chinese shipping companies" and help "establish win-win cooperation" between the two countries.¹⁷

2. Resources

Similar to the underdevelopment of the NSR, Sino-Russian cooperation on Arctic resource projects has not yet met the high expectations and rhetoric. A 2018 analysis by Alexeevna and Lasserre, based on Russian and Chinese data on Arctic development cooperation, revealed two interesting patterns: first, that Sino-Russian projects in the Arctic "are frequently misrepresented" in each country and by different publications; and second, that actual projects are fewer and less successful than might be expected, given the level of publicity for Sino-Russian cooperation in the Arctic. The authors note that "moving beyond political declarations is very difficult."

Alexeevna and Lasserre argue that the lower-than-expected level of actual partnership is due to a mismatch of expectations: on one hand, Russians want to retain full control over Arctic development, given its strategic importance to national interests, and therefore want Chinese investment funds—without Chinese involvement in decision-making. On the other hand, Chinese investors "are reluctant to invest in very expensive and risky projects, unless they can secure a role in the management and have a voice and voting rights." In addition, China is interested in participating in Arctic development projects in order to build technological expertise and industrial capabilities, whereas Russians are generally protective of their expertise and knowhow. 19 Partially, anemic development can also be explained by the investment climate in Russia. Analysts note that Russian investment protocols are neither transparent nor consistent, and that regulations are frequently changed. ²⁰ As one Chinese scholar observed, "the environment for investment in Russia is unfriendly. The legal system functions poorly and corruption is rampant. Russia usually pays lip service but exhibits little action in cooperation."²¹ Experts note that, while Russian laws on foreign investment are very strong--"a model of clarity"-- implementation is generally uneven and "there is not much evidence regarding the effectiveness of the agencies that implement" the law.²²

It appears that Russian-Chinese cooperation in the Arctic may hinge on the question of control and trust. With this in mind, the Yamal megaproject becomes especially interesting. As Alexeevna and Lasserre note, "Yamal LNG is a national flagship project" for Moscow, "with both economic and political implications not only for Moscow's foreign policy but also for domestic strategy." In a bit of uncomfortable contrast, the Yamal project is also "a showcase for China's skills and competence in the development of Arctic resources that, in turn, will strengthen the Chinese presence in the region."²³

Understanding the Belt and Road Initiative also benefits from an extended consideration of shipping and maritime activity in the northwestern Pacific area. An interesting aspect of Sino-Russian cooperation is the potential development of origination points for shipping from Asia. The North Korean port of Radjin (also spelled Rajin) has been identified as possibly a strategically critical port for China. ²⁴ Other alternatives include the Russian port of Zarubino, which is in the process of being upgraded through combined Chinese-Russian investment. Less than a dozen miles from Chinese territory, Zarubino is less politically fraught than Rajin, and also offers year-round access to the northern Pacific. ²⁵

a. Oil and gas

According to expert assessments, the Russian zone of the Arctic contains potentially 48 billion barrels of oil and 43 trillion cubic meters of gas, both significant shares of total Russian reserves. Another estimate of the overall Russian endowment is 287 billion barrels of oil equivalent. The Russian companies Rosneft and Gazprom dominate the region and have exploration plans in Shtokman, near Novaya Zemlya, as well as Yuzhno-Kirinskoye in the Far East, and Leningradskoye in the Kara Sea (Gazprom); Rosneft has plans in Khatanga, the Barents, and the Kara Seas. Barents, and the Kara Seas.

The sanctions have certainly impacted the development of Arctic oil and gas. Previously, Russia was dependent on American and Western technology for the exploitation of its more challenging oil and gas resources: should Russian (or Chinese) companies develop advanced capabilities in this area, the U.S. and its allies may lose an avenue of influence.

b. Minerals

A 2017 CNA report provided detail on Russian mining prospects and deposits.²⁹ Bai and Voronenko also highlight potential Russian-Chinese cooperation on rare earths mining in the Arctic. These strategic minerals are important to many advanced electronics and military systems. Rare earth deposits have been identified in the Kola and Taimyr Peninsulas and in Yakutia, and talks between Nornickel and General Nice Group (which is also developing rare earths in Greenland) are "in progress." In this way, mining in the Russian Arctic connects to broader strategic resource goals for Beijing, which has global interests in REE.

c. Fish

Another Arctic resource that may be of interest to China is seafood. The world's two most productive fisheries are found in the region: the Barents Sea and the Bering Sea fisheries. As yet, there is no commercial fishery in the central Arctic Ocean; in fact, in 2017, a group of Arctic and

non-Arctic states, including China, signed an agreement to hold off on fishing in the central Arctic.³¹ The moratorium is intended to give scientists enough time to adequately understand the structure of Arctic fisheries and prepare sustainable fisheries management plans. Chinese influence has been identified in the process of negotiating the moratorium.³²

According to a study by the European Commission's Joint Research Center, China is the world's largest consumer of seafood on a total basis, at 65 million tons annually, although it is only ranked seventh in per-capita seafood consumption.³³ As global fisheries decline, the as-yet untapped seafood resources of the central Arctic Ocean may be increasingly in demand.

Section 2. Military Dimension

1. Submarines

The China-Russia relationship includes a military dimension, which in the Arctic context is centered around submarines. While a Chinese submarine has not yet surfaced in the Arctic Ocean, that achievement is considered likely within a decade, according to Lyle Goldstein of the China Maritime Studies Institute.³⁴ In support of this, he points to an April 2018 paper in a leading Chinese scientific journal, the *Chinese Journal of Ship Research*, on submarine hull design for surfacing through ice. The abstract for this paper notes, "With deepening research on the geographical and climatic environment of the Arctic, the political and military value of submarines in the region has been well recognized."³⁵

Chinese military capabilities are advancing. The Chinese navy, PLAN, is increasing focused on long-range missions that will take their platforms farther and for longer periods of time. By 2020, according to a 2018 OSD assessment, China will likely field between 69-78 submarines, mostly diesel-attack but with some SSBNs and SSNs.³⁶ By the early 2020s, China will begin construction on its next-generation SSBNs, the Type 096, which will be armed with JL-3 SLBMs. A 2015 Office of Naval Intelligence (ONI) report, while not mentioning the Arctic specifically, noted that the PLAN is increasing "expected to defend major SLOCs" and this new and expanding role for the Chinese Navy will demand "the capability to sustain a maritime presence in strategic locations, in hostile conditions, and for extended periods."³⁷ China and the PLAN are moving purposefully in the direction of multi-mission naval capabilities in service of grand strategic objectives "to preserve China's interests and commensurate with its role as an emerging major power."

PLAN submarine operations already include the North Atlantic, and observers suggest that Arctic operations are likely to soon become an element of PLAN missions.³⁸ In addition, Chinese ocean science in support of military operations and seabed mining is highly advanced and may surpass U.S. efforts.³⁹

In June 2018, the Chinese nuclear corporation opened a call for bids for the country's first nuclear-powered icebreaker. ⁴⁰ While China has two icebreakers already, a nuclear-powered icebreaker would mark both a significant advance in polar capabilities and a step towards fielding a nuclear-powered carrier.

The military cooperation between China and Russia has been described as "a more balanced (though limited) security partnership between two countries that are neither adversaries nor allies, but share certain security concerns such as...balancing the United States and its allies." The extent to which Russia is willing to share its expertise in Arctic submarine operations with China may be an indication of the limits of their security partnership.

2. Russian remilitarization

Any Sino-Russian security partnership in the Arctic will be vastly complicated by the high priority of the Arctic in Russia's overall grand strategy. A NATO analysis of Russian Arctic strategy and policy concluded in 2018 that Russian policy language reflects an increased emphasis on national security in the Arctic, and a growing belief that "security is a precondition for successful resource development" in the Russian Arctic. ⁴² The analysis observed, "the Arctic has emerged as a region of immense importance in Russian strategic planning." The Arctic region is a core national interest for Russia. In recent years, Moscow has made strong statements of its intentions to build out the infrastructure required to fully secure the Russian Arctic. While these declarations of intent have not yet been fully funded, some construction has indeed moved ahead. (For more details, see Appendix 3.)

In particular, in 2014 Russia established the Arctic Joint Strategic Command. In addition, Russia has moved ahead with upgrading and extending its airfields along its northern perimeter. To the west, on Franz Josef Land, the Nagurskoye airbase was shown off in 2017 with great fanfare.⁴³ The base has a 2,500 meter airfield that was recently resurfaced to accommodate heavy planes all year round.⁴⁴

As one expert noted: "Rebuilding and upgrading regional military infrastructure and enhancing command and control have emerged as consistent themes in Russia's strategic thinking on the Arctic. The formation in December 2014 of the Arctic Joint Strategic Command (AJSC) as the fifth military district of Russia, with the Northern Fleet as its mainstay, reflected the priority that Russia began to attach to the defense of the Arctic."

However, interpretations of Russian military construction vary. A 2016 "Report on Arctic Policy" by the International Security Advisory Board (ISAB), a federal advisory committee of the US State Department, devoted considerable attention to Russia's interests in the Arctic. Regarding Russian (re)militarization of the Arctic, the ISAB report concluded:

In many respects, these military activities by Russian forces in the Arctic are simply the sort of things that any similarly-situated nation would undertake consistent with its military resources—to defend a major source of resources and revenues, protect the survivability of a key element of its nuclear deterrent, and assert its sovereignty. They are also elements of a return to a prior level of activity after the hiatus following the collapse of the Soviet Union as additional resources for all military purposes become available to the Kremlin. In this sense, the Russian military effort in the Arctic is defensive—to forestall successful US and NATO operations in the region, should such be mounted in a hostile environment, and to ensure the survivability of Russia's sea-based nuclear deterrent...Russia both fears NATO expansion into the Arctic and regards a strong Russian military posture in the region as supporting its overall military potential. (24-25)

It is important to underline that the Arctic is a core national interest for Russia. If Russia's leaders indeed have a grand strategy, developing the Arctic is one of its objectives. In addition, the bulk of Russia's strategic forces are concentrated in the Kola Peninsula in the western Arctic. As a result, the Arctic is among the most sensitive parts of Russia and among the top security priorities.

Chinese experts appear to recognize that Russia perceives a security problem in the Arctic. One of China's leading scholars of international politics wrote, "Russia's northern border is no longer peaceful. As for China, developing strategic ties with Russia can help it in 'stabilizing its northern border so that it can turn to the ocean' - in other words it can give it more space to deal with maritime disputes with its southern neighbors."

3. Icebreakers

Icebreaking ships are the only means of ensuring year-round surface access to the Arctic Ocean. Without assured access, states may face limits on their freedom of action to respond to various contingencies. Russia, which geographically dominates the Arctic basin, operates the largest fleet of icebreakers as a matter of course. Its icebreakers are used to keep ports and shipping channels open for commercial activity, as well as for other purposes. China has recently embarked on an icebreaker building program: its first icebreaker, the Xue Long, was purchased; it recently completed domestic construction of its second, the Xue Long II, and it has plans to construct a nuclear-powered icebreaker. In contrast, the U.S. icebreaker fleet has been shrinking, with just two polar-capable icebreakers currently active: the POLAR STAR, and the HEALY, which is primarily a research ship. With missions in both polar regions, the U.S. cannot maintain adequate surface presence in its Arctic EEZ.

While icebreakers are not a sufficient indicator of Arctic strength, they are a recognizable symbol and play an important role in Arctic public diplomacy. They are also important enablers for a variety of maritime activity, and will be increasingly important as Arctic traffic increases and ice conditions become less predictable.

Section 3. Political Dimension

There is a strong political dimension to China-Russia cooperation in the Arctic. Beijing is seeking to legitimate its interest in the region, and gain a shaping role in the future of Arctic development. Partnering with Russia, the dominant Arctic power, is unmistakably desirable. This may be one of the weakest areas of PRC-RUS relationship, as Russia wants Chinese investment in the Arctic, but doesn't want to cede any authority. Russia appears reluctant to grant China a greater voice in Arctic governance (or any other non-Arctic state).

In addition to partnering with Russia, China has been seeking political influence across the Arctic, with all other Arctic states, not just Russia, through both bilateral and multilateral channels. One way has been through pursuing observer status at the Arctic Council, which is the highest-level intergovernmental forum and de facto governance organization for the region.

1. A Shaping Role for China in the Arctic

The Chinese journal Advances in Polar Science published an article co-authored by Russian and Chinese scholars, which directly addressed Sino-Russian cooperation in the Arctic region. The authors summed up the alignment of Russian and Chinese interests in the Arctic in this way: "Russia is interested in Chinese investments and technology; in turn, Russia can grant China access to mineral resources and the NSR...Furthermore, through cooperation with Russia, China can expand its role in the Arctic [C]ouncil and the process of formulating the regional agenda." The authors observed that Russia and China "can play a major role in forming the system of international relations in the Arctic using their advantages and authority." In addition, "cooperation with Russia will give Chinese actions in the region more validity."

Beijing is clearly aware that its efforts to gain a seat at the Arctic table have not been uniformly welcomed, and that Russia in particular has mixed opinions. Nong Hong observes that "[u]nfortunately, China's intentions have been met with suspicion by Arctic states" and identifies Russia, Canada, and Iceland as the most "vigilant"; she specifically notes "the vigilance of the Russian military" regarding Chinese interest in the Arctic. ⁵⁰

2. Arctic Council

Established in 1996, the Arctic Council is a fairly weak, yet highly effective and widely praised forum. While its decisions are nonbinding, it functions on a consensus basis and has successfully facilitated the adoption of three international agreements: the 2011 agreement on Arctic SAR, the 2013 agreement on oil spill response, and the 2017 agreement on scientific cooperation. While only the eight Arctic states have votes at the Arctic Council, the Indigenous peoples of the Arctic region are represented by their organizations as Permanent Participants, and are able to fully participate in discussions. In addition to these participatory categories, there is a category of Observer states and organizations. Observers do not have equal right to participate in Council discussions, but may attend meetings and participate on invitation. China was granted Observer

status in 2013 after years of effort. In part, the delay in admitting China to the Arctic Council as an observer was due to Russian reluctance: "the Russian government initially expressed wariness about allowing Beijing any formal role within the organization", according to Marc Lanteigne. ⁵¹ However, other observers also point to Canadian reluctance to admit China and other observers. ⁵²

In January 2018, the State Council Information Office of China published a white paper on "China's Arctic Policy." This long-anticipated statement of China's official Arctic policy has received a great deal of analysis. A helpful explanation came in March 2018 from the Washington-based, Chinese-funded Institute for China-America Studies. This report very clearly stated China's approach to gaining influence in Arctic decision-making:

China is also active in promoting bilateral relations with Arctic states for strategic purposes...China should deal with Arctic states on an individual basis...This way, China will have much more leeway for strategic operations. This one-on-one model is similar to China's stance in the South China Sea issue, where China insists on bilateral rather than multilateral negotiation...China is trying to expand its influence by bolstering relations with five North European countries...Iceland, Denmark, Norway, Sweden, and Finland. Cooperation with these countries is not only aimed at acquiring resources, but also to expand China's influence in the Arctic...the Northern European states are not strong enough to compete with Russia or with their ally the United States—both state parties in the Arctic region—so these states are willing to turn to China for help. If China can establish a long-term strategic cooperation mechanism on Arctic affairs with the Northern European states, it will achieve a greater say in Arctic affairs. 53

As this quote illustrates, Russia is not the only focus of Chinese interest in the Arctic. In fact, China's influence-seeking strategy may be even more of a problem for the United States visavis the small Nordic countries, which may be more vulnerable.

The example of Norwegian-Chinese relations is illustrative. In 2010, following the awarding of the Nobel Peace Prize to Chinese dissident Liu Xiaobo, "for his long and non-violent struggle for fundamental human rights in China," the Chinese government retaliated by imposing import controls on Norwegian salmon that effectively closed the market. For six years, Norway worked to restore relations with Beijing, and finally succeeded in 2016—at the cost of an extraordinary joint declaration: 56

Due to the Nobel Peace Prize award and events connected to the Prize, China-Norway relations have deteriorated. The Norwegian side is fully conscious of the positions and concerns of the Chinese side and has worked actively to bring the bilateral relations back to the right track...The Norwegian Government reiterates its commitment to the one-China policy, fully respects China's sovereignty and territorial integrity, attaches high importance to China's core interests and major concerns, will not support actions that undermine them, and will do its best to avoid any future damage to the bilateral relations.⁵⁷

One way in which China may be pursuing bilateral relationships and influence with Arctic states is via foreign direct investment. A CNA study led by Mark Rosen on foreign direct investment in the Arctic highlighted the influence of Chinese FDI: "Our concern over Chinese FDI in the Arctic is that the historical impact of Chinese FDI abroad does not evoke much confidence in the practices and policies of Chinese investors." In addition, the CNA report observes, "there are ways in which FDI can affect sovereignty." For example, Greenland has recently been the subject of a great deal of speculation about Chinese investment for geopolitical-security motives. ⁵⁹

3. Sanctions

Many analysts point to 2014 as a turning point in Russia-China relations overall, and in Arctic cooperation more specifically. More bluntly, many observers identify a downturn in U.S./West-Russia relations, specifically the sanctions, as pushing Russia towards China. Medeiros and Chase have observed that, "[f]or China, the Western sanctions on Russia...were a welcome buying opportunity." China was happy to fill the market gap created by sanctions, "but requested 'friendship' prices, of course." Liu Fenghua of the Chinese Academy of Social Sciences observed in 2016 that "[s]ince the outbreak of the Ukraine crisis, the US has once again chosen to contain China and Russia simultaneously, thus greatly enhancing China-Russia strategic partnership." While the sanctions are an important element of the broader U.S.-Russia relationship, their effect on Sino-Russian cooperation in the Arctic may be an unintended outcome.

4. Russian political transition

Between April 2021-2023, Russia will hold the chair of both the Arctic Council and the Arctic Coast Guard Forum. Meetings of these groups will be held in Russia. With President Putin's final (presumed) term ending in 2024, this spells potential complications for U.S. Russia and Arctic policy. If the Russian government restricts political demonstrations, for example, the U.S. and its allies may choose to cancel participation in planned Arctic Council meetings as a means of expressing disapproval; conversely, participation in such meetings, even in the face of political repression might signal tacit approval.

-Either way, Arctic governance will be directly joined to U.S.-Russian relations in an unusually direct manner, with potentially grave implications. Thus far, the Arctic states have managed to preserve cooperation despite political tensions. The upcoming Russian chairmanship of the Arctic Council (and ACGF) will be a test of Arctic cooperation.

Section 4. Implications for the U.S. and Potential Actions

For the U.S. and its allies and partners, the route forward might effectively combine both raising the costs of China-Russia cooperation in the Arctic, and offering Russia alternatives to Chinese dependence. U.S. efforts should also include a focus on the small Arctic states that are vulnerable to Chinese influence.

One important action, which would signal American commitment to the region and prioritization of Arctic affairs, would be to fully fund the USCG polar security cutter program. Without visible surface presence in the region, and year-round all-access capability, the U.S. remains at a disadvantage. Heavy icebreaking capability would also enable U.S. Navy surface operations, facilitate more robust scientific monitoring, and support other demonstrations of sovereignty.

Decision makers need better information about the extent of Chinese influence in the Arctic region, including FDI in critical infrastructure, as well as diplomatic and social influence. Much of this information is not synthesized and monitored over time, nor linked to other key regions like the Indo-Pacific, Africa, or Latin America. Support for additional and ongoing research would improve awareness and inform policy action.

It is important to shore up relations with Nordic allies, in particular Denmark/Greenland, Norway, and Iceland, to build a common consensus and dialogue on China in the Arctic. The Denmark/Greenland relationship, in particular, would benefit from the following:

- Senior-level USG delegation/port call to demonstrate commitment and support; targeted effort to develop business opportunities; and cultural and educational exchanges, in particular through funding for Fulbright in Greenland (with University of Greenland).

The concept of an Arctic Development Bank, which would provide an alternative funding mechanism for badly-needed Arctic development projects, has been proposed. This concept could be advanced through additional hearings and discussion. For more information on the ADB concept, please see the CNA report, "Unconstrained Foreign Direct Investment: An Emerging Challenge to Arctic Security" (2017).

Appendix 1. Oil and Gas Projects in Russia

According to OECD data, Russia is one of the top three oil-producing countries in the world, the others being Saudi Arabia and the United States. Russian oil production has been gradually increasing in recent years, and now is over 0.5 million TOE. In 2017, Russia became the largest exporter of oil in the world, surpassing both Saudi Arabia and the US. In addition, Russia is the world's largest exporter of natural gas as well. According to World Bank analysis, the Russian macroeconomic outlook is modestly positive: "Overall, a sound macroeconomic framework, with relatively high levels of international reserves (\$461 billion), low external debt levels (about 29% of GDP), and comfortable import cover (15.9 months), positions Russia well to absorb external shocks. Russia's growth prospects for 2018-20 remain modest, forecast at 1.5-1.8%. Higher-than-expected oil prices could favorably affect the growth forecast." However, oil and gas exports still make up 59% of export goods in 2017 and about 25% of fiscal revenue, making Russia overly dependent on these exports; metals make up another 10.4% of exports; overall, raw materials (including energy products, metals, wood products, precious metals and stones, and other minerals) comprise well over ¼ of Russia's exports.

- Power of Siberia pipeline

The Power of Siberia pipeline, currently under construction, will carry gas from Irkutsk and Yautia, in eastern Russia, to China. It will run roughly 3000 km, and carry 38 billion cubic meters of gas per year. In 2014, Gazprom and the China National Petroleum Corporation (CNPC) signed a contract, in the presence of Presidents Putin and Xi, that obligates Gazprom to supplying 38 bcm of gas annually to China for 30 years. According to Gazprom's Alexey Miller, this is "the biggest contract in the entire history of the USSR and Gazprom" and \$55 billion USD will be invested in construction of the production and transmission facilities. Power of Siberia is in addition to earlier gas deals between Russia and China, including agreements in 2009, 2010, and 2013. Under these, Russia will eventually send up to 68 bcm of gas to China each year. The pipeline will cross the Russia-Chinese border by running under the Amur River at Blagoveshchensk.

- Chinese rigs

In 2017 and 2018, a Chinese offshore oil rig, the Nan Hai Ba Hao, explored for oil in the Russian far north. In 2017, the rig made a significant discovery in the Leningradskoye field, and in 2018 it explored in the Rusanovskoye field, both of which are under development by Gazprom. The Chinese rig was brought to Russia by the Chinese heavy lift vessel Hai Yang Shi You 278.

- Yamal gas

The Yamal LNG project, which came online in 2018, made a major contribution to Russia's economy, and "boosted" Russian LNG production by 70.1%, according to Bloomberg.⁷¹

A new giant gas project is in the works, Arctic LNG 2, located in the Gydan peninsula near the existing Yamal megaproject. The new project is projected to produce nearly 20 million tons of LNG per year, most of which will be shipped via ice-capable tankers east to Asian markets. Linked to the Arctic LNG2 project are the port of Utrenneye and a new airport. Novatek, which is developing the project, is reportedly in talks with Saudia Arabia, China, and Japan, and has already secured investment from the French company Total.

"About 90% of Russia's natural gas and about 12% of oil is today produced in the Yamal Nenets region, and a number of new fields are up for development in the years to come. Among them are the Tambey fields that are believed to hold more than 7 trillion cubic meters of gas." ⁷³

The Guangzhou Shipyard International just completed an icebreaking tanker, with Arc7 (highest) ice class rating, designed by Aker Arctic.⁷⁴ The tanker, "Boris Sokolov", will carry LNG from Sabetta in the Yamal Peninsula, to markets in Asia and Europe. It is capable of breaking up to 2 meters of ice, and sailed the Northern Sea Route in January 2019 without icebreaker escort.⁷⁵

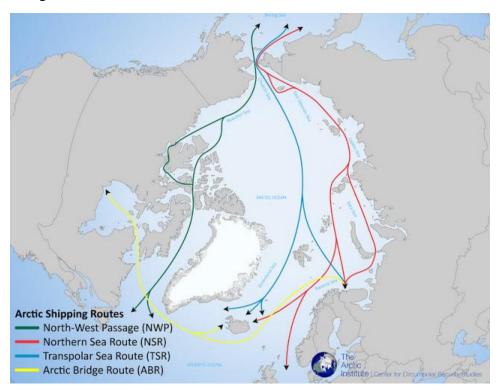
Appendix 2. Northern Sea Route (NSR) details

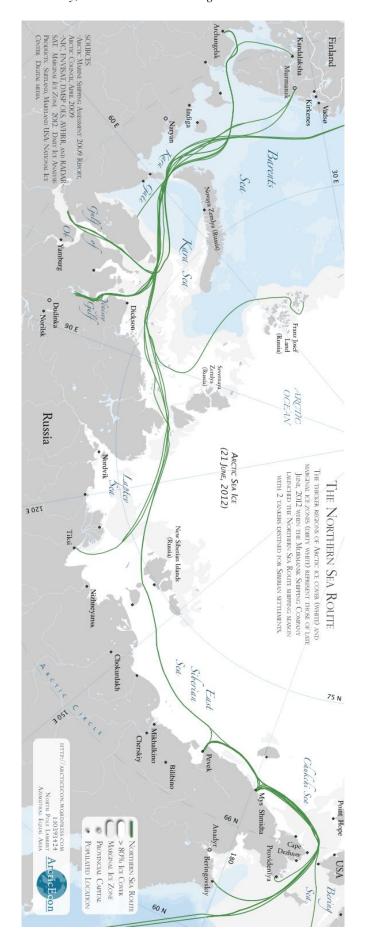
1. Traffic

- According to the Center for High North Logistics, in 2017 there were $\underline{1908}$ voyages in the Northern Sea Route:

From Europe to NSR	54
From Asia to NSR	12
Transits	27
Between NSR ports	591
From East Russia to NSR	30
From West Russia to NSR	537
From NSR ports	657

2. Figures





Appendix 3. Russian military build-up in the Arctic

- In December 2015, the AJSC received its own air force and army with the formation of the 45th Air Force and Air Defense Army of the Northern Fleet. According to Russian sources, 50 bases are expected to be built across the Arctic.⁷⁶
- According to CIMSEC,⁷⁷ since 2015 Russia has built and/or upgraded airbases on Franz Josef Land, Severnaya Zemlya, Wrangel Island, Kotelny Island, Novaya Zemlya, and on the mainland at Mys Shmidta. There are Navy bases on Kotelny Island and Alexandra Land. Ground forces include the 99th Arctic Tactical Group on Kotelny Island and two Motor Rifle Arctic Brigades stated in Murmansk.
- The Arctic Joint Strategic Command, established in December 2014, controls all of these, in additional to other combat units, radar stations, and other units in the region.
- A large year-round airbase is under construction on the New Siberian Islands. Another anti-aircraft base is under construction in Tiksi, which will become part of the 45th Army.⁷⁸
- The Moscow Times reported in March 2019 that "New air defense formation units will soon be placed" in Tiksi, and that the Northern Fleet will receive coastal defense missiles as well as a Tor-M2DT short-range air defense missile systems.⁷⁹



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