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The Process of Formulating Japan's Arctic Policy: From Involvement to Engagement

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Cover photo: The submarine USS *Annapolis* (SSN 760) rests in the Arctic Ocean after surfacing through three feet of ice during Ice Exercise 2009 on March 21, 2009. The two-week training exercise, which is used to test submarine operability and war-fighting capability in Arctic conditions, also involves the USS *Helena* (SSN 725), the University of Washington and personnel from the Navy Arctic Submarine Laboratory. US Department of Defense photo by Petty Officer First Class Tiffini M. Jones, US Navy.



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ACRONYMS

AERC	Arctic Environment Research Center	
AMAP	Arctic Monitoring and Assessment Programme	
CAO	Central Arctic Ocean	
EEZ	exclusive economic zone	
IASC	International Arctic Science Committee	
INSROP	International Northern Sea Route Programme	
JAMSTEC	Japan Agency for Marine-Earth Science and Technology	
JIIA	Japan Institute of International Affairs	
JOGMEC	Japan Oil, Gas and Metals National Corporation	
KANUMAS	Kalaallit Nunaat Marine Seismic project	
LNG	liquefied natural gas	
MEXT	Ministry of Education, Culture, Sports, Science and Technology	
MLIT	Ministry of Land, Infrastructure and Tourism	
MoFA	Ministry of Foreign Affairs	
NIDS	National Institute for Defense Studies	
NIPR	National Institute of Polar Research	
NSR	Northern Sea Route	
OPRF	Ocean Policy Research Foundation	

EXECUTIVE SUMMARY

This paper argues Japan's Arctic policy is in the process of developing toward more active engagement in the region. The first part of the paper discusses three milestones of Japan's past involvement in the Arctic, which consists of signing the Svalbard Treaty in 1920, engaging in polar science for more than 50 years and conducting the International Northern Sea Route Programme (INSROP) during the 1990s. The second part of the paper summarizes the current process of formulating Japan's Arctic interests at the ministerial level, as well as active discussions in private think tanks. Then, this paper considers opportunities and challenges for Japan in the Arctic, in areas such as Arctic shipping, oil and gas exploitation, and fisheries. The paper concludes with three strategic considerations to help formulate Japan's Arctic policy: the need to combine scientific findings with economic interests; possible diplomatic linkages between Arctic and East Asian states; and making diplomatic efforts toward subnational actors, such as indigenous groups in the region.

INTRODUCTION

Although Japan has been involved in a number of activities in the Arctic since the end of the Cold War, the Japanese government has not yet made its Arctic policy official. In recent years, however, as the impact of climate change on the Arctic has become increasingly apparent, the Japanese government has begun to define its role and interests in the Arctic at the ministerial level. This is partly because the rapid ice melting in the Arctic, caused by global warming, affects not only the Arctic Ocean and its surrounding ecosystem, but also causes the sea level to rise on a global scale, altering the earth's climate system — issues that are of concern for Japan (Arctic Monitoring and Assessment Programme [AMAP] 2011, 11). According to the Japan Agency for Marine-Earth Science and Technology (JAMSTEC), the latest research reveals that the retreat of sea ice is related to colder winter temperatures in Japan (JAMSTEC 2012). Of further concern to Japan, the ice melting in the Arctic Ocean means the area is rapidly globalizing as it becomes more and more integrated into the market economy. Globalization brings new global players into the Arctic, thus effecting an increase of marine activities in the region.

This paper discusses three milestones of Japan's involvement in the Arctic and summarizes the process of formulating Japan's Arctic interests at the ministerial level. Then, it considers opportunities and challenges for Japan in the Arctic. Finally, the paper concludes with three considerations, which could help inform the Japanese government's formulation of its Arctic policy.

THREE MILESTONES IN JAPAN'S ARCTIC INVOLVEMENT

There are three milestones in the involvement of Japan in the Arctic. The first marked involvement dates back to the Svalbard Treaty signed in 1920. As one of the 14 high contracting parties to the treaty, Japan holds certain legal rights and obligations, including rights of fishing and hunting in the territories and the territorial waters (article 2), liberty of access and entry (article 3), the establishment of an international meteorological station (article 5) and the same treatment (of nationals of the signatory countries) with the nationals of Norway, "with regard to methods of acquisition, enjoyment and exercise of the right of ownership of property, including mineral rights, in the territories specified in article 1" (article 7). In practice, these rights are difficult to execute unilaterally, but they can be executed in accordance with the relevant Norwegian jurisdiction.

Recently, some conflicts have been renewed among signatory parties, as to the interpretation of the Svalbard Treaty's applicability regarding the exclusive economic zone (EEZ) and continental shelf around Svalbard. The Japanese Ministry of Foreign Affairs (MoFA) had not formulated its position toward the treaty; however, present and future developments in terms of resource exploitation and shipping in the Arctic will increase the area's strategic importance for Japan (Ohnishi 2012, 338).

Japan's second important involvement in the Arctic is in the field of science. Japan has engaged in polar science for more than half a century. This long-standing interest has naturally prompted research in the Arctic. The 1987 Murmansk speech by then Soviet Union President Mikhail Gorbachev changed the political atmosphere of international relations in the Arctic, suggesting, as one of six concrete proposals, the coordination of scientific research in the Arctic, which led to a dramatically increased interest regarding Arctic research. This increased interest resulted in the establishment of the International Arctic Science Committee (IASC), an active and major non-governmental organization promoting Arctic research. The establishment of the IASC, in turn, affected Japanese researchers in natural science. The Japanese government founded the National Institute of Polar Research (NIPR), an inter-university research institute in 1973, which in turn established the Arctic Environment Research Center (AERC) in 1990. The AERC opened a research station at Ny-Ålesund on Svalbard in 1991, in collaboration with the Norwegian Polar Research Institute. Joining the IASC from 1991, the NIPR began to engage in a variety of national and international research activities in the Arctic. While the NIPR focussed on terrestrial fields of research, JAMSTEC began marine research in collaboration with the United States. JAMSTEC conducted its first research cruise with the oceanographic research vessel Mirai in 1998. Since then, invaluable observational studies have resulted from more than 10 Arctic expeditions by JAMSTEC.

A third important involvement in the Arctic was also given impetus by Gorbachev's proposal regarding the opening of the Northern Sea Route (NSR). "To examine all the possibilities of the NSR, an international commercial sea lane, Japan's then-named Ship and Ocean Foundation (now called the OPRF), aided by the Nippon Foundation, in collaboration with partners from Norway and Russia, carried out the INSROP from 1993 to 1999" (OPRF 2013). INSROP was an international project of close collaboration among the partner countries, with 390 participating researchers from 14 countries "pursuing the multidisciplinary study of the NSR" (ibid.). Phase 1 of INSROP was carried out from 1993 to 1995, and phase 2 from 1997 to 1998 (ibid.). In connection with the INSROP, an experimental voyage via the NSR was performed with the *Kandalaksha*, a Russian ice-breaking cargo vessel, from Yokohama, Japan to Kirkenes, Norway (ibid). During the trip, an on-board research team, composed of 18 experts and specialists from Japan, Russia and Canada, made various observations and measurements, affording them a good opportunity to deepen their understanding of natural conditions and ship performance through the NSR (ibid.). In advance of the establishment of the Arctic Regional Hydrographic Commission in 2010, INSROP pioneered charting of the shipping route in the Arctic.

THE PROCESS OF FORMULATING JAPAN'S ARCTIC INTERESTS

The impact of climate change on the Arctic and the speed at which the ice has been melting in summer seasons have been repeatedly reported by media in Japan. An incident that caused some alarm was Russia planting its national flag on the seabed of the North Pole in August 2007. One of Japan's national newspapers reported the event as the beginning of a "resource race" (Komaki and Mizuno 2007). In short, the impact of climate change, causing rapid ice melting, also affected the Japanese policy-making community, which began looking more carefully at the Arctic.

Several government ministries began making their agendas relevant to Arctic development. Intensive efforts were prompted by the Ministry of Education, Culture, Sports, Science and Technology (MEXT). Faced with the increasing effects of climate change in the Arctic Ocean and their potential impact on Arctic terrestrial environments — as already observed in the repeated breaking of records of the minimum extent of the Arctic ice cap — MEXT revitalized its Arctic research programs. For example, in May 2011, the Japan Consortium for Arctic Environmental Research was founded as a platform for coordinating the Arctic research activities of Japan. In June 2011, in the course of a governmental initiative for facilitating green innovation and environmentally friendly technologies, MEXT also initiated the Green Network of Excellence, under which the five-year Arctic Climate Change Research Project was funded, managed by the NIPR and JAMSTEC.

One can also see efforts by the MoFA. In line with increasing prospects for the Arctic Council as the most relevant body for Arctic governance, in April 2009, Japan's then Senior Vice Minister for Foreign Affairs Seiko Hashimoto attended the Antarctic Treaty-Arctic Council Joint Meeting in Washington, DC, officially

announcing Japan's application for permanent observer status in the Arctic Council. Since then, the Japanese government has been attending Arctic Council meetings as an ad hoc observer. In line with its efforts, the MoFA established the Arctic Task Force in September 2010 to help identify Japanese interests in the Arctic. Through several bilateral meetings, the Japanese government requested the support of Arctic states for the approval of Japan's application for permanent observer status to the Arctic Council. On November 6, 2012, Japan's former Senior Vice Minister for Foreign Affairs Shuji Kira attended a meeting between the Arctic Council's Swedish chair and the council's observers and ad hoc observers in Stockholm, Sweden. In his statement, Vice Minister Kira asserted that Japan deserved permanent observer status because of its active contribution to the activities under the Arctic Council, and assured the council that Japan would respect the sovereignty of the member states, their sovereign rights and jurisdiction (Kira 2012). A more recent effort by the MoFA is the appointment of Masuo Nishibayashi, ambassador of cultural exchange, to be concurrently appointed in charge of Arctic affairs (MoFA 2013). As a result of these efforts, Japan was admitted as an observer to the Arctic Council's 8th Ministerial Meeting in Kiruna, Sweden. At the meeting, Japanese Ambassador Nishibayashi said that the melting Arctic ice opened opportunities in the region for both researchers and businesses, which increased the awareness of Japanese people (Pedersen 2013).

Owing mainly to the potential impact of the opening of the NSR as a commercially viable shipping route between East Asia and Europe, in August 2012, the Ministry of Land, Infrastructure and Tourism (MLIT) set up a board in order to examine the route's feasibility and logistics for Japanese shipping companies, including ports in the northern part of Japan. The MLIT gathers relevant information through its internal and external channels. The National Institute for Defense Studies (NIDS) also conducted work in this area. In its annual report, the NIDS explains that Japan cannot stand outside future Arctic development, and recommends that Japan build reliable relationships with the Arctic states (NIDS 2011, 83-85). Additionally, in July 2012, a non-partisan group of parliamentarians on Arctic security was formed. The chair of the group, Shinzo Abe, has now become Japan's prime minister.

In line with the government's activation of policy formulation toward the Arctic, discussions are also underway in the private sector. The OPRF — a private think tank known for organizing INSROP and for its major role in the Basic Act on Ocean Policy in July 2007 — contributes significantly to studies on the Arctic and in helping to formulate policy recommendations. As part of its efforts in this context, the OPRF launched the Arctic Conference Japan in 2010, with experts in international law, security, science, shipbuilding, shipping and climate change. Over the past two years, conference members have continued to meet to establish a unified view of multi-faceted Arctic issues and to address Japan's Arctic policy and strategy in order to meet the interests of Japan and the world. In its proposals released on April 25, 2012, the Arctic Conference Japan urged the government to: establish a task force as a "playmaker" to design Japan's Arctic policy; engage actively in Arctic Ocean management; be actively involved in the environmental protection of the Arctic Ocean; reinforce involvement in Arctic natural resources development; bolster Arctic research; promptly respond to logistical changes by the opening of Arctic seaways; design a new security program in response to opening of the Arctic seaways; contribute to the establishment of order in the Arctic Ocean; and establish a framework for Japan-Russia dialogue on Arctic issues (Arctic Conference Japan 2012, 1–9).

In addition, the Japan Institute of International Affairs (JIIA), founded in 1959 as a private, non-partisan policy think tank focussed on foreign affairs and security issues, organized a research project called "Arctic Governance and Japan's Foreign Strategy," which was funded by the MoFA in 2012 as one of its international affairs research/recommendation projects. The JIIA study group released its final report in March 2013, in which the following six recommendations were made to the government:

- "Japan's financial means and technology should be utilized in the area of resource exploration and development to build win-win relationships with Coastal States" (Asari 2013, 3).
- "In the area of marine transportation, appropriate application of the [United Nations Convention on the Law of the Sea] should be ensured on the basis of the principles of the right of innocent passage (in the territorial waters of Coastal States) or freedom of navigation (in the waters beyond the territorial waters of Coastal States) on Arctic shipping routes" (ibid., 4).
- "On the security front, the Japan-US cooperation should be further strengthened, taking into account implications for the strategic environment if power projections in the Arctic Ocean become easier" (ibid., 7).
- "Fully taking into consideration the delicate environment of the Arctic Ocean, Japan should harness its expertise and technology to play a leading role in the area of environmental preservation" (ibid., 8).

- "Active diplomacy should be pursued so that governance founded on a peaceful and stable international order [can] be ensured in the Arctic Ocean" (ibid., 10).
- "The Japanese government's Arctic policy structure should be reinforced" (ibid., 11).

OPPORTUNITIES AND CHALLENGES FOR JAPAN IN THE ICE-MELTING ARCTIC

OPENING ARCTIC SHIPPING ROUTES

There are three distinct realms of opportunity for Japan in the ice-melting Arctic. The first and most beneficial opportunity lies in the opening of Arctic shipping routes. The NSR — also called the Northeast Passage — is more beneficial for Japanese shipping companies than the Northwest Passage, as the trip using the NSR is about 40 percent shorter than the 11,500 nautical mile haul through the Suez from Hamburg to Yokohama. The number of commercial ships passing through the NSR has increased radically since 2010. In 2012, 46 vessels passed through the NSR. For example, the liquefied natural gas (LNG) tanker *Ob River*, chartered by Russia's Gazprom Group, arrived at the Japanese LNG terminal in Japan with liquefied gas from Norway in December 2012, which was the first transit through the NSR made by the LNG tanker.

This trend, however, poses challenges. Japanese shipping companies have not operated transport through the NSR yet. The main reason is that it is economically less viable due to the fees that Russia sets, based on the current cargo flow (Arctic Council 2009, 117). Moreover, as a Tokyo shipping company's planning expert (who wished to remain anonymous) explained in a personal interview, reserving ice-class ships only for the summer season is an unendurable burden for shipping companies that are competing for cost performance in the global market.¹ Uncertain, intermittent weather forecasting and the lack of reporting of icy ocean conditions also pose serious hazards for Arctic shipping (Emmerson and Lahn 2012, 23).

The key to making NSR transits more economically viable lies in efforts both for correcting the disparity between the Russian regulations and globally accepted international rules and standards, and for improving weather forecasting technology, including the reporting of ice conditions. In this regard, the ongoing work for preparing the Polar Code under the International Maritime Organization is crucial.

¹ Personal communication, July 31, 2012.

OIL AND GAS

The second opportunity is in the development of oil and gas fields. Since 1989, the Japan Oil, Gas and Metals National Corporation (JOGMEC) — formerly known as Japan National Oil Corporation — has been a member of the Kalaallit Nunaat Marine Seismic (KANUMAS) project, "a regional seismic program, including new data acquisition and preliminary studies for hydrocarbon potential near offshore Greenland" (JOGMEC 2012).² "In December 2011, the Bureau of Minerals and Petroleum... of the Government of Greenland announced the opening of the licensing rounds in the Greenland Sea, offshore Northeast Greenland" (ibid.). In an attempt to participate in the rounds, Greenland Petroleum Exploration Co., Ltd. was established by the JOGMEC (ibid.).

Since the Great East Japan Earthquake in March 2011, the demand for oil and gas as alternatives to nuclear power plants has increased in Japan because the government suspended all 54 reactors, which accounted for 31 percent of the country's energy supplies. According to one estimate, crude oil imports were 4.38 million barrels per day in 2012 and will exceed 4.2 million barrels per day in 2013 (Nagatomi et al. 2012). Japan's LNG import is estimated at 87.6 million tons in 2012 and will increase to 88.7 million tons in 2013 (ibid.).

However, there are also complications in this category. Technological difficulties as a result of harsh Arctic weather make mining and exploitation difficult obstacles for investing in oil and gas. Furthermore, disputes — over maritime borders between the United States and Canada, the dominion over Hans Island and the interpretation of the Svalbard Treaty — also negatively affect the potential for the development of oil and gas in the Arctic, as does the delimitation of the continental shelf adjacent to the North Pole. Finally, a formidable obstacle is the relatively high price for oil and gas extracted from the Arctic seabed compared with that of shale gas in North America.

FISHERIES IN THE CENTRAL ARCTIC OCEAN

The third opportunity comes with potential fisheries in the Central Arctic Ocean (CAO). The warming sea temperature in the Arctic Ocean may cause the migration of fish stocks northward. Currently, there is no regional fishery management agreement covering the CAO where the high sea intersects with the EEZs of coastal states. In order to realize potential fisheries, data about fish stocks in the CAO must be obtained to facilitate sustainable management. Although this is not a straightforward task, and there is no evidence about the wealth of fish stocks in the CAO, the prospect for possible fisheries in this area provides incentives for invigorating the Japanese fishing industry.

CONCLUSION

The ice-melting Arctic is producing many global issues, such as the escalation of global warming, a rise of sea levels and a drastic overall impact on the global climate. It is crucial for Japan to deal with these issues through the facilitation of Arctic research. At the same time, however, the changing Arctic environment offers the potential to invigorate the Japanese economy. This circumstance encourages the Japanese government to formulate its Arctic policy with a long-term perspective focussing on both opportunities and challenges (Ohnishi 2013, 46–48). Toward the formulation of such an Arctic policy, the following three considerations are beneficial.

The first consideration concerns the relationship between scientific findings and economic interests. As this paper shows, since the beginning of the 1990s, the Japanese scientific community has devoted efforts toward a better understanding of the Arctic environment and the impact of climate change. However, this research has been conducted without being connected to the potential economic interests that it holds for Japanese society. When the government formulates its Arctic policy, the data and knowledge obtained from scientific research should be strategically used for planning and promoting the longterm perspectives on the economic benefits that Japan can draw from the Arctic.

The second consideration should be a close investigation of the regional order in the Arctic and its possible linkages with East Asian countries. As the Arctic Ocean is integrated with the global market, non-Arctic East Asian states such as China, South Korea and Japan will advance their commitments in the Arctic, thus becoming more involved in Arctic issues. This means that international relations in the Arctic will affect those in East Asia. The government needs to pay attention to this linked side effect between the Arctic and East Asia.

The third consideration is about the attitude of the government toward indigenous people in the Arctic. Indigenous people are substantial stakeholders in Arctic affairs and hold informal but significant influence on decisions made by regional institutions and governments in the Arctic. Their influence will be more apparent under the Canadian chairmanship of the Arctic Council. Thus the Japanese government should make diplomatic efforts not only toward the Arctic states but also toward subnational actors such as indigenous groups in the Arctic.

² According to JOGMEC (2012), "The KANUMAS project has been sponsored by the KANUMAS Group, comprising Statoil, BP, ExxonMobil, Chevron, Shell, JOGMEC and NUNAOIL A/S (National Oil Company of Greenland). In return, each member of the KANUMAS Group was granted a special preferential position to be activated when a call for tenders for exploration and exploitation licenses is issued for the area concerned."

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