Japan's Arctic Policy: The Sum of Many Parts

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Japan has a long history in polar research and this is acknowledged and encouraged by the Japanese government. However, the Japanese government has not created a unified, cross-ministerial task force operating within a unified strategy. This stems from the particular characteristics of Japanese government administration, where ministerial horizontal cooperation is rare, and where business and industry interests often play a critical role. Japanese business has not applied sufficient pressure for the government to create a central strategy as they have concluded that benefits from developing the NSR are too fragile to gain significant financial or logistics advantages, compared with existing routes. Japan views it as critical to engage in international research and development in cooperation with littoral states, as Japan does not have the legal title to access natural resources in the Arctic region. The views of the shipping industry may shift over time, and the Japanese government's attitude to energy security may shift due to the nuclear accident in 2011. From this perspective, the overarching ambition of Japan's Arctic policy is to plant seeds in order to secure interests in the future.

Background

Japan has been one of few non-Western states to conduct polar research, doing so since 1957, and mainly focusing on Antarctica. In 1990, Japan formally joined the Arctic research community by becoming a member of the International Arctic Science Committee (IASC) as a non-Arctic state. The establishment of the Centre for Arctic Research under the National Institute of Polar Research (NIPR) complemented this. The Centre maintains two observatories on Svalbard, Norway, making Japan one of the thirteen countries that have observatories on Svalbard. In July 2009, the Japanese government officially submitted an application for Permanent Observer status to the Arctic Council. Since then, a number of policies related to the Arctic have been implemented.

At present Japan does not appear to have a central strategy on the Arctic. It is therefore helpful to review events and activities related to the Arctic in a chronological order to understand the actual Japanese Arctic policy. In doing so, it is essential to be mindful of the characteristics of the Japanese

administration; it is vertically fragmented and Japanese industries often exert a strong influence in the creation of policy.

In the Japanese administration, the civil service holds the policymaking initiative and ministries are the key organizational units. This is because the Japanese bureaucratic system has maintained its function since its initiation even after the American Occupation after WWII, strengthening its position relative to politicians and business (Shinoda, 2000: 5). Initiatives tend to emerge from the bottom-up within the ministries and each ministry holds strong power over specific issues. Competition between ministries is fierce and their employees tend to be loyal to a single ministry, therefore it is not unusual for horizontal cooperation to be absent across ministries (vertical fragmentation).²

The Japanese policymaking process has been characterized as an 'iron triangle' (Drifte, 1996: 16) that consists of three major actors: the civil service, politicians and business actors. Particularly in foreign policy, Japanese business actors play an informal yet substantial role through lobbying. The civil service and business actors are interdependent. The civil service is dependent on business actors to gather political information of interest as well as on their intelligence capacities. The business actors rely on the government for support and guidance on trade-related issues (Hagström, 2000).

Actors Related to the Arctic

In terms of ministerial bodies related to the Arctic, at present there is no cross-ministerial, unified organization to deal with Arctic or Polar issues. Most likely due to the Japanese administration's characteristic of dividing labour horizontally among several ministries, issues related to the Arctic are delegated across several ministries:

- Ministry of Education, Culture, Sports, Science and Technology (MEXT) deals with scientific research;
- Ministry of Foreign Affairs (MoFA) deals with Arctic diplomacy; and
- Ministry of Land, Infrastructure, Transport and Tourism (MLIT) is in charge of overall ocean policy and has a close link to the shipping industry.

Currently there are 10 Japanese universities or research institutes conducting Arctic research (MEXT, 2010). They include:

• The National Institute of Polar Research (NIPR): the hub for Japan's Arctic research. Under the Centre for Arctic Research, it runs observatories on Svalbard, Norway, and conducts several comparative research projects on the Arctic and Antarctica.

• Japan Agency for Marine-Earth Science and Technology (JAMSTEC): it carries out a research program on the Northern Hemisphere Zone.

• Japan Aerospace Exploration Agency (JAXA): it undertakes scientific observation using special satellites that monitor water circulation in the sea, the effect of greenhouse gases, etc.

In addition, the Ocean Policy Research Foundation (OPRF), which is a think-tank and a lobbying organization for the Japanese shipping industry and related manufacturing industries, has conducted several research projects on the Arctic, particularly regarding the Northern Sea Route (NSR).

Regarding the Japanese government's capacity to conduct maritime activities in the polar regions, Japan owns three icebreakers; the *Shirase*, *Soya* and *Teshio*. The Shirase is under the auspices of the Japan Maritime Self Defense Force (SDF). For this reason, there are legal restrictions on the scope of usage for the *Shirase*, based on the SDF Act.³ At present, the *Shirase* may only be used as a supply vessel for the Japanese Antarctic Research Expedition (JARE) under NIPR, and there is no discussion to change the relevant law.⁴ The *Soya* and *Teshio* are owned by the Japan Coast Guard and only used as patrol boats, operating from Hokkaido in northern Japan.

History

As mentioned above, Japan exhibited a particular interest in the scientific aspect of the Arctic during the Cold War period and joined the International Arctic Science Committee (IASC) as a non-Arctic state since its establishment in 1990.⁵ In response, the Centre for Arctic Research was established at the NIPR.

Three years later, the Ship & Ocean Foundation (now OPRF) began a six-year research project titled 'International Northern Sea Route Programme (INSROP)'. The Nippon Foundation, which is one of the largest private foundations in Japan, funded this project, and it was carried out in cooperation with the Fridtjof Nansen Institute in Norway and the Central Marine Research and Design Institute in Russia. The project was one of the first international research projects that aimed to prove the technical feasibility of the NSR as an international commercial sea-lane (Liu & Kronbak, 2010). According to OPRF, the project ended successfully with "abundant fruit in assessment of the insurance and legal issues of the NSR and sensible suggestions for improvements" (OPRF, 2012a).

Concurrently, the Ship & Ocean Foundation conducted the 'Japan Northern Sea Route Programme (JANSROP)', which, compared with INSROP, was primarily for the Japanese shipping industry to investigate the feasibility of the NSR. This developed into JANSROP Phase II (2002-2005). The

primary objective of the Project was "to stimulate Asian countries' interest in the NSR through the presentation of update information of natural resources preserved in the regions with development and transportation scenarios" (OPRF, 2012b).

As a result of the studies, the JANSROP-GIS (geographic information system) was compiled. Based on the results from these research projects, the Japanese shipping industry's conclusion on the feasibility of the NSR was that there were too many uncertainties to generate any financial benefits.⁶

Meanwhile, in December 2004, the Council for Science and Technology Policy (under the Cabinet Office) agreed on the Promotion Strategy of Earth Observation. This included Japan's aim to realize a long-term, continuous observation of the polar regions and cryosphere (MEXT, 2010).

However, it was not until 2009 that the Arctic issue attracted significant public attention in Japan. In April, the Japanese Vice Foreign Minister released an official statement on the 50th anniversary of the Antarctic Treaty and announced Japan's intention to apply for Permanent Observer status at the Arctic Council (S. Hashimoto, 2009). In July 2009, the Japanese government officially submitted an application for Permanent Observer status to the Arctic Council. MoFA followed this action by establishing an Arctic Task Force under the International Legal Affairs Bureau, Ocean Division in September 2009. Since November 2010, MoFA officials have attended Arctic Council meetings.

These shifts were also complemented by nation-wide, large-scale scientific research projects. In March 2010, MEXT submitted a draft report 'Regarding institutional cooperation for the observation of the cryosphere'. In June 2010, the 'Arctic Research Examination Working Group' was established within MEXT and in August 2010, the Working Group released an interim report. The report proposed to establish the Consortium for Arctic Environmental Research in order to facilitate cooperation between related research institutions and to strengthen Arctic research (MEXT, 2010). The development of a 'Research Program on Arctic Climate Change' was recommended as well. In December 2010, MEXT obtained programmatic funding for Arctic Environmental Research, starting fiscal year 2011. The funding was intended to extend over five years, until fiscal year 2015. Based on this funding, the Japan Consortium for Arctic Environmental Research (JCAR) was established under the NIPR in May 2011.

Meanwhile, in April 2011, the National Institute for Defense Studies released an annual report titled 'Overview of the East Asia Strategy 2011' that contained a chapter on 'The future order of the Arctic

Ocean'. The report summarized the environmental, political and security situations in the Arctic region and proposed a number of recommendations for the Japanese government.

The attitude of the Japanese government at present is generally welcomed by the Japanese shipping industry. Given the uncertainties that exist around large-scale transiting of the NSR, the relevant Japanese business community considers the independent data and information that the governmental institutions obtain on the Arctic as sufficient for the time being. For instance, the Japanese shipping industry considers short-term data and information such as weather forecasts as sufficient.

To further accelerate this approach, the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) submitted a report together with related ministries, private businesses and advisors to indicate the NSR as a 'frontier' and held a first special committee meeting inside the ministry in August 2012 to investigate the current status and future policy on the NSR (MLIT, 2012b).

Japan's Interest in the Arctic

Against the background explained earlier, Japan's interests in the Arctic can be divided into few areas. As regards Arctic policy, the Japanese 'iron triangle' of the civil service, politicians and organized business actors seems to be in effect. This means when any action is made, an agreement is already made among the elements of the triangle, although the combination of actors might be different (for instance, it could be a triangle of MoFA, politicians interested in specific foreign affairs and fishing industry, or a triangle of MLIT, Infrastructure, Transport and Tourism, and politicians with a strong interest in transport issues and the shipping industry.)

Environment

According to the government, protecting and understanding the Arctic environment is the primary aim of Japanese Arctic engagement. The ice-covered areas in the Arctic are decreasing due to climate change, and other changes in the Arctic affect the eco-system at a global level.

The Japanese government view is that the Arctic "should be recognized as a part of the common heritage of mankind. The international community should protect this area and use it for peaceful purposes" (Horinouchi, 2010). Therefore Japan is responsible to protect the environment of this area, as a member of the international community as well as a country actively making efforts to protect the global environment.

Economic

Japan is one of the largest trading nations in the world but a country of few natural resources, and is therefore naturally interested in navigation issues and the natural resources in the Arctic. If ice in the Arctic continues to decrease, the navigation distance between Japan and Europe/North America will be greatly decreased. This may potentially cut shipping costs dramatically for the Japanese shipping industry. Regarding natural resources in the Arctic, it is understood that a decrease in the ice-covered areas will facilitate resource development in the Arctic Ocean (Horinouchi, 2010). However the Japanese industries that have led the discussion on the extent of the opportunities in the Arctic do not believe, based on current evidence, that there are significant opportunities in the Arctic even if the changes continue to occur. For them, there are too many uncertainties to generate the kind of financial benefits that would encourage them to make the substantial investments required to operate in the Arctic. Meanwhile, there are signs that the Japanese industries have renewed their interest in the NSR. MLIT, the ministry considered to have some of the strongest relations with the shipping industry, started an investigation on the usability of the NSR in March 2012, suggesting it is a yet-to-be realized opportunity in the ocean frontier (MLIT, 2012a).

Security

The Japanese government does not foresee any circumstances that require a Japanese naval presence in the Arctic. The Self-Defense Forces acknowledges that if private Japanese ships request that the SDF convoy them to protect them from an as yet unknown security threat in the region, they would be obliged to do so. However, neither the SDF nor the shipping industry foresee such circumstances arising (Y. Hashimoto, 2011: 73). Therefore, the stable use of the Arctic Ocean is in the best interests of Japan. Contributing to the stabilization of relations between Arctic littoral states by obtaining information and by cooperating with littoral states in various aspects including icebreaker technology is in the national interest (Y. Hashimoto, 2011: 74).

Meanwhile, in the wake of the Great East Japan Earthquake and the nuclear accident in Fukushima in March 2011, Japan has become more open to new sources of energy supply (The Economist, 2012). Japan is highly dependent on external energy sources, importing 96% of energy consumption in 2008 (The Federation of Electric Power Companies of Japan, 2011). 42% of the consumption is oil, 80% of which is from the Middle East (Teikoku-Shoin, 2012). Seeking to diversify both the supply and the supplier, the Japan Oil, Gas, and Metals National Corporation (JOGMEC), an

independent administrative corporation, recently participated in a test of technology on the North Slope of Alaska to extract natural gas from methane hydrates. This project was owned by an American company, ConocoPhillips, and invested in by the US Department of Energy (JOGMEC, 2012).

Governance

Japan is not one of the coastal states of the Arctic Ocean, therefore, with the exception of rights granted under the Spitsbergen Treaty, Japan does not have any territorial claim in terms of international law. For that reason, Japan's position is that the legal issues related to the Arctic Ocean should be addressed within the existing legal framework, whose central framework is UNCLOS (Horinouchi, 2010).

Japan has sought cooperation with Arctic states outside of international fora as well. A request for an endorsement for Japan's application for Permanent Observer status to the Arctic Council was made several times in ministerial meetings, such as with Canada (May 2010) and Norway (September 2011). Norwegian and Finnish embassies in Tokyo held conferences to discuss the Arctic policies of Norway and Finland with Japan (Embassy of Finland in Tokyo, 2011). Scientific research is often conducted in cooperation with Canada, Norway and Russia.

Conclusion

The particular characteristic of Japanese government administration, where business and industry interests often play a critical role in the creation of policy, is also observed in Japan's Arctic policy. Long before the current rise in public interest in the Arctic, Japanese business concluded that benefits from developing the NSR were too fragile to gain significant financial or logistics advantages over existing routes. As a result, the Japanese government has not experienced sufficiently strong pressure from the business community to prioritize Arctic issues or to create a unified, crossministerial task force operating within a unified strategy. In the meantime, as the negative impacts of climate change have become more apparent, policies related to the scientific research in the Arctic were given priorities to protect and understand the Arctic environment.

However, the views of the shipping industry are shifting over time, and perhaps the Japanese government's attitude to energy security may shift as Japanese public attitudes to nuclear energy undergo major change as a reaction to the Great East Japan Earthquake and subsequent nuclear

accident in 2011. If the Japanese government is to prioritize Arctic affairs, a more unified framework will be required.⁸

That said, Japan has a long history in polar research and this is acknowledged and encouraged by the Japanese government. The Japanese government believes Japan can contribute to the sustainable development of the Arctic by providing scientific knowledge. Furthermore, given that Japan does not have the legal title to access natural resources in the region, it is critical for Japan to engage in international research and development in cooperation with littoral states to secure interests in the future. From this perspective, one can perhaps view the overarching ambition of Japan's Arctic policy as planting a flag today, to be used tomorrow.

Notes

- 1. Japan is one of the 14 High Contracting Parties to the Spitsbergen Treaty.
- 2. See Reed (1981), Park (2010) for more on vertical fragmentation (tatewari gyosei) within the Japanese government administration.
- 3. See Self-Defense Forces Act (Act No. 165 of 1954), 4th clause of Article 100, the Enforcement Order of the Self-Defense Forces Act (Cabinet Order No. 179 of 1954).
- 4. The SDF Act specifically states that the SDF shall perform shipping and other cooperation for scientific research in Antarctica. Traditionally, SDF takes a narrow interpretation of the SDF Act.
- 5. In comparison, Japan joined the IASC much earlier than other Asian countries; China joined IASC in 1996, Korea in 2002 and India in 2012, respectively.
- 6. Interview with Fujio Onishi, Research Fellow of the Ocean Policy Research Foundation, February 2012.
- 7. Interview with Fujio Onishi, Research Fellow of the Ocean Policy Research Foundation, February 2012.
- 8. Interview with MoFA official, February 2012.

OPRF/Business	Ministry of Education, Culture, Sports, Science and Technology (MEXT)		Ministry of Foreign Affairs (MoFA)	Ministry of Land, Infrastructure, Transport and Tourism (MLIT)	Others
	Japan joins IASC, Centre for Arctic Research established at NIPR	1990			
INSROP and JANSROP (1993-1999)		1993 1999			
JANSROP Phase II (2002-2005)		2002			
					December 2004: Council for Science and Technology Policy agrees on the Promotion Strategy of Earth Observation
		2005 2009	April: Official statement on the Antarctic Treaty & Arctic Council		
June: Release of first issue of 'Arctic Sea Quarterly'					
			July: Application for Permanent Observer status submitted to Arctic Council		
	March: Draft report 'regarding institutional cooperation for the observation of the cryosphere' submitted to the Earth Observation Promotion Committee	2010			
	June: Arctic Research Examination Working Group' established within Earth Observation Promotion Committee				
	August: Earth Observation Promotion Committee released an interim report, proposed establishing the Consortium for Arctic Research and strengthening of Arctic observation				
			September: Arctic Task Force established under the International Legal Affairs Bureau, Ocean Division		
			November: Officials attend Arctic Council Meeting for the first time (SAO in Denmark)		
	December: Obtained programmatic funding for Arctic Environmental Research for 5 years, starting FY2011FY				
		2011			April: National Institute for Defense Studies releases annual report containing a chapter on the Arctic
	May: Japan Consortium for Arctic Environmental Research (JCAR) established under NIPR				
		2012		March: Submitted a report on ocean policy, stating NSR as an 'frontier'	
				August: First special committee meeting to investigate the status and future of NSR	

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References

Drifte, R. (1996). Japan's Foreign Policy in the 1990s: From Economic Superpower to What Power? New York: St. Martin's Press.

- Embassy of Finland in Tokyo. (2011). *Seminar on Arctic Policies in Finland and Japan*. Retrieved 02.10.2012 from http://www-arctic.nipr.ac.jp/web_HKKC/HKKC_top/files/Finland11Nov01.pdf.
- Hagström, L. (2000). Diverging Accounts of Japanese Policymaking. *The European Institute of Japanese Studies, Working Paper* (No.102).
- Hashimoto, S. (2009). Statement by H.E. Seiko Hashimoto, State Secretary for Foreign Affairs of Japan on the occasion of the 50th Anniversary of the Antarctic Treaty. Retrieved 08.05.2012, from http://www.mofa.go.jp/announce/svm/state0904.html.
- Hashimoto, Y. (2011). Chapter 2 The Future of the Order of the Arctic Sea: Cooperation and Confrontation of the Costal Countries (Hokkyokukai chitsujo no shorai: Engankoku no kyocho to tairitsu). In. The National Institute for Defense Studies (Ed.), East Asian Strategic Review 2011 (Higashi Azia Senryaku Gaikan 2011) (pp. 49-74). Tokyo, Japan: The National Institute for Defense Studies.
- Horinouchi, H. (2010). *Japan and the Arctic*. Retrieved 02.10.2012 from http://www.norway.or.jp/PageFiles/395907/JAPAN_AND_THE_ARCTIC.pdf.
- JOGMEC. (2012). Completion of Field Trial of CO2 Exchange in Alaska ~The First Field Trial of CO2/CH4 exchange~. Retrieved 02.10.2012, from http://www.jogmec.go.jp/english/information/news_release/docs/2012/newsrelease_1205 02.pdf.
- Liu, M., & Kronbak, J. (2010). The Potential Economic Viability of Using the Northern Sea Route (NSR) as an Alternative Route Retween Asia and Europe. *Journal of Transport Geography*, 18(3), 434-444.
- MEXT. (2010). Intermediate report of the Arctic Research Examination Working Group, the Earth Observation Promotion Committee (Chikyukansokku suishin bukai Hokkyoku kentou sagyo bukai Hokokusho Chukan torimatome-). Retrieved 02.10.2012, from http://www.mext.go.jp/b_menu/shingi/gijyutu/gijyutu2/035-4/houkoku/1296814.htm.
- MLIT. (2012a). MLIT Ocean Policy Round-table Conference Report: In an effort to a true maritime power (Kokudokotsusho kaiyo seisaku kondankai hokokusho shinno kaiyo kokka wo mezashite). Retrieved 02.10.2012 from http://www.mlit.go.jp/common/000205494.pdf.
- MLIT. (2012b). Regarding the Placement of Inner-ministry Committee Regarding the North Sea Route (Hokkyokukai koro ni kansuru shonai kentokai no secchi ni tsuite). Retrieved 02.10.2012, from http://www.mlit.go.jp/report/press/sogo11_hh_000018.html.
- OPRF. (2012a). *Activities: INSROP*. Retrieved 08.05.2012, from http://www.sof.or.jp/en/activities/index6_1.php.
- OPRF. (2012b). Activities: JANSROP Phase II. Retrieved 08.05.2012, from http://www.sof.or.jp/en/activities/index6_2.php.
- Park, G. (2010). The Politics of Budgeting in Japan: How Much Do Institutions Matter? *Asian Survey,* 50(5), 965-989.
- Reed, S. R. (1981). Environmental politics: some reflections based on the Japanese case. *Comparative Politics*, 13(3), 253-270.

Shinoda, T. (2000). *Leading Japan: The Role of the Prime Minister*. Westport: Greenwood Publishing Group.

- Teikoku-Shoin. (2012). Top 10 Oil Production Sites and Japan's Trading Partners (Genyuno seisan toppu 10 to nihon no yunyusaki). Tokyo: Teikoku-Shoin Co., Ltd.
- The Economist. (05.05.2012). A silent majority speaks: For the first time in half a century, Japan is without nuclear power. The Economist, Retrieved 02.10.2012, from http://www.economist.com/node/21554239.
- The Federation of Electric Power Companies of Japan. (2011). *Graphical Flip-chart of Nuclear & Energy Related Topics 2011*. Retreived 10.1.12, from http://www.fepc.or.jp/library/pamphlet/zumenshu/pdf/all_english.pdf.