Developing a Japan Policy towards the Arctic Ocean

Proposed by the Arctic Conference Japan to the Government



For the Sound and Sustainable Growth of the World

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The Arctic Conference Japan

Organized by Ocean Policy Research Foundation

Eight Recommendations for Japan's Arctic Policy

The Arctic Conference Japan

For the sustainable use of the Arctic Ocean,

The Conference urges the Government to:

- 1. establish the Nation's Arctic policy and a joint chiefs of staff,
- 2. bolster every research activity in the Arctic,
- 3. actively take part in protection and preservation of the environment,
- 4. participate much more directly in Arctic natural resources development,
- promptly respond to logistical changes in the seaborne trade by the opening of Arctic seaways,
- design a new national security program via the Arctic seaways and shipping,
- 7. contribute largely to the establishment of an order of the Arctic Ocean, and
- 8. make haste to strengthen Japan-Arctic states dialogues, in particular Japan-Russia one.

Foreword

Ocean Policy Research Foundation(OPRF) with the warm support of the Nippon Foundation has long been carrying out studies on the Northern Sea Route, including "the International Northern Sea Route Programme (INSROP, 1993-1999)", reinforced with the domestic project, "JANSROP", and "JANSROP II(2002-2006)" which laid particular stress on the Far East Asia and Russia. Since 2007, every fiscal year, OPRF has carried out an up-dated survey of the academic and business activities in the Arctic in the world and compiled it annually into the INSROP Follow-up Report.

Various impacts of global warming can be seen in many places. The Arctic Ocean is particularly sensitive to climate change of the globe. According to the fourth report of the Intergovernmental Panel on Climate Change (IPCC), it is "very likely" that the temperature rise in the Arctic is far higher than the average temperature rise globally. The extent of sea ice in summer has recently been greatly reduced from the mean value of 700 million km² in the latter half of last century. This reduction is too large to be attributed to inter-annual fluctuation.

These changes in the environment and ecosystem as well as expectations of natural resource exploitation have led to a growing interest in the Arctic Ocean. Although Japan is not an Arctic state, Japan is closely tied to the Arctic for various reasons. For example, climate change in the Arctic has various impacts on the climates of Japan and even those of monsoon countries; Japan has already taken part in natural resource development in the Arctic, and should be more so in the future; the increasing sailings via the Northern Sea Route would have a large influence on Japan as a major state in the Asian market; and there are many unsolved issues related to security and governance of the Arctic.

It is a matter for deep regret that there had been sporadic researches at the national level on the Arctic, since the significance of the region has not been sufficiently recognized in the society. Although data and information of the Arctic issues have been flooded in the web, until a year ago, the Government had not taken any initiative to establish an academic policy for the Arctic issues. As a consequence, the industry, in particular, has hopelessly been bewildered in making decision of its business strategy in the Arctic.

In view of this situation, the Ocean Policy Research Foundation initiated the Arctic Conference Japan in 2010 with experts in international law, security, climatology, oceanography, polar science in general, marine technology, navigation, and regulations of classification society. Over the past two years, the conference members have met to establish a unified view of multifaceted Arctic issues and to address Japan's Arctic policy and strategy to meet the interests of Japan and the world as well. This report summarizes the findings and the discussion in the conference and issues the proposals for the Arctic policy of Japan. The multi-disciplinary proposals cover wide areas such as scientific research, natural resources, shipping routes, security and management of the Arctic Ocean.

The Conference is confident that the efforts would soon be made by the Government to define policy for the Arctic, analyzing the Conference's proposals and referring the outcome of the GRENE project organized by the Ministry of Education, Science, Technology and Sports. With the policy the industry would be likely to develop new strategies and develop the business in the Arctic.

1. Establishing the Nation's Arctic Policy

There has been an urgent need for the Government to establish a task force in the Headquarters for Ocean Policy of the Prime Minister's Office as a "playmaker" that designs Japan's Arctic policy and supervises Arctic-related measures in a versatile and integrated manner. Under the established the Arctic Policy, a joint chiefs of staff should promote key development programs and demand appropriate organizations to substantiate them for executions.

Handling Arctic-related issues involves various measures in a wide range of areas, including science, technology, natural and living resources, the environment, logistics, security and diplomatic activities. Although these measures should be implemented under integrated and specific strategies, there has been only a weak "playmaker" in the Government to design such strategies and supervise the measures.

For the moment, related agencies include the Cabinet Office, Ministry of Internal Affairs and Communications, Ministry of Foreign Affairs, Ministry of Education, Culture, Sport, Science and Technology, Ministry of Agriculture, Forestry and Fisheries, Ministry of Land, Infrastructure, Transport and Tourism, Ministry of the Environment and Ministry of Defense. There is an urgent need for the government to organize an interagency bureau or department, "Joint Chiefs of Staff", that functions properly in establishing a system and projects for the above agencies and other appropriate institutions as well to collaborate in implementation of Arctic-related measures.

2. Bolstering Arctic Research

- The government should strengthen the National Polar Research Institute to become a national and international core of Arctic research.
- The Antarctic Research Vessel "Shirase" should play a role in international polar research, including the Arctic, as a research platform.
- Collaboration in scientific research with Russia under a science and technology consultation agreement should be promoted.

Collaboration with Arctic states is essential for Japanese researchers to carry out studies on utilization of and environmental protection of the Arctic Ocean. As seen in the establishment of the Japan Consortium for Arctic Research in 2011, there is a growing interest in Arctic research. The National Polar Research Institute, which has been playing a leading role in Antarctic research, is expected to do the same for the Arctic. The government should develop the institute as a core of Japanese Arctic research and to be a focal point for international collaboration.

A research vessel in the ice-covered Arctic Ocean would be a powerful tool for Arctic study and would be able to promote research cooperation with Arctic states. Although it would be ideal if Japan could build such a vessel, it seems unlikely in the current situation of difficult finances. A possible alternative is the Shirase, which has currently used for Antarctic research only.

The Shirase's high ice-going performance is internationally recognized. Considering the fact that ice-breaking research vessels in other countries are commonly utilized in both polar regions, it would be practicable for the Shirase to sail in the Arctic as well if a reasonable operation scheme and necessary budget are provided.

Japan's relations with Russia are much more important in the days of the global warming. The Russian Arctic has significant impacts on the forecast and understanding of the climate, agriculture and fisheries of Japan. Japan and Asian regions do the similar impacts on the Russian ones, especially in the Russian Far East. Japan-Russia science and technology collaboration would be crucial.

Active Involvement in Environmental Protection Scheme of the Arctic Ocean

Environmental protection of the Arctic Ocean is important as it forms a vital element in the global environment.

- The government should take a leading role in international organizations such as UNEP and IMO to promote the adoption of conventions for environmental protection of the Arctic Ocean.
- The opening of international seaways through the Arctic Ocean would lead to increased shipping in the waters around Japan and international straits of Japan and Japan-Russia. Measures should be taken for prevention of accidents and incidents and environmental protection of these waters and straits.

Environmental protection of the Arctic Ocean is important as it forms a vital element in the global environment. In the Arctic Ocean, pollutants such as oil illegally discharged or accidentally spilled from ships can result in far more persistent impacts on the environment than pollutants in other waters due to less active and slow biodegradation under cold temperature conditions. Much more attention should be paid than in other waters to other ship-source pollutions, including the invasion of alien species through ships' ballast water and fouled ship hulls, and air pollution by exhaust gas emissions from ship engines.

Increased shipping would result in higher risks of pollution and accidents in the Arctic Ocean. Measures for prevention of ship accidents and pollution as well as the establishment of quick pollution response systems are required. International collaboration and establishment of Arctic governance are crucial. The Government should take a leading role in international organizations such as UNEP and IMO to promote the adoption of conventions and rules for environmental protection of the Arctic Ocean

The opening of international seaways in the Arctic Ocean would lead to increases in sailings to and from East Asia through the Tsugaru Strait, which is an international strait. Accidents resulting in serious marine pollution, such as that caused by the Nakhodka incident, could be caused by ships with operators who have little or no experience in the straits and waters of Japan and by sub-standard ships as well. The similar matters would be expected in the Soya Strait. The Government should be aware of and prepared for possibilities of marine pollution caused by such ships.

4. Reinforced Involvement in Development of Arctic Natural Resources

Energy supply from the Middle East is vulnerable in many ways. Hydrocarbon resources in the Arctic Ocean have large potential as an alternative energy supply. The Government should consider the possibility of developing and transporting natural resources in the Arctic Ocean, in particular Russian ones, and implement relevant measures.

Japan's energy strategy should include use of hydrocarbon resources in the Arctic Ocean as a new and important energy source. Current energy supply from the Middle East cannot be guaranteed in the long term due to the unstable politics and economies in the region.

Japan's economic security demands to ensure a complementary and/or supplementary energy supply. Arctic hydrocarbon resources have the potential to be such a supply, and Russian ones will probably become a main supply in future. Due to the poor infrastructure for Arctic shipping, icebreakers escorting would provide safety sailings even in summer when thin and weak first-year sea ice would occasionally be encountered.

The Government should take necessary measures to increase Japan's presence in resource development in the Arctic in parallel with Arctic commercial shipping, through appropriate ways including strengthening Japan's relationship with Russia.

5. Prompt Response to Logistic Changes in the Seaborne Trade by the Opening of Arctic Seaways

Logistics in the seaborne trade play a vital role in the development of Japanese economy. The Government should advance a clear view about the effects of the NSR opening on the industry and economy of Japan, especially of the potential menace to the present Japan's position in the growing Asian market, without making prompt action plans in response to the change in the seaborne trade. The established view or policy should be followed by prompt actions.

① Domestic infrastructure

The Northern Sea Route as an international seaway has already been recognized as an effective way to shorten the distance and time required for sailing between Europe and Japan. This has begun to increase impacts gradually on the Japanese industry and economy. The Government should urgently take steps to cope with this situation with a clear view on the effects of the Arctic shipping, including the preparation of related regulations, action plans for developing domestic infrastructures, and R&D subsidy to the shipbuilding industry for design and construction of ice-class vessels with competitive price in the world market.

The most urgent task is undoubtedly to set a hub-port scenario in Japan in motion.

② Maintaining capacity of marine transport in the Arctic

The Snow-Dragon, Chinese polar research vessel has often sailed in the Arctic, under the budgetary support of the China's government.

While in Korea, the Korean Transport Institute (KOTI) and the Korea Maritime Institute (KMI) have already initiated studies on the NSR logistics prediction and development of infrastructure as an implementation of the national policy for the Arctic.

The conventional sea routes have been threatened by the piracy and conflicts in the Middle East. Even if the hindrance due to the sea ice is placed in the sailings in the Arctic seas, from the security perspective, Japan should have well prepared to use the routes in the Arctic. This would include maintaining ice-going ships under a Japanese flag and systematic training ways of seafarers for navigation in sea ice and Arctic conditions.

6. New Security Program in Response to Opening of the Arctic

The opening of international seaways in the Arctic Ocean would have far-reaching impacts on Japan's defense and security. The establishment of a new sea-lane defense program is needed. There is an urgent need for the Ministry of Defense to establish a defense strategy against possible military operations in the Arctic Ocean.

The opening of international seaways to and from the north-east Asia region through the Arctic Ocean would require the establishment of a new sea-lane defense plan. To this end, Maritime Domain Awareness is essential to monitor ships, including warships, in the waters of the sea-lanes.

Besides the sea-lane defense, the opening of international seaways in the Arctic Ocean would naturally have far-reaching impacts on Japan's defense and security. The importance of the Maritime Self-Defense Force in the Sea of Japan and the North-West Pacific would be increased. However, the defense capability cannot be improved overnight. Like the long-range Arctic plan by the US Department of Defense for 2030 onward, the government should prepare for military strategies and foreign countries' warship operations in the Arctic Ocean.

7. Contribution to the Establishment of Order in the Arctic Ocean

Although Japan applied for permanent observer status in the Arctic Council in July 2009, it has not yet been approved. At present, Japan sends delegations only to meetings open to ad-hoc observers.

The Council is playing a leading role in management of the Arctic Ocean. Japan has long been collaborating with the Arctic states in scientific research of the Arctic Ocean and the other Pole. Despite this, Japan is only one of the ad-hoc observers in the Council, together with late polar-research-starters such as China and Korea. It is important for Japan to obtain a permanent observer status so as to share Arctic-related information with the Arctic states and to have its views reflected in the Council making meaningful contributions. It is essential to make a levelheaded analysis of Japan's interests in the Arctic and clarify how Japan should contribute to and be involved in the Council.

Japan should take the lead in forming governance for the Arctic Ocean by applying relevant conventions and agreements, *inter alia* the United Nations Convention on the Law of the Sea, and establishing a legal framework through international bodies such as the United Nations and by talks with the Arctic coastal states.

The Arctic Ocean is mostly composed of territorial waters and exclusive economic zones of the coastal states. However, issues related to the Arctic Ocean should be recognized as the matter of global and involving all humanity, since changes in the Arctic Ocean are omens for the global changes of our planet and affect any other place on earth more or less. By this fact, an appropriate management of the Arctic Ocean is important not only for the coastal states but also the entire world.

In addition, establishment of a legal framework that enables appropriate use of international law is essential for governance to be formed for the Arctic Ocean. The Basic Act on Ocean Policy (of Japan) commits Japan's "aiming at bearing the leading role for the formation and development of the international order." (Article 7). Active diplomatic efforts are then required so as to establish a legal order for the Arctic Ocean.

8 Japan-Russia Dialogue

The Government is required to establish a framework for Japan-Russia dialogue on Arctic issues jointly and separately by governments and private sectors or by high-level government officials, with the aim of sustainable development of the NSR and equal benefit for the both countries, creating much more business opportunities in the both sides.

Japan-Russia science and technology consultation agreement should be proposed as early as possible, which would provide further economic and industry development of Japan and Russia and create reciprocal and friendly reliance between the two nations

Arctic issues, including climate change, environmental protection, scientific research, shipping routes, natural resources development, fisheries, security, and governance, are all mutually interacting and interrelated issues. No single issue stands alone. Arctic policy and strategy require an integrated and overarching recognition of these issues.

Most of Japan's interests in the Arctic Ocean relate to Russia, which has the longest coastline in the Arctic. Admitting that there are unsettled problems between Japan and Russia, efforts should be made to establish a bilateral framework for handling Arctic issues. Such a framework may include high-level regular talks between ministers and a public-private collaboration forum named, for example, the "Japan-Russia Arctic Forum".