Chapter 8

Recommendations for Japan's Diplomacy "Arctic Governance and Japan's Diplomatic Strategy" Project (Prepared by: ASARI Hideki)

1. Background

Having remained an "unexplored sea" for a long time, the Arctic region is now increasingly garnering recognition from a range of countries as a "new frontier" as its ice melts and diminishes as a result of global warming. Considering the impacts of the global warming on the Earth's environment, this development is not something to be hailed without reservation and each country needs to continue working to prevent global warming; given, on the other hand, that a "new frontier" is indeed emerging in reality and the strategic environment and the economic competitive conditions affecting Japan's national interests are being transformed, Japan must take action so as to safeguard its national interests. At the same time, the melting of ice is bringing with it the emergence, as real-world issues, of matters concerning the legal status of the Arctic region and the relationships of rights and obligations among different countries, which, as it were, have previously been "frozen" in ice. If, going forward, nations engage in their respective claims and activities in a unilateral fashion, resulting in the Arctic becoming an arena brimming with nationalistic quarrels where they blatantly pursue their own interests, we might find ourselves faced with the "tragedy of the commons," which would cause the environment to be further deteriorated and resources to be depleted.

From this standpoint, research has been carried out under this Project for the duration of one year with a mission to deliberate on (a) what national interests Japan should safeguard amid the ongoing appearance of a "new frontier" in the Arctic region, (b) by what means and in what areas such national interests should be safeguarded and (c) how governance of the Arctic region necessary for ensuring not only Japan's own national interests but also common international interests should evolve. The following recommendations are the outcomes of the discussions held among the members of the Project.

2. Policy recommendations

(1) Basic approach

Although covered in ice, the Arctic Ocean is an ocean and is therefore subject to a series of existing relevant rules of international law, particularly laws of the sea, including as embodied in the United Nations Convention on the Law of the Sea (UNCLOS). While, theoretically, one may conceive a whole new regime such as in the form of an "Arctic Treaty," it is difficult for it to become a realistic option, given the Arctic coastal states, including the US and Russia, have a negative stance about it. Rather, Japan's national interests would be better served if the area beyond territorial seas were treated as "commons (an area shared by the international community)," except with respect to certain matters for which sovereign rights of coastal nations are recognized over an exclusive economic zone or continental shelf (resource exploration, development, etc.) in accordance with relevant rules of international law including the UNCLOS.

The nature of the Arctic Ocean as "commons" looms even clearer if one considers that, as will be discussed later, the environment of the Arctic region is more delicate than other waters and that warming in the Arctic region has an effect of accelerating the pace of global warming. When acting on the "new opportunity" that is emerging in the Arctic Ocean, it is therefore necessary to have a mindset directed towards how the "commons" should be protected by all nations working together, based on the existing treaty order, as opposed to a "zero-sum" type of mindset.

In the meantime, however, the application of the UNCLOS, simple though it may seem, involves a number of points of ambiguity when it comes to application in individual cases. Take as an example the provision of Article 234 of the Convention. While it allows Coastal States to take certain steps for the purpose of preserving the environment, this leaves an issue, for instance, as to whether or not some of the regulations on navigation imposed by a Coastal State are within the scope permitted by Article 234 of the Convention. While abiding by the UNCLOS as the basics, it is imperative to make sure that Japan's national interests and the "commons" features should not be impaired in its details of application. Additionally, Japan needs to play a leading role in the development of new rules on matters of navigation safety and environmental preservation beyond the scope of discipline of the UNCLOS, while ensuring the consistency of such new rules with the Convention. Presented below are six specific recommendations founded on the approach described above:

(2) Recommendation I: 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. In this attempt, adequate attention must be paid to the environment in consideration of any particular conditions that the Arctic Ocean poses.

The continental shelf of the Arctic Ocean is estimated to contain 13% of the world's total oil and 30% of the total gas, both in terms of undiscovered resources.¹ While only a portion of them has actually been explored and developed due to the severe hydrographic conditions there, it is safe to say that the continental shelf of the Arctic Ocean has a potential to play a role in contributing to stabilizing the global energy supply and demand balance in the future. For Japan, from a perspective of ensuring stability in its own energy supply as well, it is critical to be actively involved in resource exploration and development on the continental shelf of the Arctic Ocean. This is because maintaining "upstream" interests can work to mitigate fluctuations in trade terms in times of energy emergency. There are a range of programs for supporting "upstream" interest acquisition overseas, including exploration equity financing by the Japan Oil, Gas and Metals National Corporation (JOGMEC) and loans from the Japan Bank for International Cooperation (JBIC), which should be utilized proactively.

The UNCLOS forms the core of international rules that govern the continental shelf of the Arctic Ocean, as is the case for other continental shelves. Therefore, a Coastal State has sovereignty over the waters within 200 sea miles from its coastal baseline and any area beyond 200 sea miles should be treated in accordance with the provisions of the Convention. In any event, Japan's involvement in resource exploration and development on the continental shelf of the Arctic Ocean can be made possible by cooperation with Coastal States, such as Russia. Taking into account the magnitude of risk that comes with resource exploration and development, investments from abroad are attractive for Coastal States as well and foreign businesses do indeed have a part in projects in the Barents Sea and the Kara Sea. Cooperation should be promoted while efforts are made to build win-win relationships with Coastal States.

In addition to being involved with "upstream" operation stages as mentioned above, another course of action that would be advantageous for Japan is to become an active purchaser of natural gas from the Arctic region. There are mutually complementary demands for natural gas produced

in the Arctic region - the one in Europe, where summertime demand is not as high as in wintertime, and the other in Asia, where electricity demand rises sharply in the summertime for use for air-conditioning - which suggests that Japan's decision to actively make spot purchases in the summertime will contribute to diversifying its natural gas supply sources and can also bring about an effect of keeping in check natural gas prices in Asian markets, which have soared as they are interlocked with oil prices.

Meanwhile, environmental preservation should be a matter of particular attention in any resource exploration or development in the Arctic region. The Arctic Ocean's very low water temperatures make the speed of decomposition of crude oil, in the event of oil leakage, slower than in other waters, resulting in its negative impact on the environment lingering for an extended period of time. In the process of exploring or developing resources in the Arctic region, caution must therefore be used most scrupulously to avoid even the smallest chance of an accident. In this connection, Japan should carry on basic research on steps against crude oil spillages in ice-covered waters in case of accidents involving oil field development in the Arctic Ocean, as well as basic research on environmental preservation in the Arctic region.

In any case, resource exploration or development in the Arctic region should be regarded as business-based and win-win cooperation based on the sovereign rights of Coastal States and not as a "resource rivalry." By harnessing its experience in resource exploration and development as well as its financial means and technological expertise, Japan should, with its government and industry working together, contribute to the creation of a win-win order: Japan's energy security is augmented; Coastal States reaps the benefits and; stability is brought to the international energy demand and supply balance.

(3) Recommendation II: In the area of marine transportation, appropriate application of the UNCLOS 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. Steps should be taken to ensure navigation safety and to preserve the environment which are conducive to the utilization of shipping routes commensurate with the nature of the cargo.

Recently, Arctic shipping routes, particularly the one called the Northeast Passage, which runs alongside Russia's northern coasts, have been drawing attention. For example, the navigation

distance between Rotterdam and Yokohama could be shortened by approximately 34% on the Northeast Passage (approximately 7,397 sea miles) compared to navigation via the Suez Canal (approximately 11,279 sea miles). Another point is the absence of piracy concerns on the Northeast Passage, unlike the southern route.

Meanwhile, the feasibility of the Northeast Passage requires deliberations based on the reality on the ground. Considering, for instance, that the Northeast Passage is available only during ice-melting periods, it is not necessarily suitable for container vessels, which serve much of cargo transportation on shipping routes between Japan and Europe. As container vessel operations form part of the production line, as it were, of the manufacturing industry, regularity and punctuality are prerequisites. In addition, the fact that ice, even if it is indeed melting, is still scattered all over the Northeast Passage makes it impossible for ships to run at the same speed as they do on the southern route. Further still, given the potentially enormous impact in the event of fuel oil leaking out in ice-bound seas, it might be necessary to use diesel oil, which is more costly than fuel oil, and it will also be necessary to use ships that satisfy special specifications required of ships navigating ice-bound seas.

As a result of examining these and other circumstances, this research project finds that the type of cargo suitable for the Northeast Passage for now, with cost implications taken into account as well, is non-regular bulks (resources such as LNG and gas condensate). Natural gas extracted on the continental shelf of the Arctic Ocean fits this type. When contemplating the use of any Arctic navigation route, it is therefore necessary to do so from a perspective of an all-encompassing strategy, associating it with the form of involvement in resource exploration and development on the continental shelf in the Arctic Ocean as well. For instance, there is substantial room for Japanese technology to play a part in resource surveys, including seismic mineral exploration, and plant construction, etc. Furthermore, participation in the upstream operation itself, *i.e.*, resource development, carries even greater significance from a standpoint of not only economic value but also resource security. The utilization of the Northeast Passage can be associated with the Yamal Peninsula LNG project, for which production is expected to begin before long, in 2017. As the Northeast Passage requires a special ship structure and reinforced equipment from a perspective of safe navigation and environmental pollution prevention needed in a voyage in ice-bound seas, the cost of shipbuilding will be high, which makes it necessary to examine using shipbuilding financing facilities from the Japan Bank of International Cooperation (JBIC) and the Development

Bank of Japan (DBJ).

When the use of the Northeast Passage is envisioned in that light, steps then must be taken to ensure navigation safety, and environmental preservation. Examples include establishing a system for supplying drift ice and meteorological information to shipping companies, using a weather observation satellite, so as to facilitate more in-depth navigation planning. As the lack of any emergency port of call capable of accommodating large vessels alongside the northern Russian coasts east of Murmansk is another element of concern about the use of the Northeast Passage, it is appropriate to encourage its development, pointing to advantages for Russia that the increased use of the Northeast Passage can bring about.

With regard to excessive claims for rights made by Coastal States, Japan can join hands with other user countries to try to dissuade such claims. The UNCLOS provides that Coastal States have "the right to adopt and enforce non-discriminatory laws and regulations for the prevention, reduction and control of marine pollution from vessels" in ice-covered areas within the limits of the exclusive economic zone (Article 234) and the charges for navigation support services (icebreakers, ice pilots, etc.) that Russia requires ships transiting the Northeast Passage probably draw the basis from this provision. However, as the cost breakdown not being made transparent, it is necessary to examine if the requirement imposed by Russia is a reasonable one conforming to the Convention. While the Northwest Passage, which runs alongside Canada's northern coasts, does not attract as much attention as the Northeast Passage for the time being, Canada claims a vast area of seas as its internal waters by applying the straight baseline method; it is also necessary to examine if such treatment is appropriate.

As the Arctic Ocean is characterized by low water temperatures and the slow speed of decomposition of polluting oil, the environment would suffer an irremediable destruction in the event of fuel oil leakage. It would not suffice to leave this issue up to Coastal States alone to tackle; Japan is also well-positioned to make contributions in the area of expertise and technology in an effort to ensure emergency preparedness associated with any large-scale oil spill accident and there is also a need to develop a structure that provides ways for nations to work together to address the issue. The central role would be played by the International Maritime Organization (IMO) and Japan, being a maritime nation, needs to take an active part in international cooperation centering around the IMO. The IMO is also currently in the process of developing a Polar Code

that sets out discipline associated with maritime safety and environmental preservation in polar waters; leading the discussion in this forum for Japan should also work to check any arbitrary moves made by Coastal States.

(4) Recommendation III: 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. It is also appropriate to clearly place such changes in the strategic environment in Japan's defense policy.

From a security standpoint, the strategic environment surrounding Japan would be affected if the use of the Arctic Ocean, previously "seas beyond reach," became easier. In the past, it was only specialized vessels, such as large icebreakers, that could navigate the Arctic Ocean, covered with thick ice, and power projections in the Arctic Ocean was therefore not recognized as a real issue. If, however, the further melting of ice made it possible, for regular ships to navigate the area under certain conditions, it would also become easier to perform military operations. This means that the "background" that used to be safe would turn into a new "defense front line," particularly for Russia, but the US would also face the same issue.

For instance, China's active moves in the Arctic Ocean have been drawing attention recently, while China is also said to be working on improving the performance of its strategic nuclear forces, including higher survivability and readiness, longer range, better targeting accuracy and multiple warheads.² It is perfectly conceivable that as a result of China succeeding in the development of JL-2, its new SLBM (submarine-launched ballistic missile) allegedly with a range of 8,000 km, coupled with the greater ease for China to deploy its SSBMs (ship, submersible, ballistic missile, nuclear-powered) in the Arctic Ocean, almost the entire land mass of the US could enter in the range of JL-2 in the future and China would therefore be equipped with effective second strike capabilities against the US. In order to prevent a situation where the US's extended nuclear deterrence capabilities would be affected, Japan and the US must examine deepening their cooperation in line with the changes in the strategic environment in the Arctic Ocean: more specifically, reinforcing missile defense and the system of antisubmarine patrol that covers choke points like the Soya Strait and the Tsugaru Strait.

The prospect of power projections in the Arctic Ocean becoming a real issue also means that, seen from Russia' standpoint, its capabilities of maritime strategic maneuver deployment between

Europe and Asia should improve, while a new defense front - the kind never envisioned before - is emerging. The route via the Sea of Japan out to the Western Pacific Ocean and the Bering Strait should also change strategic implications of the Sea of Okhotsk for Russia.

Keeping abreast of the changes in the strategic environment in the Arctic Ocean, the US already developed a comprehensive Arctic policy (National Security Presidential Directive 66) in the name of President Bush in January 2009, which was followed in November of the same year by the development of the "Arctic Roadmap" by the US Navy. This Roadmap provides assessments of the current state of affairs and future predictions about the Arctic Ocean, as well as examines a strategy, policy and plan, investments, operations and exercises, outreach and strategic communication activities, and aims at establishing readiness and capabilities, bearing in mind the US's fiscal years 2010 to 2014. The 2010 QDR (Quadrennial Defense Review) also contained a statement about the Arctic Ocean and the "Arctic Roadmap" is scheduled for review every four years concurrently with the QDR.³

While the US is thus a step ahead in actions to address the Arctic issues in the area of security, Japan also needs to clearly place the changes in the strategic environment in the Arctic Ocean in its defense policy. Specifically, Japan should, in its National Defense Program Guidelines, assess the changes in the strategic environment in the Arctic Ocean and, examine what actions Japan should take. At the same time, Japan and the US also need to engage in close strategic consultations and deepen their defense cooperation, looking 10 to 15 years ahead, in areas including missile defense and antisubmarine patrol as discussed earlier. Cooperation between the Self-Defense Forces and the US Navy encompasses not only actions to address such threats but also other domains, including search and rescue (SAR) operations in the event of trouble in the Arctic Ocean.

(5) Recommendation IV: 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. At the same time, it also needs to have a leading part in the fight against global warming, bearing in mind the enormous impact that progress in the melting of ice in the Arctic Ocean can have on the Earth's environment.

Since, as explained previously, water temperatures are low, and any polluting oil is therefore decomposed only slowly, in the Arctic Ocean, an oil spill accident would lead to the irremediable

destruction of the environment. It is true that resource development and new navigation route development in the Arctic Ocean will be beneficial, but they need to be performed in a way so as to ensure a balance with environmental preservation. More specifically, every possible step must be taken to prevent any oil spillage from occurring as a result of resource development and basic research needs to be further advanced as to what should be done in the event of an oil spillage. In the domain of maritime transportation, Japan also needs to assume a key role in the IMO's work of developing discipline for maritime safety and environmental preservation and to develop a framework of international cooperation in emergency responses to an incident involving an oil spillage. An idea of creating international rules like the "Protocol on Environmental Protection to the Antarctic Treaty" is also worth exploring.

Measures to stop the progress of ice melting in the Arctic Ocean are also needed. Although it is true that the melting of ice in the Arctic Ocean is giving rise to new "opportunities," the further progress of this phenomenon is simply a peril to the Earth's environment, considering negative impacts that the melting of ice in the Arctic Ocean brings about; it is said, for example, that any surface of the Arctic Ocean covered by white-colored ice, thus reflecting the sunlight, will, once the ice melts, absorb the sunlight to an increased extent and accelerate global warming as a consequence.⁴ This implies the need for joint efforts by nations to take more rigorous steps to combat global warming. From this perspective, necessary actions include utilizing natural gas, which emits less CO_2 than coal or oil, curbing the consumption of fossil fuels themselves through improved energy efficiency, using nuclear energy with economic efficiency, safety and waste disposal addressed as basic imperatives, and developing new types of energy. Such efforts will be conducive to fighting global warming as well as to advancing energy efficiency, Japan must play a leading role in the fight against global warming, taking advantage of its expertise and technology.

The environment of the Arctic Ocean has many aspects that are not yet understood. The list of issues that require further research is extensive: rising water temperatures in the Arctic Ocean that are said to be progressing faster than in other regions of the Earth; impacts of changes in the snow and ice of the Arctic Ocean on the meteorological system and; impacts that the changing Arctic environment can have on the climate of the Earth as a whole through the thermohaline circulation (a mechanism whereby the North Atlantic Deep Water is said to circulate through the Indian Ocean and the Pacific Ocean in the course of 2,000 years). Given its long-term accumulation of

scientific research in the polar zone, Japan should build more on that in the future and contribute to improving international expertise on the environment of the Arctic Ocean through international research collaboration, communication between researchers and other such means. For the purpose of researching the environment of the Arctic Ocean, there is also a need to have a platform that enables research to be performed onsite, as well as a need to have a robust research structure, including the construction of a new icebreaker or the utilization of the Antarctica observation vessel "Shirase."

(6) Recommendation V: Active diplomacy should be pursued so that governance founded on a peaceful and stable international order be ensured in the Arctic Ocean. An appropriate approach would be one leading to greater "common interests" of the countries concerned, including Arctic States and countries surrounding Japan.

Arctic governance needs to be based on a mindset directed towards how "commons" should be protected by means of concerted efforts by nations, not on a "zero-sum" type of mindset. From such a viewpoint, Japan, while ensuring its interests, must work on expanding "common interests" of the international community through large and small multinational frameworks and bilateral cooperation. Japan should take the initiative in the area of international rules on the Arctic. Specifically, Japan should take a lead in clarifying the provisions of the UNCLOS as well as establishing new operational rules on matters not covered by the UNCLOS, based on the Convention and other relevant rules of international law.

The first name that comes up as a venue for coordinating cooperation associated with the Arctic Ocean is the Arctic Council, which consists of eight Arctic States as members and other stakeholder countries, international organizations and other entities participating as observers. Japan is currently an ad-hoc observer but has made an application for permanent observer status, which is slated for deliberation at the 2013 Arctic Council Ministerial Meeting. While its very origin as a forum of high-level talks between Arctic States undeniably gives it an exclusive trait, as is manifest in its membership consisting exclusively of Arctic States, it does carry a certain level of legitimacy - it is participated in by influential countries like the US and Russia and is centered around Arctic coastal nations that have the closest interests in the Arctic Ocean - and is therefore a framework that Japan should also attach importance to. Being an observer, Japan is not allowed to take part in decision-making; it is nevertheless advisable that it should build up contributions in scientific

research, environmental preservation and other areas associated with the polar zone to make Japan's arguments more persuasive and to exert as much positive influence as possible on decision-making at the Arctic Council.

That being the case, the Arctic Council will remain just one of the several diplomatic means as long as Japan has no decision-making power. Japan should, while ensuring its national interests, also contribute to the governance in the Arctic Ocean through other international organizations, large and small multinational frameworks, and bilateral cooperation. One example of an initiative that Japan must play a leading role in is the work in progress at the IMO to develop a Polar Code in connection with marine safety and environmental preservation. Another point is the makeup of the G8, with the US, Russia and Canada being Arctic Council members, the UK, France and Germany observers and Japan and Italy ad-hoc observers; considering that the G8 is a framework to play a significant role in global governance, it would be useful to broach the Arctic issue in that framework. In addition, Japan should contribute to the governance and promote cooperation associated with the Arctic Ocean, through the use of a variety of diplomatic means, including cooperation with its ally the US, cooperation under a Japan-US-Russia framework and cooperation with China and Korea.

One should not be oblivious of the indigenous peoples in the context of the governance in the Arctic region. Climate change in the Arctic Ocean has deprived the indigenous peoples of their livelihood and seriously affected their foundation of life. The Arctic Council has raised the involvement of indigenous peoples as a significant point at issue. If Japan is to be vigorously involved with the Arctic issue, it will need to attend to the issue of environmental preservation, a matter that might greatly affect the lives of the indigenous peoples.

(7) Recommendation VI: The Japanese government's Arctic policy structure should be reinforced. Specifically, the Cabinet Secretariat should play a role of the headquarters so that the relevant ministries, including the Ministry of Foreign Affairs, the Ministry of Economy, Trade and Industry, the Ministry of Land, Infrastructure, Transport and Tourism, the Ministry of Defense, the Ministry of the Environment, and the Ministry of Education, Culture, Sports, Science and Technology, can implement coherent policies.

As described above, issues associated with the Arctic region are wide-ranging, from resources to marine transportation, security, environment, governance and much more. The Japanese

government has been building up a steady contribution thus far in the form of participation in discussions in the Arctic Council, scientific research on the polar zone and in other forms but, going forward, will be required to boost its action much more as an all-government effort, considering substantial impact of the various issues in the Arctic Ocean on Japan's national interests and common international interests. To that end, it needs to set up a headquarters function in the Cabinet Secretariat and sort out complex and entangled issues in order to work out a systematic course of action. One idea is to establish a "ministerial meeting on Arctic issues," while they can also be presented as a main agenda item at a "National Security Council" of which establishment is currently being considered. By means of such and other frameworks, the Administration should articulate strategies and measures and it would be useful to showcase their orientation and details in the form of such means as "Arctic White Paper." As a further move for the purpose of actively participating in and contributing to a variety of large and small multinational or other forms of discussion, Japan should appoint an ambassador in charge of the Arctic, with examples of Arctic Council member countries in mind.

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¹ US Geological Survey, "USGS Release: 90 Billion Barrels of Oil and 1,670 Trillion Cubic Feet of Natural Gas Assessed in the Arctic," July 23, 2008, http://www.usgs.gov/newsroom/article.asp?ID=1980
² "Defense of Japan (White Paper on Defense)" 2012, in the section about the military posture under (1) Nuclear forces and missile forces in subsection 4, Section 3: China, Chapter I.
³ US NAVY ARCTIC ROADMAP," Department of the Navy, October, 2009
⁴Mutsuyoshi Nishimura, "Environmental Issues in the Arctic Circle," Section 1, Chapter 5 of this Report (The Japan Institute of International Affairs, 2013).