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INTERNATIONAL COOPERATION IN THE ARCTIC REGION: THE SEARCH AND RESCUE AND THE BARENTS COOPERATION*

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Abstract

The melting of the Arctic sea ice caused by global warming made great chances such as drilling rich natural resources, using Northern Sea Route and so on, and not only Arctic regional countries, but also other countries have been trying to get the good positions in the Arctic region. It is not easy for the countries to cooperate in the Arctic region and Arctic countries are strengthening the militarization to keep the influences. However, to develop the Arctic region, the search and rescue (SAR) should be well prepared by the international cooperation. After the Ukraine Crisis, the Arctic countries have felt Russian threat, and international cooperation including Russia became to be very difficult. However, there are regional relations differed from international relations, and the Barents cooperation seems to have great potential to think about the Arctic cooperation including SAR.

Keywords: Arctic Sea, Search and Rescue, Arctic Council, Barents Cooperation, Northern Sea Route, Militarization

1. Introduction

In recent years, the melting of the Arctic sea ice has been a significant phenomenon of global warming. In fact, the problems concerning Arctic region has been one of the most sensitive issues with respect to global warming in the world. This phenomenon is of course serious danger for the global ecosystem. In addition, many kinds of creatures in the Arctic region such as polar bears are in the critical situation, and the traditional lives of the indigenous peoples in the Arctic region who have been dependent on the Arctic ecosystem are also seriously threatened in recent years.

However, the world's attention concerning new situations of Arctic region resulted from the warming seems to concentrate to the business chances or strategic interests rather than ecological issues. Because, the melting of ice by the global warming is making it easier to use the sea route, so "the Northern Sea Route (NSR)" and exploit the rich natural resources in the Arctic

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region. Then not only the Arctic regional countries, but also even non-Arctic actors, including Asian countries such as Japan, China, South Korea, Singapore, and India became to have strong interests to the Arctic region and are very active in Arctic affairs in the recent years (Lunde *et al.* 2016). Japan, China, South Korea, Singapore, and India have been observers in the Arctic Council (AC) since 2013, and Japan has been keeping the observer status in the Barents Euro–Arctic Council (BEAC). So, we can say the Arctic issue is a global problem (Heininen and Southcott, 2010).

In addition, this new situation made the Arctic region more important strategically. Then, some border problems became serious, because countries such as Russia have been trying to make its territory as large as possible. At the same time, many Arctic regional states, especially Russia, have been trying to expand their military power in the Arctic. These movements concord to the recent world tension caused by serious incidents such as Ukrainian Crisis, Syria situation, Russian cyber terrorisms and fake-information attacks, the recent wave of populism, and so on. In such situation, Russian military expansion is the most remarkable. In fact, the Arctic region was one of the most serious front lines between the US and the USSR during the cold war era, and the USSR had militarized the Arctic region as much as possible. However, after the collapse of USSR, Russia had decreased military presences in the Arctic region not only by the end of the cold war, but also by the serious economic situation until 2000s when Russia revived economically under President Vladimir Putin. Some people say that the Russian militarization in the Arctic region has been stimulated by Ukrainian crisis, however such argument seems to be misleading, because Russia started remilitarization in the Arctic region before the Ukrainian Crisis.

In this way, there are serious tensions in the Arctic region especially by the militarization, disputes concerning territory, natural resources, many kinds of rights, business chances and so on. On the other hand, international cooperation is necessary to develop Arctic region, exploit the natural resources, and keep the safety of the transit including NSR and so on. In other words, if the Arctic actor tries to get the fruit from the Arctic's new situation, they must cooperate. Although international cooperation with full of tension make the cooperation difficult, it seems that the Search and Rescue (SAR) and BEAC can be good tool and example of the international cooperation in the Arctic region. Because SAR is the most important base for all the projects in the Arctic region, or no project will be successful without SAR. In addition, the technologies concerning SAR will help the developments of many projects. On the other hand, BEAC is one of the successful projects in the Arctic region, and it has been one of the important bases of the peace of Barents region. For example, Barents cooperation was not affected by the Ukrainian Crisis, although so many countries became to see Russia as evil after the Ukrainian Crisis. In addition, the border demarcation between Russia and Norway in 2010 was one of the fruits of Barents cooperation (Håkon, 2014).

Therefore, this study highlights the importance of the SAR and BEAC as keys to Arctic international cooperation. This research was done by the examination of the previous works and many interviews mainly in Finland and Norway. I conducted 32 interviews in Helsinki, Oulu, Rovaniemi in Finland, Oslo, Tromsø, Kirkenes in Norway in March 2016, August 2016 and January 2017¹. The interviews were especially effective to prove the meanings and further potentials of BEAC.

2. Possibilities and challenges in the Arctic Region

The melting of the Arctic sea ice has given new commercial potential to the Arctic region in the form of the Northern Sea Route (NSR), its rich natural resources, and fishery and tourism industries. This has attracted many actors all over the world. In particular, the NSR and natural resources have triggered economic interests (Fang, 2015; Lanteigne, 2016).

2.1. Russian new pivot to Asia and the Northern Sea Route (NSR)

The NSR is a sea route connecting East Asia and Northern Europe with the shortest distance

¹ The cited interviews are listed in the reference.

through the Bering Strait and the Russian coast of the Arctic Ocean. The Arctic region's marine area was an important strategic base for the Union of Soviet Socialist Republics (USSR); USSR had highly militarized this area during the Cold War era, although Russia declined military settlement in Arctic region after the collapse of the USSR. However, Russia has indicated a renewed interest in the Arctic region and the NSR, beginning a rearmament process.

Russia's renewing the interests on the Arctic region was caused by not only ice melting, but also by the Russian new policy. Vladimir Putin's 3rd regime, which started in 2012, has been making importance to build the tight relations with Asian countries and develop Russian Far East, Siberia, and the Northern Territory. In November 2001, just before the Putin returned to the Presidential post, Putin published "Eurasian Union" concept. Putin explained "Eurasian Union" concept as the union which links Asia and Europe and plays a positive role like EU with soft power and economic power, and its base would be "Eurasian Economic Union" (Putin, 2011). This concept has been thought as one of the first step of Russian new pivot to Asia, because the main target of Eurasia is Asian region.

After coming back to the Presidential post, Putin has been trying to develop the Russian Far East, Siberia, and the Northern Territory by many actions and laws. Putin has set the development of the Far East and Siberia as the most important issue of the administration, and on May 21, 2012, the Russian Federation Far Eastern Development Ministry was newly established according to Russian Federation Presidential Decree No. 612. By the presidential decree, the Far Eastern Development Minister will serve concurrently as Presidential Champion of the Far East. This office building was set up in Khabarovsk, and it is the first case in the history of the Russian Federation in that the Federal ministries and agencies were established in addition to Moscow, so it is obvious how Putin hoped to develop the Far East and Siberia. In addition, huge budget for the development of the Far East and Siberia were secured² and Special Economic Zone was established in Vladivostok. In September 2012, Russia held Asia-Pacific Economic Cooperation (APEC) summit in Vladivostok. In addition, to increase the population in the Far East and the Northern Territory, so called "Russian Homestead Act" was proposed in 2016. The main contents of the act are giving 1 hectare or 2.5 acres of land in the Russian Far East and the Northern Territory for free to Russian citizens and foreign nationals as long as they live there and utilize the land for 5 years. The original idea of the act was proposed by the presidential envoy to the Far East Federal District, Yury Trutnevin in early 2015. He suggested offering large plots of land for free to anyone willing to resettle to the Russian Far East to start a farm or business (RT, 2016).

In addition, Russian recent diplomatic policy has been focusing on Asia. As the concept of new pivot to Asia could be seen in the Putin's "Eurasian Union" concept, this tendency became much stronger after 2014, when the Ukrainian Crisis became very serious and the Western countries started the economic sanction against Russia. Then, Russia started to make much sicker relations with Asian countries, especially with China. In September 2015, "Eastern Economic Forum" has held in Vladivostok in accordance with the Decree No. 250 of the Russian President of May 19, 2015 by Putin, and the forum has been held every year. Eastern Economic Forum's main aim is developing the economic relations between Russia and the Asian countries. In addition, Russia has been trying to make political relations deeper with wider Asian countries (Korolev, 2016; Hirose, 2016).

² Unfortunately, the budgets for the development of the Far East and Siberia were diverted to Crimea after Russia annexed Crimea in March 2014.



Figure 1. Northern Sea Route

Source: Created by the author

From the point of view of Russian new pivot to Asia and political aim for developing Russian Far East, Siberia and the Northern territories, the meaning of Northern Sea Route (Figure 1) became much more important for Russia. Based on the United Nations Convention on the Law of the Sea (UNCLOS), Article 234, the Northern Siberia waters of the Arctic Sea belong to Russia; Russia has been issuing navigation permits from the viewpoint of safety and environmental protection. Russia requests that all vessels passing through the NSR meet various obligations such as pre-application of navigation, sailors' experiences on ice-melting navigation, allowing escorts by a Russian icebreaker vessel, tolls levied for environmental protection and safety, liability for damages, and so on. Thus, the NSR is now under Russian control (Zagorski, 2016).

It is said that using the NSR makes it possible to considerably shorten the navigation route and reduce time and fuel costs. In addition, NSR is evaluated as being much safer than routes that pass through Middle East and Africa, where there are many security concerns—terrorism, conflicts, piracy in Somalia, and so on. Therefore, many actors have commercial interests in the NSR since 2010³. In fact, there has been an annual increase in the number of vessels sailing the NSR. According to the International Maritime Organization (IMO), the number of vessels sailing the NSR was four in 2010 but 34 in 2011 and 46 in 2012. However, it is still very difficult to use NSR commercially because it is open only during the summer months (approximately four months), and even during these months, the support of an icebreaker is necessary. From a commercial viewpoint, there is very little profitability in using the NSR due to the extremely high costs. Experts suggest that it will not be fit for commercial use for at least 30 years (Balmasov, 2016).

2.2. Resources in the Arctic

It is widely known that the Arctic region is rich in natural resources, as shown in Figure 2. For example, it is said that 10% of the undiscovered crude oil in the world (in Norway and Canada in particular), 30% of natural gas (in Russia in particular), and nickel, cobalt, gold, diamond, and iron ore (in Canada in particular) are all in the Arctic region. If the Arctic sea ice melts further, the extraction of these natural resources will become considerably easier and cheaper. As a consequence, the new battle for sovereignty over the continental shelf has intensified, and not only Russia, but also Denmark, Canada and the US has been claiming the right of the North Pole

³ For example, China has great interest to NSR and succeeded to sail NSR by its icebreaker vessel "Setsuryu" without Russian escort.

and so on (BBC, 2014).

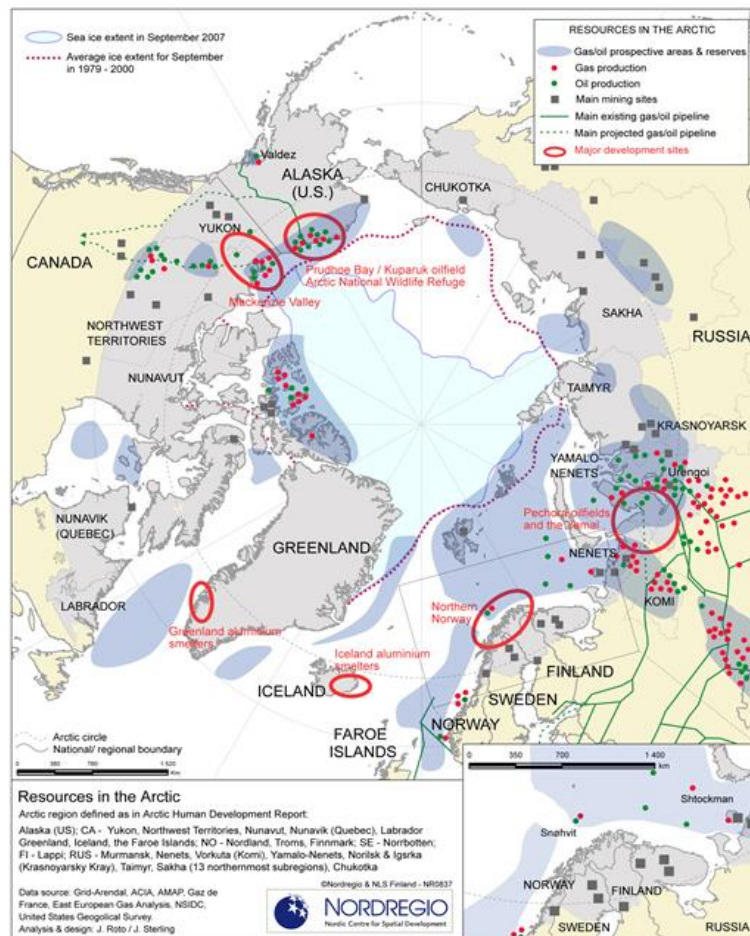


Figure 2. Resources in the Arctic
Source: Nordregio (2011)

The United Nations' Convention on the Law of the Sea (UNCLOS) provides guidelines to nations with respect to problems arising out of the use of the world's oceans, and the Arctic territorial problem can be tackled using these guidelines⁴. It allows claimants 12 nanometers of territorial seas measured from baselines that normally coincide with low-water coastlines and an exclusive economic zone (EEZ) extending to 200 nautical miles (including the territorial sea). To exploit the seabed and resources beyond 200 nautical miles, it is necessary to appeal to the International Seabed Authority.

However, Russia has been claiming the wider shelf. In 2001, it submitted an application to the United Nations Commission on the Limits of the Continental Shelf (CLCS), claiming the seabed of the central part of the Arctic sea (beyond the 200 nautical miles of EEZ) as its own continental shelf, although it was dismissed due to a lack of scientific evidence. Russia has been seeking sufficient scientific evidence and re-submitted a similar application to CLCS in 2015. However, it has never received a favorable result. In fact, Article 76(5) of UNCLOS rules that a continental shelf cannot exceed 350 nautical miles from the established baseline; Russian claims

⁴ The efficacy of UNCLOS seems to be controversial, because the US does not sign for it. However, the US generally observes the Law of the Sea, on the other hand, China that is the member of UNCLOS, for example, does not observe the Law of the Sea such as the case of South China Sea problem. So, it seems not to have strong authority over the Arctic problem.

are beyond this standard. However, Russia argues that the 350 nautical miles cannot be applied to the Russian case because the seabed and its resources area are “natural components of the continent.” The Russian case is now under the consideration of CLCS, but full assessment of the CLCS is believed to take up to three years from 2016 (Staalesen, 2016).

In such a situation, MIR-1 and 2 Deep Submersibles with six people reached the bottom of the Arctic sea near the North Pole. It also succeeded in sampling the soil and settled the titanium Russian flag at approximately 4,300 meters deep into the seabed using the robot arm. The settlement of the national flag has no international legal effect, but this Russian action has engendered a great impact, showing Russia’s strong intentions for the Arctic region. However, Arctic resources are extremely expensive to produce due to the hard natural environment. This is the case especially in winter, considering the necessity of high-level technology.

Therefore, there are not many commercial exploits of Arctic resources. There are currently only two working offshore oil projects. One is the Prirazlomnaya in Russia by Gazprom, and the other one is Goliat in Norway by Eni and Statoil, although one project (Polar Pioneer in USA by Shell) has been pending mainly for economic and technological reasons (Bourne, 2016). Especially, since the latter half of 2014, oil prices have declined, making it more difficult to expect economic profits from Arctic projects.

In fact, highly developed technology is necessary for the Arctic resource projects due to the darkness, low temperature, and ice, in winter. For example, most materials become extremely fragile in temperatures 40°C below the freezing point. In addition, working hours in winter are shorter due to the darkness and cold⁵.

However, Russia is in the difficult situation of having to develop Arctic resources due to the concurrence of bad conditions (economic sanctions by Western countries and Russian countermeasures arising as a consequence of the Ukrainian Crisis⁶), leading to a substantial decline in crude oil prices, especially after the second half of 2014. The sanction started after the Crimean Annexation by Russia in March 2014, but the level of the sanctions was raised gradually. In addition, there was a simultaneous, significant decline in oil prices.

2.3. The positive and negative views about the Arctic cooperation

Since there are no treaties such as the “Antarctic Treaty,” which has frozen territorial claims and since Arctic organizations, such as the AC, have no authority over Politico–Military Affairs, the possibility that the Arctic actors will compete to seek greater rights and interests is considerable. However, all related international laws and rules have been complied with until now (Byers, 2013), and governance in the Arctic appears to remain in a relatively stable condition.

In addition, the AC has been evaluated to be well functioning, and the Barents cooperation has been also active. The International Maritime Organization (IMO) has adopted the International Code for Ships Operating in Polar Waters (Polar Code), which entered into force on January 1, 2017. It is evaluated as an historic milestone in the IMO’s work to protect ships and people aboard them, both seafarers and passengers, in the harsh environment of the waters surrounding the North and South poles (IMO, 2018). The Polar Code is also expected to be an important base of good governance around the two poles. However, there are complicated interests in the Arctic states (Table 1) and there are many conflicts of interest present.

Among territorial issues, the following four are the most serious: (1) boundaries in the Beaufort Sea and the status of the Northwest Passage between the U.S. and Canada, (2) the Hans Island between Canada and Denmark (via Greenland), (3) the Lomonosov Ridge (a mountain range across the region) among Canada, Denmark, and Russia, and (4) the maritime

⁵ In the worst case, a worker can work only for two hours a day and all workers work at the same spot for a month, after which they must rest for a month outside the Arctic region for maintaining their health (Interview at Kirkenes by author on 11st March 2016; Bourne, 2016).

⁶ By the sanction, Russia could not develop the oil fields in the Arctic region, because Russia needs the western technology to do so (Mäe, 2016). Due to the sanctions, several foreign oil companies have had to suspend their participation in Russian oil and gas projects not only in the Arctic region but in all Russian fields (Vedomosti, 2014).

border from the Bering Sea to the region between the U.S. and Russia (Foizee, 2016).

Table 1. Arctic policy and state interests of AC member states

Canada	Exercise sovereignty and national security, promote social and economic development, protect the environmental heritage, and improve and devolve northern governance
Denmark & Greenland	Active climate policy, underlining the special status of the littoral states, paying the particular attention to security, sovereignty, and surveillance
Finland	Stability of the region, Strategies for the climate change and environmental protection ⁷ , Energy efficiency and renewable energy resources, Promoting the EU's role in the Arctic
Iceland	Material interests such as fisheries and the economy, International cooperation (especially with Asian countries), Environmental problems, Profit from the new trans-Arctic shipping route, Against the Norwegian policy on Svalbard in its Arctic policy document
Norway	Realizing the High North Strategy focusing on keeping political stability, international cooperation, securing maritime boundaries and sovereignty, sustainable economic and social development in the region (Norwegian Ministry of Foreign Affairs, 2006)
Russia	Expansion of the military capacity in the Arctic ⁸ , Security, International Arctic cooperation as the peace zone, Economic development, Resource Development, Security First, Economy Second (Bailes, 2016)
Sweden	To facilitate continued low tension in the Arctic, strengthen the AC, develop the EU Arctic policy, prioritize climate change and environmental policies, and promote economic development and close relations between the state and business communities
USA	Economic and social development of Alaska, Security in a larger international setting, however the government does not have strong interests in the Arctic region.

Source: Created by the author in reference to Offerdal (2014), Shadian (2014), Härkönen (2016), Käpylä (2016a), Mikkola (2016a), Miwa (2016), and Raferlsen (2016).

Russian movements have represented the most serious threat for Arctic cooperation because Russia has an increased interest in territory, the Northern Sea Route, resources, and so on. However, the Russian real actions in the Arctic region including military expansion were not only the reason of the feeling of Russian threats by other courtiers. Russian image was really damaged by Ukrainian Crisis, especially by Crimean Annexation. By Russian actions in Ukraine, the world, especially Russian neighbor countries such as Baltic countries, had the serious threat for Russia. Even Japan, that is Russia neighbor, but divided by the sea from Russia, had felt threat for Russia thinking that Russian military expansion in Arctic will be extended to the Northern Territory. In addition, they have expanded their military presence in the Arctic region, especially after 2013 (Olsen, 2015). Then, wariness against Russia has grown generally following the Ukrainian crisis. Therefore, Russian strategy for the Arctic is really an important key for Arctic cooperation (Laruelle, 2014). In addition, there are many problems in the Arctic hard and soft security situation (Bailes, 2015; Bailes, 2016; Heininen, 2014; Heininen, 2016; Huebert, 2017).

Besides, recent Russian military expansion is particularly concerning, and recent active Russian military movements stand out (See Figure 3). Russia has been restoring the military bases of the Soviet era and settling new ones in the Arctic since 2008. In December 2014, the Russian Armed Force settled a new military district in the Arctic region. In early 2015, Russia

⁷ Finland initiated the Arctic Environmental Protection Strategy (AEPS), which was the base of Arctic Council (AC) in 1991.

⁸ Russia resumed bomber flights over the North Atlantic and Pacific Ocean in 2007; then adopted an Arctic strategy document in 2008 and the main points are establishing new military units in the Arctic, settlements of more efficient border, and coast guard service in the Russian Arctic (Åtland, 2011).

exercised Arctic “military patrols” from its Northern Fleet, involving 38,000 servicemen, more than 50 surface ships and submarines and 110 aircrafts (Foizee, 2016). In addition, Russia is making use of the so-called “Hybrid War” even in the Arctic region especially against the member of NATO, using the geopolitical situation and new technologies including IT, SNS, information and so on (Baev, 2015; Balasevicius, 2015).

In such a situation, many media, some politicians such as Canadian Environment Minister Leona Aglukkaq and researchers such as Fujio Onishi argue that Russian military activism in the Arctic started after the Ukrainian Crisis, but this is not true (Quaile, 2014; Onishi, 2016). Russia began a revival of its military presence from 2008 and strained militarization in 2013 before the Crimea annexation (Käpylä *et al.* 2016; Foizee, 2016).

In addition, it is also true that many Arctic countries other than Russia have recently been expanding their military presence in the Arctic region (Hilde, 2014). In the case of Finland, Norway and Sweden, such tendencies are related to the Russian threat caused by the Ukrainian Crisis; and in the case of Canada and the US, they are trying to compete to Russian present from the strategic point of view.

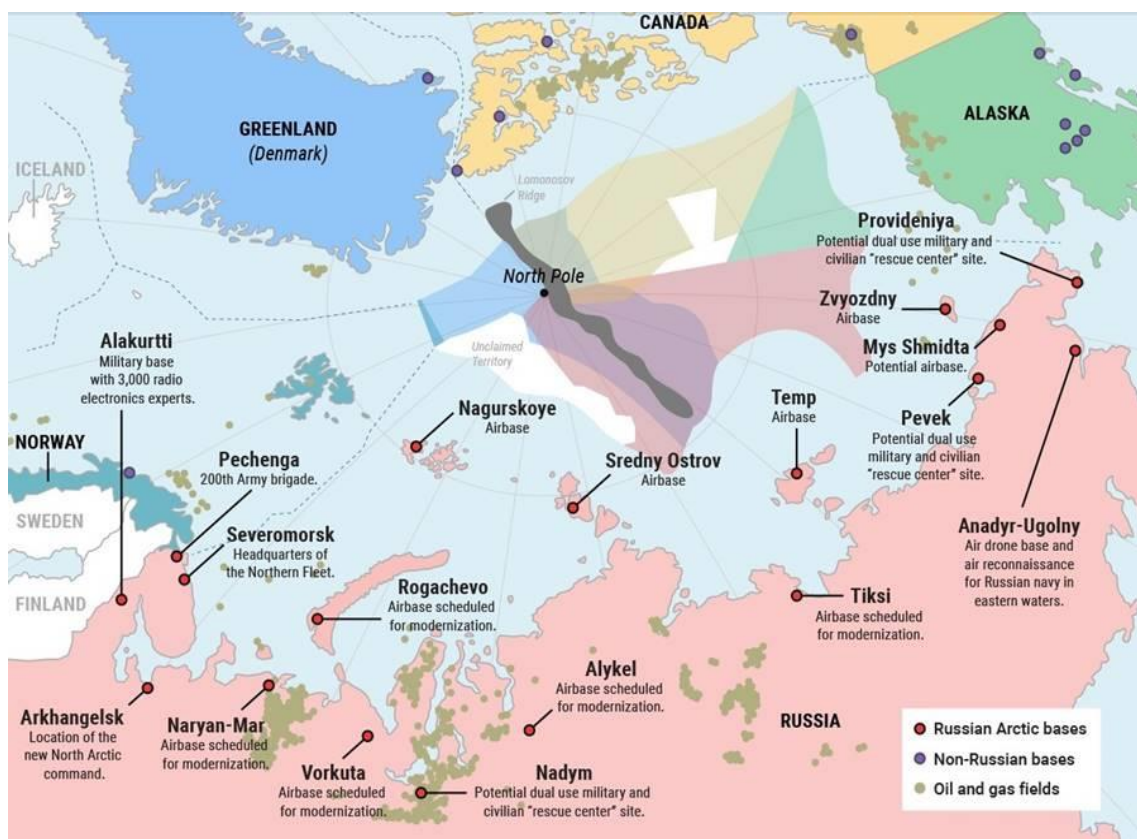


Figure 3. Arctic bases and resources

Source: Busch (2017)

For example, Canada has planned the deep-water “naval facility” at Nanisivik and has promised to build armed icebreaker vessels, several patrol ships, and several vessels to proceed toward gaining control over the Arctic. Canada also conducted large-scale “military exercises” in the Canadian Arctic region every year. The recent exercise “Exercise ARCTIC BISON 2017” was held from 17th to 26th February 2017 in Gimli and Manitoba and about 200 members of Canadian military participated to it (Government of Canada, 2017).

The U.S. permitted Shell to drill for oil in the Chukchi Sea and the U.S. “Coast Guard” has already deployed sophisticated ships, aircrafts, and other maritime assets in the Alaskan Arctic for the duration of Shell’s drilling in the Arctic in 2015. The U.S. is aiming to exploit energy resources and expand the military presence in the Arctic region (Foizee, 2016), and such

tendency of making the tension with Russia make larger and became one of the bad conditions for the Arctic cooperation.

3. Considering of the Arctic regional cooperation

As described above, the attentions for the Arctic region and Arctic strategic values have been intensified in the recent years. However, it is not easy to make the multi-national cooperative relations especially under the recent situation with high tensions led by the Ukraine Crisis.

However, international cooperation in the Arctic region is very necessary to effective and reasonable development of the Arctic region; and to keep the safety of the people who are engaging to the Arctic related works. Therefore, considering the positive possibilities and realizing of the international/regional cooperation in the Arctic region are urgent need. Then, this paper argues that Barents cooperation and SAR have the highest possibilities to realize the international/regional cooperation in the Arctic, because I heard many positive stories on them in the interviews (Hahl, 2016; Hallberg, 2016; Hojem, 2016; Orheim, 2016; Raferlsen, 2016; Soleim, 2016; Staalesen, 2016).

3.1. Background of the Arctic regional cooperation

During the Cold War period, the Arctic region was at the forefront of the US–USSR confrontation and acted as a buffer zone between them. This resulted in many strategic bombers flying over the Arctic sea and nuclear submarines working underneath the ice flows. After the collapse of the USSR, the strategic importance of the area was reduced and peaceful movements concerning the Arctic region became active. However, Arctic geopolitical importance has been gaining global attention following global warming. Then, many Arctic countries, especially Russia, have again started to build military bases and equipment in the Arctic region in recent years. Russia was the first country, which has started re-expanding military power in the Arctic region after the end of Cold War. Russia since 2012 in particular has embarked on a large-scale military modernization in the Arctic across basically all defense branches, with a special focus on the air and maritime domain. In the background of the Russian movements, there are three basic drivers: military-strategic calculations, economic development, and domestic objectives (Parker, 2017). Now Russia has many military bases in the Arctic region (See Figure 3) and it has 3 nuclear-powered ice-breaker vessels, although no other countries has nuclear-powered ice-breaker vessels and conducts many military exercises in the Arctic region. However, from around 2017, all Arctic states have been strengthening their military capabilities in the Arctic (*Graphic News*, 8/24/2012). So, regardless of the Ukrainian Crisis, all arctic states have started military expansion. Then after the Ukrainian Crisis, the tendency of military expansion in the Arctic has been intensified especially by the threat for Russia.

Canada has been trying to intensify the military power in the Arctic region and its armed force has been conducting many exercises in the Arctic (MacDonald, 2016). The US government has been worried about Russian military expansion, and Pentagon updated the Arctic strategy in February 2017, and by the updating, the Navy will have to expand the fleet of submarines and icebreakers, just as Russia has done in recent years (Gehrke, 2017).

Norway decided to expand military in 20 years. As the initial step in a process aimed to add 165 billion Kroner (€18.1 billion) to the budgets of the Norwegian Armed Forces over the coming 20 years starts, and both Army and the home guard will get extra budget. It is planned that 52 new F-35 fighter jets, 4 new submarines and new surveillance aircrafts will be bought (Nilsen, 2016).

Sweden also has started to modernize defense power. The Swedish Armed Forces (SAF) tried to gain more budgets, so \$34-44 billion in defense spending over the term of the next five-year Defense Policy Plan (DPP) and the government has started to add the budget from 2016. In addition, Sweden reintroduced compulsory military service from 2018, although Swedish compulsory military service was ended in 2010, in March 2017 (BBC, 2017).

3.2. Arctic governance

There have been existing international tensions in the Arctic region all the time, although the level of tension has changed during the period. However, it is also true that the Arctic sea has been called a “zone of peace.” The Arctic region can thus be said to be a rare region in the world, pertaining to which many countries can cooperate peacefully.

To think about the Arctic region as a zone of peace, the “Murmansk Initiative” with a landmark speech by Mikhail Gorbachev (the eighth and last leader of the Soviet Union) at Murmansk on October 1, 1987 became very important. Gorbachev appealed to Western countries to join him in transforming the Arctic into a “zone of peace and fruitful cooperation” in his speech (Gorbachev, 1987). The key words of the speech were as follows: Denuclearization, naval arms control, confidence-building measures, energy cooperation, scientific cooperation, empowerment of Indigenous peoples, environmental cooperation, opportunities from the opening of the Northern Sea Route (Hough, 2013).

It can be said that Gorbachev had foresight because the main points of his speech are identical to the current tasks concerning the Arctic affairs. This speech became the source of current international, regional, multilateral, and bilateral cooperation concerning the Arctic region (Heininen, 2016). Despite its still being the Cold War era, international relations concerning the Arctic region were gradually changing behind the scenes after the onset of the reforms introduced in the economic and political system in USSR (perestroika). After the end of the Cold War, Arctic regional cooperation, including Russian participation, started smoothly, with the Barents Euro–Arctic Council (BEAC) being founded in 1993.

The governance system and possibilities of cooperation in the Arctic region are noteworthy. Governance is horizontal between states and vertical within them, but in practice, the contrast is not as sharp. Such a governance principle has been at the heart of Arctic international cooperation attempts (Young, 1982; Stokke, 2014). There are many actors and many international institutes in the Arctic governance and many of these overlap (See Figure 4).

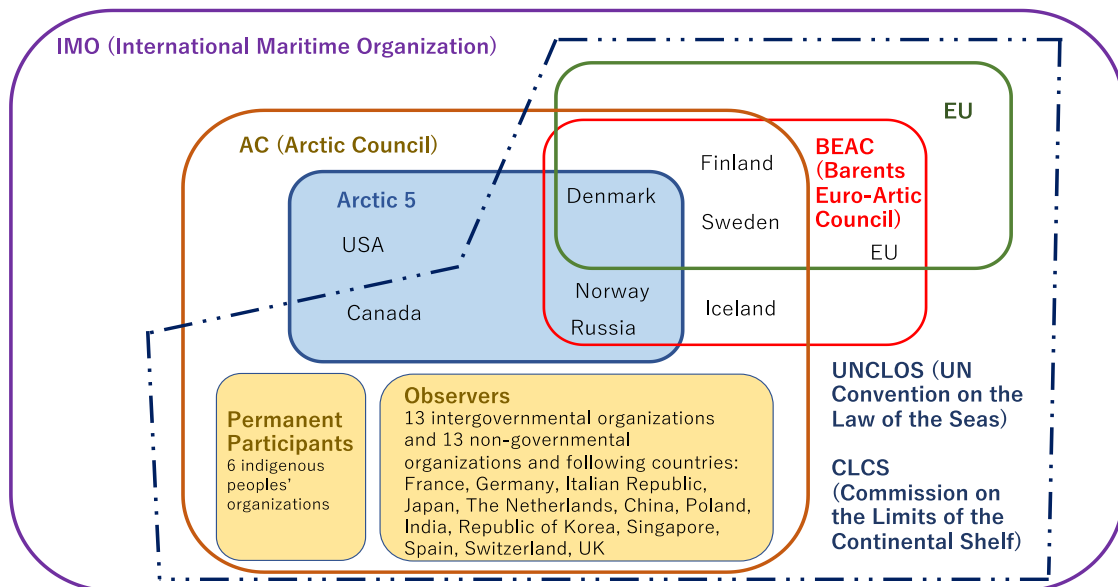


Figure 4. Arctic cooperation frameworks

Source: Created by author.

The most important actor seems to be the Arctic Council (AC), but the Barents Euro–Arctic Council (BEAC) and other Barents cooperation movements seem to have great potential. AC has led general actions concerning Arctic affairs except the political or militaristic affairs. In addition, AC is consisted by not only regular members in the Arctic region, but also includes many kind of observers of regional non-governmental actors and non-regional countries. And its activity has been done peacefully. Therefore, AC can be said to be the most important actor from the

point of view of its leading character, comprehensiveness and peacefulness. However, all interviewees, who are working for the Barents cooperation, said the fruits and potentials of the Barents cooperation were great, and showed me many achievements. In addition, they said that they are sharing "Barents Identity" and special regional relations with mutual trust. As the most admired fruit of the Barents cooperation, all interviewees mentioned maritime border demarcation between Russia and Norway in 2010. In addition, the truth that people who are engaging the Barents cooperation have no bad feeling for Russia even after Ukrainian Crisis by which many Russian neighbor became to have serious bad feeling against Russia (Hahl, 2016; Hallberg, 2016; Hojem, 2016; Orheim, 2016; Raferlsen, 2016; Soleim, 2016; Staalesen, 2016).

3.3 The three main Arctic actors

In the governance system of the Arctic region, the activities of 3 Arctic main actors have been important. Besides these three, there are other organizations such as Nordic Council (NC), The Northern Forum, International Arctic Science Committee (IASC) and so on.

The first one is the Arctic Five (A5). It comprises the five Arctic coastal states of Norway, Denmark, Russia, Canada, and the United States. It adopted the "Ilulissat declaration" in 2008, and members agreed to use this framework of existing international law for Arctic affairs with no need for a new legal framework. This principle has been the foundation of Arctic governance. The basis of "Ilulissat declaration" was the "United Nations Convention on the Law of the Sea: UNCLOS," adopted on April 30, 1982 at the Third United Nations Law of the Sea Conference. The aim of UNCLOS was to establish the comprehensive and general order on the Law of the Sea.

The second one is the Arctic Council (AC). It is the most important actor in the Arctic. Its member countries are Canada, Denmark (including Greenland and Faroe Islands), Finland, Iceland, Norway, Sweden, Russia, and the United States. Member States are fixed to the above 8 Arctic countries, and will not be changed unless the procedure rules are changed. The 8-member countries are situated in the Arctic region. Its observers are 13 intergovernmental, regional, or inter-parliamentary organizations, 13 Non-Arctic countries (China, France, Germany, India, Italy, Japan, South Korea, the Netherlands, Poland, Singapore, Spain, and the United Kingdom, Switzerland) and 13 Nongovernmental organizations.

13 intergovernmental, regional, or inter-parliamentary organizations of observers are International Council for the Exploration of the Sea (ICES), International Federation of Red Cross and Red Crescent Societies (IFRC); The World Conservation Union (IUCN); North Atlantic Marine Mammal Commission (NAMMCO); OSPAR Commission, Nordic Council of Ministers (NCM); Nordic Environment Finance Corporation (NEFCO); Standing Committee of Parliamentarians of the Arctic Region (SCPAR); United Nations Economic Commission for Europe (UN-ECE); United Nations Development Programme (UNDP); United Nations Environment Programme (UNEP); World Meteorological Organization (WMO); West Nordic Council (WNC).

13 Nongovernmental organizations of observers are Advisory Committee on Protection of the Sea (ACOPS); Arctic Institute of North America (AINA); Arctic Circumpolar Gateway; Association of World Reindeer Herders (AWRH); Circumpolar Conservation Union (CCU); International Arctic Science Committee (IASC); International Arctic Social Sciences Association (IASSA); International Union for Circumpolar Health (IUCH); International Work Group for Indigenous Affairs (IWGIA); National Geographic Society (NGS); Northern Forum (NF); Oceana; University of the Arctic (UARctic); World Wide Fund for Nature-Global Arctic Program (WWF).

Observers are invited to meetings, but they have no voting rights. However, they may make speeches and submit proposals and documents, if the chairman admits. In addition, Permanent Participants (PPs) are also important for the AC because the AC respects the indigenous peoples in the Arctic region. The limit of members to the PP is seven, but six PPs⁹ are now working in AC. PPs have no decision rights, but their influences are not insignificant.

⁹ AIA: Aleut International Association, AAC: Arctic Athabaskan Council, GCI: Gwich'in Council International, ICC: The Inuit Circumpolar Council, RAIPON: The Russian Association of Indigenous Peoples of the North, and The Saami Council

The AC was established in 1996 under Canadian leadership, based on the Declaration on the Establishment of the Arctic Council ("The Ottawa Declaration"). AC is a high-level intergovernmental consultation body and its secretariat is in Tromsø, Norway. Its predecessor organization was the Arctic Environmental Protection Strategy (AEPS). The organization was established in 1991 by the eight AC member countries under the leadership of Finland, aiming to protect Arctic ecology. The AC is trying to promote cooperation, harmony, and exchange among the Arctic countries concerning common tasks, such as sustainable development and environmental protection in the Arctic region. Although all decisions have been adopted by consensus, the AC has dealt with various problems flexibly and succeeded in developing the AC (Hoel, 2009). The AC has shown respect for the opinions of indigenous people and opened its windows for all actors, including non-Arctic actors. In this sense, the AC has been working as an open consortium.

Until the end of 2000s, the AC dealt with relatively minor problems. However, national interests concerning the Arctic region, such as the demarcation problem, natural resource problem, fishery, military, tourism, passage, and so on, became complicated between countries after the ice melting, and some now describe the Arctic region as the special field of the "New Great Game" (Graff, 2007). Following this, the tasks of the AC became complicated (Offerdal, 2014). However, the AC is not involved in political and security problems. In other words, the AC is working only on low-priority political issues such as economy and trade and not on high-priority issues such as military and politics. The AC thus has great limits but can gather various actors to the peaceful table. Then, this study focuses on Barents Cooperation such as Barents Euro-Atlantic Council as follows.

The third one is the Barents Euro-Arctic Council (BEAC), and the author think that it has great potentials for Barents Cooperation. It was established in 1993 through Norwegian initiatives and comprises Denmark, Finland, Iceland, Norway, Russia, Sweden, and the EU. The BEAC is a forum for cooperation of the Barents region and has a secretariat in Kirkenes. The BEAC is trying to develop itself as the frontier regional cooperative body. The BEAC is also performing very actively and promoting useful activities in partnership with various organizations, movements, events, radio program, and so on in the Barents region. As the radio program, "Radio Barents 111" has been realized as the Barents Identity and is known as a theater performance, which tries to explore life along the border in the north (Karlsbakk, 2012).

The main organization or movements, other than BEAC, are the following: Barents Regional Council, Barents Euro-Arctic Council, The Norwegian Barents Secretariat and several other Secretariats and centers, Kolarctic ENPI CBC program [2010-14], Barents Spektakel and so on (Heikkila and Laukkanen, 2013). As with the AC, the BEAC also has a high level of respect for the rights of indigenous people and minorities.

BEAC members are sharing Barents Identity (Barents Tourism, 1993) and have cooperated over various fields such as Search and Rescue (SAR), research and education, environmental measures, the economy, risk management, resource development, technology, and so on.

Barents Identity is defined as following: (1) Working towards a common regional identity in the Barents based on strong shared values and a clear sense of belonging. This should be done by promoting cooperation and respecting the diversity of cultural identities within the region; (2) Assuring the protection of cultural heritage, indigenous peoples, languages, and traditional livelihoods across the Barents; (3) Introducing education about the Barents and its society in the curriculum of primary and secondary schools; (4) Supporting teacher and student exchange programs at the level of secondary education; (5) Supporting interregional upper secondary schools and other similar primary / secondary educational programs; (6) Building and promoting mutual understanding and place identity through cross-border cultural events and festivals targeted at local inhabitants (Hallberg, 2016; Hojem, 2016; Orheim, 2016; Soleim, 2016; Staalesen, 2016; Raferlsen, 2016).

There are many kinds of cooperation in the Barents region; all of them seem to be successful according to the interviews. Interviewee said the key of success is the shared Barents Identity and it works only in the region, but in the governmental level. Such cooperation has spread out and become entangled over the Barents countries and has promoted confidence-

building of BEAC members. They believe that the Barents Identity and a sense of solidarity of the region were shared, even during the Cold War era, Therefore the BEAC was officially established within two years of the collapse of the USSR, although international politics did not allow this solidarity to be realized during the Cold War era. I heard that the people in the region could cooperate each other in the occasions such as shipping, fishing and so on and such cooperation was not so bordered by the national borders (Hahl, 2016; Hallberg, 2016; Hojem, 2016; Orheim, 2016; Raferlsen, 2016; Soleim, 2016; Staalesen, 2016).

In addition, they believe that regional cooperation can affect international politics. Indeed, the maritime demarcation between Russia and Norway, which was resolved peacefully in 2010 (Henriksen and Ulfstein, 2011; Honneland, 2016), was the most distinguished fruit of Barents cooperation. Inasmuch as a positive political atmosphere is important to establish trust between countries, it can resolve difficult matters such as territorial disputes. Generally, and especially for Russia, the positive atmosphere is really important to resolve difficult political issues such as territorial problem. For example, Russian politicians such as President Vladimir Putin, Foreign Minister Sergey Lavrov stress that the good atmosphere and mutual confidence is necessary even to start the negotiation on the territorial problem, but there are no such bases between Japan and Russia. On the other hand, it can be said that Russia and Norway could have the base to start the peaceful negotiations and make agreement concerning territorial problem by Barents cooperation. So, the effect of Barents cooperation seems to be significant.

In the Barents cooperation, the logic of the regions is superior to the logic of the states. After the Ukrainian crisis and the activation of sanctions against Russia by Western countries, the relationship between Russia and the other Arctic states grew serious. However, people engaging the Barents cooperation suggest that such a situation is simply the story of international politics and that the Ukrainian Crisis does not affect the Barents cooperation. They say that "We are different from Moscow, Oslo, Helsinki, and so on" (Hahl, 2016; Hallberg, 2016; Hojem, 2016; Orheim, 2016; Raferlsen, 2016; Soleim, 2016; Staalesen, 2016). Such non-governmental regional cooperation can contribute to the peace generally. For example, regional cooperation in the South Asia region contributes to the conflict resolution (Lama, 2012). Therefore, the Barents cooperation seems to have great potential to attain the wider Arctic cooperation even in the governmental level.

3.4. The importance and High possibilities of SAR

As seen above, international cooperation in the Arctic seems to be difficult, especially in the highly tense atmosphere and expanding militarization after the Ukrainian Crisis. Nonetheless, regional cooperation is highly possible (the Barents cooperation). This is due to the presence of complicated competing interests concerning Arctic affairs. This is unrelated to the Cold War structure and its heritage because there are territorial disputes not only between Russia and other countries but also between Canada and the U.S, and between Canada and Denmark.

However, there are certain issues for which all concerned parties can share interests and cooperate, such as SAR and Cooperation on Marine Oil Pollution Preparedness and Response. SAR is searching by using of aircraft, surface craft, submarines, specialized rescue teams, and equipment and provision of aid to people who are in distress or imminent danger on land or at sea. The common field of SAR includes many specialty sub-fields founded upon terrain considerations. SAR includes mountain rescue and ground rescue operations, including the use of search and rescue dogs, urban SAR in cities, combat SAR on the battlefield, and air-sea rescue over water (US Legal, 2018). SAR and Cooperation on Marine Oil Pollution Preparedness and Response are respective issues, but both of them are very important for the all concerned parties, in other words, their successes are the shared interest for all of them. That is why, the cooperation on both issues was agreed by AC, although this study focuses on only SAR. Then, the AC has agreed to cooperate on SAR in 2011 (Arctic Council, 2011) and Oil Pollution Preparedness and Response in 2013 (Arctic Council, 2013). They are not high political problems, and both are very important tasks for all, therefore AC members can cooperate for them.

Interests in the Arctic region, such as resource development, fishery, tourism, the protection of the environment ecosystem, protection of the indigenous people and minorities,

research, data observation, usage of the NSR, building and improving ice-breaker vessels, and infrastructure developments (submarine cable, satellite, communication tools, road, railway, port facilities, and urban planning) cannot be realized without SAR. To realize all these interests, sufficient infrastructure, support of ice-breaker vessels, and SAR are needed. On the other hand, for the effectiveness of SAR, infrastructures, ice-breaker vessels, communication tools, and so on are necessary. Therefore, SAR and various interests are complementary to each other. For example, to promote tourism, ice-breaker vessels for tourists, transportation facilities, communication tools, urban planning, including hotels, restaurants, and leisure facilities, are necessary. To prepare such things, the activities of ice-breaker vessels and working even during winter is important. For the activities, SAR fulfills the basic needs. In this way, most interests in the Arctic relate to each other and SAR is important to all of them. The interests of the Arctic countries are differed from each other, but SAR and Oil Pollution Preparedness and Response are the very rare issues which related countries can share the interests. Then AC not only agreed the cooperation on SAR, but also conducted the joint exercise on SAR by 8 AC member countries. The first joint exercise on SAR "SAREX 2012" was conducted in 10-14 September 2012, and this exercise was paid attention as the important base of Arctic real cooperation. After the Ukrainian crisis which was peaked in 2013, such joint exercise was not realized, but Norway keep the joint exercise with Russia except for 2014 when the international tension caused by the Ukrainian Crisis became the hardest.

SAR in the Arctic is not easy, especially due to the darkness and cold during winter. However, if some incidents are occurred in such harsh conditions, the importance of SAR became more intensified. In addition, some incidents in the Arctic region can be occurred over the more than 2 countries, so cooperative system on SAR is really important.

On the other hand, it is also true that tendency of recent military expansion in the Arctic region is serious, and there are security dilemmas in Arctic cooperation (Depledge, 2015). However, the military is capable of two-sided utilization. Military expansion may be due to a threat to national security. On the other hand, it is also beneficial to international cooperation and SAR. Military activities include the monitoring system, radar, sensors, border guards, and (nuclear) ice-breaker vessels, which are of high importance to SAR as well (Virtanen, 2013; Hilde, 2014).

For an efficient SAR, the military aspect is really important. In the present technological situation, we cannot assume SAR without military support (Virtanen, 2013). For example, Canada has been using the army for SAR, such as the "Fixed-Wing-Search and Rescue Project," which is the SAR project using military air forces by National Defense (Defense Industry Daily, 2016). In addition, Finland, Iceland, Norway, and the U.S. have been dealing with SAR mainly through their Ministry of Defense and the army. Furthermore, most SAR activities are mainly held by border guards or coast guards. The Swedish Maritime Administration is the responsible authority for Maritime and Aeronautical Search and Rescue Services. In Russia, the Russian Ministry of Emergency Situations is in charge of SAR, and activities are mainly done by border guards and the Federal Security Service of the Russian Federation (FSB). In the Danish case, the Ministry of Economic and Business Affairs, Ministry of Transport, and Ministry of Justice have overall responsibility for the SAR response.

In addition, before the AC's agreements on SAR in 2011, several SAR exercises had already been completed: in Russia, the U.S., and Canada in 1993 (under the auspices of the NATO Partnership for Peace in 1996), in a bilateral manner between Russia and Norway [the Barents Exercise], and between Russia and the U.S. [Northern Eagle] (Laruelle, 2014). The bilateral SAR cooperation between Russia and Norway is particularly notable.

Russia and Norway have cooperated on oil-spill response in the area for over 20 years. Then Russia and Norway initiated joint military exercise "POMOR exercise" annually, and POMOR 2012 included the exercise on SAR (Luszczuk, 2016). In addition, they started the joint drill for SAR "Barents Exercise" since 2010 when they signed "The treaty on maritime delimitation and cooperation in the Barents Sea and the Arctic Ocean," a treaty that ended the territorial dispute between them. Although the "Barents Exercise" was not realized in 2014, when the Ukrainian Crises was in full swing, it was restarted in 2015 and further developed in 2016.

Furthermore, Russia has been committed to advancing SAR in the Arctic, although some people evaluate Russia as the most dangerous actor, especially after the Ukrainian Crisis.

However, this argument is controversial. For example, Mikkola (2016b) and Käpylä (2016b) said Russia is the most dangerous actor in the Arctic region, but some researcher such as Murray (2016) and many people who are engaging to the Barents Cooperation (Hahl, 2016; Hallberg, 2016; Hojem, 2016; Orheim, 2016; Raferlsen, 2016; Soleim, 2016; Staalesen, 2016) say that we should not oversell the Russian threat in the Arctic. Russian authorities announced that they had allocated 910 million Rubles to the creation of 10 centers for search and rescue along the NSR. The 10 centers are located in Murmansk, Arkhangelsk, Naryan-Mar, Vorkuta, Nadym, Tiksi, Pevek, Provideniya, Anadyr, and Nenets and a total of 980 persons are working there. Russia has now taken over the chair of the Barents Council since October 2015 for a period of two years. As the chair, Russia is pushing for the strengthening of a "Barents identity" and promoting the "Barents brand" along with safe and stable cross-border transportation and logistics networks, environment and climate, as well as culture and tourism and are deeply related to the SAR problem (The Barents Observer, 2015).

In addition, cooperation with local communities is important. For example, for its SAR, Iceland places central reliance on volunteers in the region (The Icelandic Association for Search and Rescue: ICE-SAR). Such an attitude would also be important for other Arctic states, and SAR cooperation can be done between borders and communities.

Military expansion is of course the danger for the world peace, but it would be very difficult for one country to reduce the military power, which was built at once. So, it would be possible to peaceful use of the military presence. In fact, the cooperation on SAR can be linked to the military presence. Thus, even in the international political high tension after the post-Ukrainian crisis period, the Barents cooperation and military and SAR cooperation seems possible. In addition, such cooperation can realize deeper intergovernmental cooperation in the Arctic.

4. Conclusion

Due to global warming and ice melting in the Arctic, new opportunities have been created. Indeed, new competition for the limited pies has been also become prominent. At the same time, good governance and peaceful cooperation are a necessity to keep Arctic peace. However, there are complicated interests in the Arctic; Arctic affairs tend to be affected by international politics and geopolitical factors. Therefore, the recent high tensions arising due to the Ukrainian crisis and the resultant tensions in the Baltic Sea and Black Sea have cast a shadow over Arctic cooperation. Even in the Barents Cooperation, which is highly expected to be a base for Arctic cooperation, Hallberg (2016), Hojem (2016), and Soleim (2016) stress the shadow of the Ukrainian Crisis in the interviews. In addition, Heikkila (2014) points out that he became not able to keep the good relations with his former Russian close friends who worked for the Barents cooperation, because some people could not cut off tension by Ukrainian crisis from the Barents Cooperation. Having said this, many people in the Barents community say there are no effects from the Ukrainian Crisis to the Barents cooperation and the Barents identity when interviews were conducted (Staalesen, 2016; Raferlsen, 2016). In addition, Barents Identity was thought to have been working even from the cold war era. So, it can be said that Barents Identity has never been affected by history and international affairs but has been kept by the people in the region and it has been working as the key to keep the peace of Barents region, where is the main part of the Arctic.

Besides, in this study, we argued that SAR could be an important base for Arctic cooperation because it is the most important and basic condition for all concerned parties to realize their interests such as matured infrastructures, natural resources, fishing, NSR, tourism, shipping, communications, and so forth in the Arctic. On the other hand, if such many kinds of the factors of Arctic development would success, it would contribute to SAR. So, SAR and all interests of the Arctic region are deeply related, and they share a "chicken and egg relationship."

It is true that international cooperation in the Arctic region seems to be very difficult. Nevertheless, cooperation on SAR, which is still possible with limited infrastructure and cooperative systems, as well as regional cooperation such as Barents cooperation can be a good base of Arctic cooperation. Such a level of cooperation can promote mutual trust and understanding even in the governmental level if the related party would share the strong mind to cooperate. As a consequence, all Arctic actors should try to promote trust-building at the regional

level and state level in their many fields and then link various cooperative activities including SAR activities. This will not be easy and will take much time to attain. However, making strident efforts to achieve this is the only possible basis for genuine cooperation in the Arctic.

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