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Energy Factor in the Arctic Geopolitics: Curse or Opportunity?

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Geopolitical Issues of the Arctic
During the Cold War, the Arctic was a security flashpoint with U.S. and Soviet nuclear submarines patrolling under the North Pole and bombers airborne over the region. Today, the Arctic is disassociated from great power politics, but new geopolitics development with the Arctic’s melting.

Countries with military/security interests and naval capacity in the Arctic are Russia, Canada, Norway, Denmark, and the U.S. Russia has been the headline grabber with the Chilingarov expedition planting a Russian flag on the sea bed under the North Pole and the resumption of bomber overflights in August 2007.¹ Russian military interests center on the Kola Peninsula, home to the Russian nuclear submarine fleet, and on rebuilding the Northern fleet.² U.S. released the revised U.S. Arctic Regional Policy in January 2009. The new U.S. policy statement reiterates that national security and defense needs a U.S. goal in the Arctic.³ Denmark and Norway, which control Greenland and the Svalbard Islands, respectively, are also anxious to establish their claims. For Greenland, which has just approved a new self government relationship with Denmark, the focus is on developing a cooperative infrastructure in the Arctic, i.e., through the Arctic Council and the International Maritime Organization (IMO). Greenland’s desire to have direct participation in the deliberations of Arctic states is complicated by Danish policies, which are focused on Europe and can be at odds with the interests of Greenlanders.

Canada is also defending its political interests, for example, by making vessel notifications in the Northwest Passage mandatory and making clear it will not cede anything in the North. Canadian Prime Minister Stephen Harper, in July 2007, announced funding for new Arctic naval patrol vessels⁴, a new deep-water port, and a cold-weather training center along the Northwest Passage.⁵ Canada aims to make its case for Arctic Ocean resources under Article 76 of the UNCLOS.⁶

There are also international governmental organizations and major powers from outside the region which take an interest in the North. For example, the new Northern Dimension is interpreted to mean a common policy of the European Union (EU), the Russian Federation, Iceland and Norway in Northern Europe. In addition, northern issues are finally being given a higher priority on the EU’s agenda and matters relating to the north have been an important concern of the United Nations (UN) for years; for example, the UN has special duties in the region through the UN International Law of the Sea.

Major powers from outside the region, such as the UK, France, Germany, China, Japan and South Korea are taking a growing interest in many aspects of the North, such as in scientific research. Finally, there is a growing worldwide, even global, economic and political interest toward the northernmost regions of the globe, particularly due to the estimated fossils in the shelves of the
northern seas and visions of new trans-arctic sea routes. Consequently, trans-national corporations (TNCs) have strong commercial interests to become present to utilize energy resources.\textsuperscript{vii}

**Energy Resources in the Arctic**

The melting ice coverage has led some analysts to believe that previously inaccessible oil and gas deposits may now be accessible permanently or periodically.\textsuperscript{viii} Successful development of these reserves would help to alleviate the pressure on the global oil and gas markets and potentially enhance energy security as a result.\textsuperscript{ix}

While there are deposits of uranium and coal scattered throughout the area north of the Arctic Circle, the main energy resources of interest for commercial operators are oil and gas. The precise quantities of these resources remains unknown, however, a study conducted in 2008 by the United States Geological Survey (USGS) suggests the Arctic may contain approximately 13\% of the global mean estimate of undiscovered oil, which is approximately 618 BBO.\textsuperscript{x} While the Eurasian side of the Arctic is more natural-gas-prone, the North American side is more oil-prone. The North American side of the Arctic is estimated to have about 65\% of the undiscovered Arctic oil, but only 26\% of the undiscovered Arctic natural gas.\textsuperscript{xi} The Arctic Alaska region, the Amerasia Basin, and the East Greenland Rift are expected to hold about 48.6 billion barrels of undiscovered oil, which is about 54\% of the total undiscovered Arctic oil. Approximately 2.5 billion barrels of oil have already been discovered in large fields in both the Amerasia Basin and the Northwest Canadian Interior Basins that are not yet being produced.\textsuperscript{xii}

The estimated amount of undiscovered gas is more significant — approximately three-times as much as the estimated oil on an energy-equivalent basis. The median estimated amount represents some 30\% of global estimated undiscovered gas.\textsuperscript{xiii} Of course, the existence of these resources does not mean that they will all be exploited. Ultimately, this will most likely be decided by the price of the resource weighed against the extraction, processing, and transportation costs of getting it to market.

Current estimates of hydrocarbon resources in the Arctic vary between three and 25\% of the world total. Most are likely within established Russian territory, but the extent of deposits in disputed or international spaces is unclear, and the viability of extraction depends on a host of shifting economic and technological variables.\textsuperscript{xiv}

Much attention has been devoted to maritime boundary disputes involving the Arctic states, Canada, Denmark, Norway, Russia, and the US. Some analysts believe that the Arctic might witness conflicts between the littoral states caused by the quest for energy resources.\textsuperscript{xv} However, this assessment is perhaps overstated considering that the Arctic region is roughly divided into three parts, with one-third onshore, one-third continental shelf, and one-third deep ocean basin. The report suggests that the deep ocean basin areas contain little hydrocarbon resources. Most of the resources lie on the continental shelves or onshore.\textsuperscript{xvi} The borders claimed by the Arctic states are generally not disputed in the areas anticipated to contain the hydrocarbon deposits hence neither are the resources that lie within them.

The melting of the Arctic ice cap in combination with developments elsewhere concerning future energy security are creating scenarios that range from low level friction to potential conflict between the eight nations surrounding the Arctic region, which leads to the question under the legal framework: who owns the energy resources in the Arctic.

**Who owns the energy resource: Legal Aspect**

With energy resource playing a significant role in the Arctic’s geopolitics, it is important to clarify the ownership of these rich resources. To do that, an unfolding of the disputes among the Arctic states will help clear off the uncertainty.
A framework to resolve boundary disputes in the Arctic exists in the form of the United Nations Convention on the Law of the Sea (UNCLOS). UNCLOS contains provisions regarding the delineation of the outer limits of continental shelves and maritime boundaries. It obliges states to submit their boundary claims to the UN Commission on the Limits of the Continental Shelf (CLCS) within ten years of ratifying UNCLOS.\textsuperscript{vii} Russia, the US, Canada, and Norway have all claimed as 12nm territorial sea and a 200 nm EEZ in the Arctic Ocean. Like the EEZ, the continental shelf automatically extends out to 200 nm, save for the need for a boundary with a neighbouring State. The international law on how to define a continental shelf beyond 200nm is found in Article 76 of UNCLOS. Within the extended continental shelf, a State has sovereign rights on and under the seabed, including hydrocarbons (e.g., oil, gas, and gas hydrates), minerals, etc.

Each of the five Arctic States has an External Continental Shelf (ECS) in the Arctic Ocean and two of those States, Russia and Norway, have made a submission to the CLCS. Russia was the first to make a submission to the Commission in December 2001. The Commission issued recommendations at its June 2002 meeting that included a recommendation that Russia make a revised submission that includes additional data for the central Arctic Ocean. Russia is collecting and analyzing these data now. Norway has proceeded the farthest of any Arctic State to define its ECS. It made a submission in 2006 that covers three areas – the Banana Hole, the Loop Hole, and a small area north of Svalbard. The CLCS issued recommendations in March of 2009. Norway has publically accepted those recommendations.

Canada has ECS in the central and western portions of the Arctic Ocean as well as off its East Coast. Canada has two separate cooperative data collection efforts, one with Denmark (since 2005) on the Lomonosov Ridge and another with the US (since 2008) on the Canada Basin and the Chukchi Borderland. Canada’s submission is due in July 2013. Denmark has ECS in five areas: two areas off the Faroe Islands and three areas off Greenland. Denmark’s submission is due in November 2014. The US has been gathering and analyzing data to determine the outer limits of its extended continental shelf since 2002, but has been collecting data in the Arctic Ocean since 2003.

Five Arctic states issued the Ilulissat Declaration on 28 May 2008, affirming that each state would remain committed to the legal framework of the law of the sea to resolve any overlapping claims.\textsuperscript{viii} The agreement by the Arctic states to resolve their disputes through the UNCLOS framework suggests that the overlapping boundary issues will be settled amicably although it is likely that they will take some time to be finalized.

Article 136 of UNCLOS provides that the ‘Area’ beyond national jurisdiction and its resources are the common heritage of mankind. No State shall claim or exercise sovereignty or sovereign rights over any part of the Area or its resources. All rights in the resources of the Area are vested in mankind as a whole, on whose behalf the International Seabed Authority shall act. The Non-arctic States and international organization have interests in the exploration and exploitation of the natural resources in the seabed beyond the jurisdiction of any Arctic States in this region. However, the general conduct of States in relation to the Area shall be in accordance with the provisions of UNCLOS, the principles embodied in the Charter of the United Nations and other rules of international law in the interests of maintaining peace and security and promoting international cooperation and mutual understanding.

**Challenge and Cooperation**

*Political challenge* for oil companies that show interest in energy extraction may stem from unresolved boundary disputes. Besides, the opening up of Arctic sea routes once only navigable by icebreakers threatens to complicate delicate relations between countries with competing claims to Arctic territory — particularly as once inaccessible areas become ripe for exploration for oil and natural gas. The United States, Russia and Canada are among the countries attempting to claim jurisdiction
Economically challenge also exists. Finding large Arctic oil and natural gas deposits is difficult and expensive; developing them as commercially profitable ventures is even more challenging. Arctic oil and natural gas resource exploration and development are expensive because of the challenges from harsh winter weather that requires the equipment be specially designed to withstand the frigid temperate, limited transportation access and long supply lines that reduce the transportation options and increase transportation costs, physical environment that requires additional site preparation to prevent equipment and structures from skimming, and operating cost that are increased by the ice-pack conditions that extend over much of the Arctic Ocean. In addition, while the Arctic has the potential to be a more important source of global oil and natural gas production sometime in the future; the timing of a significant expansion in Arctic production is difficult to predict.

In addition to political and economic challenge, technological concern shall not be neglected, as the feasibility (and thus the cost) of extracting oil and gas in the Arctic will depend most heavily on the state of the available technology as well as climatic developments which may produce a more or less hospitable environment in which to operate. Extraction technology has been grappling with extreme-climate marine drilling for decades, but the pace of new advancements will dictate the feasibility of exploitation in coming years.

It is more challenging to forecast the level of offshore hydrocarbon extraction in the future. Operating in the Arctic environment is made more challenging by the presence of ice and the generally severe weather conditions. In order to manage the risk that flows from these conditions, hydrocarbon extraction operations must design safety and protection into their infrastructure and procedures. Moreover, given the more fragile nature of the Arctic environment in comparison to other hydrocarbon producing areas of the world companies will be expected to operate with increased environmental safeguards in the Arctic. Together, these higher standards will result in increased operating costs for the oil and gas companies. These costs may convince some companies that the potential gains are not worth the risks of investing in the region.

Opportunity for Cooperation
The high cost of doing business in the Arctic suggests that only the world’s largest oil companies, most likely as partners in joint venture projects, have the financial, technical, and managerial strength to accomplish the costly, long-lead-time projects dictated by Arctic conditions. Incentives to settle outstanding disputes would rise with the increasing potential economic returns posed by exploitation, and as a result polarization within the international system.

Meanwhile, while there are disagreements between the Arctic states on the maritime boundaries, there are still reasons to believe that these disagreements can be resolved amicably. The prospect for conflicts relating to unresolved boundary disputes seems remote. The existing vehicles for dispute resolution and cooperation in the region, UNCLOS and the Arctic Council, will also help to reduce tensions. Indeed, there are already examples of cooperation between states regarding the development of contested and non-contested areas. It seems that the countries in question realize that they stand to gain more through cooperation than through confrontation.

Joint management of resource fields is another option that might come into play as countries involved in a dispute might see more advantage in approaching the disagreement this way rather than losing a claim in an international tribunal. Cooperation between Norway and Iceland regarding the development of the Dreki field could serve as a model for similar arrangements in the future. Another example is the continental shelf dispute concerning an area rich in natural gas between Russia and Norway in the Barents Sea. Both countries dispute the other’s interpretation of where their borders extend into the offshore Economic Exclusion Zone (EEZ). While it is possible that
there could be a conflict between the two countries over this area, it seems highly unlikely given the potential costs versus the potential benefits. Both countries have substantial reserves within the undisputed areas of their continental shelves so to risk conflict over what would be an incremental increase in total reserves would be nonsensical. Indeed, on June 5, 2009, Russia and Norway signed a Memorandum of Understanding to explore ways to jointly develop the contested areas.\textsuperscript{xxv} There is already cooperation between the gas companies of the two.

Geopolitical issues are not exclusively conflicts over interests, although such concerns tend to dominate. They can also reflect cooperative, multilateral initiatives by which as state pursues its interests vis-à-vis other states. Such cooperative ventures are often considered desirable and even unavoidable when a state is seeking a result that cannot be achieved unilaterally. At the same time, cooperation frequently establishes a level of governance – in some cases formally, in other less formally – by which mutual understanding can clarify intentions and help to build trust.

Conclusion
The Arctic has recently witnessed a manifold growth in its geo-strategic importance due to the huge deposit of oil and natural gas, and the potential contribution of northern sea routes for global shipping. As a result of this, northern regions and seas have become a target area for the growing economic, political and military interests of the Arctic states as well as of major powers outside the region and trans-national companies, such as states activities of ensuring energy security that are an important element in their foreign policy, and countries’ efforts to assure access to natural resources which affect security dynamics\textsuperscript{xxvi}

While it is important to look at the Arctic issue from a law of the sea perspective, with the Arctic states resorting to the Commission of Limits of Continental Shelf (CLCS) for advice on the outer limit of continental shelf, and major powers, transnational corporation seeking for chances to develop in the common heritage of mankind in the “area” beyond national jurisdiction; political, economic and technological concern also challenge the oil companies in further investment in energy development in the Arctic. By the same token, however, joint management of resource is another option that might come into play as countries involved in a dispute might see more advantage in approaching the disagreement this way rather than losing a claim in a zero-sum game. Examples of cooperation already existed. Future regional governance in energy security in the Arctic could serve to break the dilemma of the Arctic disputes, with regard to national sovereignty, and unsolved maritime border. Energy factor, rather than a curse for the Arctic dispute, could serve as an opportunity for regional cooperation in the Arctic, thus preventing the further escalation in this region.

Endnotes:

\textsuperscript{i} Borgerson, Scott G., “Arctic Meltdown: The Economic and Security Implications of Global Warming,\textit{ Foreign Affairs}. Volume 87 No. 2, pp.63-77


\textsuperscript{iv} “Ottawa buying up to 8 Arctic patrol ships”, CBC news, July 9, 2007

\textsuperscript{v} Borgerson, “Arctic Meltdown”.

\textsuperscript{vi} Final Report and Findings of The Arctic Climate Change and Security Policy Conference


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“Norway,” *Country Analysis Briefs*