

Cooperation or conflict?

■ The way
forward
■ for arctic
governance



ARCTIC GOVERNANCE

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PHOTO: U.S. Navy photo by Mass Communication Specialist 1st Class Tiffini M. Jones

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Where is the Arctic going?

WELCOME TO THE FIRST ISSUE of The Circle, WWF International Arctic Programme's new publication which replaces the Arctic Bulletin. The new name is an obvious reference to the Arctic Circle, but is also suggestive of all of the systemic linkages in the Arctic, circular self-perpetuating processes that keep the Arctic in balance. Many of these systems are now being destabilized by threats such as climate change. We hope that this publication will bring forward ideas on how to address the threats, and keep the Arctic in balance.

The Circle will come out four times a year, and will in each publication focus on one specific issue related to the Arctic. We will ask the key international actors working within that particular area to share their thoughts and ideas on various aspects of that issue. The aim is to ensure that you will get a wide and well-informed perspective on the most significant current issues related to the Arctic, and will be able to hear some new ideas directly from the source.

Our first topic is arctic governance. What happens when previously inaccessible areas of the Arctic Ocean become accessible for fishing and oil and gas exploration? How

“ We hope that this publication will bring forward ideas on how to address the threats, and keep the Arctic in balance.

should national and international interests be balanced in the Arctic Ocean? What are the roles of the United Nations Convention on the Law of the Sea (UNCLOS) and the Arctic Council? Are the current legal regimes sufficient? What do some of the arctic states want arctic governance to look like? What is the Indigenous perspective on these issues?

These are some of the questions our distinguished selection of authors address through their contributions. We have asked people who have solid background from not only the legal aspects of arctic governance – but also from politics, international diplomacy and academic research – to give us their views on how they see the current challenges and solutions. We thank all the authors for contributing with their time and ideas.

We hope that this first issue of The Circle will give you a lot of new input and food for thought. We look forward to receiving your feedback and comments, so that we can do our best to make the next issue even better. ○



Dr NEIL HAMILTON

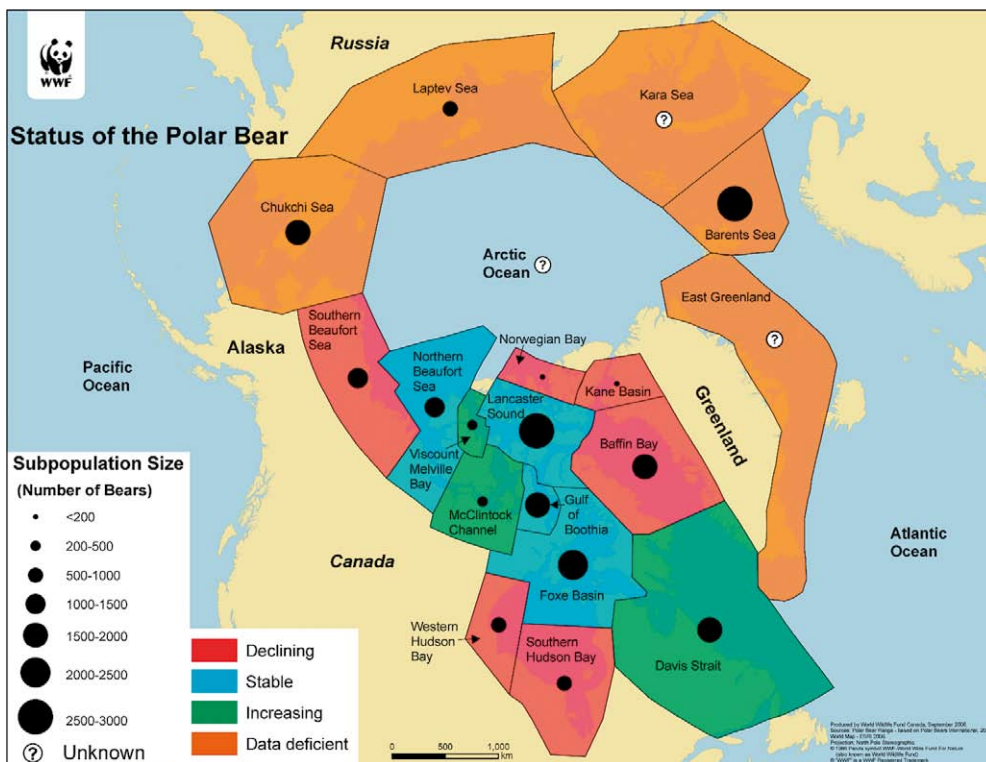
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Cover: The crew of the Los Angeles-class attack submarine USS Hampton (SSN 767) posted a sign reading “North Pole” made by the crew after surfacing in the polar ice cap region. Hampton took part in ICEX 04, a joint operational exercise beneath the polar ice cap. The Ice Exercise demonstrates the U.S. and British Submarine Force's ability to freely navigate in all international waters, including the Arctic. U.S. Navy photo by Chief Journalist Kevin Elliott.

The WWF International Arctic Programme gratefully acknowledges the financial support of The W. Garfield Weston Foundation for publication of The Circle.



Big wins for polar bears

WWF LAUNCHED earlier this year a concerted push for big conservation wins for polar bears, set firmly within the context of the battle against global warming. The first milestone of the campaign occurred in March in Tromsø, Norway, at a meeting of the parties to the 1973 Agreement on the Conservation of Polar Bears.

During this meeting, the five polar bear nations Canada, Greenland/Denmark, Norway, Russia and the US formally recognized climate change as the primary threat to the future well-being of polar bears. They also recognized formally “the urgent need for an effective global response that will address the challenges of cli-

mate change”. The meeting made some other important advances. It agreed to come up with a circumpolar action plan for the management of bears, and to formally designate the Polar Bear Specialist Group of the World Conservation Union (IUCN) as the scientific advisory body to the Agreement. These were all measures proposed by WWF ahead of the meeting.

This was the first official meeting under this agreement in 28 years and an historic opportunity to take action toward effective trans-boundary management and conservation of polar bears.

“Although we are generally very pleased with the meeting outcome, this is by no means the end of the story— it is the start on the path to polar bear survival,” said WWF’s polar bear coordinator Geoff York. “The real proof of this new com-

mitment to taking urgent and effective action on climate change is what leaders of these nations will commit to later this year.”

Ultimately, the polar bear nations must join with other countries at the UN climate conference in Copenhagen in December 2009 to sign an effective global deal on climate change that will save the polar bears’ arctic sea ice habitat, along with the entire ice ecosystem.

Conservation in times of rapid climate change

WHAT NEEDS to be done to bring arctic conservation science, planning and management up to speed with rapid

climate change? This was the pressing question posed to a diverse group of scientists, conservation managers, policy makers and NGO representatives from around the Arctic who gathered at a workshop at the Abisko Scientific Research Station in Northern Sweden in March. The workshop was co-hosted by the WWF International Arctic Programme and the Research Station. The discussions will be summarized and published in a scientific journal.

Governance gaps and options

A WWF-COMMISSIONED report on arctic governance gaps was launched at the Arctic Frontiers conference in Tromsø, Norway, in January. The report *International Governance and Regulation of the Marine Arctic* was written by two experts on the law of the sea, Erik Jaap Molenaar and Timo Koivurova. The report gives an overview of the current international governance and regulatory regime of the Arctic Ocean and identifies the main governance and regulatory gaps of the regime. A follow-up report by the same two authors, *International Governance and Regulation of the Marine Arctic. Options for Addressing Identified Gaps*, will be launched later this year. This report discusses the necessity, timing and comprehensiveness of the reform of the current legal regime, the

type, level and proposals for reform, and balancing rights, interests and obligations.

Arctic Survey take-off

A THREE PERSON TEAM

from Britain, led by polar explorer Pen Hadow, ventured out in February from Canada's Arctic islands by foot towards the North Pole to help provide important information about the future of the Arctic sea ice. The Catlin Arctic Survey team will remain on the ice until likely near the end of May. During the 90-day trek the team expects to be swimming between floes for up to 150 hours where the ice has broken up.

"This is important data at a

critical time for the Arctic," said WWF International Arctic Programme Director Neil Hamilton. "This is the only on the ground information about ice thickness coming out of the Arctic this year. Satellites give us good indications about the extent of the ice, but this expedition will produce solid information about its thickness and density. These measurements are important for our understanding of how long the ice will last."

Sea ice has been on a melting trend since satellite tracking began in the late 1970s. The last two summers have seen the lowest coverage of summer sea ice ever recorded. The trend of diminishing arctic sea ice raises fears for entire arctic ecosystems that depend on it, from single-celled organisms,

all the way up to larger animals such as polar bears. The sea ice is critical to the stability of the global climate, as it reflects 80 per cent of the sun's energy, whereas open water absorbs it. Without sea ice, the sun's rays will be absorbed, accelerating the warming of the Arctic and the entire world, leading to unpredictable weather patterns and rising sea levels.

Links to the team's blogs can be found on www.panda.org/arctic.

Polar bears and penguins just tip of the climate change iceberg

AS MINISTERS from Arctic Council and Antarctic Treaty states held their first ever joint meeting in Washington in April celebrating the 50th Anniversary of the signing of the Antarctic Treaty, WWF challenged the ministers to affirm their commitment to climate change action.

WWF provided the ministers with compelling recent evidence from both the north and south poles that clearly demonstrates global temperature increases must be kept well under two degrees Celsius.

"A global average temperature rise of two degrees is clearly too much for the poles," said Rob Nicoll,

Manager of WWF's Arctic and Southern Oceans Initiative. "Scientists are already unpleasantly surprised at how quickly the impacts of warming such as sea ice loss are showing up in the polar regions, exceeding recent predictions."

Global average warming due to climate change since the late 1800s is showing severe impacts at less than one degree, as the Arctic is warming at about twice the global average and parts of the Antarctic are also outstripping the global average. The polar regions themselves have profound and not yet fully understood impacts on climate globally, and there are fears that polar tipping points could trigger abrupt change around the world.

New book on climate governance

A NEW BOOK on arctic governance was published recently, titled *Climate Governance in the Arctic*. The book, which is edited by Timo Koivurova,

E. Carina H. Keskitalo and Nigel Bankes, looks at how relevant regimes, institutions and governance systems support mitigation of climate change and examines how the different governance arrangements support adaptation processes in the region.



WWF - Catlin Arctic Survey

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WWF-CANON POLAR BEAR TRACKER

TRACK!

Follow polar bears "live" as we track them on their arctic journeys

Catlin Arctic Survey

Eyes on the ice

Follow the Catlin Arctic Survey team

From late February until around the end of May, a team of 3 people from Britain will journey by foot across the disintegrating Arctic Ice Pack. Starting in Resolute in Canada's high Arctic Islands, the team is heading for the North Pole. The team is driven by a mission: to measure the thickness of the sea ice, and help scientists predict the future for this vast, beautiful, and threatened part of the Earth. As they travel across the ice, team members will file pictures, video and audio, that we will post here.

WWF is supporting this expedition because we are concerned about the future of the Arctic sea ice. The ice is on a downward trend, and is predicted to disappear in the summer within a generation. This will likely have severe consequence for the Arctic animals and people that have relied on that sea ice for generations. The disappearance of the ice is also having a global effect.

[WWF Ice Factsheet \[doc, 1.47 MB\]](#).

[WWF is working on Arctic climate change issues... find out more.](#)

[Find out more about the Catlin Arctic Survey, and the team.](#)

Video: Pen Hadow describes the sea ice conditions in the Arctic [Watch it larger](#)

Watch behind the scenes action from the trip on YouTube, join the Catlin Arctic Survey team on Facebook or follow them on Twitter

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Time for a new Arctic Treaty

Contested sovereign rights, climate change and unexploited resources are at the core of the polar tension. UNCLOS provides a foundation for resolving some of the issues, says **DON ROTHWELL**. But it can't settle all the Arctic's challenges. A new Arctic Treaty is needed.

LONG NEGLECTED in terms of international governance and management, the Arctic is slowly attracting greater attention as a region in need of an effective regime. The focus on the Arctic in the past year has been on the rising tension over new maritime claims, whilst there is also growing alarm over

the environmental consequences of climate change and how melting of the sea ice will open up previously inaccessible arctic shipping routes. Recent events have brought these issues to a head. In May 2008 officials from Canada, Russia, Denmark, Norway and the US gath-

cent years the melting of the arctic sea ice has been dramatic, with vast tracts of open water appearing. Previously inaccessible areas of the Arctic Ocean will potentially become accessible for various forms of resource exploitation ranging from much sought after new oil and gas fields, to new fishery grounds. The Northeast and Northwest Passage will also become more navigable. There is even talk of a true circumpolar route over the Pole between the Atlantic and Pacific, which has important implications for trade with China.

EXPANDING SOVEREIGN CLAIMS

Contested sovereign rights are at the core of this polar tension. Whilst over the centuries most land disputes have been amicably settled, sovereignty over the Arctic Ocean and its surrounding seas is another matter. Initially the new law of the sea as reflected in UNCLOS caused arctic states to try and resolve maritime boundaries which stretched into the adjoining frozen ocean. In some cases, such as the Beaufort Sea between Canada and the US, reaching a boundary settlement has proved impossible. There has also been tension over the sovereign rights that can be asserted over certain arctic waters, especially the Northwest Passage (claimed by Canada) and the Northeast Passage, or Northern Sea Route (claimed by Russia). Control of these waters has been seen as essential to the recognition of sovereign rights on the part of the adjoining countries. The law of the sea has therefore been

part of the catalyst for these events, whilst climate change is the other part of the equation.

UNCLOS is the basis upon which all countries rely in order to assert a raft of maritime claims over the territorial sea, exclusive economic zone, and the continental shelf. Whilst UNCLOS was concluded in 1982, it has only been since 2001 that claims have been made to an "outer continental shelf" which extends beyond an uncontested 200 nautical miles to possibly as far offshore as 350 nautical miles. This is the foundation of the latest arctic oil rush as first the Russians, then the Norwegians and soon the Canadians, Danes, and ultimately the Americans stake their overlapping claims, many of which will converge in the central Arctic Ocean. The arctic seabed, including that at the North Pole, is effectively being carved up in an unprecedented ocean grab with the eventual sovereign right to exploit whatever mineral resources may be found as the ultimate prize.

Yet whilst it sets basic rules for the assertion of these claims and the resolution of disputes, UNCLOS allows for considerable flexibility as to their final resolution. The convention does not provide, for example, a clear formula for how shared maritime space such as the Arctic Ocean is to be divided. All of these developments place a spotlight on how the Arctic is being managed and whether those countries with interests in the region are capable of responsibly dealing with these new challenges. Historically, the Arctic Council, first established in 1996 has provided a forum

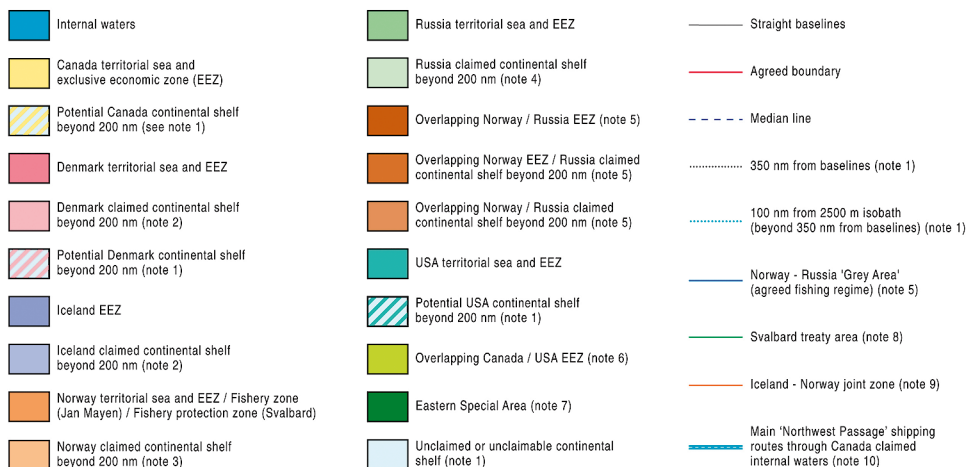
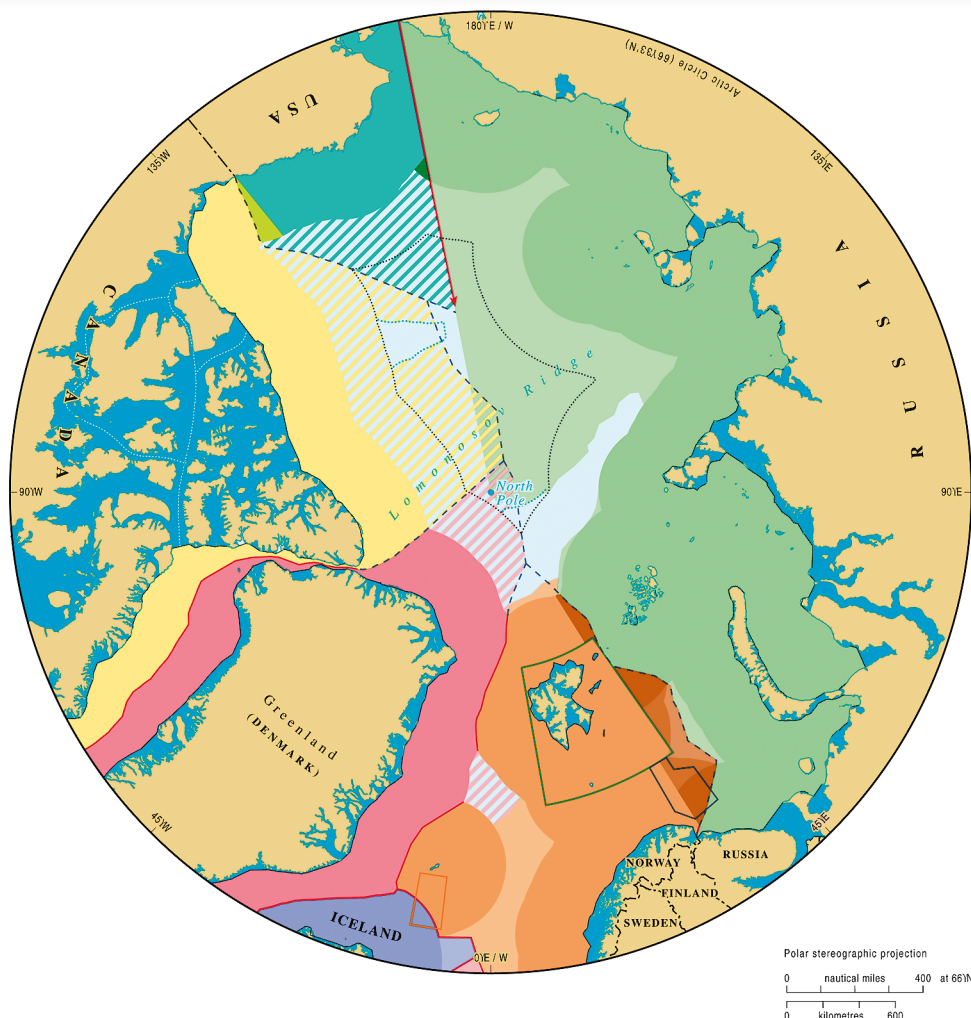


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ered in Greenland and concluded the Ilulissat Declaration which asserted that the law of sea was the basis for the resolution of all outstanding arctic maritime issues. While the 1982 United Nations Convention on the Law of the Sea (UNCLOS) provides a foundation for resolving some of these issues, it is an overstatement to suggest it can settle all the Arctic's challenges.

In addition to how the region should be managed, the Arctic's resource potential continues to attract headlines. The U.S. Geological Survey estimated in 2008 that 90 billion barrels of undiscovered but technically recoverable oil existed north of the Arctic Circle. Climate change is another factor. In re-

MARITIME JURISDICTION AND BOUNDARIES IN THE ARCTIC REGION



For notes to the map please see <http://www.dur.ac.uk/ibru/resources/arctic>
Map: International Boundaries Research Unit, Durham University

for arctic issues but it has consistently avoided contentious issues.

ALTERNATE REGIONAL FRAMEWORK

Could an alternate regional framework for the Arctic be developed? One model would be a new regime based on a regional treaty. Such a treaty would need to be based upon respect for existing sovereign rights compatible with current legal frameworks. Within those parameters there would be potential to develop innovative responses to some of the region's challenges. A relatively short framework treaty addressing fundamental sovereignty and dispute resolution mechanisms which included a set of overarching regional management principles would provide a sound foundation for the regime. Essential elements would include an unambiguous statement respecting pre-existing sovereign rights whilst at the same time setting aside existing territorial or maritime disputes, and processes for developing appropriate resource management mechanisms in areas where seabed claims are disputed. Guiding principles for an Arctic Treaty could include respect for the environment, conservation and sustainable management of natural resources, freedom of scientific research, and acknowledgment of indigenous rights. Comprehensive arctic-wide environmental management with a strong oceans focus would also be essential. Such a treaty would, however, only be a starting point. There would inevitably be a need for additional side agreements to address specific issues such as navigation and shipping, marine environmental protection, and threatened species protection.

The time has come for a reassessment of the reluctance of the arctic states to support a fully functioning regional organisation. The current arctic regime is a patchwork of soft political responses in need of an overarching binding treaty framework which UNCLOS cannot provide. The time for an Arctic Treaty has come. ○

Arctic environmental governance: Are new regimes needed?

Is there a pressing need to negotiate a new, comprehensive, and binding treaty for protection of the arctic environment? Briefly put: no, writes **OLAV SCHRAM STOKKE**. Not because strengthening of legal measures is unnecessary, but because there already exist institutions – with either broader or narrower participation than the “Arctic eight” – that can provide better venues.

THIS ARTICLE DEVELOPS a slightly longer answer in three steps: it pinpoints institutions and players central to arctic environmental governance, briefly reviews some salient environmental challenges, and draws some implications as to how best to improve arctic environmental governance.

INSTITUTIONS AND PLAYERS

Global environmental change affects the Arctic with particular force, notably with respect to temperature change and bioaccumulation of pollutants that pose severe health threats. The “Arctic eight” include two pivotal states in global climate politics, the USA and the Russian Federation – and a third key player, China, has recently obtained observer status in the Arctic Council. That institution has become a high-level international forum for discussing and acting on a range of regional challenges and for generating arctic premises in broader

debates on environmental regulation. As a soft-law institution, the Arctic Council adopts non-binding declarations at its bi-annual ministerial meetings. In-between those meetings, the Senior Arctic Officials of the eight member states oversee the activities of six working groups, which serve as the work-horses of this institution.

Significant as the Arctic Council is for regional environmental governance, several broader instruments weigh far

more heavily. Most of the rapid changes currently underway in the arctic natural environment are the result of global warming, and the centerpiece for international action on mitigation of greenhouse gas emissions is the United Nations Framework Convention on Climate Change and its Kyoto Protocol. Similarly, much of the hazardous compounds that now threaten arctic ecosystems originate from industrial activities and energy generation far beyond the region and require action



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*Shtokman, Barents Sea.
Here a gigantic gas
field is under develop-
ment.*

PHOTO: Trym Ivar Bergsmo/StatoilHydro

within broader institutions, including those under the regional Convention on Long-Range Transported Air Pollution (CLRTAP). By far the most important single instrument regulating arctic activities, however, is the 1982 United Nations Law of the Sea Convention. It provides a legally binding framework for addressing a wide range of arctic issues, also in the environmental field. Salient provisions of this treaty have become customary international law and are therefore binding on all states, whether or not they have ratified it.

Also non-arctic actors have begun to demonstrate growing interest in the arctic environment. Various actions of the European Parliament have aimed to raise the EU's profile in arctic affairs, most recently by calling in October 2008 for "a standalone EU Arctic policy" and suggesting that the European Commission should "be prepared to pursue the opening of international negotiations designed to lead to the adoption of an international treaty for the protection the Arctic". Soon thereafter, the EU Commission presented a Communication on the Arctic region, highlighting environmental protection, sustainable resource use, and "enhanced Arctic multilateral governance".

AIRBORNE TOXIC SUBSTANCES

The Pole-bound atmospheric and oceanic circulation systems and rivers draining into the arctic waters transport a range of toxic substances that originate or volatilize further south, including various persistent organic pollutants (POPs). Low temperatures create an arctic "cold trap", or sink, for some of these POPs, preventing further transport. Accordingly, regional states and institutions cannot seriously address the POPs problem without engaging broader international regimes. Attention focused first on the creation of a separate POPs Protocol under the CLRTAP, which covers Europe and North America, and later on the negotiation of the global Stockholm POPs Convention. Activities under the Arctic Council's Arctic Monitoring and Assessment Program (AMAP) contributed significantly to achieving these instruments which today commit states to eliminate, or in some cases restrict, the production, use, and trade of certain particularly harmful substances. The AMAP's attention to transport pathways and the health impact on mammals and humans glove-fitted the criteria used by the negotiators to identify chemical substances in particular need of regula-

tion: transport range, persistence, toxicity, and bio-accumulation. The Arctic Council successfully acted as a catalyst for broader action.

OFFSHORE OIL AND GAS

Fact-finding characterizes Arctic Council activities concerning regional hydrocarbons, most recently through the council's Oil and Gas Assessment. Earlier expectations of an arctic "energy rush" have not materialized, but the rapid warming currently underway in the region and the depletion of oil and gas in more southerly parts of arctic states make an escalation of hydrocarbon operations likely. Seismic activities and exploratory drilling are activities of long standing; some major arctic offshore fields are now in production, while others, like the giant Shtokman gas field in the Barents Sea, are moving towards that stage. The main concern surrounding offshore oil and gas activities in the Arctic is the risk of major accidents involving large-scale oil spills, a risk higher than in temperate zones. Regular operational discharges are unlikely to add significantly to the total load of hydrocarbons in arctic waters, which are largely brought into the region from other areas through oceanic circulation. Should an accident occur, however, climate and weather conditions, darkness and long distances will hamper rescue and restoration efforts.

The Arctic Council has adopted, and is in the process of revising, a set of Arctic Offshore Oil and Gas Guidelines, but this soft-law instrument is not salient in relevant bureaucracies and it lacks reporting and review procedures. This institution's potential as a venue

for negotiating substantively stronger and binding measures is modest, since its membership is a mix of states with and without jurisdiction over the continental shelves of the Arctic. States with an arctic shelf have few incentives for negotiating such constraint on their exercise of sovereignty within a venue framework that includes non-shelf states as well. Canada, Denmark, Norway, Russia and the USA adopted in 2008 the Ilulissat Declaration, noting that by “virtue of their sovereignty, sovereign rights and jurisdiction in large areas of the Arctic Ocean the five coastal states are in a unique position to address these possibilities and challenges [and] ... therefore see no need to develop a new comprehensive international legal regime to govern the Arctic Ocean.” Binding rules on hydrocarbon activities negotiated among the “Arctic eight” would distribute costs and benefits asymmetrically: the loss of regulatory leeway would afflict only the shelf states, whereas the political and environmental gains of more ambitious regulation would be shared by all. Therefore, sub-regional fora seem more promising for consideration of stronger international regulations in this area – for instance, among sub-sets of arctic states or through the OSPAR Convention for the Protection of the Marine Environment of the North-East Atlantic, which commits parties to best available technology standards concerning drilling procedures and discharge levels.

MARITIME TRANSPORT

While in areas like dumping the Law of the Sea Convention defines minimum standards for regional action, this convention sets maximum standards for rules on other kinds of vessel pollution by foreign vessels – and those caps on coastal-state or regional action become lower, the further away from the coastline a vessel operates. Within 12 nautical miles from the shore, states are free to “adopt laws and regulations for

“When it comes to environmental governance, the Arctic is often either too small or too big.”

the prevention, reduction and control of marine pollution from foreign vessels” as long as such measures do not impede innocent passage. In the Exclusive Economic Zone, considerably less leeway remains: coastal states can unilaterally only set rules “conforming to and giving effect to generally accepted international rules and standards established through the competent international organization or general diplomatic conference” – meaning through the International Maritime Organization. Should the coastal state consider those rules inadequate for certain sensitive areas, it must seek approval from this “competent international organization” – even for relatively modest interventions like requirements for using particular sea lanes or compulsory pilotage. While particular rules apply to spatial areas with certain physical or socio-economic characteristics – such as enclosed or semi-enclosed seas, straits used in international navigation, and ice-covered areas – their implications for the rights of coastal states to regulate maritime transport are internationally contested. These various constraints, and the navigational interests of the leading powers that produced them, leave scant room for regulatory action by the arctic states alone.

IMPLICATIONS FOR ARCTIC GOVERNANCE

This brief review of pressing environmental challenges has indicated the limits of what any arctic institution can aspire to, be it a soft-law forum like the Arctic Council or one based in a new binding treaty. In such key areas as climate change, hazardous compounds, and arctic shipping, broader institutions are more important, because much of

the activity that gives rise to environmental problems either occurs outside the region or falls under the jurisdiction of non-arctic states. Concerning oil and gas, only a sub-set of arctic states have jurisdiction over the relevant activities,

so sub-regional advances seem more realistic than a circumpolar approach. When it comes to environmental governance, the Arctic is often either too small or too big.

This situation explains the emphasis that arctic institutions place on monitoring and fact-finding activities. Normative contributions are scarce: regional institutions largely generate soft norms that echo rules under broader instruments and fail to provide review procedures that would add political teeth. Within these constraints, the Arctic Council has nevertheless enhanced environmental governance in the region in several ways: by improving the knowledge base for environmental measures; by preparing practical guidance on how to reduce risks associated with activities involving threats to the arctic environment; by using broader regulatory fora to highlight the arctic dimension of problems; and by supporting the capacity of arctic states to implement existing commitments.

A legally binding arctic environmental regime would not serve to enhance any of those functions significantly. Furthermore, the political impediments to reaching circumpolar agreement on a single comprehensive legal regime are substantial: they include the differing interests that arctic states have on such key issues as shipping and oil/gas activities, unresolved boundaries and issues of jurisdiction, and the fact that many of the issues of concern are already regulated in global or regional treaties. Therefore, the most promising approach to strengthening substantive commitments for protection of the arctic environment lies in seeking productive interplay between arctic institutions and existing issue-specific regimes. ○

Community-based monitoring and self-interest

History shows us that interventionist measures are unlikely to succeed in the Arctic, writes **MICHAEL BRAVO**. The real conservation opportunities lie in community-based monitoring.

WITH ALL THE EXCITEMENT about a new era of governance to protect the Arctic, one could be excused for thinking that there is not much history of relevance to conservationists. After all, the received story goes something like this: in 1989, Gorbachev made a famous speech in Murmansk about the end of the Cold War ushering in a new era of peace and cooperation for the Arctic. Soon after, an Arctic Environmental Protection Strategy (AEPS) was established and became the platform for the creation of the Arctic Council in 1996. With renewed political pressures and volatile commodity prices, a new era calls for a new level of cooperation to strengthen environmental regulations.

That potted history of arctic governance sounds quite plausible, and the “Arctic eight” are all developed nations. Isn’t a round of sensible negotiations following the rule of law set out in the United Nations Convention on the Law of the Sea,

together with some input from other interested countries, enough to create an effective environmental regime? Probably not. The usual reasons trotted out are that Russia is an unreliable partner in environmentalism, the United States ratifies international agreements at a glacial pace, and that the five arctic lit-

toral states are closing ranks to protect their resource claims. There is a grain of truth in all of those.

As a result, conservation NGOs like WWF and Greenpeace lobby with other interested parties like the European Commission to adopt more interventionist positions, creative perhaps, but interventionist all the same. This has produced some interesting new proposals like ecosystems-based management or an Arctic Treaty. While these are interesting to conservationists and academics, they also have the unfortunate effect of either being ignored by key decision-makers or making arctic states more intransigent. Now we need some history to gain a clearer picture of the opportunities for conservation.

ORIGINS OF CONSERVATION

My colleague, Richard Grove, author of *Green Imperialism*, tells a story about the origins of conservation: that a conservation consciousness emerged in island colonies of the East India Company like St. Helena and Mauritius in the late 1700s. Seeing firsthand the consequences of destroying their small island ecosystems in the South Atlantic and Indian Oceans, they realized that their existence depended on finding new strategies for sustaining scarce resources. Taking some liberties with history, we could also say that it is a seminal moment in the birth of community-based environmental monitoring.

Pause for a moment, and look north to the Arctic. The subsistence harvesting of both land and marine mammals, both wild and domesticated, by indigenous groups and settlers around the circumpolar North pose little threat to their vast environment. To the contrary,



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“A View of the Town and Island of St Helena in the Atlantic Ocean belonging to the English East India Company.” Copper engraving. Published by A. Hogg c. 1790.

SOURCE: Wikimedia Commons

“ ... conservation consciousness emerged in island colonies of the East India Company like St. Helena and Mauritius in the late 1700s.

as small-scale hunters, they take what they need, and in some cases, they take more to trade. Their sustainable livelihood is predicated on maintaining a constant relationship of proximity and respect for the animals that sustain them. Causing prolonged or unnecessary suffering is seen as reprehensible. Taking a few further liberties, we could also say that these indigenous traditions are, culturally speaking, the original form of community-based monitoring of marine mammals.

The difference from industrial whaling is a question of values, scale, equipment and markets. In the far North Atlantic, around Spitsbergen, out of sight of subsistence hunters, industrial-scale hunting of the slow-swimming bowhead whales had been taking place with growing intensity since the late sixteenth century – mainly by the Dutch, French, Germans, Danes, British and Basques. Come 1815, the bowheads are rapidly disappearing; meanwhile the whalers claim that the whales are migrating away to avoid capture.

What saves the remaining bowheads, ironically, is free trade and the abolition of state subsidies. Their removal reveals the sad truth that the inferior grade oil found in bowheads from the Greenland Seas was very rarely profitable at all. Its main advantage was that it came out of the backyard of Europe's northern nations.

This seemingly harmless word “backyard” is where life becomes more complicated. It

has been a prerogative in the spatial vocabulary of sovereign states to describe their peripheral, contiguous territorial space informally as a “backyard”. The vast geography of the northern latitudes began to be colonized by European trading companies and missionaries as early as the sixteenth century, but systematic taxation, registration, and religious conversion was a process that lasted from the eighteenth century through the twentieth century. The presence of state bureaucracies – Canada, Norway, Sweden, Finland, Denmark, the United States and Russia – are comparatively recent, growing largely after

the Second World War. The European Community arrived with its Northern Dimension policy accord with Russia in 1997.

HOMELANDS AND BACKYARDS

One person's backyard is another person's homeland. Although the Arctic is sparsely populated, its strength from a conversation point of view is that it is the homeland of peoples in every arctic country. They have everything at stake and every reason to defend or develop sustainable livelihoods. History has shown however that amongst

the policymakers in arctic states, the periphery has usually gone relatively unnoticed. Roman Abramovich is famous today because he owns a major metropolitan football club, not because he was an industrialist and enlightened technocratic governor of Chukotka.

History also shows us that the real weakness in seeking adequate conservation measures in the Arctic is that the

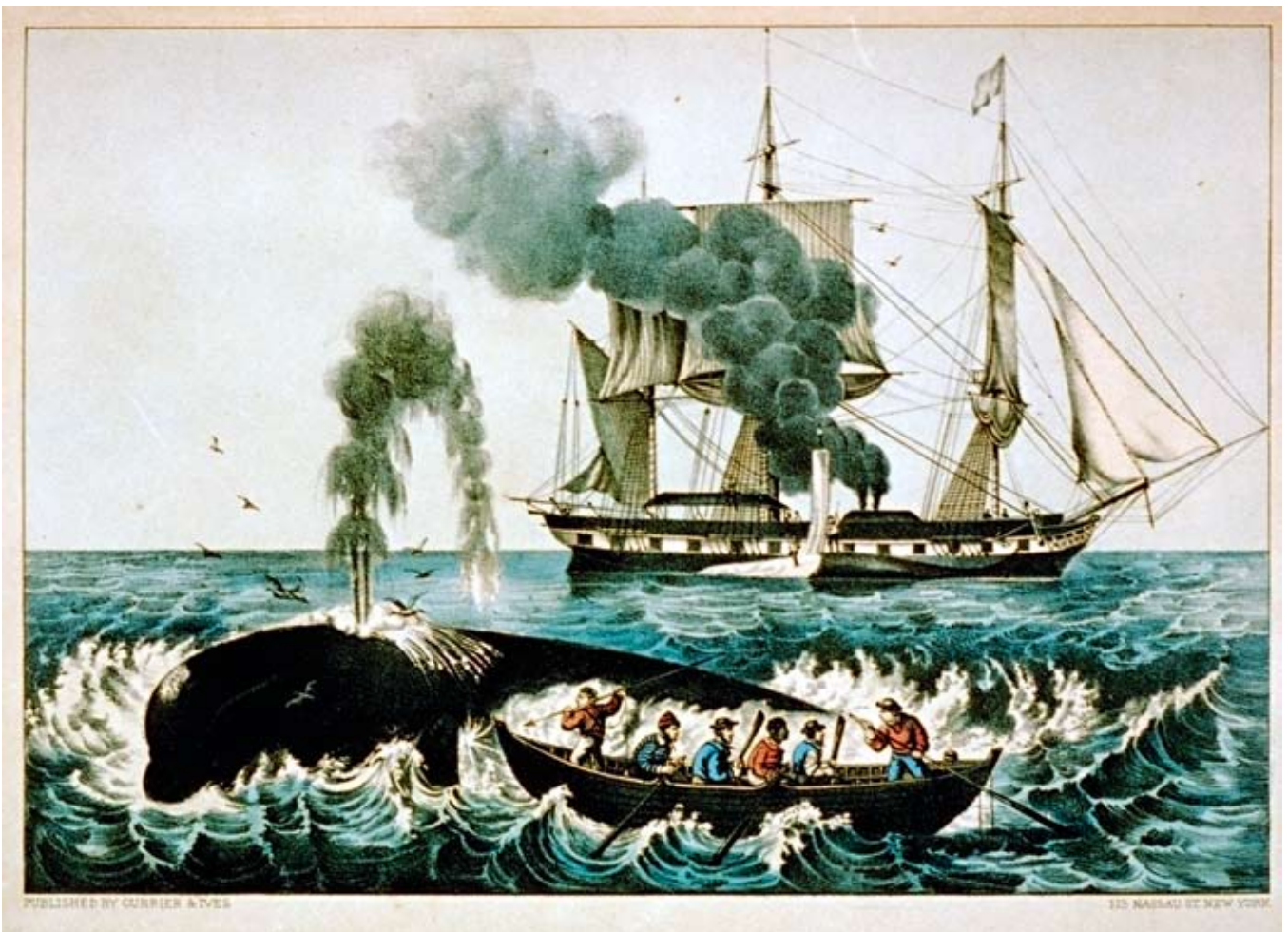
political and cultural diversity of the eight arctic states is far greater than first meets the eye. The arctic territories are at least eight backyards and many homelands – and not one backyard that will be subsumed by a powerful environmental regime. That is why we have an Arctic Council and why an Arctic Treaty is politically a non-starter. That, together with the peripheral situation of arctic geography, makes negotiating and ratifying comprehensive



Seal-hunter, 1929, Nunavut.

PHOTO: L.D. Livingstone/Library and Archives Canada/PA-126894

“Taking a few further liberties, we could also say that these indigenous traditions are, culturally speaking, the original form of community-based monitoring of marine mammals.”



A New England whaler.

SOURCE: Wikimedia Commons

international regional environmental deals much, much more difficult.

Where then lie the real conservation opportunities? Geographers like to point out that local places, no matter how far away, are connected to the global and that is true of the Arctic. The need for environmental monitoring in the Arctic will continue to grow rapidly and it needs to become accessible to a much wider set of stakeholders. Although the required resources for monitoring climate change, adaptive responses, shipping, industrial effluence and other contaminants are scarce, there are strategies for optimizing monitoring. Community-based monitoring should be a

major part of the solution. The arctic communities, Permanent Participants of the Arctic Council and settler peoples, are very adept at forming transnational

partnerships. Environmental organisations can find plenty of opportunities to develop and democratize community-based monitoring. Cultural obstacles

— paternalism, fur bans, ignorance, education — are significant, but they can be overcome. If conservationists are willing to set aside their fears and biases and make a genuine effort to spend more time in the Arctic engaging with communities in their homelands, doors of opportunity will open. The added benefit is that the money will be much better spent than the considerable sums now being devoted to colloquia on how to fix other peoples' backyards. ○

“ The need for environmental monitoring in the Arctic will continue to grow rapidly and it needs to become accessible to a much wider set of stakeholders.

“North Pole as a pole of peace”



All activities in the Arctic Ocean are jeopardized without coherent strategies for peace and stability, writes **PAUL ARTHUR BERKMAN**. The issues of Arctic Ocean governance need to be reframed from the center outward rather than from the coastal periphery inward.



USS Alexandria (SSN 757) Commanding Officer, Cmdr. Michael Bernacchi looks through the periscope for a safe position to surface the boat. Alexandria surfaced through half a meter of ice during ICEX-07, a U.S. Navy and Royal Navy exercise being conducted on and under a drifting ice floe about 180 nautical miles (330 kilometers) off the north coast of Alaska.

PHOTO: U.S. Navy photo by Chief Mass Communication Specialist Shawn P. Eklund

THE ARCTIC OCEAN involves many governance components that already are in operation.

Strategies cover long-standing national interests of the eight arctic states, particularly the five coastal states that enclose the arctic basin. There also are sectoral strategies for shipping, fisheries and environmental protection with international institutions that are in force among arctic and non-arctic nations. In addition, broad international legal frameworks for the sea exist beyond regional or resource specification.

A widely discussed challenge is to reconcile these diverse approaches with

common purpose of ecosystem-based management as identified in national and international policy documents that apply to the Arctic Ocean. While such policy coordination will promote consistent and cost-effective solutions to ecosystem problems, which are becoming increasingly urgent, there is even greater imperative to prevent international discord in the Arctic Ocean as the sea-ice disappears.

The simple truth is

that all activities in the Arctic Ocean are jeopardized without coherent strategies for peace and stability.

The overarching policy-making system for the Arctic Ocean is the law of the sea and the five coastal States remain according to the 2008 Ilulissat Declaration “committed to this legal framework” even as they assert their “sovereignty, sovereign rights and jurisdiction in large areas of the Arctic Ocean”. More specifically, this framework is the United Nations Convention on the Law of the Sea, which has been



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Overlying water column as a source of cooperation, with the High Seas (dark blue) as an international space in the central Arctic Ocean surrounded by the Exclusive Economic Zones of the Arctic coastal states (light blue).

Modified from R. Macnab, O. Loken, A. Anand, Meridian Fall/Winter, 1 (2007).
MAP: Canadian Polar Commission (www.polarcom.gc.ca/rt.php?mode=ViewPost&postingID=88692).

ratified by all Arctic nations except the United States.

In a complementary manner, the most important arrangement for cooperation in the Arctic Ocean is the Arctic Council. The Council has, in line with the Declaration on the Establishment of the Arctic Council, served since 1996 as a “... high level intergovernmental forum to provide a means for promoting cooperation, coordination and interaction among the Arctic states, with the involvement of the Arctic Indigenous communities and other Arctic inhabitants on common Arctic issues.” Although the Council is without legal personality and regulatory authority, it has played important roles in generating policy-relevant knowledge about the Arctic and bringing arctic issues to

the attention of global fora.

In this regard, the Council’s most effective tool has been scientific assessments that could be incorporated into policies established by institutions with mandates in regions of the Arctic Ocean, such as the Convention for the Protection of the Marine Environment of the North-East Atlantic or the Convention on Future Multilateral Co-operation in the North East Atlantic Fisheries, as well as by institutions with global marine mandates affiliated with the International Maritime Organization. Understanding the holistic interplay among existing institutions associated with Arctic Ocean governance requires coordination, which could be facilitated by the Arctic Council in a manner that further acknowledges the



special role and responsibilities of the arctic states and indigenous people's organizations.

Soviet President Gorbachev identified the existence of "burning security issues" in the Arctic over 20 years ago and proposed a forward looking effort to treat the Arctic as a "zone of peace". But an inclusive dialogue about security risks and responses relating to the Arctic Ocean has yet to emerge, as illustrated by the Ilulissat Declaration asserting that "the five coastal states have a stewardship role" in Arctic Ocean governance without mentioning either security or peace.

"National implementation" strategies lack the consistency needed to resolve transboundary impacts in a dynamic natural system. Sectoral strategies focused on energy development, shipping, fishing or tourism activities are useful, so long as they do not lead to fragmented governance.

The question is how to balance national and international interests in the Arctic Ocean. One useful way forward

Three polar bears approach the starboard bow of the Los Angeles-class fast attack submarine USS Honolulu (SSN 718) while surfaced 450 kilometers from the North Pole. Sighted by a lookout from the bridge (sail) of the submarine, the bears investigated the boat for almost two hours before leaving.

PHOTO: U. S. Navy photo by Chief Yeoman Alphonso Braggs

is to draw a clear distinction between the sea floor (much of which may well come under arctic coastal state jurisdictions) and the overlying water column. Ecologically and legally distinct from the sea floor, the overlying water column reveals an alternative jurisdictional configuration for arctic and non-arctic nations alike to share in the governance of the Arctic Ocean. The High Seas, as an undisputed sea zone beyond national jurisdictions, establishes the central Arctic Ocean as an international space subject to cooperative decision-making regarding a variety of issues (e.g. fishing and shipping) through existing regulatory arrangements and customary international law.

By reframing the issues of Arctic Ocean governance from the center outward rather than from the coastal

periphery inward – with the "North Pole as a pole of peace" as Mikhail Gorbachev envisioned – the High Seas opens the door for stable international governance in the Arctic Ocean without contravening the sovereignty, sovereign rights and jurisdiction of the arctic coastal states. This governance solution involves the integration of science diplomacy tools (notably ecosystem-based management) with recognition of international space and common interests in the Arctic Ocean for the lasting benefit of all humanity. ○

[For additional information, refer to: Berkman, P.A. and Young, O.R. 2009. Governance and Environmental Change in the Arctic Ocean. *Science* (scheduled publication: 17 April 2009)]

Arctic marine challenges of globalization and the maritime industry

Globalization and the increasing economic connection of the Arctic to the rest of the planet are driving increases in arctic marine operations, writes **LAWSON W. BRIGHAM**, resulting in a number of challenges for the Arctic.

PRIOR TO THE RECENT, global economic recession, natural resource developments, marine tourism, and marine scientific exploration have

been the primary uses responsible for increases in the numbers of ships observed in arctic waters. Arctic climate change, as manifested in arctic sea ice retreat, provides for greater marine access and potentially longer seasons of navigation in many marine regions of the Arctic. However, for the maritime indus-

Murmansk and Dudinka, port city on the Yenisey River for the industrial mine complex at Norilsk, the world's largest nickel producer. In northwest Alaska, location of the Red Dog Mine (the world's largest zinc mine), large bulk ore carriers sail into the Chukchi Sea during a summer ice-free navigation season to load zinc ore for carriage to Pacific markets. Since 1991 Russian nuclear icebreakers have carried tourists on voyages to the North Pole. During recent summers icebreakers carrying scientists have sailed to every region of the Arctic Ocean basin conducting oceanographic and geophysical research. Increasing numbers of cruise ships have sailed off Greenland's east and west coasts, Svalbard, and in the Canadian Arctic. Hydrocarbon developments in the Arctic, principally by

Norway and Russia, have also stimulated increased arctic marine traffic. Liquefied natural gas has been shipped to markets in Spain and the U.S. East Coast from the Snøvit/Hammerfest complex in the Norwegian Arctic. Oil from the Varandey offshore terminal in the Pechora Sea (onshore oil developed in western Siberia) is being shipped to Murmansk using a fleet of new, ice-breaking tankers.

INCREASING CHALLENGES

The challenges of this expanded arctic marine activity are posed by ships operating in support of several global industries – the oil and gas industries; the hard minerals industries (global commodities such as nickel, zinc, palladium, copper, and iron ore); and the global marine tourism industry. Multiple arctic

routes are being sailed today, some in ice-covered waters, but a majority of operations are being conducted in ice-free conditions, for example large cruise ships operating only in summer. The risks of these voyages are varied, and the patchwork of rules for arctic ships applied by several arctic coastal states, make it apparent a unified, international set of regulations are required. The significant challenge for the arctic states is that the marine infrastruc-

try, climate change

and sea ice retreat have not been the key drivers of increased arctic marine activity. Continued sea ice retreat during summer may provide opportunities for future trans-arctic voyages, but the vast majority of arctic marine operations will remain destination, focused on regional trade and economic development.

Early in the 21st century the scope and breadth of arctic marine operations is quite striking. For example, year-round navigation is maintained between

“The significant challenge for the Arctic states is that the marine infrastructure readily accessible to the shipping industry in much of the world's oceans is simply not available in most of the Arctic Ocean.”



Dr. LAWSON W. BRIGHAM is Chair of the Arctic Marine Shipping Assessment and Senior Fellow at the Institute of the North. He is also Professor at the University of Alaska Fairbanks.



Today's interest in the shipping routes across the Arctic Ocean is motivated by commercial pressure to shorten the sailing distance between the northern Atlantic and Pacific Oceans. For example: The sailing distance over the North Pole between Kobe, Japan and Hamburg, Germany is only about 2,700 kilometers, as opposed to 6,000 kilometers via the traditional west-bound route through the Suez Canal.

MAP: Meridian Canadian Polar Commission (www.polarcom.gc.ca/rtp.php?mode=ViewPost&postingID=48892).

ture readily accessible to the shipping industry in much of the world's oceans is simply not available in most of the Arctic Ocean. The exceptions to this critical issue are key elements of marine infrastructure found in northern Norway and in regions of northwest Russia. Missing in most other arctic marine areas are modern navigation charts, port services, communications, salvage, search and rescue (SAR) capability, adequate environmental response, and comprehensive weather and sea ice information. The list of current and future needs is lengthy and will require significant public and private investment.

With expanded marine uses in the Exclusive Economic Zones of the arctic coastal states, the need for multiple use management strategies will become paramount. Such strategies will be especially important in arctic waters where indigenous residents have been the sole seasonal users of an arctic waterway for perhaps hundreds of years. Also, high traffic arctic regions may warrant the institution of vessel traffic lanes for enhanced marine safety and marine environmental protection. Effective surveillance and monitoring of all arctic marine traffic will be a key

challenge for each of the arctic states; timely sharing of this marine information within the arctic community will also be a critical test of arctic state cooperation.

RECOGNIZED GAPS

The multilateral regime that applies to the Arctic Ocean, as to all oceans, is the United Nations Convention on the Law of the Sea (UNCLOS). For the maritime world UNCLOS balances the rights (freedom) of navigation with appropriate marine environmental protection measures and the rights of coastal states; vessel-source pollution measures in the framework are focused on coastal and flag state responsibilities. UNCLOS is the legal framework under which arctic marine operations can be conducted, but it is a UN body, the International Maritime Organization (IMO), that has primary responsibility and authority to regulate international shipping. Other international bodies such as the World Meteorological Organization (for global and regional climate, weather and sea ice information), the International Hydrographic Organization (for charting standards), the International Telecommunications Union, and the International Maritime Satellite Organization

have relevant responsibilities for the global maritime industry as well as for arctic marine navigation. These bodies are important for defining the technical aspects of maritime infrastructure required in the Arctic. The IMO instruments that are relevant to arctic marine operations include: MARPOL (International Convention for the Prevention of Pollution from Ships, 1973 & 1978); SOLAS (International Convention for the Safety of Life at Sea, 1974); BWM (International Convention for the Control and Management of Ship's Ballast Water and Sediments, 2004); and, the IMO Guidelines for Ships Operating in Arctic Ice-Covered Waters. The three conventions are global in scope while the IMO Guidelines are voluntary (non-legally binding) rules under current revision.

There are recognized gaps in the existing IMO regulations regarding arctic-specific protection measures and gaps in addressing practical maritime issues in the Arctic such as SAR and environmental response. Several *possible* future actions include: development of unified, international standards for polar ship construction; widespread adoption of the IMO Guidelines "polar classes"; development of IMO arctic-specific standards for discharges, stack emissions and ballast water; a circumpolar or arctic SAR agreement; development of a certification program for arctic navigation and cold regions operations; a multi-lateral arctic environmental response agreement; and, greatly enhanced investments for improving arctic marine infrastructure, beginning with increased support for hydrography, charting and primary communications. Each of these measures would enhance marine safety while improving the protection of arctic residents and the arctic marine environment. The Arctic Council's Arctic Marine Shipping Assessment to be released in late April 2009 can act as a strategic guide or catalyst for these initiatives and should be a useful baseline assessment of current and future arctic marine activity. ○

What is the law applicable to protection of the arctic environment?

The Arctic is subject to a patchwork of legal frameworks. **ALEXANDER VYLEGZHANIN** helps us navigate through the technical, legal waters of the Arctic.

THE DIFFERENT ASSESSMENTS of an extensive legal framework applicable to the Arctic Ocean are as follows:

- The applicable framework consists mainly of the United Nations Convention on the Law of the Sea (UNCLOS), including its Part XI on the International Area (the sea-bed beyond the limits of national jurisdiction) and the 1994 Agreement on Implementation of this part, and also article 76 (on a delineation – between the continental shelf and the International Area).

- Alternatively, the legal status of the Arctic Ocean had been formed long before UNCLOS was adopted in 1982 through the national legislative approaches of the five arctic coastal states and the general consent with these national practices. That is, activities in the Arctic Ocean were governed before 1982 and are governed after UNCLOS entry into force mainly by customary international law.

Is this of practical significance for preserving the arctic environment?

Yes. For a court which may consider a relevant international dispute, the legal regime of the Arctic and of the Arctic Ocean is not covered only by the inter-

national law of the sea and certainly not only by UNCLOS.

It is often asserted that UNCLOS as a whole is a part of customary international law?

This is not accurate. On the contrary, I would support the paper, provided by Canadian Parliamentary Staff: “UNCLOS ... coexists with international customary law, which is sometimes similar and sometimes slightly different from

“ **The legal regime of the Arctic Ocean was never and is not now a static body of rules.**

what UNCLOS provides.” The legal regime of the Arctic Ocean was never and is not now a static body of rules. The applicable international customary law has been formed during the last centuries through continuous legal actions of the arctic coastal states and the relative responses (including tacit agreement or acquiescence) of other states (not only arctic states).

Are there legal interests common to the EU countries and the eight arctic states in the Arctic? Are there potential areas for legal cooperation among them?

Yes. The Arctic High Seas. That is the ice and water areas of the Arctic Ocean beyond 200 miles from the baselines. Such common interests provide themselves new chances for international economic cooperation in the central Arctic.

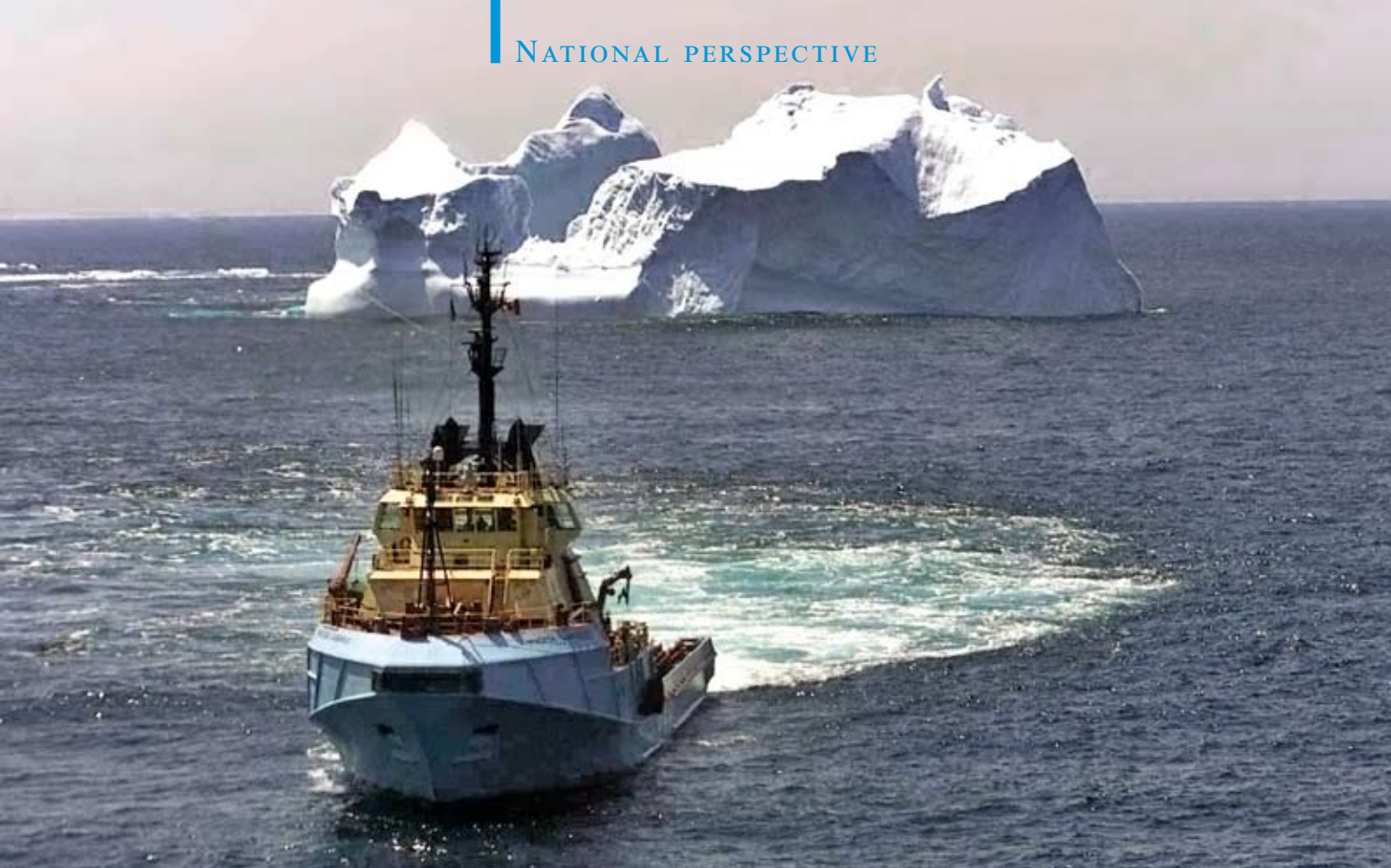
What practical legal steps might be taken to develop new chances of international cooperation in the Arctic?

Firstly, it is advisable to take use of the best environmental standards and the environmentally and economically best technologies in regulating future economic activity in the Arctic High Seas in order to protect the arctic environment.

Secondly, bearing in mind a possibility for new fishery opportunities with melting ice in the Arctic, it may be useful to provide as early as possible a concept of a contemporary legal framework for management of living resources in the Arctic High Seas.

Thirdly, it is time for European, Russian and Canadian business to cooperate in creating economically attractive, mutually beneficial and environmentally safe transnational legal mechanisms for unimpeded shipping of goods via the Northern Sea Route (along the Russian arctic coast) from Western Europe to Japan or China and vice versa, and via the Northwest Passage (along the Canadian arctic coast). ○

Dr ALEXANDER VYLEGZHANIN is Director of the Law Research Center, Russian Academy of Sciences.



Towing re-directs icebergs to another path.

PHOTO: Courtesy of Petro-Canada.

Canada and Arctic Ocean governance

What do you do when you have spent the last 40 years trying to get everyone's attention and suddenly you get it? This is the current Canadian dilemma regarding the Arctic Ocean, writes **ROB HUEBERT**.

SINCE THE EARLY 1970s successive Canadian governments have attempted to get the attention of its northern neighbours and the world in an effort to establish a system of governance for the Arctic. After being ignored for much of the last 40 years the world is suddenly interested. However, Canada has two problems. First, it was not expecting this new attention and has momentarily

been lost for words. Second, it is realizing that when others do agree to pay attention, it is because they not only want to listen, but also have something to say.

So what does Canada want international governance in the Arctic Ocean to look like? As with all other states, the Canadian position is a combination of national interests, values and hopes.

There are some consistent themes but there are also some contradictions and mixed messages. This is largely caused by the fact that Canada has spent more time laying claim to their part of the Arctic rather than thinking about what they want the Arctic for.

Canadians want the Arctic to be developed in a sustainable fashion that protects and promotes the interest of Canadians and especially those who call the north home. On 11 March, 2009 the Canadian foreign minister gave a speech in northern Canada in which he outlined the Canadian official position.



Dr ROB HUEBERT is an Associate Professor in the Department of Political Science at the University of Calgary. He is also the Associate Director of the Centre for Military and Strategic Studies. He is currently a Senior Research Fellow of the Canadian International Council.

In the speech, he said “we are affirming our leadership, stewardship and ownership in the region”. In order to do this, the Canadian government has vowed to take a leadership role in the process of reinvigorating the Arctic Council – in which Canada had played a leading role in its creation. Canada has also always been and continued to be the main supporter of the inclusion of northern indigenous peoples in any discussion regarding international governance. Finally in May 2008 in Greenland, Canada agreed to the Ilulissat Declaration in which the five arctic states – Russia, US, Denmark (for Greenland), Norway and Canada – agreed that they would resolve any boundary disputes regarding the extended continental shelf in a peaceful manner. But they also agreed that there was no need to develop an arctic specific treaty.

HEDGING ITS BETS

The reality is that Canada is hedging its bets when it comes to the issue of governance over the Arctic Ocean. There is no doubt that traditionally Canada has attempted to create a multilateral answer to the issues surrounding the Arctic. But ultimately these efforts have been stymied by US reluctance to participate in any such effort. At the same time, there is no doubt that recent Canadian governments are also determined to ensure that their own national interests are protected. These two factors alone make it very unlikely that Canada would either attempt to lead or support an effort to create an Arctic Treaty for the governance of the region.

There are five main issues that will determine the Canadian position on arctic governance. Each concerns resources within its own national jurisdiction – the regulation of shipping; the development of oil and gas; fishing; search and rescue, and pollution response.

“ This means that in conjunction with the expected Russian, Danish and US claims, almost all of the Arctic Ocean seabed will be claimed.

The issue of shipping in the Arctic is perhaps the most politically sensitive issue facing any Canadian government. Successive governments have made very strong statements reaffirming the Canadian position that the Northwest Passage is internal waters. Both the United States and the European Union have both issued policy papers where they have challenged the Canadian view. The issue that Canada will therefore face in any future discussion is how to ensure that all shipping is held to the highest environmental standards. But perhaps even more important, any government will need to respond to negative public opinion if future discussions are perceived as threatening the long-term Canadian position on the Passage. Thus any discussion on shipping in any part of the Arctic will be difficult for Canada.

OIL AND FISHING

The development of oil and gas is also a challenging issue. On the one hand, Canada has consistently stated that it wants the arctic environment to be protected. However, it has also pushed for the development of oil and gas in the Arctic.

Canada is also preparing its claim for its extended continental shelf in the Arctic. While its claims are not yet known, it is clear from where Canadian

research is being conducted, it hopes to go all the way to the North Pole and perhaps beyond. This means that in conjunction with the expected Russian, Danish and US claims, almost all of the Arctic Ocean seabed will be claimed. If this comes to pass, these states will veto any international efforts to create an international regime governing the development of these resources. What may be possible is a regional agreement that will allow for cooperation in the development of the oil and gas resources. This could

deal with the necessary environmental standards, search and rescue and other such related needs.

Canada has also not given much thought to what a fishing agreement should look like in the Arctic. It has preferred to try to avoid this issue and as such has not been willing to consider the wider international ramification of fishing in an increasingly opening Arctic Ocean beyond national control.

Thus when one examines Canadian interests in governance in the Arctic Ocean, any effort to develop a multilateral effort will now be tempered by national interests. Canada will not be as willing as it had once been to develop an international treaty. Instead, the Canadian position on any effort to develop an international governance system needs to be sensitive to these interests. What may be possible is a regional base treaty that allows for the best practises for all forms of resource development – oil and gas, shipping, and fishing. This could be one overarching treaty, or a series of separate agreements. However, it is clear that such actions need to be undertaken sooner rather than later. The longer that vested interests for each of these areas are allowed to develop, the harder it will be for Canada to reach consensus on its own national position in any multilateral negotiations. ○

Partnership in the Arctic

Times are changing once again for the people in the High North, writes **EGIL OLLI**. Industries are developing, the climate is changing, and new possibilities for partnerships are emerging.

THE AREA IN which the Sámi live is called Sápmi, and it has always been rich in natural resources. At different times in history, the demand for these resources has made this area into a hub of trade and contact, leading to “progress” which has changed culture and society. Sápmi has never been an unexplored virgin wilderness. It has always been and continues to be the homeland of the Sámi people.

Times are changing yet again. There is now growing demand for oil, gas, minerals and thoroughfares for transportation. New technologies are being developed and climate changes are making resources more readily available. It is in the strategic interests of the states of the Arctic to learn more about indigenous territories, and to engage in activities and maintain a presence there. The strategic interest shown in our territories is nothing new to the Sámi. Dramatic changes have taken place, beginning in the early 1800s. That was the era when modern states became a powerful force in our territories. In the 1800s and large parts of the 1900s, the Sámi posed a threat to Norway’s strategic interests in the north because we were perceived as alien, primitive and un-Norwegian. Assimilation was therefore necessary, and the church, the school system and the development of communications were instrumental in that respect. However, the similarities end there. Today the Sámi are recognised as a separate people. We are entitled to our own language, to speak as a

people and, at least to a certain extent, to be heard as a people. However, that is still a far cry from the Sámi being an equal partner to state authorities, that is, a partner that is viewed as a strategic asset when new initiatives are taken to exploit opportunities in arctic areas.

ADAPTATION KNOW-HOW

The climate is changing. Our day-to-day routines and our ways of living are challenged by global warming. The current forms of fishing, farming, reindeer husbandry, hunting and trapping are challenged as they stand today. Experience and knowledge built up over the generations also provide a platform for adaptability. Such traditional knowledge must therefore be incorporated into research on and scientific analyses of climate changes and global warming. Those who live in arctic areas have experienced climatic variations before, at different times, to different extents and on different scales. The indigenous peoples of the Arctic, including the Sámi, possess knowledge about how to adapt to a changing climate and changing natural habitats. Accordingly, scientists need to consult us when they draw up models for how to slow the pace of change and reverse the trend we are now seeing, and not least when it comes to initiatives for minimising vulnerability and maximising adaptability.

It is indeed a paradox that climate change is both driven by and is a driver of a new era in the oil, gas and mineral industry. This is especially evident in

the Arctic where this trend can affect indigenous peoples in several ways. Global warming is changing the very essence of our subsistence dramatically. It is facilitating access to new areas for operations that threaten Mother Nature herself, and any mitigation in connection with climate-friendly energy development will threaten the land used for indigenous peoples’ traditional industries. Competence and capacity building may arguably be the most important initiative for adapting to new circumstances and for being able to recognise and take advantage of new opportunities.

New industries are emerging. Exploration efforts aimed at finding oil, gas and minerals in our territories are more intensive now than ever before. If we

were to identify one area in which indigenous peoples the world over have had especially negative experiences, it would be in relation to the production of oil, gas and minerals by states and multinational corporations. There is no lack of examples to show how such activities have led to the quelling and ousting of indigenous peoples. This has happened by taking away indigenous peoples’ subsistence and by failing to include indigenous peoples and local communities in sharing the advantages, utility value and progress such new activities represent.

CONSIDERABLE OPTIMISM

On 13 September 2007, the UN General Assembly adopted the Declaration on Indigenous Rights. There are reasons why the declaration contains provisions that prohibit states from moving indigenous peoples against their will (Article 10) and provisions that call for indigenous people’s prior informed consent,



EGIL OLLI has been Member of the Sámi Parliament since 1989 and is currently the President of the Sámi Parliament in Norway.





especially as regards mineral activities that affect their land and resource areas. The decision is an historic milestone in the work to promote recognition of indigenous peoples' human rights. The declaration expressly recognises indigenous peoples' right to self-determina-

“ The current forms of fishing, farming, reindeer husbandry, hunting and trapping are challenged as they stand today.

tion, including the Sámi people's right to be free to make decisions regarding their own economic, social and cultural development and their own natural resources, as well as their own political position.

There is currently considerable optimism and activity associated with the possibilities that oil, gas and minerals may offer for the revitalisation of economic development in the High North. If such economic development is to offer advantages to those of us who live here, it must take place within statutory parameters that also ensure development for the indigenous peoples on whose territories the states have been built. Norwegian society-building has had the advantage of having robust democratic institutions which have seen to it that the utility value of natural resource-based economic activities has served the many, and not merely the few. However, it can hardly be said that this policy has focused on giving the Sámi the freedom to shape and develop their own communities and industries. It is now high time that the Sámi be included when “the powers that be” set the terms for and take decisions regarding a new and different use of resources.

Times have changed. The Arctic has the resources and the people. We already have many of the prerequisites for economic development that could bring sustainable social and cultural progress in our areas. Such positive progress would nonetheless demand a great deal of us. We must pause to reflect on history and dare to look forward to a world in which all peoples are equal partners, where confidence is built and cooperation is developed. A partnership between the states and the indigenous peoples must be enshrined in tangible policy, as well as in legislation and actual practice.

It is only when a genuinely equitable partnership is developed that resources, people, knowledge and capital will be fully integrated and thus help revitalise indigenous communities. ○

PHOTO: Staffan Widstrand

The arctic melting pot

The Arctic has gone from having mainly a military purpose to being a melting pot of challenges and possibilities, writes **BILYANA RAEVA**. This is why multilateral cooperation is needed, involving both arctic and non-arctic states.

IN THE BEGINNING of the last century the Arctic gained a highly strategic importance for the arctic nations, which resulted in a race for territorial conquest. With the beginning of the Cold War and the confrontation between the

USA and Soviet Union, the Arctic region had mainly a military purpose. This resulted in the creation of numerous military bases, patrolling ships in the iced waters and nuclear trials. The governance in the region was bipolar with no common multilateral approach to the local issues, nor did it have a legislative

framework to supervise the activities of the nations.

All this collapsed in the last decade of the 20th century when new opportunities opened for the Arctic in a more respectful way regarding nature, indigenous people and a sustainable use of natural resources. The military purpose of the area diminished and “third countries” became interested in cooperating in the region. With the emerging issue of global warming, the Arctic became well known for its sensitivity to climate change and the disastrous impact that it has on this region and on the planet. NGOs and researchers had a crucial role in sensitizing the public opinion to

the environmental issues in the Arctic and in setting this on the top of the political agenda related to the Arctic.

Things changed with the Arctic, but still, governance there is far from what is the case in the Antarctic region. Indeed, the Nord Pole is not a research area as it is in the South. Disputes related to natural resources and navigational zones have become increasingly important and we can easily foresee that this trend will continue.

“The growing importance of the Arctic requires a need for clear and respected rules of governance.”

Nowadays the Arctic faces numerous challenges, such as the environmental issue, military concerns, socio-economic needs, the respect for indigenous cultures and many others. In order to face them and to avoid a new Cold War in the region, we need a multilateral approach. A race between arctic nations for resources and territories will benefit no one, we only risk to spark off new conflicts. Territorial conflicts have already begun in the region. Additionally, when new maritime routes will be available and extraction of natural resources will be possible in places so far covered by ice, we will need a precise, clear and respected regulatory framework in order to avoid an environmental disaster based on the will to

gain rapid economic benefits.

This is why multilateral cooperation is needed, including both the arctic countries and non-arctic states. The problems we face in the Arctic are not limited to the coastal countries, they are common to everyone and the consequences would affect everybody. Securing a multilateral approach for the Arctic will guarantee that there is no dominant position, and decisions will have to be

made through a consensus, which is the best democratic way to proceed. The existing regulatory framework of the UN could be used as a base, but it is not sufficient and we all know that it is not always respected.

What we need is an international treaty similar to the one for the Antarctic, balanced between the respect for the environment and the use of natural resources. The treaty should also give more voice to indigenous and local people related to arctic governance, in order to avoid social discontent. Together with my colleagues from the European Parliament, we have already appealed for such a treaty and we will continue to defend this line, which we believe is the most suitable for the Arctic. We believe this is the most appropriate way to respond to the growing interest in the Arctic in the coastal countries, but also in the non-coastal one, such as China, India, South-Korea, Brazil, the members of the EU and others. This will avoid solutions based only on national interests which disregard the general well-being of the region.

The growing importance of the Arctic requires a growing need for clear and respected rules for its governance. I sincerely hope, and will work towards it, that governance will not be associated with the word clamp but with the words respect, sustainability and peace. For some a melting pot could signify additional problems, to me it means additional possibilities for solutions. In the arctic case, these are highly needed. ○



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Sweden in a unique position to drive change

As climate change causes the ice, snow and permafrost of the Arctic to melt, a tragedy is unfolding before our eyes, writes **PETER ERIKSSON**. Sweden should take advantage of its current and upcoming political roles to shift management of the region to the international community and create a world park.

THE LIVELIHOODS AND CULTURES

of indigenous peoples are threatened; eco-systems are on the brink of collapse; pristine natural areas of iconic value to all the inhabitants of the world are in peril already because of what we as humans have done in the past. The Arctic region is changing and it will never become the same again. Many of the unique values in the area seem irreversibly lost which is a tragedy on an unprecedented scale.

Although the Arctic is changing it is not too late. The Arctic still harbours enormous values that can and must be rescued. If we act forcefully it may be possible to restrain the development, to save some of what is now at stake.

It is clear that the imperative for the Arctic, as well as for the rest of the world, is to limit climate change as much as feasible. Only by doing so can we also limit the damages to the region and preserve the prerequisites for arctic life and wilderness as we know it.

The global community is currently negotiating a treaty with the ambition to restrict emissions of carbon dioxide and other greenhouse gases to the

atmosphere. Presumably this treaty will be signed in Copenhagen later this year and enter into force 2013.

TOO LITTLE GLOBAL ACTION

But we can also see that the pace of climate change is unchecked and that actions on the global level so far are characterised by "too little too late". The Green Party of Sweden does not believe that any of the proposals submitted for the negotiations of a new treaty contain actions that will be even remotely close to what is needed.

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the global temperatures, especially in the Arctic, thus making it possible to extract more fossil fuels. According to some estimates, the region may contain as much as 25 percent of the global fossil resources. Nations as well as private oil companies are eager to exploit these new opportunities, gearing up their extractive and military activities in the region.

In this respect the Arctic is no different from other parts of the world. In spite of the widespread knowledge that humanity is heading into a full-scale climate disaster, mainly caused by the extensive use of fossil fuel, we are increasing our efforts to find more. In fact, global investments in exploration of fossil fuels are larger than ever and increasing.

To what use? Obviously the human

race cannot possibly use the oil and coal we have already found without causing a disaster.

Why should we then pour enormous resources into finding more of the same? Why should we let greed ultimately destroy some of the last wildernesses on Earth? Why should we risk international security in a fight over a resource that we cannot use – one that would ultimately destroy not only the Arctic but our global environment and civilization?

PROPOSAL FOR NEW AGREEMENT

Clearly, every drop of oil, every piece of coal and every whiff of gas that is extracted from the crust of the earth, will be used, pushing us further down the path of destruction. Therefore the Green parties of the world believe that an effective global agreement to abate climate change



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must encompass limits on the extraction of fossil fuels.

Seeing that no such mechanism is being considered in the on-going climate negotiations, the Green parties of Europe propose to place a moratorium on the exploration and extraction of fossil fuels in the Arctic region. To this end, the international community should, as soon as possible, draw up and adopt a convention or other international instrument that protects the region from the extraction of fossil fuels and minerals and other industrial activities for at least 100 years.

The agreement should also designate the Arctic region as a non-militarized zone; recognize the supremacy of the indigenous peoples living in the region and their right to traditional life-styles and aim to assist the peoples of the North in adaptation to climate change.

Such an instrument could be constructed in the same way as the agreement that today protects the Antarctic against exploitation or through a protocol under the United Nations Convention on the Law of the Sea (UNCLOS).

Indeed a global agreement to create a World Park in the Arctic would be of immense value in the effort to protect and preserve the ecological and cultural values of the Arctic, as well as alleviating the risk of international conflict. Seeing that this is no small achievement in itself, the consequences would be even more important in the endeavour to keep fossil fuels under ground and ultimately checking climate change, the main threat to the region as well as to humanity and the ecosystem.

POLITICAL OPPORTUNITIES

Most certainly Sweden could play a key role in the creation of the proposed agreement. Sweden is one of only eight member states in the Arctic Council, the body currently managing the region, and one of only two member states that do not have economic or military interests there. In the years 2011–2013 Sweden will also chair this body.

Prior to this, Sweden will chair the European Union during the second half of 2009, the period when a new global climate regime is expected to be agreed and at a time when the EU is developing and adopting arctic policies. Additionally, Sweden currently holds the chair of the Nordic Council, one of the stakeholders in the Arctic, and will chair the Nordic Council of Ministers in 2013.

This places Sweden in a unique situation at a crucial time. By using these chairs consecutively, like political stepping stones, the Swedish government has the opportunity to take initiatives in the direction of shifting management from the Arctic Council to the international community and proposing activities, such as an international conference on the creation of a global treaty. The Green Party of Sweden urges the Swedish government to seize this opportunity to create a World Park in the Arctic, in effect saving the Arctic and contributing vastly to global security and the protection of the global climate. ○



PHOTO: Staffan Widstrand

New international rules for the Arctic Ocean: Limit a little, save a lot

The international community agrees that the Arctic Ocean today stands at the threshold of profound and dangerous ecological changes, writes **TATIANA SAKSINA**. A new sea emerges right before our eyes, offering great economic opportunities, yet extreme vulnerability without proper protection and wise use of its marine environment. She argues that a new governance agreement for the Arctic Ocean should be developed as soon as possible.

THERE IS WIDESPREAD agreement that the environmental governance regime for the Arctic Ocean is insufficient and that greater cooperation is needed more than ever. The EU Communication *The European Union and the Arctic Region* acknowledged that “the main problems relating to Arctic governance include the fragmentation of the legal framework, the lack of effective instruments, the absence of an overall policy-setting process and gaps in participation, implementation and geographic scope”.

What steps can be taken then to protect the marine environment and

sustainably manage economic activities in the Arctic Ocean?

The international community could pursue sector-based regulation. This approach has formed the fundamental basis of most marine management until very recently, and has clearly failed to protect the marine environment to date. It results in conflict between sea-users, does not consider how the activities cause cumulative impacts

and cannot deliver an ecosystem-based approach to marine management. In sum, the sector-based regulation approach has resulted in declining marine environmental quality and loss of biodiversity.

Second, we can enhance the role of the Arctic Council – an inter-governmental forum established in 1996 but which has no legal, binding authority. This solution is “simple” and quick to implement. However, there are built-in limitations to a forum-based collaborative approach. Keeping the objective of the Arctic Council as a high level forum

will not help to manage the economic activity in the Arctic Ocean in a sustainable manner and protect the marine environment. Even if the Arctic Council is given more decision-making powers, it will take longer to turn it into a legitimate political force than to create a new legal framework.

CONSTITUTION FOR THE OCEANS

Third, we can adopt a collaborative multilateral agreement. Such an agreement would form the strongest legal basis for a harmonized ecosystem-based management regime capable of conserving the ecosystems and living resources, as well as ensuring that economic activities are managed sustainably for future generations. It would incorporate more robust and enforceable obligations on the part of arctic states to protect the marine environment.

However, most coastal states are unwilling to stretch this far. The Ilulissat Declaration states that: “...we recall that an extensive international legal framework applies to the Arctic Ocean... This framework provides a solid foundation for responsible management by the five coastal states and other users of this Ocean through national implementation and application of relevant provisions. We therefore see no need to develop a new comprehensive international legal regime to govern the Arctic Ocean.”

By the “extensive legal framework”, the signatories to the Ilulissat Declaration meant the United Nations Convention on the Law of the Sea (UNCLOS). UNCLOS is indeed a “Constitution for the Oceans”. It governs all aspects of ocean space, such as delimitation, marine scientific research, economic activities and the settlement of disputes relating to ocean matters.

However, UNCLOS sets out only minimum standards for the protection of the marine environment and encourages states to agree on detailed rules for such protection on the regional basis. Article 197 of UNCLOS requires

state parties to cooperate in formulating and elaborating international rules consistent with this convention, for the protection and preservation of the marine environment, taking into account characteristic regional features.

NEED FOR NEW RULES

All similar enclosed or semi-enclosed ocean waters are governed by regional governance agreements developed under the UNCLOS umbrella. Why is the Arctic Ocean an exception?

WWF believes that such rules should be developed for the Arctic Ocean as soon as possible. As a model, we do not suggest the Antarctic Treaty. Instead, we propose combining key elements of the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention), the Convention for Conservation of the Marine Living Atlantic Resources (CCMLAR), and Regional Fisheries Management Organization (RFMO) and International Maritime Organization (IMO) regulations – in a binding, enforceable structure that gives primacy to environmental concerns.

Apart from UNCLOS there are a number of international agreements that aim to protect the marine environment which are applicable to the Arctic Ocean but most of which contain no specific reference to it. Can we make the existing rules work? What if we take the approach of enhancing the implementation of existing instruments and improving coordination? Unfortunately this approach is unlikely to lead to greater protection of the marine environment.

Indeed, these agreements are too generic and contain only minimal rules of protection. For example, the International Convention for the Prevention of Pollution from Ships (MARPOL 1973/1978) does not entirely prohibit the discharge of ship wastes into marine environment. Similarly, the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter does not entirely prohibit dumping



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from ships. The impact of ship-source pollution may be aggravated in cold, icy, semi-enclosed ocean waters like the Arctic Ocean.

CURRENT FRAMEWORK GAPS

Moreover, the current international legal framework contains too many important gaps and loopholes. For example:

- There is no regional fisheries management organization for the entire region. Meanwhile, overfishing and illegal, unreported and unregulated fishing continues;
- There is no adequate control of environmental impacts of petroleum extraction, despite the vast amounts of oil stored below the Arctic;
- There are no internationally binding rules to regulate operational pollution from offshore installations;
- There are no special IMO fuel content, discharge, emission or ballast water exchange standards (ballast waters have transported invasive species such as zebra mussels across the world, creating ecological havoc);
- There are no navigation standards and comprehensive mandatory or voluntary IMO routing system for ships, and;
- There are no legally binding special construction, design, equipment and manning standards.

This fragmented legal framework is incapable of providing for a sustainable development of the Arctic Ocean as it is based on a sectoral approach. This approach has proven itself to be a failure.

How can we patch up this highly fragmented and complicated legal framework with profound gaps in regulation, and make it capable of protecting the arctic marine environment?

We need to consolidate issue-based regulations, fill the regulation gaps, incorporate modern principles of environmental law, for example the precautionary principle, and establish a legal basis for an ecosystem-based manage-

“ WWF believes that the Arctic Ocean presents the first possibility in the history of humanity to demonstrate how an ocean can be used wisely and for the long term benefit of arctic states, the arctic peoples, and the world.

ment regime. The only way to achieve this is to create a new overarching international agreement. Only a binding agreement can provide for enforceable reciprocal obligations which guarantee performance.

How far are arctic coastal states ready to go to protect this extraordinary beautiful and resource-rich ocean? We all know that nothing can stop economic development, nor should we discourage it if it is done properly. The economic use of our Arctic Ocean already brings benefits to the arctic coastal states. It is a legitimate right of the coastal states to explore and exploit the natural resources of the Arctic Ocean and to use its waters and resources therein for economic purposes. Other states also have legitimate rights as there is a freedom of navigation and fishing enshrined in UNCLOS. However, should there not be corresponding obligations? Indeed, there are – namely, to protect the marine environment. Achieving this may require the imposition of limits on the economic activity to some extent. But so far coastal states

have been reluctant even to meet their current obligations.

UNIQUE OPPORTUNITIES

WWF believes that the Arctic Ocean presents the first possibility in the history of humanity to demonstrate how an ocean can be used wisely and for the long term benefit of arctic states, the arctic peoples, and the world. It is the only ocean that has not been overexploited, providing opportunities to protect existing resources without the challenge of repairing past damage.

The Arctic Ocean represents a common good, a global public good that we must carefully manage and entrust to future generations – for its pristine beauty as well

as for its bountiful natural resources. The Arctic Ocean is a unique ecosystem for which the international community and particularly the five coastal states have a stewardship obligation. This requires cooperative planning and management of marine resources with the view of long-term sustainability, responsibility for environmental quality shared by all those whose actions affect the arctic environment. Only through enlightened leadership and careful stewardship by arctic countries and arctic peoples can environmental damage and degradation be prevented.

Given the economic exploitation pressures, it is imperative to lay down strict environmental constraints before poorly conceived and implemented activities begin.

The longer the delay in developing international environmental rules, the higher the likelihood that unplanned and unregulated development will damage the very resources most necessary for a sustainable future in the Arctic. ○

THE PICTURE



Fiction and science

This is the first printed map of the Arctic, from an age where the Arctic was an impenetrable unknown wilderness. It combines the medieval conception of the Arctic with the most advanced cartography and newest territorial discoveries of the late 16th century. The four huge islands in the Arctic Ocean are fictitious but the idea of an open polar sea is basically correct.

The cartographer Gerardus Mercator (1512–1594) was a leading map designer of his age and the Mercator projection is still widely used.

Gerard Mercator:
Septentrionalium terrarum descriptio
1595

Source: <http://nla.gov.au/nla.map-rm150>