

## COUNCIL OF THE EUROPEAN UNION

Brussels, 3 March 2008

7249/08

LIMITE

POLGEN 27

PESC 289

ENER 69

ENV 141

DEVGEN 28

RELEX 146

**Report** from the Commission and the Secretary-General/High Representative  
to: European Council  
Subject: Climate change and international security

Delegations will find attached a joint paper by the Commission and the Secretary-General/High Representative concerning “Climate change and international security”.

ZaöRV 69 (2009), 729-815

## ANNEX

### CLIMATE CHANGE AND INTERNATIONAL SECURITY

#### Paper from the High Representative and the European Commission to the European Council

#### I. INTRODUCTION

The risks posed by climate change are real and its impacts are already taking place. The UN estimates that all but one of its emergency appeals for humanitarian aid in 2007 were climate related. In 2007 the UN Security Council held its first debate on climate change and its implications for international security. The European Council has drawn attention to the impact of climate change on international security and in June 2007 invited the High Representative and the European Commission to present a joint report to the European Council in Spring 2008.

The science of climate change is now better understood. The findings of the Intergovernmental Panel on Climate Change demonstrate that even if by 2050 emissions would be reduced to below half of 1990 levels, a temperature rise of up to 2°C above pre-industrial levels will be difficult to avoid. Such a temperature increase will pose serious security risks that would increase if warming continues. Unmitigated climate change beyond 2°C will lead to unprecedented security scenarios as it is likely to trigger a number of tipping points that would lead to further accelerated, irreversible and largely unpredictable climate changes. Investment in mitigation to avoid such scenarios, as well as ways to adapt to the unavoidable should go hand in hand with addressing the international security threats created by climate change; both should be viewed as part of preventive security policy.

Climate change is best viewed as a threat multiplier which exacerbates existing trends, tensions and instability. The core challenge is that climate change threatens to overburden states and regions which are already fragile and conflict prone. It is important to recognise that the risks are not just of a humanitarian nature; they also include political and security risks that directly affect European interests. Moreover, in line with the concept of human security, it is clear that many issues related to the impact of climate change on international security are interlinked requiring comprehensive policy responses. For example, the attainment of the Millennium Development Goals would be at considerable risk because climate change, if unmitigated, may well wipe out years of development efforts.

This report focuses on the impact of climate change on international security and considers the impact of these international security consequences for Europe's own security, and how the EU should respond.

The EU is in a unique position to respond to the impacts of climate change on international security, given its leading role in development, global climate policy and the wide array of tools and instruments at its disposal. Moreover, the security challenge plays to Europe's strengths, with its comprehensive approach to conflict prevention, crisis management and post-conflict reconstruction, and as a key proponent of effective multilateralism.

The European Security Strategy recognised the link between global warming and competition for natural resources while the Communication "Europe in the World" highlighted the effects of globalisation on external relations.

The report considers how the full range of EU instruments, including Community and CFSP/ESDP action, can be used alongside mitigation and adaptation policies to address the security risks. It also considers the implications for the intensification of political dialogue with third countries. A post-2012 agreement has to be developed by the end of 2009 and all levers of EU foreign relations must work towards this end.

The report concludes that it is in Europe's self interest to address the security implications of climate change with a series of measures: at the level of the EU, in bilateral relations and at the multilateral level, in mutually supportive ways.

Although this report addresses the impact of climate change on international security, the EU's response will be conditioned by the impact of climate change on Europe itself. Climate change will heavily affect Europe's natural environment and nearly all sections of society and the economy.

## II. THREATS

The effects of climate change are being felt now: temperatures are rising, icecaps and glaciers are melting and extreme weather events are becoming more frequent and more intense. The following section outlines some of the forms of conflicts driven by climate change which may occur in different regions of the world.

### **i) Conflict over resources**

Reduction of arable land, widespread shortage of water, diminishing food and fish stocks, increased flooding and prolonged droughts are already happening in many parts of the world. Climate change will alter rainfall patterns and further reduce available freshwater by as much as 20 to 30% in certain regions. A drop in agricultural productivity will lead to, or worsen, food-insecurity in least developed countries and an unsustainable increase in food prices across the board. Water shortage in particular has the potential to cause civil unrest and to lead to significant economic losses, even in robust economies. The consequences will be even more intense in areas under strong demographic pressure. The overall effect is that climate change will fuel existing conflicts over depleting resources, especially where access to those resources is politicised.

### **ii) Economic damage and risk to coastal cities and critical infrastructure**

It has been estimated that a business as usual scenario in dealing with climate change could cost the world economy up to 20% of global GDP per year, whereas the cost of effective concerted action can be limited to 1%. Coastal zones are the home of about one fifth of the world's population, a number set to rise in the years ahead. Mega-cities, with their supporting infrastructure, such as port facilities and oil refineries, are often located by the sea or in river deltas. Sea-level rise and the increase in the frequency and intensity of natural disasters pose a serious threat to these regions and their economic prospects. The East coasts of China and India as well as the Caribbean region and Central America would be particularly affected. An increase in disasters and humanitarian crises will lead to immense pressure on the resources of donor countries, including capacities for emergency relief operations.

### **iii) Loss of territory and border disputes**

Scientists project major changes to the landmass during this century. Receding coastlines and submergence of large areas could result in loss of territory, including entire countries such as small island states. More disputes over land and maritime borders and other territorial rights are likely. There might be a need to revisit existing rules of international law, particularly the Law of the Sea, as regards the resolution of territorial and border disputes. A further dimension of competition for energy resources lies in potential conflict over resources in Polar regions which will become exploitable as a consequence of global warming. Desertification could trigger a vicious circle of degradation, migration and conflicts over territory and borders that threatens the political stability of countries and regions.

#### **iv) Environmentally-induced migration**

Those parts of the populations that already suffer from poor health conditions, unemployment or social exclusion are rendered more vulnerable to the effects of climate change, which could amplify or trigger migration within and between countries. The UN predicts that there will be millions of “environmental” migrants by 2020 with climate change as one of the major drivers of this phenomenon. Some countries that are extremely vulnerable to climate change are already calling for international recognition of such environmentally-induced migration. Such migration may increase conflicts in transit and destination areas. Europe must expect substantially increased migratory pressure.

#### **v) Situations of fragility and radicalization**

Climate change may significantly increase instability in weak or failing states by over-stretching the already limited capacity of governments to respond effectively to the challenges they face. The inability of a government to meet the needs of its population as a whole or to provide protection in the face of climate change-induced hardship could trigger frustration, lead to tensions between different ethnic and religious groups within countries and to political radicalisation. This could destabilise countries and even entire regions.

#### **vi) Tension over energy supply**

One of the most significant potential conflicts over resources arises from intensified competition over access to, and control over, energy resources. That in itself is, and will continue to be, a cause of instability. However, because much of the world’s hydrocarbon reserves are in regions vulnerable to the impacts of climate change and because many oil and gas producing states already face significant social economic and demographic challenges, instability is likely to increase. This has the potential to feed back into greater energy insecurity and greater competition for resources. A possible wider use of nuclear energy for power generation might raise new concerns about proliferation, in the context of a non-proliferation regime that is already under pressure. As previously inaccessible regions open up due to the effects of climate change, the scramble for resources will intensify.

#### **vii) Pressure on international governance**

The multilateral system is at risk if the international community fails to address the threats outlined above. Climate change impacts will fuel the politics of resentment between those most responsible for climate change and those most affected

by it. Impacts of climate mitigation policies (or policy failures) will thus drive political tension nationally and internationally. The potential rift not only divides North and South but there will also be a South – South dimension particularly as the Chinese and Indian share of global emissions rises. The already burdened international security architecture will be put under increasing pressure.

### III. GEOGRAPHICAL EXAMPLES

In many regions, climate change is fuelling one or more of the threats identified above. The following sections illustrate how climate change is multiplying existing pressures in various regions around the world. Since the EU's neighbours include some of the most vulnerable regions to climate change, e.g. North Africa and the Middle East, migratory pressure at the European Union's borders and political instability and conflicts could increase in the future. This could also have a significant impact on Europe's energy supply routes.

#### 1. Africa:

Africa is one of the continents most vulnerable to climate change because of multiple stresses and low adaptive capacity. In North Africa and the Sahel, increasing drought, water scarcity and land overuse will degrade soils and could lead to a loss of 75% of arable, rain-fed land. The Nile Delta could be at risk from both sea-level rise and salinisation in agricultural areas while 12 to 15% of arable land could be lost through sea-level rise in this century with 5 million people affected by 2050. Already today, climate change is having a major impact on the conflict in and around Darfur.

In the Horn of Africa reduced rainfall and increasing temperatures will have a significant negative impact on a region highly vulnerable to conflict. In southern Africa, droughts are contributing to poor harvests, leading to food insecurity in several areas with millions of people expected to face food shortages. Migration in this region, but also migration from other regions through Northern Africa to reach Europe (transit migration) is likely to intensify. In Africa, and elsewhere, climate change is expected to have a negative effect on health, in particular due to the spread of vector-borne diseases further aggravating tensions.

#### 2. Middle East:

Water systems in the Middle East are already under intense stress. Roughly two-thirds of the Arab world depends on sources outside their borders for water. The Jordan and Yarmuk rivers are expected to see considerable reduction in their flows affecting Israel, the Palestinian territories and Jordan. Existing tensions over access

to water are almost certain to intensify in this region leading to further political instability with detrimental implications for Europe's energy security and other interests. Water supply in Israel might fall by 60% over this century. Consequently, a significant drop in crop yields is projected for an area that is already largely arid or semi-arid. Significant decreases are expected to hit Turkey, Iraq, Syria and Saudi Arabia and thus affect stability in a vitally strategic region for Europe.

### **3. South Asia:**

Sea-level rise may threaten the habitat of millions of people as 40% of Asia's population (almost 2 billion) lives within 60km from the coastline. Water stress and loss of agricultural productivity will make it difficult for Asia to feed its growing population who will additionally be exposed to an increase of infectious diseases. Changes in the monsoon rains and decrease of melt water from the Himalayas will affect more than 1 billion people. Conflicts over remaining resources and unmanaged migration will lead to instability in a region that is an important economic partner of Europe with factors of production and distribution concentrated along vulnerable coastlines.

### **4. Central Asia:**

Central Asia is another region severely affected by climate change. An increasing shortage of water, which is both a key resource for agriculture and a strategic resource for electricity generation, is already noticeable. The glaciers in Tajikistan lost a third of their area in the second half of the 20th century alone, while Kyrgyzstan has lost over a 1000 glaciers in the last four decades. There is thus considerable additional potential for conflict in a region whose strategic, political and economic developments as well as increasing trans-regional challenges impact directly or indirectly on EU interests.

### **5. Latin America and the Caribbean:**

In drier areas of Latin America climate change will lead to salinisation and desertification of agricultural land and to decreasing productivity of important crops and livestock. This will have adverse consequences for food security. Sea-level rise is projected to cause increased risk of flooding in low-lying areas. Increases in sea surface temperature due to climate change are projected to have adverse effects on coral reefs, and cause shifts in the location of fish stocks. Latin American and Caribbean countries are already subject to the detrimental effects, including many extreme events, associated with the El Niño cycle. Changes in rainfall patterns and the disappearance of glaciers are projected to significantly affect water availability

for human consumption, agriculture and energy generation, for example in the Andes region. Countries in the Caribbean and the Gulf of Mexico are already increasingly affected by major hurricanes. This will be further exacerbated by climate change and result in social and political tensions in a region with often weak governance structures.

## 6. The Arctic:

The rapid melting of the polar ice caps, in particular, the Arctic, is opening up new waterways and international trade routes. In addition, the increased accessibility of the enormous hydrocarbon resources in the Arctic region is changing the geo-strategic dynamics of the region with potential consequences for international stability and European security interests. The resulting new strategic interests are illustrated by the recent planting of the Russian flag under the North Pole. There is an increasing need to address the growing debate over territorial claims and access to new trade routes by different countries which challenge Europe's ability to effectively secure its trade and resource interests in the region and may put pressure on its relations with key partners.

## IV. CONCLUSIONS AND RECOMMENDATIONS

The impact of climate change on international security is not a problem of the future but already of today and one which will stay with us. Even if progress is made in reducing the emissions of greenhouse gases, weather patterns have already changed, global temperatures have already risen and, above all, climate change is already being felt around the globe.

The active role of the EU in the international climate change negotiations is vital and must continue. The EU has demonstrated leadership both in international negotiations, in particular by advocating the 2°C target, and with its far-reaching decisions on domestic climate and energy policies. Yet, the EU cannot act alone. In a changing international political landscape, major emitters and emerging economies will also have to be engaged and commit to an ambitious global climate agreement under the UN framework.

In the EU's response, special consideration needs to be given to the US, China and India and what the implications mean for the EU's long term relations with Russia. The recommendations below should be complemented by further studies and followed up by coherent EU action plans, aiming at addressing the different dimensions of the responses required to address the impact of climate change on international security in a comprehensive and effective manner. The upcoming examination of the implementation of the European Security Strategy, and as ap-



propriate proposals to complement it, should take account of the security dimension of climate change.

### **Enhancing capacities at the EU level**

A first step to address the impact of climate change on international security should be to build up knowledge and assess the EU's own capacities, followed by an improvement in the prevention of, and preparedness for early responses to, disasters and conflicts. Financial implications for such responses should be identified and also be considered in the EU's budget review.

Possible actions that could be developed include:

- Intensify EU capacities for research, analysis, monitoring and early warning and Watch Lists including the Institute for Security Studies, the EU Satellite Centre (EUSC), the EU Joint Situation Centre (SITCEN), the EU Network of Energy Correspondents (NESCO), the Global Monitoring for Environment and Security and Joint Research Centres. Monitoring and early warning needs to include in particular situations of state fragility and political radicalisation, tensions over resources and energy supplies, environmental and socio-economic stresses, threats to critical infrastructures and economic assets, border disputes, impact on human rights and potential migratory movements.
- Further build up EU and Member State planning and capabilities including civil protection and the use of crisis management and disaster response instruments (civil and military) to contribute to the response to the security risks posed by climate change.
- Commission further work to look, region-by-region, in more detail at what the security implications are likely to be and how they will affect EU interests.

### **EU multilateral leadership to promote global climate security**

Climate change is a key element of international relations and will be increasingly so in the coming years, including its security dimension. If recognised, it can even become a positive driver for improving and reforming global governance. As it is a global problem, the EU is advocating a multilateral response. Building on the successful Bali conference in Dec 2007 the EU needs to continue and strengthen its leadership towards an ambitious post-2012 agreement in 2009, including both mitigation and adaptation action by all countries as a key contribution to addressing climate security.

Possible actions that could be developed include:

- Focus attention on the security risks related to climate change in the multilateral arena; in particular within the UN Security Council, the G8 as well as the UN specialised bodies (among others by addressing a possible need to strengthen certain rules of international law, including the Law of the Sea).
- Enhance international cooperation on the detection and monitoring of the security threats related to climate change, and on prevention, preparedness, mitigation and response capacities. Promote the development of regional security scenarios for different levels of climate change and their implications for international security.
- Consider environmentally-triggered additional migratory stress in the further development of a comprehensive European migration policy, in liaison with all relevant international bodies.

### Cooperation with third countries

Climate change calls for revisiting and reinforcing EU cooperation and political dialogue instruments, giving more attention to the impact of climate change on security. This could lead to greater prioritisation and enhanced support for climate change mitigation and adaptation, good governance, natural resource management, technology transfer, trans-boundary environmental cooperation (inter alia water and land), institutional strengthening and capacity building for crisis management.

Possible actions that could be developed include:

- Further integrate adaptation and resilience to climate change into EU regional strategies (for example Northern Dimension, European Neighbourhood Policy, EU-Africa Strategy, Barcelona Process, Black Sea Synergy, EU-Central Asia Strategy, Middle East action plan). Special attention should be given to the most vulnerable regions and potential climate security hot spots. The Global Climate Change Alliance between the EU and the most vulnerable developing countries should be built upon.
- Develop an EU Arctic policy based on the evolving geo-strategy of the Arctic region, taking into account i.a. access to resources and the opening of new trade routes.
- Examine the security implications of climate change in dialogue with third countries including through the sharing of analyses.

**EUROPE HAS TO FACE UP TO THE SECURITY POLICY  
IMPACT OF CLIMATE CHANGE – JOINT  
CONTRIBUTION BY FRANK-WALTER  
STEINMEIER AND HIS BRITISH COUNTERPART DAVID  
MILIBAND**

Steinmeier and Miliband at the NATO Foreign Ministers meeting, 6 March 2008

From the melting Arctic glaciers to the growing African deserts, climate change is a reality. It threatens our prosperity and well-being, not just in Europe but beyond. Moreover, it will reshape the geopolitics of the world in which we live, with important consequences for peace and security.

Climate change will act as a stress multiplier. It will exacerbate existing pressure on scarce resources, particularly energy, water and food – we are already seeing record spikes in global food prices and growing concern about the consequences in places like China. Competition for scarce resources threatens to fuel migration. The impact is likely to be most acute in regions such as the Sahel, the Middle East and South and Central Asia, where people are already socially and economically vulnerable and which are prone to instability. Rising sea-levels and melting ice caps also risk triggering new conflicts over shifting maritime borders. This is not an apocalyptic scenario. It is the assessment of increasing numbers of security experts based on the findings of climate scientists. Their conclusions demand a clear and coherent foreign and security policy response.

The European Union is already leading the global effort to tackle climate change. In Europe, we are building the world's first competitive, energy secure low carbon economy. Alongside developing the world's first functioning carbon market, we last year committed ourselves to meeting ambitious targets designed to put us on a fasttrack to de-carbonising the European economy – 20% of total energy to come from renewable sources by 2020, 12 demonstration Carbon Capture and Storage plants by 2015, and a 20% reduction in total greenhouse gas emissions by 2020, 30% if other developed countries show similar ambition.

Internationally, we are pushing mitigation efforts under the Kyoto-Protocol and working hard to broker a post-2012 global climate deal. We launched negotiations at the UN meeting in Bali in December. It is now imperative that we agree an ambitious, binding, comprehensive and equitable agreement by the end of 2009 at the UN meeting in Copenhagen.

And we have put the security implications of climate change on top of the international agenda. In 2007, the UK initiated a debate in the UN Security

ZaöRV 69 (2009)

Council on the impacts of climate change on peace and security. During her EU Presidency in 2007, Germany initiated a report on a European response to the new security risks.

European leaders will discuss this report at their Spring Council later this week.

Both UK and Germany support a European response to the emerging security challenges of climate change. We want to help implement an effective European and multilateral strategy to address the new threats. What are the important elements of such a strategy?

**First**, we should intensify our efforts to meet the new security risks triggered by climate change. With the European Union's strategy for Central Asia and the new EU-Africa partnership, we have groundbreaking policy frameworks which will allow us to mainstream climate security into the EU's regional policies. In Central Asia, transboundary water management is an important pillar within our strategy. By helping build capacity, fostering regional dialogue, and setting up more efficient water infrastructure we are promoting water as focus of regional co-operation, rather than regional division. The same is true for Africa, where the effects of food insecurity, water shortages and extreme weather are likely to be severe. The EU-Africa Partnership gives priority to more cooperation to address land degradation and increase aridity. Promoting food security through initiatives like the "Green Wall for the Sahara" is a key element for political stability and crisis prevention in Africa.

**Second**, we will have to address an increasing number of global natural disasters such as storms, floods, and droughts in the future. There is a strong case for closer monitoring of climate related developments in crisis-prone areas. But we also need to prepare for increased demand for European-led disaster management and humanitarian relief.

**Third**, we need to consider now how climate change will affect the strategic context of European foreign and security policy in the years to come. For instance the shrinking Arctic icecap could raise questions about resources, delimitation of maritime zones and sea-lanes in the far North. To avoid new tensions, the EU report on climate security proposes a European Arctic policy. It is vitally important for European security to implement governance structures for the Arctic region based on international law, aiming at a cooperative and peaceful management of resources and preserving the ecological heritage of mankind.

Anticipating new foreign policy challenges and reinforcing the climate security and conflict prevention aspects of our regional strategies are important steps in defining a joint EU response. These efforts will help us to avoid growing resentment between those most responsible for climate change and those most

affected by it. A potential stand-off between “polluters” – both in the North and among the emerging economies – and “victims”, who will be predominantly in the South, would put the already burdened international security architecture under increasing pressure.

Ultimately, there is no hard power option for tackling the causes of the climate threat or for dealing with its direct impacts. You cannot use military force to build a low carbon global economy; no weapon system can halt the advance of a hurricane bearing down on a city, or hold back the rising sea. But what the emerging analysis on climate and security tells us is that we can be sure that there will be hard power consequences if we fail to rise to the challenge.

ZaöRV 69 (2009)

**THE ILULISSAT DECLARATION  
ARCTIC OCEAN CONFERENCE  
ILULISSAT, GREENLAND, 27 – 29 MAY 2008**

At the invitation of the Danish Minister for Foreign Affairs and the Premier of Greenland, representatives of the five coastal States bordering on the Arctic Ocean – Canada, Denmark, Norway, the Russian Federation and the United States of America – met at the political level on 28 May 2008 in Ilulissat, Greenland, to hold discussions. They adopted the following declaration:

The Arctic Ocean stands at the threshold of significant changes. Climate change and the melting of ice have a potential impact on vulnerable ecosystems, the livelihoods of local inhabitants and indigenous communities, and the potential exploitation of natural resources.

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. In this regard, we recall that an extensive international legal framework applies to the Arctic Ocean as discussed between our representatives at the meeting in Oslo on 15 and 16 October 2007 at the level of senior officials. Notably, the law of the sea provides for important rights and obligations concerning the delineation of the outer limits of the continental shelf, the protection of the marine environment, including ice-covered areas, freedom of navigation, marine scientific research, and other uses of the sea. We remain committed to this legal framework and to the orderly settlement of any possible overlapping claims.

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. We will keep abreast of the developments in the Arctic Ocean and continue to implement appropriate measures.

The Arctic Ocean is a unique ecosystem, which the five coastal states have a stewardship role in protecting. Experience has shown how shipping disasters and subsequent pollution of the marine environment may cause irreversible disturbance of the ecological balance and major harm to the livelihoods of local inhabitants and indigenous communities. We will take steps in accordance with international law both nationally and in cooperation among the five states and other interested parties to ensure the protection and preservation of the fragile marine environment of the Arctic Ocean. In this regard we intend to work together including through the International Maritime Organization to strengthen existing measures and deve-

ZaöRV 69 (2009)

lop new measures to improve the safety of maritime navigation and prevent or reduce the risk of ship-based pollution in the Arctic Ocean.

The increased use of Arctic waters for tourism, shipping, research and resource development also increases the risk of accidents and therefore the need to further strengthen search and rescue capabilities and capacity around the Arctic Ocean to ensure an appropriate response from states to any accident. Cooperation, including on the sharing of information, is a prerequisite for addressing these challenges. We will work to promote safety of life at sea in the Arctic Ocean, including through bilateral and multilateral arrangements between or among relevant states.

The five coastal states currently cooperate closely in the Arctic Ocean with each other and with other interested parties. This cooperation includes the collection of scientific data concerning the continental shelf, the protection of the marine environment and other scientific research. We will work to strengthen this cooperation, which is based on mutual trust and transparency, inter alia, through timely exchange of data and analyses.

The Arctic Council and other international fora, including the Barents Euro-Arctic Council, have already taken important steps on specific issues, for example with regard to safety of navigation, search and rescue, environmental monitoring and disaster response and scientific cooperation, which are relevant also to the Arctic Ocean. The five coastal states of the Arctic Ocean will continue to contribute actively to the work of the Arctic Council and other relevant international fora.

Ilulissat, 28 May 2008



**COMMON CONCERN FOR THE ARCTIC  
CONFERENCE ARRANGED BY THE NORDIC  
COUNCIL OF MINISTERS  
ILULISSAT, GREENLAND (9–10 SEPTEMBER 2008)**

**Chairman's Conclusions**  
*Ambassador Hans Corell,*  
**Former Legal Counsel of the United Nations**

**Introduction**

I have been asked to present Conclusions. These Conclusions are based on material presented to the Conference and the discussions during the five Panel sessions.

Needless to say, the Conclusions represent my perception of the results of the Conference. They should also be seen in the context of the objectives of the Conference: to increase awareness of how European Union policies and actions affect conditions in the Arctic and to raise awareness of the new challenges and opportunities that are a result of changing environmental, economic and social conditions in the Arctic region.

The purpose of the Conference was not to adopt common positions. Even if it would have been an advantage to present such positions, this would not have been possible among other things because of the short time at our disposal. As a matter of fact, it represented a challenge for the Chairman to present Conclusions immediately following a sequence of five Panels in one and the same day.

In order to assist those whose task it is to follow up on our work, I have attempted to highlight matters that have emerged in the discussions and such that must be addressed in the near future by individual states, regional organisations and the European Union. In other words: I have attempted to produce a document that can be used as a practical working tool.

The focus of the Conference has been on the Arctic and the European Union and how to best assist the different components of the EU to address Arctic issues more effectively and in a more coherent manner. This raises the question of the competence of the Union. It may be that some of the elements that are highlighted in these Conclusions do not fall within this competence. However, it is not for the

ZaöRV 69 (2009)

Chairman of the Conference to attempt to make a judgement here. I believe that it is more important to list the elements identified (many, or perhaps most of which may not come as a surprise) and then leave it to the Union, its members, the Arctic states and others concerned to decide who should do what.

At first sight, the lists below may appear lengthy, raising matters of great significance as well as issues of more limited importance. It could be argued that by reducing the lists one would bring the most important matters to the forefront. However, again, I do not believe that it is for the Chairman to set priorities. There are many actors – scientists, experts, politicians, Arctic residents, etc. – who are involved, or should be involved in addressing the matters that were discussed during the Conference. Any priorities should be set by them and ultimately by those responsible at the highest political level.

Against this background, I believe that the Conclusions should be presented as they appear in the lists. Eventually, these lists might be transformed into action plans that can be monitored by the Secretariat of the Nordic Council of Ministers and others. I intend to make a more detailed proposal in this respect to Secretary General Ásgrímsson for his consideration, partly in response to the plea that he made in his Opening Remarks: It is crucial that we not just talk and read reports – we must act!

A very important contribution to the Conference is the review of existing EU policies and actions that are related to and affect developments in the Arctic. This review appears in *The European Union and the Arctic – Policies and actions* (ANP 2008:729 Nordic Council of Ministers).

With these provisos, the following is the report on my Conclusions.

## A. Opening Session

The conference was opened with Welcome Remarks by *Ms Aleqa Hammond*, Greenland's Minister for Nordic Co-operation, and Opening Remarks by State Secretary *Mr Johan Tiedemann*, representing *Ms Cristina Husmark Pehrsson*, Sweden's Minister for Nordic Co-operation.

*The Chairman* was invited to conduct the proceedings and delivered Opening Remarks (see below).

Thereafter, the Conference heard Opening Remarks by *Mr Halldór Ásgrímsson*, Secretary General to the Nordic Council of Ministers, and Key Note Addresses by *Dr Joe Borg*, EU Commissioner for Fisheries and Maritime Affairs, *Ambassador Laurent Stefanini*, French Presidency of the EU, and *Ms Diana Wallis*, Vice-

President of the European Parliament. This material will appear in the Conference Proceedings.

## B. Setting the Scene

After the Opening Session, the Conference heard presentations by *Dr David Carlson*, Director of the International Polar Year Programme Office, *Dr Rasmus Ole Rasmussen*, Senior Research Fellow, Nordic Centre for Spatial Development, NordRegio, and *Ms Adele Airoidi*, Consultant at Milieu Ltd. Their presentations will appear in the Conference Proceedings. However, to assist the readers of the present report, summaries are included here.

### *Environmental and Climate Change in the Arctic*

(Based on a presentation on environmental and climate change in the Arctic by *Dr David Carlson*, Director of the International Polar Year Programme Office)

A report prepared for the Conference, entitled “Ice in the Arctic – Sea Ice as an Indicator and Integrator”, occurs just near the end of the 2008 melting season for the Arctic, at a time of rapid changes in sea ice. The report highlights factors that will determine the final 2008 sea ice extent and draws attention to the other two large ice masses of the Arctic, the Greenland ice sheet and the circum-Arctic permafrost. The point is made that although sea ice extent represents a compelling indicator, the Arctic functions as an integrated and connected system.

From the report we learn that the sea ice in 2007 reached a minimum of 4.2 million square kilometers on 21 September in 2007, an extent 40 per cent below the average for the past 28 years and so low that it surprised all observers and called into question many of the assumptions we might use to estimate 2008 conditions. It appears that the 2008 extent will be very close to the 2007 figure.

The development of ice-free Arctic transportation routes, occasions of ice-free conditions at the highly-symbolic North Pole, and the eventual complete sea ice disappearance in the summer season provide the general public with compelling and potent indicators of climate change. For long term planning, however, we should not get distracted by any single year. For annual Arctic (and hemispheric) heating and cooling, ice volume matters as much as ice extent. Therefore, we need to monitor changes in thickness (and age) as well as changes in the extent of the ice. Arctic sea ice has shown annual and spatial variability in the past and we must expect that it will do so in the future even during rapid decline; annual and seasonal predictability will remain a substantial challenge. Most important, sea ice plays a substantial role in Arctic marine ecosystems and has strong correlations with permafrost and with the Greenland ice sheet; its annual decline and seasonal disappearance portends and indicates changes in the entire Arctic system.

Real and urgent threats to ice-dependent animals such as seals and bears convey important messages to the public and to decision makers. Again, however, long-range planning requires attention to the entire Arctic marine system. Depending on season and snow cover, useful amounts of light can penetrate through several meters of sea ice. The underside of ice becomes habitat for an interesting and unique array of microorganisms. These microorganisms can grow abundant enough to give the underside of sea ice a brownish green colour; they attract other organisms adapted to the ice environment. Animals and materials sinking from under-ice communities stimulate biological activity on the sea floor; in shallow environments, animals move back and forth from ocean bottom to overlying ice.

The sea ice sea floor connections represent substantial components of local ecosystem productivity over large coastal areas of the Arctic. In summer, under-ice and ice-edge environments provide favourable conditions for many fish, birds, seals and whales. The presence of sea ice thus has a protective effect on the Arctic sea floor and a stimulatory effect on Arctic marine ecosystems. The absence of sea ice will disrupt the ecological connections and expose large areas of undisturbed sea floor to exploitation, and particularly to bottom trawling.

On geologic (glacial – interglacial) time scales, the northern ice masses – sea ice, permafrost, and land-based ice sheets – grow or retreat together. On shorter time scales, decades, we can expect that permafrost degradation and the Greenland ice sheet ablation will also react to and replicate the disappearance of sea ice. We should anticipate similar patterns of decline: faster-than-expected changes, periods of high variability followed by periods of rapid decline, one or more irreversible tipping points.

It is suggested that we are only beginning to understand the Arctic as an integrated marine and terrestrial system. We see caribou become coastal species during summer months, often dependent on sea ice for migration to and from off-shore islands. We get a sense of Arctic vegetation greening and growing in synchrony with the seasonal cycles of sea ice, and of extreme northern plants and animals at risk along with the ice. We get a sense of atmosphere and ocean interacting with ice to encourage its winter growth and then force and arrange its summer disappearance.

The drift of the research vessel Tara during the first months of the International Polar Year provides a reminder of how these Arctic changes interact and accelerate. Starting in the same season and following virtually the same route as Fridtjof Nansen's Arctic expedition ship the Fram more than 100 years earlier, the Tara took approximately one third the time (14 months compared to 34 months) for a complete crossing at the mercy of wind, ocean and ice. The Arctic gives restless

signals in all seasons; we have much less time than we think to understand and protect it.

*Globalisation, Social Issues and Arctic Livelihood*

(Based on a presentation on globalisation, social issues and Arctic livelihood by Dr Rasmus Ole Rasmussen, Senior Research Fellow, NordRegio)

Both the economic and the social life in the Arctic have been – and in the future will be – exposed to marked economic and social impact. The increased interests in the Arctic, intensified by the economic prospects opened up by the melting of ice that previously limited the accessibility, have called for further attention.

*Responses to environmental changes.* Northern communities have always been challenged by environmental changes, but have adjusted to the changes. The situation in Greenland during the last century serves as a good illustration. A dramatic increase in sea temperature along West Greenland during the 1910s–1920s caused an increase in the cod stock becoming the dominating species and fundamental for the economy. Another shift occurred during the 1980s where a cooling causing cod to decline and resulted in a move of the economy from cod to shrimp fisheries. In both cases the changes have had profound impacts, in the first case with the establishment of a more permanent settlement structure, and in the second through an increased urbanisation of the population.

*Impact of new activities.* Attention is drawn toward exploitation of the mineral and energy resources in the north, as well as the opening of new transport routes. Benefits, however, rarely remain in the region, and permanent jobs are rare. And when jobs are retained, the result may be adverse effects such as social stratification and inequity in wealth distribution. Long-lasting consequences often persist through industrial waste, tailings, and environmental contaminations, so the opening up of new opportunities is a challenge to the northern communities. “The Law of the Sea” already exists as a legal framework for resolving potential conflicts in the Arctic, but the situation is not that simple, according to many northerners. The United Nations Convention on the Law of the Sea is based on the recognition of rights of states. But it is not recognising the rights of people. Adding the principle of subsidiarity, however, may provide a conceptual tool to mediate polarity of pluralism and the common good in a globalised world, granting the peoples in the Arctic a voice by treating the Arctic as a distinct region in international society.

*Complex economies.* Fishing and hunting has been the economic basis for most northern communities, still perceived by many as the main economic basis for communities in the North. The reality, however, is that the third sector – the service sector with wage work in administration, education, social service, etc. – is the main income source for most families, creating jobs for 80 per cent or more of the employed persons. Especially for women, who seem to be more open to the new

activities, not only accepting jobs outside the traditional primary sector, but also ready to accomplish the training and educational requirements needed. Still, however, the informal economy and subsistence activities are ensuring basic supply, sharing with family and neighbours, and informal sale on local markets. It is especially important for the continuation of small scale hunting and fishing in villages, providing the basic sustenance and a small cash income.

*Responses to globalisation.* The changes in the overall economic structure are affecting the household structures as well as the settlement pattern. An increase in the out-migration of both males and females, looking for education and work opportunities outside the villages and smaller towns, are contributing to an increased urbanisation in the Arctic. And the process has been accelerated by a higher rate of out-migrating females, eventually leading to a substantial increase in the number of households consisting of single men in the villages. The general pattern shows that 55 to 70 per cent of persons with tertiary education are women, while men tend to finish their educational careers with primary or secondary education, or vocational training. The question of opportunities has very much to do with availability of educational options, first of all through national programmes, but increasingly through new initiatives regarding circumpolar cooperation in education such as University of the Arctic, providing a new world of possibilities.

*The new demographic challenges.* The different responses to changes affect the options of staying or leaving, as young persons simply have to leave in order to pursue a future. And when they have left, many of them never come back to stay, especially women in the age group from sixteen to thirty-five, the youngest seeking education and the older seeking jobs. Many northern communities are therefore experiencing a situation where in the younger group are only six or seven females to ten males. And this gender imbalance has a marked impact, affecting both social life and the economy, with a divide between village life and large scale extractive industries, both dominated by males, while towns and cities increasingly are characterised by third sector activities, actively chosen by females through a “step-stone” process of migration, from villages to towns, to regional centres and the capital regions, and eventually out of the country.

#### *Conclusion*

It is important to react to changes in the Arctic. But it is also important to realise that the ongoing changes are multi-dimensional. Changes in climate and the environment are important factors, but in relation to the future of settlements, communities and cultures, in the end it is the people in the Arctic that are decisive.

#### *The European Union and the Arctic – Policies and Actions*

(Based on a presentation of a consultancy report “The European Union and the Arctic – Policies and actions” by Ms Adele Airolidi, Consultant at Milieu Ltd.)

The report to the Nordic Council of Ministers reviews the main European Union policies and actions of relevance for the Arctic. It highlights the place of research and environment as the EU policies having the most direct impact on the Arctic, and of the recently launched Integrated Maritime Policy as having a strong potential for impact. A number of other EU policies, while not targeting the Arctic as such, impact on it. The Northern Dimension is the only EU policy with a declared Arctic component, but its main emphasis has been so far on different elements.

In the last few months, there has been an unprecedented surge of interest in the Arctic within the EU. Climate change has been the main catalyst for such new awareness and interest. As climate change is moving higher and higher up the EU list of priorities, attention to the Arctic has increased in parallel in a number of EU sectoral policies.

A determining element for such attention appears to have been the realization of the opportunities offered by a future, largely ice-free, Arctic Ocean – the exploitation of new or increased energy, mineral and fishery resources and the opening of new navigation routes.

The new geopolitical importance gained by the Arctic region because of climate change – the anticipation of new opportunities but also the emergence of new problems, including relating to international security – has been recognised by the EU institutions. The Arctic has a place on the agenda of the Commission and of the Council, and remains on the agenda of the European Parliament.

On the basis of present circumstances, which may be in some aspects in rapid evolution, the main conclusions of the report are that *the EU already impacts on the Arctic in many ways* and that *the increasing environmental, economic and political importance of the Arctic, its proximity to and historical links with Europe, warrant a conscious effort by the EU to develop as a minimum a more systematic and proactive approach*. Two main challenges need to be addressed to this end.

The first is to ensure better consistency of EU attitude and action, through a clearer and as far as possible concrete definition of ends and means, guided by the concept of sustainable development. More active interaction with Arctic countries and cooperation with the Arctic regional bodies and within broader international contexts dealing with issues of importance to the Arctic would be part of this approach.

The second, closely related, challenge is the development in the EU of a corresponding internal organisation, a central function in the European Commission supported by an efficient network reflecting the multiple Arctic-relevant aspects of EU policies and actions, to act as coordinator internally and as contact point both internally within the EU and towards the exterior.

If the idea of a full-fledged EU Arctic policy, evoked as a possibility in the EU political context, were to be pursued, it might be worth considering two questions which have emerged during the preparation of this report: whether the EU would be able to back its interest in the Arctic with enough substance, and how an EU Arctic policy could be developed in the absence of a sufficiently strong Arctic constituency able to express the interests of Arctic residents.

*The Law of the Sea*

(Excerpt from the Opening Remarks by the Chairman, *Ambassador Hans Correll*)

In the debate there have been suggestions that the Arctic is up for grabs in some way. There is a rush to lay hands on the resources that undoubtedly exist in this vast region.

If we focus on the Arctic Ocean alone, it is a sea of some 14 million square kilometres surrounded by continents. This represents almost one and a half times the size of the United States of America. By comparison, the size of the Russian Federation is some 17 million square kilometres. This should give us some idea of the size of the area – the ocean and the surrounding land areas – that we will be discussing.

It should also be understood that our discussion does not take place in a legal vacuum. On the contrary, there is a legal regime that applies to the Arctic Ocean, namely the United Nations Convention on the Law of the Sea. This means for example that the rules on the Territorial Sea, the Exclusive Economic Zone and the Continental Shelf are applicable in the Arctic.

Of course, there can be disputes about how these rules should be applied. But this does not differ from what applies in other parts of the world. And having a dispute with a neighbouring state is perfectly legitimate; one can always differ on how to construe the provisions of a treaty. What matters is how such disputes are resolved.

There have been suggestions that disputes relating to control over areas in the Arctic could develop into armed conflict. References have been made to the planting of the Russian flag on the sea floor close to the North Pole. But that flag planting can be seen as a symbolic act at most. It certainly does not have any legal relevance. The question of the extension of the Russian Continental Shelf was brought before the Commission on the Limits of the Continental Shelf already in 2001.

There are also other issues relating to territorial claims and maritime delimitation. But, as I said, the Law of the Sea Convention should provide sufficient guidance.



ce for the states concerned and in particular for the five Arctic coastal states to settle these matters in a peaceful and dignified manner.

However, it is important to point out that the Convention on the Law of the Sea certainly does not solve all issues related in the Arctic Ocean. The Convention foresees that additional measures may have to be taken for various reasons, in particular, for the protection of the environment. New sea lanes may require rules relating to both the ships that will ply the Arctic Ocean within a not too distant future and the lanes themselves since they may have to be identified and subjected to traffic separation schemes. It may also be necessary for states to agree upon additional rules relating to fisheries and extraction of non-renewable resources in the Arctic.

In our discussions we should also bear in mind that, depending on the subject matter, different constituencies in the world community may have an interest. That this applies to the Arctic states goes without saying. But also neighbouring states and the European Union have an interest in the Arctic. As a matter of fact, I would suggest that they have an obligation to engage in matters relating to the Arctic.

We should also not forget that if the Arctic Ocean becomes navigable the rules on the freedom of the high seas will apply. And the freedom of the high seas is a matter of concern to all states.

The argument could also be made that the geography of the Arctic Ocean is such that the provisions of Articles 122 and 123 of the Law of the Sea Convention on enclosed or semi-enclosed seas are applicable. If so, the states bordering the Arctic Ocean have an express obligation to cooperate with each other in the exercise of their rights and in the performance of their duties under the Convention.

I am fully aware that there are also many questions related to the land surrounding the Arctic Ocean that must be addressed with equal precision. But because of the discussion that has taken place relating to the law of the sea I thought it was important to clarify that there is a regime that will take us a long way to resolve many of the issues that we are facing at present.

### **C. The Panels**

In the second day, the Conference was addressed by and engaged in discussions with five Panels moderated by Ms Annika Ström Melin:

#### ***PANEL 1. TERRESTRIAL LIVING RESOURCES***

This Panel had been asked to focus on the effects of climate change and consequences of melting permafrost and glaciers on the protection and sustainable use of terrestrial living resources. Specifically, the panelists were asked to address direct

and indirect impacts of current agricultural and forestry policies (economic, social and environmental); maintenance of biological diversity and use of genetic resources; land use and management of natural resources, and impacts of industrial and radiological pollution.

After an introduction by Mr *Jan Vapaavuori*, Principal Advisor, Finland's Minister for Nordic Co-operation, the Conference heard presentations by four panelists: *Ms Malin Brännström*, Legal Advisor, National Union of the Swedish Sámi People, *Mr Jesper Madsen*, Director of Department, National Environmental Research Institute NERI, Denmark, *Mr Yrjö Eljas Norokorpi*, Area Manager, Natural Heritage Services of Metsähallitus, Finland, and *Mr David Stanners*, Head of Programme, European Environment Agency (EEA). This material will appear in the Conference Proceedings.

#### Chairman's Conclusion

Having followed the discussion in Panel 1 my conclusion is that the following matters need to be addressed:

1.1 The implementation of existing international agreements relevant to the Arctic should be the first priority in protecting Arctic terrestrial living resources.

1.2 Proper research requires standardised, integrated programs for examining the Arctic terrestrial ecosystems. Long term monitoring, including community-based monitoring, is also needed together with scientific research to assist the peoples in the Arctic to set proper hunting and harvesting quotas. The "Sustaining Arctic Observing Networks" (SAON) process deserves strong support.

1.3 All forest land use planning should be carried out in strict accordance with participatory planning best practices.

1.4 The role of northern forests as carbon sinks and source of bioenergy must be examined and given broader recognition in the new international climate agreement that will succeed the Kyoto Protocol.

1.5 More nature-oriented forest management practices are needed that mimic the natural processes and dynamics of the forest ecosystem. The core objective should be to increase the amount of uneven-aged and mixed species forests that are kept continuously well stocked and productive and, in so doing, improve felling potential.

1.6 An extensive conservation area network should be established and maintained throughout the Arctic to foster high ecosystem biodiversity.

1.7 There is a need to examine how EU policies and rules on slaughter and meat control relate to the specific needs of reindeer husbandry.

1.8 To design effective and efficient responses and adaptation strategies, it is important to assess the impact of climate change together with other pressures, and also to clearly identify the sources of the pressures causing the problems so that action can be taken in the right place.

## ***PANEL 2: MARINE LIVING RESOURCES***

This Panel had been asked to focus on the effects of current policies on the protection and sustainable use of fish stocks and other marine living resources, such as seals and whales. Specifically, the panelists were asked to address the adequacy of regional and global conventions on fisheries management and biodiversity; effects of management regimes, trade and fisheries policies; implications of climate change for future policies on sustainable management of living marine resources; pollution from persistent organic pollutants and heavy metals in Arctic waters; and bi-prospecting, i.e. commercial use of genetic biological material.

After an introduction by *Ms Diana Wallis*, Vice-President of the European Parliament, the Conference heard presentations by four panelists: *Mr Poul Degnbol*, Scientific Advisor on Fisheries, EU Commission, DG MARE, *Mr Aqqaq Lyngge*, President, Inuit Circumpolar Council, Greenland, *Ms Jacqueline McGlade*, Executive Director, European Environment Agency (EEA), and *Mr Jóhann Sigurjónsson*, Director General, Marine Research Institute, Iceland. This material will appear in the Conference Proceedings.

### *Chairman's Conclusion*

Having followed the discussion in Panel 2 my conclusion is that the following matters need to be addressed:

2.1 Mechanisms must be developed which can provide for regulated access to new fisheries, whether in new areas that become accessible, or because new fish stocks appear in new areas due to climate change. These mechanisms must respect the interest of Arctic residents.

2.2 When new fish stocks appear in new areas and other stocks disappear, it is important that international management authorities try to avoid disputes on management and utilisation. Therefore, strengthened methodologies and tools are needed for allocating utilisation rights when changes occur in the habitats of living marine resources.

2.3 Methods and tools also need to be developed to effectively enforce such management regimes. In particular, since there is a risk that non-regulated fisheries develop in the Arctic, instruments are urgently needed to effectively prevent *illegal, unregulated and unreported* fishing (IUU fishing).

2.4 Specific instruments, such as those decided and implemented through regional fisheries management organisations, need to be upgraded (e.g. the Convention on Future Multilateral Co-operation in North-East Atlantic Fisheries) or elaborated to effectively regulate the activities of specific economic sectors in support of an integrated framework for maritime management. The North East Atlantic Fisheries Commission (NEAFC) could provide a setting to discuss how to implement such a framework. It could also be asked to examine the extensions of its geographic coverage and membership in order to cover Arctic fish stocks.

2.5 The EU ecosystem approach in marine management must be strengthened, extended and made operational through a legal basis for international cooperation in the Arctic Ocean as a whole.

2.6 Europe has a clear and direct role and responsibility helping to reduce the release of persistent organic pollutants (POPs) and heavy metals and thereby their impact on the Arctic.

2.7 The EU should enter into an open dialogue with Inuit so that the total import ban on seal products does not hurt the Inuit dependency on seals. It is important that EU policies on the exploitation of Arctic marine living resources reflect the interests of those depending on those resources as much as the interests of specific EU constituencies.

2.8 There is a need to develop a regional observation and monitoring system for the Arctic Ocean to support scientific research and policymaking. (Cf. 5.8)

2.9 Mechanisms must be established to ensure regular provision of and access to environmental data and information. Governments need to act consistently and refrain from being selective by taking into account some scientific advice while disregarding other such advice. If not, the result will be policy-based evidence instead of evidence-based policy. (Cf. 5.8)

### ***PANEL 3: NON-RENEWABLE RESOURCES – NEW OPPORTUNITIES AND CONCERNS***

This Panel had been asked to focus on challenges and opportunities due to effects of climate change. Specifically, the panelists were asked to address expanded exploitation of non-living resources, e.g. oil, gas and minerals; new maritime

transportation routes; increased commercial shipping; need for improved regulation to enhance maritime safety and environmental protection at sea; effects of increasing tourism on the environment, local development and traditional living conditions; policies to reduce risk and prevent physical damage to infrastructure and environmental disasters on land; emergency and rescue capabilities; and best practices, improved methods and new technologies.

After an introduction by *Ms Heidi Grande Røys*, Norway's Minister for Nordic Co-operation, the Conference heard presentations by five panelists: *Ms Mette Agerup*, Assistant Director, Ministry of Oil and Energy, Norway, *Mr Claude Rouam*, Head of Unit, EU Commission, DG ENV, *Mr Martin Sommerkorn*, Senior Climate Change Advisor, World Wide Fund for Nature (WWF), *Mr Dimitrios Theologitis*, Head of Unit, EU Commission, DG TREN, and *Mr Joseph Westwood-Booth*, Head of Section, International Maritime Organization (IMO). This material will appear in the Conference Proceedings.

#### *Chairman's Conclusion*

Having followed the discussion in Panel 3 my conclusion is that the following matters need to be addressed:

3.1 Activities related to oil and gas in the Arctic Ocean must be prudent which requires high environmental standards adapted to the sensitivity of the Arctic; ecosystem based management; rigorous environmental and strategic impact assessment; effective prevention, preparedness and response to accidents, including clean-up of pollution incidents; and advanced monitoring and research.

3.2 Production and transport of oil and gas in and through ice-affected waters should be carefully regulated. The safety issues, including environmental protection, must be further analysed.

3.3 Cooperation among the Arctic states to obtain good resource management and sustainability is necessary.

3.4 Possible options should be considered for enhancing environmental governance of the Arctic. Such options might include a United Nations Convention on the Law of the Sea (UNCLOS) implementing agreement for environmental issues; a regional sea agreement (along the lines of the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR)); further development of multilateral environmental agreements at the global or regional level; strengthening and broadening the role of the Arctic Council; ensuring participation by a broader range of stakeholders; and more engagement by the EU and use of the tools it has to offer (research, European Environment Agency, funding via e.g.

Northern Dimension Environmental Partnership, participation in the Arctic Council, etc.), or a combination of these solutions.

3.5 Consideration should be given to the provisions in UNCLOS on enclosed or semi-enclosed seas (Articles 122 and 123) and their application to the Arctic. States bordering such a sea have an obligation to cooperate with each other in the exercise of their rights and in the performance of their duties under the Convention. In particular they shall endeavour, directly or through an appropriate regional organisation, to coordinate the implementation of their rights and duties with respect to the protection and preservation of the marine environment.

3.6 Tourism shipping appears to be the biggest short to medium-term challenge within the maritime transport sector in the Arctic and should be addressed with urgency. Dialog and partnership with Arctic tour operator organisations can prove useful and helpful.

3.7 It is necessary to establish a proper identification system for maritime surveillance and vessel traffic management in the Arctic.

3.8 With regard to the maritime safety in Arctic waters, governments should bring their concerns to the attention of the International Maritime Organisation (IMO) so that Member States can consider them with a view towards finding internationally agreed solutions. Unilateral regional action should be avoided.

#### ***PANEL 4: LOCAL DEVELOPMENT – CAPACITY BUILDING***

In the Arctic

Panel 4 had been asked to focus on current local and regional development policies. Specifically, the panelists were asked to address migration trends in Arctic regions; the role of education and training to promote capacity building and reduce genderimbalances; the EU-Greenland Overseas Country and Territory Agreement as an example of external support for local development policies; impacts of new information technologies on local culture and traditional values; new economic activities; policies to retain income from natural resource extraction in Arctic communities; provision of education, health and social services in remote areas; policies to promote job opportunities and maintain the viability of traditional livelihoods.

After an introduction by Mr Bertel Haarder, Denmark's Minister for Nordic Co-operation, the Conference heard presentations by four panelists: Ms Lida Skifte Lennert, Head of Department, Ministry of Foreign Affairs, Greenland, Ms Linn Harkess, Programme Manager, EU Commission, Europeaid, Mr Russel Shearer, Director, Northern Science and Contaminants Research, Indian and Northern Af-

fairs, Canada, and Mr Pavel Sulyandziga, First Vice-president, Russian Association of Indigenous Peoples of the North (RAIPON). This material will appear in the Conference Proceedings.

#### Chairman's Conclusion

Having followed the discussion in Panel 4 my conclusion is that the following matters need to be addressed:

4.1 There should be closer cooperation between the EU and the Arctic Council for the benefit of the peoples of the Arctic.

4.2 In the Greenland Overseas Country and Territory (OTC) Programme Document there is special focus on strategic areas that currently lack manpower or where there is a strong development potential: tourism, construction, raw materials, health, social welfare and education. By focusing on these areas the Greenlandic workforce should be better equipped to meet future demands.

4.3 Issues related to the Greenland ice cap, including climate change, should form the core of future Greenland-EU cooperation. Further, a broader cooperation between Greenland and the EU should be developed so that it contributes to the development of Greenland supporting sector policies within the areas of education, mineral resources, energy, tourism, research and culture.

4.4 Many Arctic communities are threatened. If we want to preserve these communities and sustain their development, it is of paramount importance to assist the indigenous peoples to adapt to the current changes; to increase access to education and quality healthcare; and to promote development and implementation of a strategy to accelerate growth of the local economy based on traditional livelihoods, tourism and production of processed goods.

4.5 Indigenous peoples should get further recognition and empowerment to be able to participate in decision-making with respect to natural, economic and social challenges.

4.6 It is of great importance to preserve and develop the use of indigenous peoples' languages in the future. This should be done through the use of modern technology and specially designed programs.

Reference is also made to the Conclusions relating to the other Panels.

**PANEL 5: ARCTIC RESEARCH – SCIENCE AND TRADITIONAL KNOWLEDGE**

Panel 5 had been asked to focus on policies to enhance the impact of Arctic research and access to data and dissemination of research results. Specifically, the panelists were asked to address local participation and the usefulness of scientific research to local communities; combinations with traditional knowledge; the International Polar Year and other major research activities in the Arctic; the need for enhanced circumpolar coordination and access to polar regions for scientific research; options for new forms of joint transnational research cooperation; and policies to ensure sustained funding and of expanded long-term observation and monitoring of Arctic change.

After an introduction by *Dr David Carlson*, Director of the International Polar Year Programme Office, the Conference heard presentations by four panelists: *Dr Paul Egerton*, Director, European Polar Board, *Ms Elisabeth Lipiatou*, Head of Unit, EU Commission, DG Research, *Mr Sven-Roald Nystø*, Special Adviser, Árran Lulesami Centre and The Sami Institutions Network on High North Affairs, Norway, and *Dr Simon Stephenson*, Director of Division, National Science Foundation of the United States. This material will appear in the Conference Proceedings.

*Chairman's Conclusion*

Having followed the discussion in Panel 5 my conclusion is that the following matters need to be addressed:

5.1 An integrated approach to financing and prioritisation of future research themes in the Arctic is required to maximise impact and added value to society.

5.2 There is a need for commitment to connected planning and identification of common research strategies between European states as between those states and non-European Arctic states. The development of European multi-lateral partnerships with common priorities and elements of shared investment should be encouraged.

5.3 A full understanding of the economic consequences and impacts on society from climate change will rely heavily on the most accurate research assessments and scientific evidence collected in the Arctic region.

5.4 The vulnerability and resilience to climate change not only depends on cultural aspects and ecosystem diversity but also on the policies, legal rules and insti-



tutional arrangements that govern social-economic systems and social-ecological systems.

5.5 With the expected increase in the industrialisation and transport in the Arctic due to easier access to natural resources because of climate change, it is necessary to develop and implement common standards concerning indigenous peoples with respect to rights and participation in decision-making to apply to all economic activity in the High North.

5.6 Earth-system research (integrating across disciplines and multiple scales) is important since change in the Arctic can only be understood in a global context.

5.7 Funding across borders for research should be enhanced and new ways of collaboration in his field should be developed.

5.8 An assessment should be made on how data policies could be framed to enhance a free and open exchange of data necessary for environmental and climate research. (Cf. 2.8 and 2.9)

5.9 A re-assessment should be made of the timeliness, relevance and impact of research information on the development of policy.

#### **D. Concluding Discussion**

After the Panels, a Concluding Discussion was held during which the Conference was addressed by *Mr Janos Herman*, Principal Advisor, EU Commission, DG RELEX. Mr Herman's Summary will appear in the Conference Proceedings.

Among the most salient points in Mr Herman's address was his comments relating to the need for replacing outdated and mistaken perceptions about the Arctic in the EU – and about the EU in the Arctic. A key task would be to improve Arctic governance; gaps in environmental governance had been presented very convincingly during the Conference. A framework, preferably Arctic-wide, to regulate fisheries activities is necessary, and so is a regime for managing energy production and transport. Mr Herman also believed that the Conference had clarified the thinking on seals.

With respect to relevant rules, Mr Herman maintained that the United Nations Convention on the Law of the Sea is the cornerstone but that the legal regime can and should be developed further as should Arctic frameworks and organisations. In that context he suggested that one should look at the possibility of the European Commission applying for permanent observer status in the Arctic Council so

that the Commission could play a bigger role and take part more actively in the work of the Council.

Mr. Herman also mentioned that a first step towards addressing all these matters would be a Communication that the Commission will present to the Member States of the European Union in November this year. This Communication will cover all issues related to Arctic cooperation, including an enhanced role for European Union in the Arctic. It will be built around three main tasks: protecting and preserving the Arctic; promoting sustainable exploitation of Arctic resources; and contributing to strengthening Arctic multilateral governance.

Thereafter *the Chairman* closed the Conference by outlining the Conclusions that appear in the present report. He also made reference to “The Arctic” and “Law of the Sea” under “Selected Material” at [www.havc.se](http://www.havc.se).

#### *Chairman’s General Conclusions*

The Opening Remarks and the Keynote Speeches at the Conference testify to the fact that matters relating to the Arctic and the High North must be addressed with determination and in a well structured manner. Even if they may seem self-evident, I nevertheless believe that it is appropriate to close the Conference by drawing the following General Conclusions.

(a) In order to bring about necessary action, matters relating to the Arctic and the High North must be addressed at the highest political level.

(b) The issues discussed at the Conference must be addressed through appropriate institutional arrangements and the adoption of precise legal rules or action plans. Such decision-making depends on well structured information, based on solid research.

(c) Before new rules are contemplated states and international organizations should ensure that the existing legal regime is implemented and that states that have not yet acceded to or otherwise accepted elements of this regime do so.

(d) There is a clear connection between the work to protect the Arctic and the work necessary to develop an effective post 2012 climate regime which is expected to be agreed upon at the Climate Change Conference in Copenhagen in December 2009.

(e) Against this background and in view of the active engagement that the European Union has demonstrated in the field of environment and climate change, it is of utmost importance that the European Union and other major actors get deeply involved in matters relating to the Arctic; because of its impact on the climate of

the earth and human living conditions far outside the High North, the Arctic is of concern to the whole world.

Ilulissat, Greenland, 10 September 2008

*Hans Corell*  
Conference Chairman

ZaöRV 69 (2009)

## EUROPEAN PARLIAMENT RESOLUTION OF 9 OCTOBER 2008 ON ARCTIC GOVERNANCE

P6\_TA(2008)0474

*The European Parliament,*

- having regard to the International Polar Year (March 2007 - March 2009),
- having regard to the Eighth Conference of Arctic Parliamentarians, held in Fairbanks, Alaska from 12 to 14 August 2008,
- having regard to the Commission communication on Arctic policy expected in the autumn of 2008,
- having regard to its earlier resolutions on the Northern Dimension of 16 January 2003<sup>1</sup>, 17 November 2003<sup>2</sup>, 16 November 2005<sup>3</sup> and 16 November 2006<sup>4</sup>
- having regard to the conclusions of the Arctic Climate Impact Assessment report from 2005,
- having regard to Rule 108(5) of its Rules of Procedure,

A. whereas the Commission published a Communication on 10 October 2007 entitled ‘An Integrated Maritime Policy for the European Union’ (COM(2007)0575) (the ‘Blue Book’),

B. whereas on 14 March 2008 the High Representative and the Commission issued a policy paper to the European Council, entitled ‘Climate Change and International Security’,

C. whereas the geopolitical and strategic importance of the Arctic region is growing, as symbolised by the planting of a Russian flag on the sea bed below the North Pole in August 2007,

---

<sup>1</sup> OJ C 38 E, 12.2.2004, p. 283.

<sup>2</sup> OJ C 87 E, 7.4.2004, p. 411.

<sup>3</sup> OJ C 280 E, 18.11.2006, p. 73.

<sup>4</sup> OJ C 314 E, 21.12.2006, p. 25.

D. having regard to the UN Convention on the Law of the Sea (UNCLOS), which has not yet been ratified by the US Senate and which was not formulated with specific regard to the current circumstances of climate change and the unique consequences of melting ice in the Arctic Seas,

E. whereas the recent conference of Arctic parliamentarians brought together elected representatives from the European Parliament, Canada, Denmark, Greenland, Iceland, Finland, Norway, Sweden, Russia and the US, to discuss the issues of maritime safety, health care, environmental protection and sustainable development,

F. whereas the Arctic region is currently not governed by any specifically formulated multilateral norms and regulations, as it was never expected to become a navigable waterway or an area of commercial exploitation,

G. whereas maritime traffic in Arctic waters has increased exponentially in recent years, owing to increased interest in offshore drilling and the ever more frequent passage of cruise ships, as well as the prospects offered by the Northwest Passage,

H. whereas the Arctic region may contain approximately 20 % of the world's undiscovered oil and gas reserves,

I. whereas the Ilulissat Declaration was adopted by the 'A5 countries' (Denmark, Canada, Norway, Russia and the US) in May 2008,

J. whereas the Commission participated fully in the conference on 'The Arctic: Our Common Concern', organised by the Nordic Council of Ministers in Ilulissat (Greenland) on 9 and 10 September 2008, and whereas Parliament notes the chairman's conclusions in respect of that conference,

K. whereas the above-mentioned conference on the Arctic also focused on climate change in the region, its effects on the indigenous populations and possible adaptations to these effects,

L. whereas the rate of global warming in the Arctic region is much higher than in the rest of the world, with an increase of 2 °C in the last hundred years compared to an average of 0,6 °C in the rest of the world,

M. whereas the changes in climatic conditions in the Arctic are already such that the Inuit people, for example, can no longer hunt in the traditional manner, as the ice is too thin to hold their sleds, while wildlife such as polar bears, walrus and foxes are in danger of seeing much of their habitats disappear,

N. whereas three of the EU's Member States, and a further two of the EU's closely-related neighbours participating in the internal market through the EEA Agreement, are Arctic nations, meaning that the EU and its associated states comprise more than half the numeric membership of the Arctic Council,

1. Is deeply concerned at the effects of climate change on the sustainability of the lives of the indigenous peoples in the region, in terms of both the general environment (melting icecap and permafrost, rising sea levels and flooding) and the natural habitat (the retreating icecap poses problems for polar bears' feeding habits), and underlines that any international decisions relating to these issues must fully involve and take account of all peoples and nations of the Arctic;

2. Recalls that during the 20th century, Arctic air temperatures increased by approximately 5 °C, and that this increase is ten times faster than the observed global mean surface temperature; underlines that additional warming of about 4-7 °C in the Arctic is predicted for the next hundred years; believes, therefore, that the time for diagnosis is over and the time for action is now;

3. Underlines that Arctic species and societies have developed highly specialised methods of adaptation to the harsh conditions found at the poles, thus making them extremely vulnerable to dramatic changes in these conditions; is very concerned for walruses, polar bears, seals and other marine mammals which rely on sea-ice for resting, feeding, hunting and breeding, and which are particularly threatened by climate change;

4. Welcomes the concluding conference statement adopted by the Eighth Conference of Arctic Parliamentarians in Fairbanks on 14 August 2008;

5. Welcomes the fact that the 'High North' forms part of the EU's Northern Dimension policy, but is convinced that awareness of the Arctic's importance in a global context needs to be raised further by delivering a standalone EU Arctic policy;

6. Underlines the significance of the Arctic for the global climate in this respect, and hopes that the present support for research activities in that region will be continued beyond the International Polar Year;

7. Awaits with great interest the forthcoming Commission communication on Arctic policy, and hopes that it will lay the foundations for a meaningful EU Arctic policy; calls on the Commission to address, at least, the following issues in its communication:

a) the state of play in relation to climate change, and adaptation to it, in the region;

- b) policy options that respect the indigenous populations and their livelihoods;
- c) the need to cooperate with our Arctic neighbours on cross-border issues, in particular maritime safety; and
- d) options for a future cross-border political or legal structure that could provide for the environmental protection and sustainable orderly development of the region or mediate political disagreement over resources and navigable waterways in the High North;

8. Calls on the Commission to include energy and security policy in the Arctic region on its agenda, and to propose, in particular, in its expected communication on the region, suitable subjects and joint working procedures for the EU and the Arctic countries in the fields of climate change, sustainable development, security of energy supply and maritime safety;

9. Draws attention to the fact that the Arctic region, by virtue of its impact on the world's climate and its singular natural environment, merits special consideration as the EU develops its position for the COP 15 UN Climate Change Conference, due to be held in Copenhagen in 2009;

10. Is of the view that the maritime traffic in the region (both tourist- and offshore drilling-related) does not enjoy anywhere near the level of minimum international safety rules that prevail in other international waters, in terms of either protection of human life or protection of the environment, and urges the Commission to ensure, as soon as possible, that appropriate amendments are made to the International Maritime Organisation (IMO) regulations;

11. Emphasises the external aspects of energy policy and the role of the Arctic in the formulation of the Energy Policy for Europe (EPE), as proposed by the March 2007 European Council;

12. Supports the Arctic Council in maintaining the Arctic region as a region of low tension, open to international research cooperation, so as to allow its potential as a future energy supplier region to be fully developed within a sustainable environmental framework;

13. Remains particularly concerned over the ongoing race for natural resources in the Arctic, which may lead to security threats for the EU and overall international instability;

14. Urges the Commission to take a proactive role in the Arctic by at least, as a first step, taking up 'observer status' on the Arctic Council, and considers that the Commission should set up a dedicated Arctic desk;



15. Suggests that the Commission should be prepared to pursue the opening of international negotiations designed to lead to the adoption of an international treaty for the protection of the Arctic, having as its inspiration the Antarctic Treaty, as supplemented by the Madrid Protocol signed in 1991, but respecting the fundamental difference represented by the populated nature of the Arctic and the consequent rights and needs of the peoples and nations of the Arctic region; believes, however, that as a minimum starting-point such a treaty could at least cover the unpopulated and unclaimed area at the centre of the Arctic Ocean;

16. Instructs its President to forward this resolution to the Council, the Commission, the Governments of the Member States, Norway, Iceland, Russia, Canada and the United States, and the regional cooperation actors.

ZaöRV 69 (2009)

**MONACO CONFERENCE – 9TH – 10TH NOVEMBER 2008  
“THE ARCTIC: OBSERVING THE ENVIRONMENTAL  
CHANGES AND FACING THEIR CHALLENGES”  
FINAL DECLARATION**

The ministers, government representatives and politicians present in Monaco, the representatives of the European institutions and international organisations:

Are aware of the key role played by the Arctic area within the planet’s climate system, as emphasised in the report produced by the Arctic Council and IASC (Arctic Climate Impact Assessment, ACIA) and by the reports of the Intergovernmental Expert Panel on Climate Change (IPCC);

Have listened with interest to the presentation of the findings of the scientific experts on major changes affecting the environment in the Northern high latitudes, a particularly vulnerable and unique area from an ecological point of view, and on the social, economic and cultural consequences of these changes;

Are aware of the legitimate interests of Arctic indigenous peoples and other Arctic residents, to be fully involved in issues and processes which are of importance to them;

Are concerned not only by the latest regional effects of the summer melting of the sea ice – as the sea ice extent has reached its lowest level in the Summer of 2007 and its disappearance in summer is feared in little more than a decade –, but also by the reducing mass of glaciers and ice sheets which has consequences on the rise of the sea level;

Are very concerned by the impact of these phenomena on global climate change;

Are also aware of the feedbacks on the Arctic ecosystem from climate change, living resources exploitation, chemical contamination from long range transport and invasion of alien species;

Have recognised the essential contribution of research, observation and monitoring for understanding and predicting the evolution of the Arctic environment and climate, including the impact on biodiversity and the effect of diffusion and contamination by chemicals, thus providing complete and useful information to inform political decision-making at national and international levels;

ZaöRV 69 (2009)

Have re-stated the need to act collectively to address these challenges through a global agreement on climate change in COP 15 Copenhagen;

Are pleased with the results of the collaborative international scientific work during the International Polar Year (2007-2008) (IPY) presented at the Conference and call for further development and intensification of this work.

In this respect, have taken note of the appeal of the scientists and qualified experts who have spoken during the Conference, on the need to:

- Uphold the impetus launched by the International Polar Year 2007-2008 (IPY) and capitalise on the momentum created by consolidating and sustaining the mobilisation of scientific research and monitoring initiatives;

- Have access to long term, reliable, unbroken data sets with pan-Arctic extent, that will enable efficient and effective analysis of Arctic changes for policymaking;

- Take into account an interdisciplinary approach making the link between the different observations: physical, biological, chemical, and including social sciences, with the participation of Arctic indigenous peoples and Arctic residents, in order to better understand and predict the changes under way and to accurately reflect the complexity of the Arctic system;

- Make an important European contribution to support the future of the international Sustaining Arctic Observing Networks (SAON) process, which will deliver recommendations at the Ministerial Meeting of the Arctic Council in April 2009 and to a wider group of stake-holders;

- Invite the European countries to take full part in the ongoing Arctic Council monitoring and assessment networks and programmes (AMAP, CAFF and SDWG) and to provide scientific data to their thematic data centres, as a way to enhance the cooperation and integration among European and Arctic monitoring and research stations;

- Work towards the creation of a European coordination framework to harmonise and optimise the gathering and the use of scientific data in the Arctic and link these data with other data in the pan-Arctic SAON framework, based for example on the process begun through the European Polar Consortium (ERA-NET) and the European Polar Board aiming at setting up a network to improve cooperation and interaction among European scientific monitoring stations;

- Encourage synergies among existing infrastructures for Arctic observation and promote exploration of new observation platforms;

- Underline the importance of facilitating access to research sites in the Arctic;
- Make full benefit of the strong existing networks of EU, UN and internationally supported observation programmes such as the Global Terrestrial Observing System (GTOS), the Global Climate Observing System (GCOS) and the Global Ocean Observing System (GOOS) and other observation programmes to work towards integration of observations in the Arctic Ocean and the surrounding terrestrial areas and to support related global efforts such as GEO/GEOSS and the EU Copernicus programme to improve Earth observation capabilities;
- Consider the opening up of the existing reporting and information network, EIONET (European information and observing network) to include all countries collecting relevant information in the Arctic;
- Have sufficient financial and human resources available.

The ministers, government representatives and politicians present in Monaco, the representatives of the European institutions and international organisations are ready to work towards fulfilling these ambitions and pushing them forward within the appropriate regional and international bodies.

The French Presidency of the Council of the European Union will ensure the promotion of this initiative and will hand it over to the Czech and Swedish presidencies within the framework of the work programme of the three presidencies of the Council of the European Union (second semester 2008 to end 2009).

ZaöRV 69 (2009)

COMMISSION OF THE EUROPEAN COMMUNITIES  
Brussels, 20.11.2008  
COM(2008) 763 final

## COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL

### THE EUROPEAN UNION AND THE ARCTIC REGION

#### 1. INTRODUCTION

The European Union is inextricably linked to the Arctic region<sup>1</sup> (hereafter referred to as the Arctic) by a unique combination of history, geography, economy and scientific achievements.

Three Member States – Denmark (Greenland), Finland and Sweden – have territories in the Arctic. Two other Arctic states – Iceland and Norway – are members of the European Economic Area<sup>2</sup>. Canada, Russia and the United States are strategic partners of the EU. European Arctic areas are a priority in the Northern Dimension policy<sup>3</sup>. Beyond areas of national jurisdiction, the Arctic Ocean contains parts pertaining to the high seas and the seabed managed by the International Seabed Authority.

The vast sea and land spaces of the Arctic region are vital and vulnerable components of the Earth's environment and climate system. Arctic air temperatures have been increasing twice as much as the global average<sup>4</sup>. Coverage of sea ice, snow cover and permafrost have been decreasing rapidly, triggering strong feedback mechanisms that accelerate global warming. Accelerated loss from the Greenland ice sheet would raise sea levels rapidly and considerably.

---

<sup>1</sup> The notion "Arctic region" used in this Communication covers the area around the North Pole north of the Arctic Circle. It includes the Arctic Ocean and territories of the eight Arctic states: Canada, Denmark (including Greenland), Finland, Iceland, Norway, Russia, Sweden and the United States.

<sup>2</sup> Provisions of the EEA Agreement ensure full participation of the EEA EFTA countries in the Internal Market and in these respects allow for cooperation in fields such as environment, research, tourism and civil protection, all of great importance for the Arctic.

<sup>3</sup> The Northern Dimension is a shared policy among its four partners: the European Union, Iceland, Norway and Russia, promoting stability, prosperity and sustainable development.

<sup>4</sup> Arctic Council finding (2005), confirmed by later measurements.

In spite of harsh conditions, melting of ice and new technologies will gradually increase access to Arctic living and non-living resources as well as to new navigation routes. Although the Arctic remains one of the most pristine areas on Earth, it will be increasingly at risk from the combined effects of climate change and increased human activity.

EU policies in areas such as environment, climate change, energy, research, transport and fisheries have a direct bearing on the Arctic. It is a fundamental premise of the EU's Integrated Maritime Policy that each sea-region is unique and needs individual attention in balancing its uses in a sustainable manner.

In view of the role of climate change as a "threats multiplier", the Commission and the High Representative for the Common Foreign and Security Policy have pointed out that environmental changes are altering the geo-strategic dynamics of the Arctic with potential consequences for international stability and European security interests calling for the development of an EU Arctic policy<sup>5</sup>. On the whole, Arctic challenges and opportunities will have significant repercussions on the life of European citizens for generations to come. It is imperative for the European Union to address them in a coordinated and systematic manner, in cooperation with Arctic states, territories and other stakeholders. This Communication sets out EU interests and proposes action for EU Member States and institutions around three main policy objectives:

- Protecting and preserving the Arctic in unison with its population
- Promoting sustainable use of resources
- Contributing to enhanced Arctic multilateral governance

## **2. PROTECTING AND PRESERVING THE ARCTIC IN UNISON WITH ITS POPULATION**

### **2.1. Environment and climate change**

Activities in EU Member States – as most other countries – leave an environmental footprint in the Arctic. Addressing the root causes of Arctic changes requires a global response. Impacts resulting from climate change represent a challenge of paramount importance for the region at present and also for the future. The EU is a leader in fighting climate change and in promoting sustainable development.

---

<sup>5</sup> Climate change and international security, joint policy paper of 14 March 2008 to the European Council.



EU Member States and the European Community are parties to most multilateral environmental agreements of fundamental importance for the Arctic. European industries are in the front line in developing technologies for safe and sustainable operations in harsh conditions – on land, in coastal zones and offshore.

While the Arctic environment is particularly vulnerable, the low population and infrastructure density make emergency response management extremely difficult.

*Policy objectives*

The main goal must be to prevent and mitigate the negative impact of climate change as well as to support adaptation to inevitable changes. Prevention and mitigation action should also concern other global and trans-boundary processes with negative impacts in the Arctic, such as long-range transport of pollutants. This should be complemented by developing a holistic, ecosystem-based management of human activities, ensuring that the latter are administered in a sustainable way, integrating environmental considerations at all levels. There is a need to improve emergency response management.

*Proposals for action:*

- Assess the effectiveness of EU policies and of multilateral environmental agreements in responding to Arctic environmental challenges.
- Strengthen international efforts to mitigate climate change and identify areas where support for adaptation to the effects of climate change needs to be provided, including the adaptive management of biodiversity.
- Promote permanent dialogue with NGOs on the state of the environment in the Arctic region.
- Coordinate efforts with Arctic states, territories and other stakeholders promoting high environmental standards. Enhance ecosystem-based marine management in the Arctic Ocean by sharing EU experience with the Arctic states.
- Where strategies and projects of the EU affect the Arctic, take account of environmental impacts before decisions are made. Promote the use of impact assessments of projects, plans and programmes affecting the Arctic environment, including strategic environmental assessments, and share experience with the Arctic states.
- Support screening and monitoring of chemicals in the Arctic. Step up efforts to reduce pollution of the Arctic by persistent organic pollutants, heavy metals and other contaminants, including those from land-based sources. Continue suppor-

ting the destruction of stocks of harmful chemicals and the reduction of the risk of radioactive release in the Arctic.

– Pursue cooperation on prevention, preparedness and disaster response. The Commission's Monitoring and Information Centre can contribute to enhancing EU disaster response capacity in the Arctic. The Commission will support concluding an agreement on emergency prevention and response in the Barents Euro-Arctic Council (BEAC)<sup>6</sup>.

– Strengthen cooperation on improving primary energy savings, energy efficiency and the use of renewable energies in the Arctic.

– Contribute to assessing the impact on marine mammals of increased acoustic noise generated by human activities.

## 2.2. Support to indigenous peoples and local population

About a third of the 4 million people living in the Arctic are indigenous. They are particularly vulnerable to the increasing pressures of climate change and globalisation.

### *Policy objectives*

Arctic indigenous peoples in the EU are protected by special provisions under European Community Law<sup>7</sup>. A key principle of the Joint Statement on EU development policy<sup>8</sup> is the full participation and free, informed consent of indigenous peoples. EU regional policy and cross-border programmes also benefit indigenous peoples, whose organisations participate in the Northern Dimension. Rights of indigenous peoples are a thematic priority under the European Initiative for Democracy and Human Rights.

Hunting marine mammals has been crucial for the subsistence of Arctic populations since prehistoric times and the right to maintain their traditional livelihood is clearly recognised. However, modern human activities have put certain of these species in danger and there is growing concern in the EU about animal welfare. EU policies should continue to take all factors into account, seeking an open dialogue with the communities concerned.

### *Proposals for action:*

---

<sup>6</sup> Forum for intergovernmental cooperation in the Barents region.

<sup>7</sup> Protocol 3 to the Act of Accession of Sweden and Finland.

<sup>8</sup> Adopted by the Council, the Parliament and the Commission in 2005.

- Engage Arctic indigenous peoples in a regular dialogue.
- Provide opportunities for self-driven development and the protection of their lifestyle.
- Support in particular the organisations and activities of the Saami and of other peoples of the European Arctic, *inter alia* under regional and cross-border programmes. Promote Northern European know-how in reindeer husbandry.
- Continue efforts ensuring effective protection of whales especially within the framework of the International Whaling Commission (IWC), including in the Arctic context. Support proposals for the management of indigenous subsistence whaling, provided that conservation is not compromised, whaling operations are properly regulated and catches remain within the scope of documented and recognised subsistence needs.
- Conduct dialogues with indigenous and other local communities traditionally engaged in the hunting of seals.
- The Community is currently considering banning the placing on the market, import, transit and export of seal products. However, this should not adversely affect the fundamental economic and social interests of indigenous communities traditionally engaged in the hunting of seals. Under the terms of the Proposal for a Regulation of the European Parliament and of the Council concerning trade in seal products<sup>9</sup>, seal products resulting from hunts traditionally conducted by Inuit communities which contribute to their subsistence are exempted. The proposal also foresees that trade is allowed in other cases where certain requirements are met regarding the manner and method whereby seals are killed and skinned. The Commission's dialogue with the indigenous communities concerned will aim to facilitate the practical implementation of these provisions.

### 2.3. Research, monitoring and assessments

Policy responses should be based on assessments using the best available knowledge and understanding of the processes affecting the Arctic. The Arctic Council<sup>10</sup> has wide research programmes and publishes valuable assessments.

EU Member States and the European Community are major contributors to Arctic research<sup>11</sup>. The current Seventh Community Framework Programme

---

<sup>9</sup> COM(2008) 469, 23.7.2008.

<sup>10</sup> The Arctic Council is an intergovernmental forum promoting cooperation among Arctic states involving indigenous communities.

addresses new projects and large international undertakings dealing with Arctic-related research. The European Polar Board seeks to harmonise and maximise the impact of European polar research. The European Environment Agency has made a series of assessments, building on the work of the Arctic Council.

Nevertheless, long-term monitoring, coordination and data availability remain insufficient for Arctic research.

#### *Policy objectives*

The European Community should maintain the Arctic as a priority area for research to close knowledge gaps and assess future anthropogenic impacts, especially in the area of climate change. Moreover, it should strengthen international cooperation and interoperability and contribute to designing concrete steps for prevention, mitigation and adaptation.

#### *Proposals for action:*

- Develop further research programmes dealing with sea-level rise, loss of sea ice and melting permafrost as well as related feedbacks leading to accelerated warming and having other anthropogenic impacts on the Arctic ecosystems.

- Assess the state and evolution of the Arctic environment in order to contribute to the formulation of appropriate EU policies.

- Create new research infrastructure and enhance monitoring and surveillance capabilities. Contribute to the completion of the Aurora Borealis research icebreaker project.

- Coordinate efforts in different research areas relevant to the Arctic such as environment, transport, health and energy, as well as develop Arctic technologies.

- Ensure continuity in space measurements via GMES<sup>12</sup>. Support long-term measurements and reporting of marine data through the European Marine Observation and Data Network. Contribute to establishing the Arctic component of Global Earth Observing System of Systems.

- Develop enhanced, broad international information exchange on research projects and facilitate coordination of national programmes. Thus the EU should

---

<sup>11</sup> Past Community Framework Programmes (FP5 and FP6) provided support to more than 50 polar-related projects. This includes DAMOCLES, the largest contribution to the International Polar Year. Within FP6 the Arctic-related budget reached € 86 million.

<sup>12</sup> GMES (Global Monitoring for Environment and Security) is an EU initiative aiming at delivering sustainable and fully reliable information services based on Earth observation capacities.

contribute to supporting the establishment of the Sustained Arctic Observing Network.

– Ensure open access to information from Arctic monitoring and research based on the principle of the Shared Environmental Information System. Facilitate and support outreach to the broader public.

### 3. PROMOTING SUSTAINABLE USE OF RESOURCES

#### 3.1. Hydrocarbons

The Arctic contains large untapped hydrocarbon reserves<sup>13</sup>. Known Arctic offshore resources are located inside the Exclusive Economic Zone of Arctic states. Arctic resources could contribute to enhancing the EU's security of supply concerning energy and raw materials in general<sup>14</sup>. However, exploitation will be slow, since it presents great challenges and entails high costs due to harsh conditions and multiple environmental risks.

##### *Policy objectives*

Support for the exploitation of Arctic hydrocarbon resources should be provided in full respect of strict environmental standards taking into account the particular vulnerability of the Arctic. The EU edge in technologies for sustainable exploitation of resources in polar conditions should be maintained.

##### *Proposals for action:*

– Work to strengthen the foundations for long-term cooperation, particularly with Norway and the Russian Federation, facilitating the sustainable and environmentally friendly exploration, extraction and transportation of Arctic hydrocarbon resources. As elsewhere, the guiding principles will be a level playing field and reciprocal market access.

– Encourage the observance of the highest possible environmental standards. Press for the introduction of binding international standards, building *inter alia* on the guidelines of the Arctic Council and relevant international conventions.

---

<sup>13</sup> Cf. Wood Mackenzie and Fugro Robertson: "Future of the Arctic, A new dawn for exploration" and assessments from the U.S. Geological Survey. It is important to note that estimates are based on surveys; further in-depth research is needed for more accuracy.

<sup>14</sup> On 4 November 2008, the Commission adopted a Communication on "The raw materials initiative – meeting our critical needs for growth and jobs in Europe" COM(2008) 699.

- Promote further research and development in offshore technology and infrastructures. Build on experience accumulated in European industry in offshore oil and gas exploitation. Facilitate further research and innovation as emphasis shifts to even harsher climates and deeper waters.

- Encourage the growth of maritime clusters where universities and research centres can provide trained staff and research facilities to smaller companies. Much of the innovation will be driven by small and medium-sized enterprises in regional clusters.

- Assess possibilities of endorsing the guidelines for oil and gas exploitation drafted by the Arctic Council.

### 3.2. Fisheries

The only significant Arctic fisheries occur at present in the Barents Sea and to the east and south of the Norwegian Sea. Nonetheless, climate change might bring increased productivity in some fish stocks and changes in spatial distributions of others. New areas may become attractive for fishing with increased access due to reduced sea ice coverage. For some of the Arctic high seas waters there is not yet an international conservation and management regime in place. This might lead to unregulated fisheries.

The EU is among the most important consumers of Arctic fish, of which only a small part is caught by Community vessels. The European Community is a member of the North East Atlantic Fisheries Commission (NEAFC). It cooperates fully with states with sovereignty or jurisdiction in Arctic waters, seeking not only to ensure fishing opportunities, but also to guarantee long-term conservation and optimum utilisation of fishery resources.

#### *Policy objective*

The EU's main objective is to ensure exploitation of Arctic fisheries resources at sustainable levels whilst respecting the rights of local coastal communities.

#### *Proposals for action:*

- Put in place a regulatory framework for the part of the Arctic high seas not yet covered by an international conservation and management regime before new fishing opportunities arise. This will prevent fisheries developing in a regulatory vacuum, and will ensure fair and transparent management of fisheries in accordance with the Code of Conduct for Responsible Fishing. In principle, extending the mandate of existing management organisations such as NEAFC is preferable to

creating new ones. Until a conservation and management regime is in place for the areas not yet covered by such a regime, no new fisheries should commence.

### 3.3. Transport

EU Member States have the world's largest merchant fleet and many of those ships use transoceanic routes. The melting of sea ice is progressively opening opportunities to navigate on routes through Arctic waters. This could considerably shorten trips from Europe to the Pacific, save energy, reduce emissions, promote trade and diminish pressure on the main trans-continental navigation channels. But serious obstacles remain, including drift ice, lack of infrastructure, environmental risks and uncertainties about future trade patterns. Hence the development of Arctic commercial navigation will require time and effort.

#### *Policy objectives*

It is in the EU's interest to explore and improve conditions for gradually introducing Arctic commercial navigation, while promoting stricter safety and environmental standards as well as avoiding detrimental effects.

By the same token, Member States and the Community should defend the principle of freedom of navigation and the right of innocent passage in the newly opened routes and areas.

#### *Proposals for action:*

– Promote the full implementation of existing obligations concerning navigation rules, maritime safety, routes system and environmental standards in the Arctic, in particular those under the International Maritime Organisation (IMO).

– Stress the need to avoid discriminatory practices (in particular in terms of fees, obligatory services, regulations) by any of the Arctic coastal states towards third countries' merchant ships.

– Improve maritime surveillance capabilities in the far North. The Commission together with the European Space Agency is exploring a polar-orbiting satellite system that can pick up signals from anywhere on the globe. If successful, this would allow better knowledge of ship traffic and faster reactions to emergencies. The Galileo satellite navigation system will also play an important role in the Arctic for better and safer navigation, maritime surveillance and emergency response.

– Within the applicable rules of competition law, maintain the competitive lead of European shipyards in developing technology required for Arctic conditions<sup>15</sup>. The potential to provide specially-designed, environment-friendly ships, including ice-breakers, is an important asset for the future.

– Explore support for designating some Arctic navigation routes as particularly sensitive sea areas under IMO rules, if proposed by any of the Arctic coastal states.

– Support any further work to enhance IMO environmental and safety standards applicable to Arctic waters.

In the field of land and air transport in European Arctic areas the main aim should be the development of East-West land and air transport infrastructures. The establishment of a Northern Dimension Partnership on Transport and Logistics will further support better land connections between the EU and North-West Russia, which are important for the future development of the area.

### 3.4. Tourism

Arctic tourism, especially cruise ship tourism, is developing rapidly, but several accidents have demonstrated associated risks.

#### *Policy objectives*

The EU should continue to support sustainable Arctic tourism, welcoming the efforts made to minimise its environmental footprint. Protection of the environment and benefits to local coastal communities should be primary considerations.

#### *Proposals for action:*

– Support increasing the safety of cruise ships, better guiding, restriction of access to highly vulnerable areas.

– Encourage environmentally friendly tourism, involving local communities.

---

<sup>15</sup> In shipbuilding, ship repair and conversion, marine equipment and design, such as the unique Double Acting Ship with the bow optimised for open water conditions and the stern designed for ice-breaking. Dredging of Arctic ports is another field.



#### 4. CONTRIBUTING TO ENHANCED ARCTIC MULTILATERAL GOVERNANCE

There is no specific treaty regime for the Arctic. No country or group of countries have sovereignty over the North Pole or the Arctic Ocean around it. There are several maritime borders where Arctic coastal states have not agreed upon the delimitation of Exclusive Economic Zones<sup>16</sup>. Submissions to the UN Commission on the Limits of the Continental Shelf may result in overlapping claims<sup>17</sup>. Moreover, there are different interpretations of the conditions for passage of ships in some Arctic waters, especially in the Northwest Passage<sup>18</sup>.

An extensive international legal framework is already in place that also applies to the Arctic. The provisions of the UN Convention on the Law of the Sea (UNCLOS)<sup>19</sup> provide the basis for the settlement of disputes including delimitation. UNCLOS also contains rules for the use of living and non-living resources and the protection of the environment. Moreover, there is a long range of multilateral environmental agreements applying to the Arctic, frequently without comprising specific references to it.

In May 2008 five Arctic Ocean coastal states adopted a Declaration<sup>20</sup> stating that they remain committed to the legal framework in place and to the orderly settlement of any overlapping claims. Since then, several of them have announced steps extending or affirming their national jurisdiction and strengthening their Arctic presence.

The Arctic Council has been successful in preparing assessments, developing a regional identity and setting the Arctic agenda. Along with the BEAC and the Nordic Council of Ministers<sup>21</sup>, it is a participant in the Northern Dimension.

---

<sup>16</sup> Five bilateral delimitations have been negotiated. Unresolved are: Russia vs Norway in the Barents Sea, US vs Russia in the Bering Strait and US vs Canada in the Beaufort Sea. Canada and Denmark have a dispute over Hans Island. In addition, Norway and several countries, including EU Member States, interpret the applicability of the Svalbard Treaty in the 200 nm area around this archipelago differently.

<sup>17</sup> In 2001 Russia submitted a claim for a large portion of the Arctic, including the North Pole. Norway also submitted a claim; Denmark and Canada intend to establish claims.

<sup>18</sup> The dispute involves both the delimitation of Canada's internal waters where they can fully regulate trespassing, and the right of Canada to adopt and enforce laws to prevent pollution from vessels in ice-covered waters.

<sup>19</sup> 19 All Arctic states (except for the US), all EU Member States and the Community are parties to UNCLOS.

<sup>20</sup> The Ilulissat Declaration of the Arctic Ocean Conference of 28 May 2008.

<sup>21</sup> The Nordic Council of Ministers does valuable work promoting Arctic cooperation.

The European Parliament has recently highlighted the importance of Arctic governance and called for a standalone EU Arctic policy urging the Commission to take a proactive role in the Arctic<sup>22</sup>. The parliamentary dimension of Arctic cooperation is crucial to raise awareness and to strengthen policy input. The European Parliament has been playing a valuable role in this respect.

The European Investment Bank can support investments in parts of the Arctic region, in accordance with its mandates, especially in the sectors of environment, transport, energy and research infrastructures.

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.

#### *Policy objectives*

– The EU should work to uphold the further development of a cooperative Arctic governance system based on the UNCLOS which would ensure:

- security and stability
- strict environmental management, including respect of the precautionary principle
- sustainable use of resources as well as open and equitable access

– The full implementation of already existing obligations, rather than proposing new legal instruments should be advocated. This however should not preclude work on further developing some of the frameworks, adapting them to new conditions or Arctic specificities.

– The EU should promote broad dialogue and negotiated solutions and not support arrangements which exclude any of the Arctic EU Member States or Arctic EEA EFTA countries.

– Arctic considerations should be integrated into wider EU policies and negotiations.

#### *Proposals for action:*

---

<sup>22</sup> Resolution of 9 October 2008 on Arctic governance.

- Assess the effectiveness of Arctic-relevant multilateral agreements to determine whether additional initiatives or measures are needed. Closely follow the processes of maritime delimitation and of the establishment of the outer limits of the continental shelves to assess their impacts on EU interests.
- Explore the possibility of establishing new, multi-sector frameworks for integrated ecosystem management. This could include the establishment of a network of marine protected areas, navigational measures and rules for ensuring the sustainable exploitation of minerals.
- Enhance input to the Arctic Council in accordance with the Community's role and potential. As a first step, the Commission will apply for permanent observer status in the Arctic Council.
- Suggest that Northern Dimension partners hold regular discussions about Arctic issues and examine possibilities for projects under the Northern Dimension Environmental Partnership to cover wider areas in the European Arctic. Efforts in the area of energy efficiency and under new Northern Dimension partnerships will have great relevance for Arctic cooperation.
- Launch a reflection on possibilities for further development of Arctic-related cross-border cooperation and regional programmes to enhance cooperation with the Arctic states.
- Explore all possibilities at international level to promote measures for protecting marine biodiversity in areas beyond national jurisdiction, including through the pursuit of an UNCLOS Implementing Agreement.
- Work towards the successful conclusion of international negotiations on marine protected areas on the high seas.
- Discuss with Norway and Iceland how the Marine Strategy Framework Directive will be integrated into the EEA Agreement and thus apply to a part of the Arctic Ocean.
- Include Arctic matters in future high-level dialogue meetings on maritime affairs.
- Provide an overview of all the EU's relevant Arctic-related activities on the thematic website on Maritime Affairs, and promote dialogue with stakeholders on these activities.
- Explore – together with the Nordic countries – possibilities for creating a European Arctic Information Centre.

- Establish closer links with Arctic education networks.

#### *Greenland*

Being part of Denmark, Greenland is one of the Overseas Countries Territories (OCTs) associated to the Community. Significant Community financial assistance is provided to Greenland through Annual Action Programmes<sup>23</sup>.

#### *Proposal for action:*

- Enhance Arctic-related cooperation with Greenland. Additional efforts should be envisaged to make the EU an even more important partner for Greenland in managing its fragile environment and the challenges confronting its population<sup>24</sup>.

## 5. CONCLUSION

The suggestions contained in this Communication aim to provide the basis for a more detailed reflection. This will be useful for implementing the EU's strategic initiatives, including the Integrated Maritime Policy. The present Communication should also lead to a structured and coordinated approach to Arctic matters, as the first layer of an Arctic policy for the European Union. This will open new cooperation perspectives with the Arctic states, helping all of us to increase stability and to establish the right balance between the priority goal of preserving the Arctic environment and the need for sustainable use of resources.

---

<sup>23</sup> In the period 2007-2013, financial assistance of up to € 25 million per year is allocated to Annual Action Programmes in support of the education and vocational training sector. Additionally, € 15.8 million per year is devoted to fisheries.

<sup>24</sup> Having regard to the Commission Green Paper on Future relations between EU and OCTs - COM(2008) 383.

**NATIONAL SECURITY PRESIDENTIAL DIRECTIVE  
AND HOMELAND SECURITY PRESIDENTIAL  
DIRECTIVE**

January 9, 2009

NATIONAL SECURITY PRESIDENTIAL DIRECTIVE/NSPD – 66  
HOMELAND SECURITY PRESIDENTIAL DIRECTIVE/HSPD –

25

Memorandum for the Vice President  
The Secretary of State  
The Secretary of The Treasury  
The Secretary of Defense  
The Attorney General  
The Secretary of The Interior  
The Secretary of Commerce  
The Secretary of Health and Human Services  
The Secretary of Transportation  
The Secretary of Energy  
The Secretary of Homeland Security  
Assistant to the President and Chief of Staff  
Administrator of the Environmental Protection Agency  
Director of the Office of Management and Budget  
Director of National Intelligence  
Assistant to the President for National Security Affairs  
Counsel to the President  
Assistant to the President and Deputy National Security Advisor for International  
Economic Affairs  
Assistant to the President for Homeland Security and Counterterrorism  
Chairman, Council on Environmental Quality  
Director of the Office of Science and Technology Policy  
Chairman of the Joint Chiefs of Staff  
Commandant, U.S. Coast Guard  
Director, National Science Foundation

SUBJECT: Arctic Region Policy

ZaöRV 69 (2009)

## **I. PURPOSE**

A. This directive establishes the policy of the United States with respect to the Arctic region and directs related implementation actions. This directive supersedes Presidential Decision Directive/NSC-26 (PDD-26; issued 1994) with respect to Arctic policy but not Antarctic policy; PDD-26 remains in effect for Antarctic policy only.

B. This directive shall be implemented in a manner consistent with the Constitution and laws of the United States, with the obligations of the United States under the treaties and other international agreements to which the United States is a party, and with customary international law as recognized by the United States, including with respect to the law of the sea.

## **II. BACKGROUND**

A. The United States is an Arctic nation, with varied and compelling interests in that region. This directive takes into account several developments, including, among others:

1. Altered national policies on homeland security and defense;
2. The effects of climate change and increasing human activity in the Arctic region;
3. The establishment and ongoing work of the Arctic Council; and
4. A growing awareness that the Arctic region is both fragile and rich in resources.

## **III. POLICY**

**A. It is the policy of the United States to:**

1. Meet national security and homeland security needs relevant to the Arctic region;  
Protect the Arctic environment and conserve its biological resources;
2. Ensure that natural resource management and economic development in the region are environmentally sustainable;

3. Strengthen institutions for cooperation among the eight Arctic nations (the United States, Canada, Denmark, Finland, Iceland, Norway, the Russian Federation, and Sweden);
4. Involve the Arctic's indigenous communities in decisions that affect them; and
5. Enhance scientific monitoring and research into local, regional, and global environmental issues.

## **B. National Security and Homeland Security Interests in the Arctic**

1. The United States has broad and fundamental national security interests in the Arctic region and is prepared to operate either independently or in conjunction with other states to safeguard these interests. These interests include such matters as missile defense and early warning; deployment of sea and air systems for strategic sealift, strategic deterrence, maritime presence, and maritime security operations; and ensuring freedom of navigation and overflight.

2. The United States also has fundamental homeland security interests in preventing terrorist attacks and mitigating those criminal or hostile acts that could increase the United States vulnerability to terrorism in the Arctic region.

3. The Arctic region is primarily a maritime domain; as such, existing policies and authorities relating to maritime areas continue to apply, including those relating to law enforcement.<sup>1</sup> Human activity in the Arctic region is increasing and is projected to increase further in coming years. This requires the United States to assert a more active and influential national presence to protect its Arctic interests and to project sea power throughout the region.

4. The United States exercises authority in accordance with lawful claims of United States sovereignty, sovereign rights, and jurisdiction in the Arctic region, including sovereignty within the territorial sea, sovereign rights and jurisdiction within the United States exclusive economic zone and on the continental shelf, and appropriate control in the United States contiguous zone.

5. Freedom of the seas is a top national priority. The Northwest Passage is a strait used for international navigation, and the Northern Sea Route includes straits used for international navigation; the regime of transit passage applies to passage through those straits. Preserving the rights and duties relating to navigation and

---

<sup>1</sup> These policies and authorities include Freedom of Navigation (PDD/NSC-32), the U.S. Policy on Protecting the Ocean Environment (PDD/NSC-36), Maritime Security Policy (NSPD-41/HSPD-13), and the National Strategy for Maritime Security (NSMS).

overflight in the Arctic region supports our ability to exercise these rights throughout the world, including through strategic straits.

6. Implementation: In carrying out this policy as it relates to national security and homeland security interests in the Arctic, the Secretaries of State, Defense, and Homeland Security, in coordination with heads of other relevant executive departments and agencies, shall:

- a. Develop greater capabilities and capacity, as necessary, to protect United States air, land, and sea borders in the Arctic region;
- b. Increase Arctic maritime domain awareness in order to protect maritime commerce, critical infrastructure, and key resources;
- c. Preserve the global mobility of United States military and civilian vessels and aircraft throughout the Arctic region;
- d. Project a sovereign United States maritime presence in the Arctic in support of essential United States interests; and
- e. Encourage the peaceful resolution of disputes in the Arctic region.

### C. International Governance

1. The United States participates in a variety of fora, international organizations, and bilateral contacts that promote United States interests in the Arctic. These include the Arctic Council, the International Maritime Organization (IMO), wildlife conservation and management agreements, and many other mechanisms. As the Arctic changes and human activity in the region increases, the United States and other governments should consider, as appropriate, new international arrangements or enhancements to existing arrangements.

2. The Arctic Council has produced positive results for the United States by working within its limited mandate of environmental protection and sustainable development. Its subsidiary bodies, with help from many United States agencies, have developed and undertaken projects on a wide range of topics. The Council also provides a beneficial venue for interaction with indigenous groups. It is the position of the United States that the Arctic Council should remain a high-level forum devoted to issues within its current mandate and not be transformed into a formal international organization, particularly one with assessed contributions. The United States is nevertheless open to updating the structure of the Council, including consolidation of, or making operational changes to, its subsidiary bodies,



to the extent such changes can clearly improve the Council's work and are consistent with the general mandate of the Council.

3. The geopolitical circumstances of the Arctic region differ sufficiently from those of the Antarctic region such that an "Arctic Treaty" of broad scope – along the lines of the Antarctic Treaty – is not appropriate or necessary.

4. The Senate should act favorably on U.S. accession to the U.N. Convention on the Law of the Sea promptly, to protect and advance U.S. interests, including with respect to the Arctic. Joining will serve the national security interests of the United States, including the maritime mobility of our Armed Forces worldwide. It will secure U.S. sovereign rights over extensive marine areas, including the valuable natural resources they contain. Accession will promote U.S. interests in the environmental health of the oceans. And it will give the United States a seat at the table when the rights that are vital to our interests are debated and interpreted.

5. Implementation: In carrying out this policy as it relates to international governance, the Secretary of State, in coordination with heads of other relevant executive departments and agencies, shall:

- a. Continue to cooperate with other countries on Arctic issues through the United Nations (U.N.) and its specialized agencies, as well as through treaties such as the U.N. Framework Convention on Climate Change, the Convention on International Trade in Endangered Species of Wild Fauna and Flora, the Convention on Long Range Transboundary Air Pollution and its protocols, and the Montreal Protocol on Substances that Deplete the Ozone Layer;
- b. Consider, as appropriate, new or enhanced international arrangements for the Arctic to address issues likely to arise from expected increases in human activity in that region, including shipping, local development and subsistence, exploitation of living marine resources, development of energy and other resources, and tourism;
- c. Review Arctic Council policy recommendations developed within the ambit of the Council's scientific reviews and ensure the policy recommendations are subject to review by Arctic governments; and
- d. Continue to seek advice and consent of the United States Senate to accede to the 1982 Law of the Sea Convention.

#### **D. Extended Continental Shelf and Boundary Issues**

1. Defining with certainty the area of the Arctic seabed and subsoil in which the United States may exercise its sovereign rights over natural resources such as oil, natural gas, methane hydrates, minerals, and living marine species is critical to our

national interests in energy security, resource management, and environmental protection. The most effective way to achieve international recognition and legal certainty for our extended continental shelf is through the procedure available to States Parties to the U.N. Convention on the Law of the Sea.

2. The United States and Canada have an unresolved boundary in the Beaufort Sea. United States policy recognizes a boundary in this area based on equidistance. The United States recognizes that the boundary area may contain oil, natural gas, and other resources.

3. The United States and Russia are abiding by the terms of a maritime boundary treaty concluded in 1990, pending its entry into force. The United States is prepared to enter the agreement into force once ratified by the Russian Federation.

4. Implementation: In carrying out this policy as it relates to extended continental shelf and boundary issues, the Secretary of State, in coordination with heads of other relevant executive departments and agencies, shall:

- a. Take all actions necessary to establish the outer limit of the continental shelf appertaining to the United States, in the Arctic and in other regions, to the fullest extent permitted under international law;
- b. Consider the conservation and management of natural resources during the process of delimiting the extended continental shelf; and
- c. Continue to urge the Russian Federation to ratify the 1990 United States-Russia maritime boundary agreement.

## **E. Promoting International Scientific Cooperation**

1. Scientific research is vital for the promotion of United States interests in the Arctic region. Successful conduct of U.S. research in the Arctic region requires access throughout the Arctic Ocean and to terrestrial sites, as well as viable international mechanisms for sharing access to research platforms and timely exchange of samples, data, and analyses. Better coordination with the Russian Federation, facilitating access to its domain, is particularly important.

2. The United States promotes the sharing of Arctic research platforms with other countries in support of collaborative research that advances fundamental understanding of the Arctic region in general and potential Arctic change in particular. This could include collaboration with bodies such as the Nordic Council and the European Polar Consortium, as well as with individual nations.

3. Accurate prediction of future environmental and climate change on a regional basis, and the delivery of near real-time information to end-users, requires obtaining, analyzing, and disseminating accurate data from the entire Arctic region, including both paleoclimatic data and observational data. The United States has made significant investments in the infrastructure needed to collect environmental data in the Arctic region, including the establishment of portions of an Arctic circumpolar observing network through a partnership among United States agencies, academic collaborators, and Arctic residents. The United States promotes active involvement of all Arctic nations in these efforts in order to advance scientific understanding that could provide the basis for assessing future impacts and proposed response strategies.

4. United States platforms capable of supporting forefront research in the Arctic Ocean, including portions expected to be ice-covered for the foreseeable future, as well as seasonally ice-free regions, should work with those of other nations through the establishment of an Arctic circumpolar observing network. All Arctic nations are members of the Group on Earth Observations partnership, which provides a framework for organizing an international approach to environmental observations in the region. In addition, the United States recognizes that academic and research institutions are vital partners in promoting and conducting Arctic research.

5. Implementation: In carrying out this policy as it relates to promoting scientific international cooperation, the Secretaries of State, the Interior, and Commerce and the Director of the National Science Foundation, in coordination with heads of other relevant executive departments and agencies, shall:

- a. Continue to play a leadership role in research throughout the Arctic region;
- b. Actively promote full and appropriate access by scientists to Arctic research sites through bilateral and multilateral measures and by other means;
- c. Lead the effort to establish an effective Arctic circumpolar observing network with broad partnership from other relevant nations;
- d. Promote regular meetings of Arctic science ministers or research council heads to share information concerning scientific research opportunities and to improve coordination of international Arctic research programs;
- e. Work with the Interagency Arctic Research Policy Committee (IARPC) to promote research that is strategically linked to U.S. policies articulated in this directive, with input from the Arctic Research Commission; and

- f. Strengthen partnerships with academic and research institutions and build upon the relationships these institutions have with their counterparts in other nations.

## F. Maritime Transportation in the Arctic Region

1. The United States priorities for maritime transportation in the Arctic region are:

- a. To facilitate safe, secure, and reliable navigation;
- b. To protect maritime commerce; and
- c. To protect the environment.

2. Safe, secure, and environmentally sound maritime commerce in the Arctic region depends on infrastructure to support shipping activity, search and rescue capabilities, short- and long-range aids to navigation, high-risk area vessel-traffic management, iceberg warnings and other sea ice information, effective shipping standards, and measures to protect the marine environment. In addition, effective search and rescue in the Arctic will require local, State, Federal, tribal, commercial, volunteer, scientific, and multinational cooperation.

3. Working through the International Maritime Organization (IMO), the United States promotes strengthening existing measures and, as necessary, developing new measures to improve the safety and security of maritime transportation, as well as to protect the marine environment in the Arctic region. These measures may include ship routing and reporting systems, such as traffic separation and vessel traffic management schemes in Arctic chokepoints; updating and strengthening of the Guidelines for Ships Operating in Arctic Ice-Covered Waters; underwater noise standards for commercial shipping; a review of shipping insurance issues; oil and other hazardous material pollution response agreements; and environmental standards.

4. Implementation: In carrying out this policy as it relates to maritime transportation in the Arctic region, the Secretaries of State, Defense, Transportation, Commerce, and Homeland Security, in coordination with heads of other relevant executive departments and agencies, shall:

- a. Develop additional measures, in cooperation with other nations, to address issues that are likely to arise from expected increases in shipping into, out of, and through the Arctic region;

- b. Commensurate with the level of human activity in the region, establish a risk-based capability to address hazards in the Arctic environment. Such efforts shall advance work on pollution prevention and response standards; determine basing and logistics support requirements, including necessary airlift and icebreaking capabilities; and improve plans and cooperative agreements for search and rescue;
- c. Develop Arctic waterways management regimes in accordance with accepted international standards, including vessel traffic-monitoring and routing; safe navigation standards; accurate and standardized charts; and accurate and timely environmental and navigational information; and
- d. Evaluate the feasibility of using access through the Arctic for strategic sealift and humanitarian aid and disaster relief.

## G. Economic Issues, Including Energy

1. Sustainable development in the Arctic region poses particular challenges. Stakeholder input will inform key decisions as the United States seeks to promote economic and energy security. Climate change and other factors are significantly affecting the lives of Arctic inhabitants, particularly indigenous communities. The United States affirms the importance to Arctic communities of adapting to climate change, given their particular vulnerabilities.

2. Energy development in the Arctic region will play an important role in meeting growing global energy demand as the area is thought to contain a substantial portion of the world's undiscovered energy resources. The United States seeks to ensure that energy development throughout the Arctic occurs in an environmentally sound manner, taking into account the interests of indigenous and local communities, as well as open and transparent market principles. The United States seeks to balance access to, and development of, energy and other natural resources with the protection of the Arctic environment by ensuring that continental shelf resources are managed in a responsible manner and by continuing to work closely with other Arctic nations.

3. The United States recognizes the value and effectiveness of existing fora, such as the Arctic Council, the International Regulators Forum, and the International Standards Organization.

4. Implementation: In carrying out this policy as it relates to economic issues, including energy, the Secretaries of State, the Interior, Commerce, and Energy, in coordination with heads of other relevant executive departments and agencies, shall:

- a. Seek to increase efforts, including those in the Arctic Council, to study changing climate conditions, with a view to preserving and enhancing economic opportunity in the Arctic region. Such efforts shall include inventories and assessments of villages, indigenous communities, subsistence opportunities, public facilities, infrastructure, oil and gas development projects, alternative energy development opportunities, forestry, cultural and other sites, living marine resources, and other elements of the Arctic's socioeconomic composition;
- b. Work with other Arctic nations to ensure that hydrocarbon and other development in the Arctic region is carried out in accordance with accepted best practices and internationally recognized standards and the 2006 Group of Eight (G-8) Global Energy Security Principles;
- c. Consult with other Arctic nations to discuss issues related to exploration, production, environmental and socioeconomic impacts, including drilling conduct, facility sharing, the sharing of environmental data, impact assessments, compatible monitoring programs, and reservoir management in areas with potentially shared resources;
- d. Protect United States interests with respect to hydrocarbon reservoirs that may overlap boundaries to mitigate adverse environmental and economic consequences related to their development;
- e. Identify opportunities for international cooperation on methane hydrate issues, North Slope hydrology, and other matters;
- f. Explore whether there is a need for additional fora for informing decisions on hydrocarbon leasing, exploration, development, production, and transportation, as well as shared support activities, including infrastructure projects; and
- g. Continue to emphasize cooperative mechanisms with nations operating in the region to address shared concerns, recognizing that most known Arctic oil and gas resources are located outside of United States jurisdiction.

## **H. Environmental Protection and Conservation of Natural Resources**

1. The Arctic environment is unique and changing. Increased human activity is expected to bring additional stressors to the Arctic environment, with potentially serious consequences for Arctic communities and ecosystems.
2. Despite a growing body of research, the Arctic environment remains poorly understood. Sea ice and glaciers are in retreat. Permafrost is thawing and coasts are eroding. Pollutants from within and outside the Arctic are contaminating the region. Basic data are lacking in many fields. High levels of uncertainty remain concer-

ning the effects of climate change and increased human activity in the Arctic. Given the need for decisions to be based on sound scientific and socioeconomic information, Arctic environmental research, monitoring, and vulnerability assessments are top priorities. For example, an understanding of the probable consequences of global climate variability and change on Arctic ecosystems is essential to guide the effective long-term management of Arctic natural resources and to address socioeconomic impacts of changing patterns in the use of natural resources.

3. Taking into account the limitations in existing data, United States efforts to protect the Arctic environment and to conserve its natural resources must be risk-based and proceed on the basis of the best available information.

4. The United States supports the application in the Arctic region of the general principles of international fisheries management outlined in the 1995 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of December 10, 1982, relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks and similar instruments. The United States endorses the protection of vulnerable marine ecosystems in the Arctic from destructive fishing practices and seeks to ensure an adequate enforcement presence to safeguard Arctic living marine resources.

5. With temperature increases in the Arctic region, contaminants currently locked in the ice and soils will be released into the air, water, and land. This trend, along with increased human activity within and below the Arctic, will result in increased introduction of contaminants into the Arctic, including both persistent pollutants (e.g., persistent organic pollutants and mercury) and airborne pollutants (e.g., soot).

6. Implementation: In carrying out this policy as it relates to environmental protection and conservation of natural resources, the Secretaries of State, the Interior, Commerce, and Homeland Security and the Administrator of the Environmental Protection Agency, in coordination with heads of other relevant executive departments and agencies, shall:

- a. In cooperation with other nations, respond effectively to increased pollutants and other environmental challenges;
- b. Continue to identify ways to conserve, protect, and sustainably manage Arctic species and ensure adequate enforcement presence to safeguard living marine resources, taking account of the changing ranges or distribution of some species in the Arctic. For species whose range includes areas both within and beyond United States jurisdiction, the United States shall continue to collaborate with other governments to ensure effective conservation and management;

- c. Seek to develop ways to address changing and expanding commercial fisheries in the Arctic, including through consideration of international agreements or organizations to govern future Arctic fisheries;
- d. Pursue marine ecosystem-based management in the Arctic; and
- e. Intensify efforts to develop scientific information on the adverse effects of pollutants on human health and the environment and work with other nations to reduce the introduction of key pollutants into the Arctic.

#### **IV. Resources and Assets**

A. Implementing a number of the policy elements directed above will require appropriate resources and assets. These elements shall be implemented consistent with applicable law and authorities of agencies, or heads of agencies, vested by law, and subject to the availability of appropriations. The heads of executive departments and agencies with responsibilities relating to the Arctic region shall work to identify future budget, administrative, personnel, or legislative proposal requirements to implement the elements of this directive.

GEORGE W. BUSH



## SEMINAR ON SECURITY PROSPECTS IN THE HIGH NORTH, REYKJAVIK 29 JANUARY 2009

### Chairman's Conclusions

On 29 January 2009, NATO and the Government of Iceland jointly organized a seminar in Reykjavik to discuss the challenges facing the Allies in the High North. The participants agreed that the confrontation of the Cold War belongs to the past and nations now face a completely new security environment. They underscored that it remains a priority to preserve the current stability in the High North as a region of low tension by managing the ongoing limited increase in military activities in a transparent, deliberate and measured way.

The participants recognized that global climate change and ice melting, growing accessibility to significant energy and marine resources and the potential opening of new trans-arctic shipping routes, create new challenges and opportunities and increases the strategic importance of the High North. Non-traditional threats such as risks to the environment caused by potential pollution and large-scale accidents due to increased shipping and other economic activities, as well as the need to preserve economic and energy security, merit close attention, while respecting the sovereignty and initiatives of all Arctic states.

The participants agreed that the rule of law in international relations is a prerequisite for peaceful regional development. The United Nations Convention on the Law of the Sea provides the essential legal framework for activities and cooperation in maritime areas.

The participants pointed to the importance of further strengthening the cooperation between all relevant actors in the High North. This includes the eight Arctic states: the United States, Russia, Canada, Denmark, Finland, Iceland, Norway and Sweden; institutions like NATO, the EU and the IMO; regional organizations like the Arctic Council, with its non-Arctic observer states, and the Barents Euro-Arctic Council; and the Nordic countries through their increasing security co-operation. The participants acknowledged and welcomed the interest in High North issues from other European countries and countries beyond the region, including Japan, South Korea and China. Attention should be given to involving them, as appropriate, in further work with High North issues.

The participants agreed that the High North is of enduring strategic importance for NATO where NATO continues to have legitimate security interests. Ensuring regional security is an integral part of NATO and transatlantic cooperation. Thus, risks and threats in the High North affect the security of NATO Allies and its

ZaöRV 69 (2009)

partners. Participants also emphasised the indivisibility of security for all Allies and concurred that regionalisation within the Alliance should be avoided.

At the same time the participants recognised that not all security risks and threats are best addressed by NATO. Close cooperation with other key stakeholders – a comprehensive approach – is needed to address the complex and nonlinear set of existing and emerging security challenges. To achieve this, dialogue with key stakeholders is crucial. NATO, and other organisations, will therefore need to emphasise confidence-building, transparency and partnership in its approach to the High North. The participants agreed that strengthened cooperation between NATO and the Allies and Russia, within the existing frameworks, including the NATO-Russia Council when appropriate, is particularly important.

The participants agreed that a renewed NATO situational awareness in the High North should concentrate on where NATO can provide added value to regional security and maintain low tension in the region. Developing a relevant response to some of the High North challenges should be part of the ongoing transformation of the Alliance.

The participants underscored that security in the region requires practical, cross-border cooperation on surveillance and response capabilities such as search-and-rescue at sea and disaster relief operations. In that regard, NATO could have an important role to play. NATO air surveillance and maritime situational awareness in the High North is important and already contributes to regional security in the widest sense. The aim should be to create concrete synergies with other actors, and pool civil and military resources for the benefit of common security.

Finally, the participants agreed that security prospects in the High North warranted further analysis and discussions, within relevant NATO bodies and committees, and welcomed Norway's intention to arrange a follow-up seminar in Norway in 2010.

**MEETING OF THE PARTIES TO THE  
1973 AGREEMENT ON THE CONSERVATION OF POLAR  
BEARS  
TROMSØ, NORWAY, 17 – 19 MARCH 2009  
OUTCOME OF MEETING \*\*\***

*Climate change has a negative impact on polar bears and their habitat and is the most important long term threat facing polar bears. Action to mitigate this threat is beyond the scope of the Polar Bear Agreement. Climate change affects every nation on the earth and reaches well beyond the five parties to the Agreement so the parties look to other fora and national and international mechanisms to take appropriate action to address climate change.*

## **Introduction**

The Agreement on the Conservation of Polar Bears was concluded in Oslo, Norway, on 15 November 1973, and today has Canada, Greenland, Norway, Russia and the United States of America as parties.

At a polar bear range states meeting in Shepherdstown, West Virginia, USA, 26 – 28 June 2007, the range states, in accordance with the provisions of the Agreement, including Articles VIII and IX, agreed that meetings under the Agreement should be held on a biennial schedule or otherwise as agreed to by the Parties.

The range states also agreed in Shepherdstown that the first such meeting should be held in 2009, and in 2008 the parties welcomed the offer of Norway to host such a meeting.

Against this background, the five parties met in Tromsø, Norway, 17 – 19 March 2009, with an objective to provide an update on the conservation status for the polar bears, review implementation of the Agreement, identify useful polar bear conservation strategies and to discuss mechanisms for enhanced implementation of the Agreement.

---

\*\*\* This outcome document is not legally binding and creates no legally binding obligations of the parties to the 1973 multilateral agreement for the conservation of polar bears.

## Harvest Management

The parties continue to regard harvest management as an important part of polar bear management. The parties note the important progress made in developing sustainable harvest regimes, including the setting of bilateral coordinating mechanisms. The parties recognized the cultural and nutritional importance of subsistence harvest of polar bears to the Native peoples of the north.

## Polar bears and climate change

The parties agreed that impacts of climate change and the continued and increasing loss and fragmentation of sea ice – the key habitat for both polar bears and their main prey species – constitutes the most important threat to polar bear conservation.

The parties noted with deep concern the escalating rates and extent of changes in the Arctic induced by climate change to date and that future changes are projected to be even larger. The parties agreed that long term conservation of polar bears depends upon successful mitigation of climate change.

### Management responses

The parties agreed that conservation of polar bears requires adaptive management in response to climate change. The primary adaptation strategy will be to manage and reduce the other stresses on polar bears and their ecosystems, such as habitat destruction, harvesting, pollution and anthropogenic disturbance. Furthermore, continued climate change amplifies such stressors and underscores the need for proactive and comprehensive management strategies.

Resilience of polar bear populations to climate change depend upon proactive approaches and should be explored further to encourage conservation planning that is relevant both today and in the future. The parties have differing capabilities and recognized the advantages of sharing best management practices that address the range of impacts associated with climate change.

The parties agreed that effective responses depend upon an understanding of likely regional climatic and ecological changes. Monitoring climate and environmental change – in particular loss of sea ice and denning habitat – and associated responses in polar bear populations and the ecosystems that they depend upon is vital to allow for adjustments in management strategies.

### Longer term perspectives

The parties expressed concern that ultimately, opportunities for polar bear conservation are limited by the magnitude and rate of change in climate and sea ice conditions.

The parties were also concerned that their common obligations to protect the ecosystem of which polar bears are a part can only be met if global temperatures do not rise beyond levels where the sea ice retreats from extensive parts of the Arctic. A scientific presentation noted that if sea ice is reduced according to present projections, polar bears are likely to be extirpated from most of their range within this century.

On this background, the parties recognized the urgent need for an effective global response that will address the challenges of climate change. Further, the parties recommended that ongoing efforts within appropriate fora negotiating strategies to address climate change should be informed of the significance of climate change to the conservation of polar bears.

### **Habitat protection**

The parties reinforced the importance of habitat protection as a means of implementing Article II of the Agreement on protection of ecosystems of which polar bears are a part. Parties also welcomed efforts already undertaken on habitat protection, including protected areas and land and seascape planning.

The parties also recognized that expansion of protected areas can potentially reduce the vulnerability of polar bear populations and the ecosystems of which bears are a part. It was also recognized that protected areas should be designed with consideration of long-term shifts in sea ice conditions that will result from climate change and the overall integrity of habitats critical to polar bear survival.

### **Contaminants and pollution**

The parties expressed concern that long range transport of pollutants into the Arctic environment is shown to affect polar bears. The scope of these effects on polar bear populations are only partially understood, but their impacts on some populations may be significant. The parties also recognized that transport mechanisms may be altered and effects on polar bears amplified as a result of climate change. Comprehensive monitoring and research on the effects of contaminant loads in polar bears, and synergistic effects of contaminants and climate change is therefore important.

The parties recognized the urgent need for an effective global response that will address the challenges of contaminants. Ongoing efforts within appropriate fora negotiating strategies to address contaminants should be informed of the significance of contaminant to the conservation of polar bears.

### Activities in polar bear areas

#### Industrial development

Industrial development continues to expand northward into areas used by polar bears. Several areas of oil and gas interest are identified within these areas. The parties recognize the need to identify key habitats for polar bears and areas in need of protection to establish a basis for land and seascape planning in advance of development. The parties also recognized the importance of having general operating procedures and mitigation measures in place for developed areas. Such measures are in use in the US Beaufort Sea coast oilfields and could provide guidance for other parties. Monitoring impacts of industrial development on polar bears was considered important as was contingency (emergency) planning. The parties agreed that strict environmental regulations and standards are needed to protect polar bears potentially affected by industrial development.

#### Shipping

The parties recognized the likelihood of dramatically increased shipping as longer ice-free seasons increase access and open new trans-polar sea routes (Northern Sea Route; transiting the Bering Strait; and Northwest Passage). Potential effects of shipping on polar bears include pollution, noise, physical disturbance related to ice-breaking, and waste. Shipping scenarios and associated impact assessments have been developed through the Arctic Council (Arctic Marine Shipping Assessment). This assessment should be considered by the parties in their work to develop specific mitigation measures, including routing of traffic and other maritime safety measures; to identify monitoring and research priorities; and, to establish contingency plans to minimize impacts from shipping on polar bears.

#### Tourism and traffic

The parties recognized the value of tourism for economic and education development goals. In some areas, there has been a dramatic increase in the number and range of cruise ships moving further north into areas used by polar bears as open water access has improved. Potential effects of increased tourism include pollution, disturbance and increased risk of defense kills. Actions to address such impacts could include limiting access to sensitive habitats, competence requirements for guides, guidelines and rules for operating in polar bear areas and near polar bears,

measures to reduce pollution risks, and post trip reports of wildlife sightings and other activities from tour operators. Polar bear viewing opportunities are expanding in many parts of the Arctic, and the parties recognized the value of Canada's management experience in Churchill.

### **Safety measures for people and communities**

Bear-human interactions will increase due to expanding human populations, industrial development and tourism. In addition, a continued increase in the number of nutritionally stressed bears on land due to retreating sea ice will result in more bear-human interactions. The parties agree on the need to develop comprehensive strategies to manage such conflicts. Opportunities to share techniques and develop strategies have been identified above. Some existing strategies include active deterrence, reduction of attractants, and community education and outreach. Expertise developed for management of other bear species should be consulted in the development of strategies specific to polar bears. The parties agreed to exchange experiences with management of bear-human interactions and welcomed the US offer to lead such an effort in collaboration with polar bear experts and managers from the other parties.

Two specific opportunities identified to develop bear-human interaction strategies are the upcoming workshops in November 2009 in Canada and planned in Alaska in 2010.

### **Development of plans for action**

In light of the growing concern over polar bear conservation in relation to climate change and a number of other emerging issues, such as oil- and gas activities, shipping and tourism, the parties agreed to initiate a process that would lead to a coordinated approach to conservation and management strategies between the parties.

A key aspect of this approach is the recognition that plans for action should be developed at a national level leading up to development of comprehensive circum-polar plans for action that address polar bear conservation.

The process to provide advice to the parties will involve the following steps.

1. Parties request of PBSG an outline or identification of topics that should be included in all national plans for action. Furthermore, PBSG should identify elements that could benefit from international cooperation. The parties recognized an interest in accomplishing this step in 2009.

2. Parties will review and discuss outline material provided by PBSG.
3. Parties will identify and initiate specific topics of general interest (such as bear-human interactions).
4. Parties will identify topics where additional information may be helpful and develop further requests to PBSG as needed.

The parties shared a general expectation that significant progress would be made by the next biennial meeting.

### **Traditional Ecological Knowledge**

The parties recognized that polar bears play an important role in the socio-economical and cultural well being of aboriginal peoples. TEK in concert with western science should be utilized in polar bear management decisions.

### **Scientific advice**

The parties recognized that Article VII of the Agreement calls for all parties to conduct national research programs, particularly relating to the conservation and management of polar bears, and that they shall coordinate such research and exchange information on research programs, results, and data on bears taken. Parties continue to be committed to carrying out research in support of polar bear conservation.

The parties also recognized that the technical support and scientific advice on polar bear conservation provided by the PBSG to the parties supports the 1973 Agreement and is a vital part of the decision making process that the competent authorities should utilize in making their management decisions concerning polar bear conservation.

The parties agreed to ask the PBSG to accept the role of scientific advisory group to the parties and welcomed the offer by the PBSG chair to bring this to the PBSG for their consideration.

### **Other issues related to the conservation of polar bears**

Export and import of polar bear products



The parties noted that the Convention on International Trade in Endangered Species (CITES) is the key regulatory mechanism for export and import in polar bear products and that all parties have adequate statutory authority for CITES. The parties acknowledged the significant progress made by Greenland in its implementation of CITES.

#### Cooperation in management of shared polar bear populations

Several polar bear populations are shared between parties, and the parties recognized the mechanisms in place for cooperation on the management of these shared populations, and encouraged further development of such cooperation.

#### Monitoring

The parties welcomed ongoing efforts to monitor status and trends for polar bear populations, and agreed on the need to strengthen monitoring throughout the range of polar bears, and to coordinate and harmonize national monitoring efforts.

#### Assessing the effectiveness of the Agreement

The parties agreed that a process should be developed to assess the effectiveness of the agreement to achieve its core objectives, and agreed to come back to this at a later biennial meeting under the Agreement.

### **Commitment to Continued Cooperation**

In accordance with the provisions of the Agreement, including Articles VIII and IX, the parties reconfirmed that meetings under the Agreement should be held on a biennial schedule or otherwise as agreed to by the Parties.

The parties welcomed Canada's offer to host the next biennial meeting in 2011 and Russia's offer to host the biennial meeting in 2013, noting that these offers facilitate a multi-year approach to coordinated implementation of the Agreement.

Recognizing the urgency of the situation, the parties have agreed to carry out regular, ongoing work leading to the 2011 meeting. Such collaboration would be facilitated by the host of the next meeting informed by the host of the previous meeting.

ZaöRV 69 (2009)

# UNITED NATIONS CONVENTION ON THE LAW OF THE SEA (EXCERPTS)

## PART I – INTRODUCTION

### *Article 1*

#### *Use of terms and scope*

1. For the purposes of this Convention:

(1) “Area” means the seabed and ocean floor and subsoil thereof, beyond the limits of national jurisdiction;

...

## PART VI – CONTINENTAL SHELF

### *Article 76*

#### *Definition of the continental shelf*

1. The continental shelf of a coastal State comprises the seabed and subsoil of the submarine areas that extend beyond its territorial sea throughout the natural prolongation of its land territory to the outer edge of the continental margin, or to a distance of 200 nautical miles from the baselines from which the breadth of the territorial sea is measured where the outer edge of the continental margin does not extend up to that distance.

2. The continental shelf of a coastal State shall not extend beyond the limits provided for in paragraphs 4 to 6.

3. The continental margin comprises the submerged prolongation of the land mass of the coastal State, and consists of the seabed and subsoil of the shelf, the slope and the rise. It does not include the deep ocean floor with its oceanic ridges or the subsoil thereof.

4. (a) For the purposes of this Convention, the coastal State shall establish the outer edge of the continental margin wherever the margin extends beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured, by either:

ZaöRV 69 (2009)

(i) a line delineated in accordance with paragraph 7 by reference to the outermost fixed points at each of which the thickness of sedimentary rocks is at least 1 per cent of the shortest distance from such point to the foot of the continental slope; or

(ii) a line delineated in accordance with paragraph 7 by reference to fixed points not more than 60 nautical miles from the foot of the continental slope.

(b) In the absence of evidence to the contrary, the foot of the continental slope shall be determined as the point of maximum change in the gradient at its base.

5. The fixed points comprising the line of the outer limits of the continental shelf on the seabed, drawn in accordance with paragraph 4 (a)(i) and (ii), either shall not exceed 350 nautical miles from the baselines from which the breadth of the territorial sea is measured or shall not exceed 100 nautical miles from the 2,500 metre isobath, which is a line connecting the depth of 2,500 metres.

6. Notwithstanding the provisions of paragraph 5, on submarine ridges, the outer limit of the continental shelf shall not exceed 350 nautical miles from the baselines from which the breadth of the territorial sea is measured. This paragraph does not apply to submarine elevations that are natural components of the continental margin, such as its plateaux, rises, caps, banks and spurs.

7. The coastal State shall delineate the outer limits of its continental shelf, where that shelf extends beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured, by straight lines not exceeding 60 nautical miles in length, connecting fixed points, defined by coordinates of latitude and longitude.

8. Information on the limits of the continental shelf beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured shall be submitted by the coastal State to the Commission on the Limits of the Continental Shelf set up under Annex II on the basis of equitable geographical representation. The Commission shall make recommendations to coastal States on matters related to the establishment of the outer limits of their continental shelf. The limits of the shelf established by a coastal State on the basis of these recommendations shall be final and binding.

9. The coastal State shall deposit with the Secretary-General of the United Nations charts and relevant information, including geodetic data, permanently describing the outer limits of its continental shelf. The Secretary-General shall give due publicity thereto.

10. The provisions of this article are without prejudice to the question of delimitation of the continental shelf between States with opposite or adjacent coasts.

*Article 77*

*Rights of the coastal State over the continental shelf*

1. The coastal State exercises over the continental shelf sovereign rights for the purpose of exploring it and exploiting its natural resources.

2. The rights referred to in paragraph 1 are exclusive in the sense that if the coastal State does not explore the continental shelf or exploit its natural resources, no one may undertake these activities without the express consent of the coastal State.

3. The rights of the coastal State over the continental shelf do not depend on occupation, effective or notional, or on any express proclamation.

4. The natural resources referred to in this Part consist of the mineral and other non-living resources of the seabed and subsoil together with living organisms belonging to sedentary species, that is to say, organisms which, at the harvestable stage, either are immobile on or under the seabed or are unable to move except in constant physical contact with the seabed or the subsoil.

## **PART IX – ENCLOSED OR SEMI-ENCLOSED SEAS**

*Article 122*

*Definition*

For the purposes of this Convention, “enclosed or semi-enclosed sea” means a gulf, basin or sea surrounded by two or more States and connected to another sea or the ocean by a narrow outlet or consisting entirely or primarily of the territorial seas and exclusive economic zones of two or more coastal States.

*Article 123*

*Cooperation of States bordering enclosed or semi-enclosed seas*

States bordering an enclosed or semi-enclosed sea should cooperate with each other in the exercise of their rights and in the performance of their duties under this Convention. To this end they shall endeavour, directly or through an appropriate regional organization:

(a) to coordinate the management, conservation, exploration and exploitation of the living resources of the sea;

(b) to coordinate the implementation of their rights and duties with respect to the protection and preservation of the marine environment;

(c) to coordinate their scientific research policies and undertake where appropriate joint programmes of scientific research in the area;

(d) to invite, as appropriate, other interested States or international organizations to cooperate with them in furtherance of the provisions of this article.

## **PART XI – THE AREA**

### **Section 2 – Principles Governing the Area**

#### *Article 136*

#### *Common heritage of mankind*

The Area and its resources are the common heritage of mankind.

### **Section 4 – The Authority**

#### **Subsection A – General Provisions**

#### *Article 157*

#### *Nature and fundamental principles of the Authority*

1. The Authority is the organization through which States Parties shall, in accordance with this Part, organize and control activities in the Area, particularly with a view to administering the resources of the Area.

2. The powers and functions of the Authority shall be those expressly conferred upon it by this Convention. The Authority shall have such incidental powers, consistent with this Convention, as are implicit in and necessary for the exercise of those powers and functions with respect to activities in the Area.

3. The Authority is based on the principle of the sovereign equality of all its members.

4. All members of the Authority shall fulfil in good faith the obligations assumed by them in accordance with this Part in order to ensure to all of them the rights and benefits resulting from membership.

## **PART XII – PROTECTION AND PRESERVATION OF THE MARINE ENVIRONMENT**

### **Section 2 – Global and Regional Cooperation**

#### *Article 197*

#### *Cooperation on a global or regional basis*

States shall cooperate on a global basis and, as appropriate, on a regional basis, directly or through competent international organizations, in formulating and elaborating international rules, standards and recommended practices and procedures consistent with this Convention, for the protection and preservation of the marine environment, taking into account characteristic regional features.

### **Section 8 – Ice-covered Areas**

#### *Article 234*

#### *Ice-covered areas*

Coastal States have the right to adopt and enforce non-discriminatory laws and regulations for the prevention, reduction and control of marine pollution from vessels in ice-covered areas within the limits of the exclusive economic zone, where particularly severe climatic conditions and the presence of ice covering such areas for most of the year create obstructions or exceptional hazards to navigation, and pollution of the marine environment could cause major harm to or irreversible disturbance of the ecological balance. Such laws and regulations shall have due regard to navigation and the protection and preservation of the marine environment based on the best available scientific evidence.

ZaöRV 69 (2009)