The changing realities of the Arctic are creating an imperative for deeper understanding of the current situation as well as to the responses and actions needed for the region to cope with these changes. The Nordic Council of Ministers wishes to contribute to a constructive and creative dialogue between different stakeholders of the Arctic in order to highlight necessary adaptation measures to the changing realities in the Arctic.

“Arctic – Changing Realities” was an attempt to move beyond some of the articulated questions, needs and challenges presented at the conference “Common Concern for the Arctic” held in Ilulissat, Greenland, in September 2008. It was also an attempt to identify in which areas the Nordic Council of Ministers could create added value to a sustainable development in the Arctic.

The conference presented three main themes:

1) Local and global governance in the Arctic
2) Resources in the Arctic
3) Living in the Arctic

The conference report is a testimony of this dialogue.

For more information visit:
Conference website: www.norden.org/arctic_changing_realities
http://www.norden.org/en/areas-of-co-operation/the-arctic
Arctic – Changing Realities

Conference arranged by the Nordic Council of Ministers, 26 May 2010, Copenhagen, Denmark
Arctic – Changing Realities
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Nordic co-operation

Nordic co-operation is one of the world’s most extensive forms of regional collaboration, involving Denmark, Finland, Iceland, Norway, Sweden, and three autonomous areas: the Faroe Islands, Greenland, and Åland.

Nordic co-operation has firm traditions in politics, the economy, and culture. It plays an important role in European and international collaboration, and aims at creating a strong Nordic community in a strong Europe.

Nordic co-operation seeks to safeguard Nordic and regional interests and principles in the global community. Common Nordic values help the region solidify its position as one of the world’s most innovative and competitive.
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Introduction
1. Introduction

Denmark has been fortunate to hold both the presidency of the Nordic Council of Ministers and the chairmanship of the Arctic Council in 2010. It is obvious to Denmark that this coincidence should be used to demonstrate the deep interest of the Nordic Council of Ministers in the parts of Nordic countries being Arctic and in the emerging agenda for the Arctic. The Arctic is on everybody’s lips and it is important to make sure that the Arctic voices are heard and that the governance situations in the area are made clear.

The Nordic Council of Ministers is supporting the Arctic through a wide range of activities. The Arctic Cooperation Programme is intended to strengthen and provide substance to the grounds on which decisions are made. Furthermore, it contributes with research and knowledge on a range spreading from health issues, empowerment of indigenous peoples to marine ecosystem based management and climate questions.

The Nordic Council of Ministers recently launched the Nordic Top Level Research Initiative – the largest joint Nordic research and innovation effort. This initiative also focuses on the Arctic and many other projects in relation to the Arctic are ongoing or in the pipeline.

The conference “Arctic – Changing Realities” held in Copenhagen on May 26, 2010 was an attempt to bring together international key stakeholders with relevance for the Arctic to discuss ideas and solutions for the challenges facing the Arctic. You will see from this conference report that there are many different positions as to how to manage and govern the Arctic. Despite the different stands, it seems all agrees on the overall aim: to preserve and protect the Arctic according to the current and future developmental challenges. The next step is to find a modus vivendi between ends and means that everybody can agree on for the benefit of the Arctic.

We hope this reading will give food for thought.

Karen Ellemann
Minister for Nordic Cooperation
Danish Presidency of the Nordic Council of Ministers 2010

Halldór Ásgrímsson
Secretary General
Nordic Council of Ministers
Setting the stage: Arctic on the threshold of change

Danish Presidency of the Nordic Council of Ministers 2010:

Ms Karen Ellemann, Minister for Nordic Co-operation and Environment, Denmark

Ms Maliina Abelsen, Minister for Social Affairs, Greenland

Mr Jørgen Niclasen, Minister for Foreign Affairs and Nordic Cooperation, Faroe Islands
2. Setting the stage

Arctic on the threshold of change

Ms Karen Ellemann,
Minister for Nordic Cooperation and Environment, Denmark
Danish Presidency of the Nordic Council of Ministers 2010

Check against delivery

As chairperson for the Nordic Council of Ministers it is a special pleasure for me to be here today to address an area also a part of the Nordic cooperation – the Arctic.

I can safely tell you that we find many different opinions about what kind of cooperation – or governance if you will – that should be in place in the Arctic.

Let me first put the Arctic in perspective.

The Arctic region is a vast area of more than 30 million square kilometres. It is about one sixth of the Earth's land area. The population living in the Arctic is about 4 million people, of which one third consists of over 30 different groupings of indigenous peoples, for instance the Samis and Inuits. During the time of the Cold War there was great global political interest in the Arctic, but as the Cold War died, so did the focus on the Arctic. However, global warming has in recent years spawned renewed attention from the world community towards the Arctic region. The consequences of a changing climate will impact the diversity and fragility of the Arctic environment, which is unique and requires special focus in the light of the many changes that are occurring, including the fast growing development in marine shipping, offshore oil and gas.

The melting of the sea ice will provide an easier access to natural resources, such as gas and oil, and new shipping routes will occur. This will create new opportunities and people and states outside the Arctic are reflecting trying to understand the consequences for themselves and the world. However new opportunities comes with responsibility and demands caution and actions nationally and internationally from Arctic states and non-Arctic states to provide for sustainable use of the marine environment in light of the multifaceted challenges facing the Arctic.

Unfortunately – for those awaiting the opportunity to rush to the Arctic – the Arctic is not terra nullus, where everyone can do as he pleases. The landmass is regulated by the laws of each arctic country and in 2008, at the initiative of the Danish Foreign Minister and the Premier of Greenland, the
five Arctic Ocean coastal states agreed in the Ilulissat Declaration for the Arctic Ocean to base themselves on the law of the sea and to solve any disputes in peaceful negotiations on the basis of that legal framework. It has been estimated that 97% of the resources under the Arctic Ocean are covered by this agreement and is to be found in the economic zones, which means that there is almost nothing left for others to share, if resources should be discovered. In other words, there is not much left to disagree about. So, if you should remember just one of my points here today, let it be this: The Arctic is not – and will not – be an area of conflict, no matter how much of the ice sheet should melt or how fast. All Arctic states agree on a peaceful future for the Arctic. Just see how Russia and Norway did it in the Barents Sea a short while ago.

What about other questions concerning the region? How is it affected by global pollution and emissions of pollutants and greenhouse gases? What are the consequences of the melting ice? What happens to the living conditions of the indigenous peoples and other inhabitants of the Arctic and what are the global implications and consequences of the observed changes and the pollution of the Arctic? Vulnerable ecosystems in the Arctic are already threatened. Traditional hunting and fishing are suffering as sea mammals and fish change their patterns of migration. The wildlife resources necessary to sustain human life are changing location. This might put the living conditions of the 4 million Arctic inhabitants at risk. Will it be possible to secure a sustainable development in the Arctic? We know that it will be a challenge to ensure predictable conditions not least because the uncertainty of how fast the impacts of climate changes will occur. The adaptability of small arctic societies will be put to a test. Other concerns are pollution – What to do here? And, most importantly, how do we handle these, both challenges and opportunities? And how do we handle this together with our neighbours? In a number of instances we only have the possibility of adapting to changing circumstances – for example the raise in sea water level – in other instances we have to act in a timely fashion to the challenges facing us in the Arctic.

In light of the diversity and fragility of the Arctic environment and the need for special focus in this sensitive area I have in my capacity as Minister for the environment together with my college from Greenland taken the initiative to invite my Arctic colleges to a meeting in Ilulissat, Greenland in June 2010. The meeting will be an informal dialogue on the international commitment to reduce the environmental impacts from the fast-growing development in marine shipping and offshore oil and gas, and the consequences of a changing climate in this sensitive area.

We don’t need a new treaty on the Arctic as some wishes to deal with the issues facing the Arctic. We have – apart from the Arctic States – not only the Nordic Council of ministers and its widespread activities – also the Arctic Council – the only circumpolar, political forum where the challenges and opportunities in the Arctic – the overall governance of the region – can be discussed by both the states and the peoples of the Arctic. The Arctic Coun-
Arctic – Changing Realities

The Arctic Council is the only international body that can balance different considerations, pave the way for development based on high environmental standards, protect the unique Arctic environment and biodiversity and put the peoples of the Arctic at the centre of the debate on the future for the Arctic – in short, doing the best to secure sustainable development. The Arctic Council is, in fact, the answer, when you ask about forming ideas about the future for the Arctic. The core of the present day Arctic Council work is protection and development of the Arctic. Its work is based on science and knowledge collected and assessed by the working groups of the Council. The output is reports that can serve as a basis for sound political decisions regarding the development of the Arctic area – decisions that are taken by the Arctic States, Arctic Communities and international organisations.

The Arctic Council is probably the most unique forum in international cooperation that exists. Its members are not only the eight Arctic states (Canada, Denmark, Finland, Iceland, Norway, Sweden, Russia and the United States), but also organisations representing the indigenous peoples living in the Arctic countries. This means that the indigenous peoples of the Arctic have their own voice without having to agree with the national representative from the country in which they live. In my opinion, this is an amazing example of democracy. The Arctic Council has no common budget, and its secretariat is temporary – financed by Norway – and consisting of three persons. The Council is not a decision-making, but a decision-shaping body, meaning that its decisions and recommendations are intended to show results at the regional or national levels as well as in the form of actual decisions in other organisations – for instance in the International Maritime Organisation. And finally, it is a consensus-based forum hereby ensuring that all Arctic states agree on the Council’s decisions.

And it works! The Arctic Council has in its short time of living delivered a long line of important contributions to the benefit of the Arctic and its peoples.

It has been operating for almost 14 years by now. The Arctic Council has a long and valuable tradition in the environmental field which of course has my special attention. Allow me to mention a few examples: The documentation of the high levels of man-made toxins such as for instance DDT in the Arctic, has played a pivotal role in the forming of an international convention out phasing the use of man made persistent organic toxins – the Stockholm Convention and I believe that the current discussions on an internationally binding agreement on mercury pollution is also spurred by the Arctic evidence of the nature and effects of emissions of this highly toxic heavy metal. Another prominent example of the joint efforts of the council is the Arctic Climate Impact Assessment from 2005. This assessment opened the eyes of the world to the consequences of the Arctic melt down, at the local, the regional as well as the global level.
The Council is also currently working on an Arctic Biodiversity Assessment, which I believe will also create a sound basis foundation on which political decision at all levels can be based.

Numerous other large and small reports, projects and initiatives have contributed significantly to our knowledge and understanding of the Arctic. In this way the Council has had a direct or indirect influence on the people living in the Arctic – but also to the rest of the world in providing updated and credible facts about Arctic issues and their global implications.

It is always debatable if an organization is sufficient powerful in face of the problems to be solved. We have a number of organizations each dealing with parts of the Arctic reality and I would wish that those organizations within their own specific area of concern would put the question to themselves if they are up to the job – and if not then to adjust to the new realities.

Within the Nordic cooperation Arctic issues have high priority, and there are substantial synergies between the Nordic Cooperation and work of the Arctic Council, where Nordic countries most often share views on priorities, as reflected in the joint chairmanship priority paper developed for the 3 consecutive chairmanships of Norway, the Kingdom of Denmark and Sweden. We have furthermore an Arctic cooperation program, where we – in close cooperation with countries within the Arctic Council – try to support social and cultural development for the inhabitants of the Arctic and several other aspects related to the Arctic.

Within the Nordic Council of Ministers we have – just as an example – allocated 1 mill. Danish kroner to a project labelled “Megatrends in the Arctic” – we hope that the outcome of this study will help arctic organizations to focus their interest to future challenges.

Until now Arctic Council has been a framework for a constructive and friendly general cooperation among the countries and peoples of the Arctic. This is what is labelled as “soft security” and we – as Arctic stakeholders – value that. The Arctic has been and is an area of peace and stability. Our task is to secure that this will also be the case in the future and that we manage the Arctic resources sustainably. I can also see merits in strengthening the Arctic Council in order to adapt it to changing realities.

Thank you for listening.
Ms. Maliina Abelsen,
Minister for Social Affairs, Greenland
Danish Presidency of the Nordic Council of Ministers 2010

As Minister for Social Affairs in Greenland, “Living in the Arctic” is the most natural topic for my address, however, I’m grateful for the opportunity to tackle the wider issue of sustainable development in the Arctic region. Therefore I’d like to thank for the opportunity to speak at this conference.

When people think of the Arctic today, there are three things that come to mind: climate change, wild and untamed nature and potential oil reserves. In the midst of all this there is a people – a people faced with the challenge of understanding and reacting to these changes and taking advantage of the new opportunities that the Arctic now offers. My most important task as a member of the newly elected government is to remind the rest of the world that there are people living in the Arctic, and to take an active role in the development of the region.

I couldn’t help smiling when I saw the heading for this part of the conference program: “Arctic on the threshold of change”. To the rest of the world it may seem as if Greenland stands on the threshold of change, and, of course, there are many changes taking place here and now. But I would remind you, that Greenland and the people of Greenland have already experienced enormous changes during the past 100 years. We passed the threshold of change some time ago, and this is not just true of Greenland but across the entire Arctic region. We can turn this to our advantage by making use of the flexibility which comes with acclimatisation to change, and the experience we have gained of dealing with rapid changes to our society.

No positive change without social sustainability

A few weeks ago I participated in a conference here in Copenhagen and delivered an address on the topic of changing attitudes in social policy. I touched, in the course of my address, on the massive societal consequences that the speed of the modernisation process has entailed for the people of Greenland. Just 50 years ago there were still people living in peat dwellings without running water, and today the majority of the population lives in modern accommodation. This rapid pace of development has of course had significant consequences for Greenlandic society, and these have been both positive and negative. Today, we are still living with the consequences of this development, consequences such as an extremely high suicide rate.

Today, the conditions under which our fishermen and hunters work have been worsened by the consequences of climate change, and that has of course had extensive knock-on social consequences. That’s why we must
continue to consider the social consequences of socio-political strategies and initiatives.

The government's belief is that even though extensive societal change has resulted in challenges we cannot afford to shy away from change and development. Rather, we must ensure that we maintain an inclusive attitude and act in order to keep ahead of the changes and challenges we experience. If we don't stay one step ahead we risk letting some of our people down, and to stay one step ahead we need to take decisions on a well-informed basis; we need a solidly democratic society where all members of society feel that they too have a stake in development. History also tells us, that it's crucial that development is firmly rooted in Greenlandic society, culture and language.

The increased focus that the Arctic region has benefited from in the last 10 years has made globalisation and its consequences even more visible in Greenland. It's as if Greenland has suddenly moved from the periphery to the centre of the world. As a people, and as that people's elected representatives, we have to ensure that we maintain a sustainable society through international-level industrial development, and upcoming petroleum extraction and mining.

We can't just take the path of least resistance. If we begin extracting large quantities of oil this will result in significant social and economic challenges. The benefits of such development will bypass the people of Greenland unless they are part of a cohesive and well-functioning society. In other words, we must be simultaneously cautious and brave. I hope we will come to discuss how this can best be achieved in the course of this conference.

Social sustainability is crucial to the government's strategy because we feel that increasing social capital in our society is key to the creation of positive growth in which each citizen and family can contribute to society. By increasing social capital we can contribute some of the Arctic regions future leaders – the generation of leaders who will have to tackle petroleum and mining companies and climate negotiators and who will face the challenge of communicating a nuanced picture of Greenland and the Arctic region to the outside world. The government's strategy is therefore to create a framework in which the individual can achieve the strength to grow, develop and flourish in order to create a society in which we can support each other and live with change.

One of the greatest challenges in Greenland is to channel social initiatives efficiently and in a structured fashion, because the demographic, geographical and climatic framework within which we operate makes these initiatives financially burdensome and unusually challenging. A large number of the 56,000 people living in Greenland live in small isolated communities in a vast Arctic region, and this affects our ability to implement social programs because it isolates our expertise and reduces our ability to deliver services locally.
There is a widespread need to strengthen social initiatives, and it is crucial that we think beyond our capital Nuuk, which is a little world all of its own. There is a reality that is far removed from Nuuk, and it's one which we cannot ignore. That's why we feel it's important to extend our social network so that we can involve the whole of Greenlandic society through exchange and cooperation between the Greenland government, local authorities, organisations and businesses.

We also wish to involve the broader international community. Nordic Council initiatives already contribute significantly to in-depth analysis of the state of the Arctic region and provide a basis for constructive cooperation between member governments. I support this work, and hope to see it extended in the future. The international community can also contribute to the development of social capital in Greenland. We already benefit greatly from our relations with the EU in the area of education and training but we are interested in further cooperation with additional partners.

If the Greenlandic population is to be equipped to cope with the pace of change in the Arctic region, it is important that we create involvement and a common understanding of the problems we face in cooperation with the local population and the international community. In that connection, we view Arctic cooperation in the ICC and other indigenous people's organisations in a positive light. We have much in common with the other Arctic communities and can learn from each other's knowledge and experience. The same is true of the Nordic region where we find inspiration and knowledge from the Nordic welfare model which functions in many ways as a model for Greenlandic society.

Finally, I would like to wish everybody a fruitful and interesting conference, and I hope we leave it enriched with further ideas for tackling the changes in the Arctic region in the best possible way.

Qujanaq.
Distinguished ministers, ladies and gentlemen

It is a pleasure for me to join my colleagues from Denmark and Greenland in introducing this special Nordic Conference on the Arctic. The Faroe Islands are proud to be an active part of both the Nordic family and the Arctic family. And I myself am proud to be the Faroese minister responsible for both.

The Faroe Islands are situated at the crossroads of Scandinavia and the High Arctic, between Northern Europe and North America. The North Atlantic is the source of our well-being and livelihood. In such a position, we not only value the cooperation we have with our neighbours in the High North, we see it as absolutely vital for peace and prosperity in the region.

“Arctic – Changing Realities” is the title of this Conference. In the Faroes we are on the threshold of change every day. We are a small island nation in the middle of the Northeast Atlantic Ocean, with an economy heavily dependent on international trade in our fish products. Even the smallest changes can have enormous impacts on our way of life – changes in the climate and our natural resource base, and changes in the global economic climate.

Faroe Islanders have learnt to cope with change over centuries of island life in a harsh climate. We have learnt to navigate rough waters and adapt quickly to new economic realities. But being good at adapting also means recognising our own limits and looking to others for advice and inspiration, especially other nations and communities who share our realities and values. This is why we appreciate so much the cooperation we have in the Nordic Council of Ministers and the Arctic Council.

Our status as an autonomous territory has been fully recognised in the Nordic Council of Ministers. This allows for us in practice to participate on an equal footing with the other seven members of the Nordic family, in all areas of cooperation that are relevant for us. This year the Faroe Islands are chairing the Nordic Committee on Fisheries and Aquaculture for the first time.

Formally speaking, the Arctic Council is limited to cooperation between States. But through our participation as a part of the Kingdom of Denmark, the Faroe Islands have opportunities on many levels to forge direct links and exchange valuable information and experiences first hand with our circumpolar colleagues. We wish to develop these links and opportunities more actively. We are also looking forward to welcoming the Senior Arctic Officials to Tórshavn for the first time in October for their autumn meeting.
I believe that what keeps both the Nordic and the Arctic cooperation dynamic and meaningful, is our strong common focus on the human dimension. We share important fundamental values as peoples living in the North, heavily dependent on nature and its resources. We in the Circumpolar North must work together to keep this focus strong.

Unfortunately we are seeing attempts to have the Arctic defined as some sort of wilderness park, which should be off limits to economic development. This ignores the rights of the people who live in the region. We are the ones who must set the course for our own future development. We certainly do not need to be told how important it is to take care of the environment on which we depend.

We should be calling more loudly on our international partners to get their priorities right. For example by spending more energy to stop the long-range pollution of our marine environment, rather than banning imports of high quality products from the sustainable hunting of seals.

It is obvious to me that the sea is the key to ensuring strong Nordic and Arctic linkages. The major challenges we face across the region relate to the oceans and seas that tie us together – the role of the ocean in the global climate, the changing distribution of shared fish stocks and access to new fishing areas, developing new forms of clean energy from the sea, and the challenges and opportunities that come with new shipping routes opening up across the Arctic, joining Europe with the Far East in a whole new way.

These are all issues we wish to explore more closely, both with our Nordic and with our Arctic partners. A strong focus on the oceans and sustainable use of the seas is in fact the Faroese contribution to Denmark’s Programme for the Presidency of the Nordic Council of Ministers this year.

So let me end my opening remarks at this Conference, by inviting you all to another one. To promote and strengthen the Nordic focus on oceans, the Faroe Islands are hosting the Conference called Seas the Future in the first week of October in Tórshavn. I firmly believe this will be a timely opportunity for us to explore the cross-cutting issues we have in common in the Nordic and Arctic cooperation – with the sea as our common platform.

Dear colleagues, the focus here today is on changing realities. Life belongs to the living, and we who live must be prepared for change. That is the reality we share in the High North. Thank you.
Panel discussions
Panel 1: Local and global governance in the Arctic

Introduction:
How should we govern the Arctic?
Ms Sinikka Bohlin, Member of the Presidium of the Nordic Council and Member of the Standing Committee of Parliamentarians of the Arctic Region, Sweden

Panellist 1:
Is the Ilulissat declaration adequate?
Mr Anton Vasiliev, Senior Arctic Official of the Arctic Council, Russian Federation

Panellist 2:
International cooperation in the Arctic
Mr Eddy Hartog, Head of Unit, DG Maritime Affairs & Fisheries, EU Commission

Panellist 3:
Differences in local governance
Ms Jessica Shadian, Ph.D., Senior Researcher, High North Center for Business and Governance, Bodø, Norway

Panellist 4:
Visions for governance in the Arctic?
Dr Robert Corell, Arctic Governance Project, USA
Panel 1 – Local and global governance in the Arctic

Introduction: How should we govern the Arctic?

Ms. Sinikka Bohlin,

Member of the Presidium of the Nordic Council and Member of the Standing Committee of Parliamentarians of the Arctic Region, Sweden

Dear Friends of the Arctic,

As a member of the Nordic Council I am glad to see this conference being realised. Last year the Nordic Council recommended that the Nordic Council of Ministers should organise an international conference about the Arctic – and here we are today.

I am also glad to be here today in my capacity as a member of the Standing Committee of Parliamentarians of the Arctic Region (SCPAR). The parliamentarians of the Arctic region have worked for many years to draw attention to the challenges the Arctic is facing, and to stress that these challenges are global.

I have been asked to talk about “How should we govern the Arctic?” This is indeed a delicate task and many have expressed their opinion on this issue before me. To begin with, I would like to say that we must be aware of what we are governing. We must start talking about the Arctic as “Us” and not as “Them”.

The Arctic is a rich region, rich in natural resources and beautiful scenery, rich in people – not in number but in culture and colourful variety. We must make the best possible use of these riches and build vigorous and stable societies that are built by the residents themselves and governed in agreement with the residents.

The geopolitical importance of the region is increasing; the exploitation of the natural resources and the security situation in the region give reason to keep a close eye on further developments. We hear statements about the Arctic being the next great area of conflict in the fight to exploit the natural resources our world so desperately needs. We hear other statements that the natural resources are clearly defined within national borders and therefore give no cause for conflicts.

I believe we are at a crossroads, where we can choose the path of peaceful cooperation in the Arctic area or we can choose the path of conflict. I sincerely hope we are wise enough to choose the path of peaceful coopera-
tion for the sake of us all. The Arctic needs statesmanship, not short-term policy.

Hopefully the recent agreement between Norway and Russia on borders in the Barents Sea is an act of statesmanship.

At the Conference of Parliamentarians of the Arctic Region in Kiruna in 2006 we held a debate on an Arctic Treaty. Our conclusion was to recommend the Governments of the Arctic countries to initiate an audit of existing legal regimes that impact the Arctic and to continue the discussion about strengthening or adding to them where necessary.

The most important question on the subject of governing the Arctic is who should be governing the Arctic. Which is the appropriate forum for Arctic issues? Is it the global forum, the regional forum or should we leave it to the five coastal states of the Arctic Ocean?

I believe the appropriate forum is the Arctic Council, with all the members, the permanent participants and the observers present to influence and shape decisions.

Cooperation between Arctic parliamentarians was initiated by the Nordic Council, and one of the aims was to promote deepened cooperation between the Arctic Governments for the benefit of the entire region. The Arctic Council has produced important results in areas such as human development, climate change and maritime policy. Cooperation between representatives from the states, the indigenous peoples in the Arctic and the science community, is in itself an important innovation in how an area can be governed and cooperation organised.

But I believe that the Arctic Council needs to be strengthened. It is the responsibility of all eight Arctic countries to use and develop the Arctic Council further, to enable us to strengthen cooperation and secure the Arctic as a peaceful region in the world.

After the first meeting of the five Arctic coastal states in Ilulissat in May 2008 we parliamentarians noted the concern expressed by the three Arctic countries and the indigenous peoples who were not invited to the meeting. The new meeting of the Arctic coastal states in Canada two months ago was criticised not only by Iceland, Finland, Sweden and the indigenous peoples, but also by the US Secretary of State, Hillary Clinton.

As a representative of a country that is not an Arctic coastal state, it is difficult for me to express any opinion of the intentions or success of the meetings. I can only say that I would have preferred that the three countries and the indigenous peoples that were excluded from the meeting room had been invited.

To ensure that the Arctic Council remains the main arena of Arctic cooperation I believe we need to include and not exclude other interested bodies. Non-Arctic states have a legitimate interest in taking part in discussion about the future of the Arctic. And last but not least, many of the non-Arctic nations and organisations have a lot to offer in Arctic cooperation. Our Nordic Cooperation is a good example of this.
The European Union has shown a growing interest in the Arctic region. The communication from the Commission on the EU and the Arctic is a big step forward, although the human dimension is lacking in the communication. I hope this is the first step in a process – the EU has opened a window to the Arctic – and I hope that the next step will be that the EU opens the door and steps out into the real life of people living in the Arctic region.

We who are here today represent many different organisations and activities committed to the development of the Arctic region. This conference shows strong interest and dedication, nevertheless I believe that our activities could, and should, be better synchronised. We should strengthen both our combined and individual impact by developing our comparative advantages in the areas that we are best suited to work with. And I believe that we should all contribute to building an Arctic identity – “We” – instead of “Them”.

Thank you for your attention.

Panellist 1: Is the Ilulissat Declaration adequate?

Mr. Anton Vasiliev,
Ambassador at Large, Senior Arctic Official of the Arctic Council, Russian Federation

Check against delivery

Dear colleagues,

We need to start from the basics. What do we mean by “governing of the Arctic” or “Arctic governance”? I don’t quite understand the issue. We need to define the term before we move forward. Russian language does not clearly distinguish the terms “to govern”, “to manage”, “to reign”, “to command”, “to run”, etc. To a Russian mind all these mean one thing – to rule. And when I see in projects and documents different ambiguous variations of “Arctic governance” (i.e. “multilateral Arctic governance”, “enhancement of the Arctic governance”, “Arctic governance reflecting the interests of all stakeholders”, etc.), I can’t get rid of impression that what is really meant is not the “governance of what”, but the “governance by whom” or – in plain words – who rules the Arctic. And casting doubt on who rules the Arctic in fact pursues a practical purpose – to participate in ruling the Arctic in order to get a piece of a “pie” of the opening Arctic riches. It is as simple as that.

To justify this you need problems. If there are no problems you create problems or invent problems. Hence, we still come across apocalyptic scenarios of allegedly inevitable clash of interests of the Arctic states leading us to a serious conflict. Hence the outburst of attention to searching gaps and
weaknesses in the existing system of the Arctic governance and to the so-called military build-up in the Arctic. And hence the talk about the “global” character of the Arctic resources, which suggests either that those to whom they belong are unable to properly manage them, or that these resources do not belong to them. Only by piling up “the problems” you can create an impression of an urgent need to “strengthen the Arctic governance”.

Needless to say, that these manipulations with the term “Arctic governance” are counterproductive and dangerous. We have no interest in playing this game.

But when I see the analysis of the Arctic governance done in good faith, what is really meant is not “who rules the Arctic”, but whether we have a potential of further strengthening of cooperation in the Arctic and what are particular fields and ways for that. And this is quite understandable and constructive. But if so, we should call a spade a spade, and not play with a highly ambiguous term “Arctic governance” when everyone has its own meaning for that.

The Ilulissat Declaration reminds us that by virtue of their sovereignty, sovereign rights and jurisdiction in large areas of the Arctic Ocean the five coastal states are in a unique position to address new possibilities and challenges in the Arctic. It is up to them to decide what is to be addressed at the national level, what – by cooperation of the Arctic states themselves, and what can be the sphere of global cooperation and interaction.

The Ilulissat Declaration is substantial and important because it sets a number of basic principles of relations and interaction among the five coastal states. The backbone of them is commitment to “the orderly settlement of any possible overlapping claims” on the basis of an extensive international legal framework that applies to the Arctic Ocean, notably UNCLOS. The Declaration notes that there is no need to develop a new comprehensive international legal regime to govern the Arctic Ocean, which means that the existing regime is quite sufficient for settling all possible problems in the region.

The Ilulissat Declaration has set a framework of cooperation among the five coastal states which is unique to them. Needless to say, that close cooperation among Russia, US, Canada, Norway and Denmark is crucial in assuring stability, predictability, peace and security in the Arctic. Only these countries directly face the Arctic Ocean, have continental shelf in the Arctic and intend to extend its limits in accordance with existing international law and using existing international mechanisms. Only they are directly responsible for practical management of the Arctic Ocean, its security and safety of navigation. Only these states face the possible public security threats in result of melting ice, because they were protected from them by ice before. The Ilulissat Declaration has set a new framework within which these and other challenges unique to these five states are viewed not as a conflict potential, but rather a potential for more intensive cooperation. And, in a way, this is the starting point of today’s international relations in the Arctic.
The Ilulissat Declaration delivers.
In 2009 Norway has become the first Arctic coastal state who had its submission on extended continental shelf in the Arctic approved by the UN Commission on the Limits of Continental Shelf. No wars, no blood, no conflict. All necessary compromises with its neighbours were found in negotiations: quietly, professionally and efficiently. This sets a good precedent for the others. And all the others have recently reiterated their commitment to Ilulissat Declaration. Which gives grounds for expectations that all other submissions shall be approved in the same orderly way.

Take another recent example of how the word and spirit of Ilulissat Declaration is realized in practice. Last month’s President Medvedev’s visit to Norway was crowned with the historic agreement of principle between Russia and Norway on delineation in the Barents Sea and the Arctic Ocean. After 40 years of consultations all necessary compromises that took care of both side’s concerns were found and the agreement was reached. One problem less in the Arctic. Without “enhancement of multilateral governance”.

And I also hope very much that this will be a good example to our partners in the Arctic who are facing the same problems. All what is needed is respect for the existing comprehensive legal framework, good will and thorough expert work.

At the second ministerial meeting of the five coastal states last March in Chelsea, Canada, we decided to enhance practical cooperation on an expert level. We shall deepen cooperation in the scientific and technical work needed to delineate the outer limits of our respective continental shelves beyond 200 nautical miles. Our national agencies responsible for public safety issues will consider potential threats in the Arctic coming from melting ice and will explore ways of sharing the relevant information and strengthen cooperation, consistent with national law. We have also discussed the value of the creation of the Arctic Regional Hydrographic Commission which would result in a better understanding of the features of the Arctic Ocean and its coastal areas, essential knowledge for safe navigation. Our experts will cooperate closely in the International Maritime Organization with a view to the timely adoption of a mandatory regime of shipping in polar waters. We have agreed to manage sustainably and through good stewardship the renewable and non-renewable resource potential of the Arctic Ocean, which can contribute to economic prosperity and social well-being, including for indigenous peoples, for generations to come.

The Ilulissat Declaration and growing cooperation among the five coastal states do not undermine or weaken the existing framework of multilateral international organizations in the Arctic. Contrary to some expressed fears and concerns, the Ilulissat process was very stimulating for the central international intergovernmental organization of the region – the Arctic Council. For example, the Ilulissat Declaration has paved the way for beginning – under the aegis of the Arctic Council – of negotiations on the multilateral instrument on cooperation in aeronautical and maritime search and rescue
operations. If successful, these negotiations could lead to signing next year of the first legally binding pan-Arctic agreement in the history of the Arctic Council. The recent ministerial meeting of the five Arctic Ocean coastal states not only expressed its full support of the Arctic Council, but also proceeded from the understanding that this key Arctic organization for cooperation in environmental protection and sustainable development should be further strengthened. Russia has long taken this view. We believe that we could strengthen the Council so that it could be better equipped for today’s challenges and opportunities through, inter alia, having its own budget, permanent secretariat, taking more binding decisions and recommendations, better structured working groups, etc. Despite of that, Russia highly appreciates the current contribution of the Council to intensification of multilateral cooperation in the Arctic and extents its full support of the Council. The same applies to another key sub-regional organization of the Arctic – Barents/Euro-Arctic Council, which is yet another example of a very fruitful and successful international organization in the most developed part of the Arctic and who has a great potential of further expansion on its own basis.

The Ilulissat Declaration, together with declarations on establishment of the Arctic Council and the Barents/Euro-Arctic Council, are not legally binding documents by itself. They are political declarations with references to existing international law relevant for the Arctic region. But they are important documents in providing certain principles of cooperation among the Arctic states, as well as between the Arctic states and non-Arctic states and organizations. They send a very clear message that, due to their sovereignty and sovereign rights, the Arctic belongs to those who live there and that the Arctic is not a “common home” for everyone. The Arctic is and will be governed by the Arctic states and its peoples. The predominant feature of state affairs in the Arctic is low tension, growing cooperation and mutual trust among the regional states, who will not allow to “rock the boat” or impose on themselves non-existent or artificially overblown problems. In my mind, some aspects of the positive experience of the High North could be even applied or taken into consideration in the other, less stable parts of the world. At the same time, the Arctic states do not isolate themselves from the outside world. Quite obviously, their relative competitive advantages can be fully used only in cooperation with non-Arctic states and entities. This applies to the exploration and future supply of hydrocarbons and other mineral resources, as well as the use of the newly accessible Arctic waterways. Exploration and development of the Shtockman gas condensate field in the continental shelf of the Barents Sea in cooperation of the Russian, Norwegian and French companies can serve as a just one good example of that. Obviously, such cooperation should be mutually beneficial and rewarding. Isolationist mentality is, in general, foreign to those who live in the Arctic. Despite climate change, natural conditions are and will be so harsh in the High North, and so few people live in such vast spaces of the Arctic, that,
even if you wish to do so, you will simply not survive there alone, without help and cooperation from the others.

To sum up, the title of my talk “Is the Ilulissat Declaration adequate?” which was assigned to me by the organizers, is, of course, a bit provocative as all good titles should be to attract interest. Adequate to what? I don’t think that I am supposed to give a direct answer to this question, but I’ll try.

I believe this Declaration is more than adequate from the viewpoint of the art of the possible. I took part in its elaboration and I can testify that these two pages of text required four months of intensive negotiations. I think that this is one of the most important and long-standing political document on the Arctic adopted recently. We hope that its provisions will be respected by everyone and we shall respect them ourselves. It clearly says that all possible Arctic problems shall be peacefully and effectively solved by the Arctic Ocean states themselves on the basis of existing international law. It says that the Arctic is not ownerless or abandoned. It delivers. It adds to existing agreements and arrangements in the Arctic and not substitutes or suppresses them. It is constructive and forward-looking. And it answers some basic questions and challenges of our times.

Ideal? Of course not. But the work shall continue.

Thank you.

Panellist 2: International cooperation in the Arctic

Mr. Eddy Hartog,

Head of Unit, Directorate General for Maritime Affairs and Fisheries, European Commission

The European Commission's contribution to the Arctic

Governance has a different meaning in different countries. There is probably agreement that its purpose is to steer human actions to collective outcomes that are beneficial to society and steer away from harmful actions. Governance commonly also implies a holistic, cross-sectional approach. This is also why it is such an essential element of the integrated maritime policy.

When talking about the Arctic one must talk about the content. The Arctic region faces many challenges such as climate change, environmental pollution, new economic activities and a changing labour market. The Arctic region is also intrinsically related to other waters, notably the Atlantic and Pacific Oceans through currents and winds.

The Arctic region is well taken care of. First and foremost its inhabitants take care of the place they live in. They are the first to be affected by any new development and thus have an interest in protecting their habitat. They
live on the territories of eight responsible Arctic States. These States regulate their lands and waters in accordance with international law, in particular the 1982 Law of the Sea Convention. Where needed, they cooperate together with other stakeholders through regional arrangements, notably the Arctic Council or the OSPAR Convention. Only on some issues is assistance of the wider international community required such as through IMO or UNEP. This is where the Arctic becomes a shared responsibility.

The EU has over the last decades contributed to the Arctic in many ways. Its policies and legislation affect the Arctic. Less pollution in the EU has a positive effect on the Arctic. The EU has also developed various partnerships with States and peoples. The EU has thirdly spent money on Arctic issues, either through research projects or through programmes such as the European Regional Development Fund. The EU has finally supported international action concerning the Arctic.

The EU institutions have stated their views through different channels. The European Commission through a Communication on the EU and the Arctic Region (November 2008); the Council through its conclusions of December 2009; the European Parliament will soon adopt a position. The Commission made various suggestions on governance in the Arctic, all based on existing legal documents. The EU is involved in the Arctic in different formats. The Commission is a full partner in the Northern Dimension, the Barents Euro-Arctic Council and the Council of Baltic Sea States. The European Parliament is a full member of the Conference of Parliamentarians of the Arctic.

The actions foreseen by the EU correspond with many initiatives taken by the Nordic Council of Ministers. It is thus obvious that synergies between the organisations can easily be developed.

Panellist 3: Differences in local governance

Ms. Jessica Shadian,
Ph.D., Senior Researcher at High North Center for Business and Governance, Bodo, Norway

An indigenous governance perspective

The Arctic is unique. While most often this reference is made to the Arctic’s unique physical features from a social science point of view the Arctic is most certainly unique in terms of its political and social make-up. There is no other region in the world that steps so far outside the boundaries of Westphalian interstate politics. The Arctic is owned and governed by 8 Arctic states. But equally so, the mental and the physical space of the Arctic is governed by a myriad of local indigenous models of governance from local
villages to an entire island. Together all of these political bodies, state and non-state alike, participate in the ownership and management of the Arctic’s immense wealth of resources. In the debate about who owns the Arctic and who should govern an understanding of the complexity of the multitude of local indigenous governance arrangements is essential. Focusing on the Sami and the Inuit, this presentation will offer a snapshot of the diverse range of indigenous governance in the circumpolar Arctic.

Local indigenous governance varies in terms of cultural differences and its particular history. Likewise, the degree of self-determination that each indigenous community maintains depends on the state, region or local community that they are a part of. Yet, there is one commonality which links the vast majority of all indigenous peoples in the circumpolar Arctic together. Almost all local indigenous groups were internally colonised. Beginning in the early 1970s, plans for energy projects and the discovery of oil and gas among other resources on indigenous inhabited lands brought to bear the necessity to address and settle the many land claims issues and aims for indigenous self-determination throughout the Arctic. The land claims agreements and the indigenous governance arrangements which emerged (a process which is ongoing) from these efforts were most often not a reaction to or against development. Rather, it was about how the local indigenous communities could prosper from and control the development of resources on their land. The land claims and other governance agreements, as such, provide an avenue for the implementation of indigenous rights and resource control and serve as the basis for realising self-government. They are not the realisation of self-determination in and of themselves.

Yet, the diversity of indigenous arrangements in the Arctic and varying rights and sovereignty each local indigenous governance arrangement affords becomes more complex when you add another layer of indigenous governance. International indigenous political actors work concurrently at the Arctic regional and international levels of politics. What then do these variations and overlapping authorities mean when we return to the present situation where melting ice is creating new opportunities for Arctic resource development? Who owns the Arctic and who should decide? One important point of departure is to realise that state governments’ and inter-state organisations cannot approach Arctic governance through the traditional lens of interstate politics. It is not sufficient to think that Arctic governance will be played out with a business as usual mentality and then add as an afterthought that governments “will consult with indigenous peoples where appropriate.”

The task for the future of Arctic governance is how to govern regionally by bridging the international to the local. This effort will take nothing short of the construction of a new set of political arrangements created from political processes which bring together all stakeholders from local community leaders on the ground where the development is taking place to scientists, local and regional policy makers and industry as well as those...
bodies which work to create and enforce international legal frameworks. In some legal circles the concept is called collaborative ecosystem governance. Some existing frameworks to turn to as possible ways to move forward are the Inuit co-management regimes in Alaska and Canada. How these approaches may be applied on a broader scale for governing the Arctic is worth discussion. Hard international law may take years or even decades and the question remains as to whether or not hard law is even desired. The pressing reality is that any process for building Arctic governance mechanisms requires active learning from all stakeholders in order to create shared understandings and new normative frameworks for sustainable Arctic development.
Panel 2: Resources in the Arctic

Introduction:
A new Arctic business environment
Ms Katrín Jakobsdóttir, Minister for Nordic Co-operation, Iceland

Panelist 1:
Traditional resources in a globalised context
Mr Karsten Klepsvik, Senior Arctic Official of the Arctic Council, Norway

Panelist 2:
Strategies for oil and gas development in the Arctic
Ms Hege Marie Norheim, Senior vice president, Corporative Initiative Northern Areas, Statoil, Norway

Panelist 3:
Large scale activities and small scale communities
Mr Hjalti Jóhannesson, Assistant director and researcher, University of Akureyri Research Centre, Iceland

Panelist 4:
New approaches to management of Arctic living resources
Dr Tatiana Saksina, Arctic Governance Officer, WWF Arctic Program, Norway
Panel 2 – Resources in the Arctic

Introduction: A new Arctic business environment

*Ms. Katrin Jakobsdottir,*
Minister for Nordic Cooperation, Iceland

Ladies and gentlemen,

It is a great pleasure to be able to address you here today and launch the panel discussion ahead of us. The issues under examination here are of very major concern to inhabitants of Arctic regions – not least us in Iceland. Arctic issues are of direct and self-evident significance for Iceland and the Icelandic government strongly emphasises positive cooperation with the country’s neighbouring states in this region.

In recent decades, Arctic issues have steadily moved to the foreground, as the significance of the region has become ever clearer to the international community. This is primarily due to information on the technological and economic feasibility of developing the rich oil and gas resources of the Arctic. Extensive geopolitical debate is focused on the changes which are now occurring in northern regions as a result of climate change and melting of the polar ice cap. There are numerous indications that these changes are proceeding more rapidly than previously assumed and are most likely inescapable.

The impact of climate changes, both positive and negative, on the lives of Arctic peoples is steadily growing. The business environment will change, with new opportunities opening up while others disappear. Global warming and changing environmental conditions impact the marine biosphere, altering species’ migration patterns and possibly resulting in relocation of local fish stocks.

These changes also bring a variety of risks, of which we must be conscious. Expanding exploration and utilisation of Arctic oil and gas resources, minerals and fishing stocks, together with increased vessel traffic, can threaten the environmental security of the region. Here all Arctic nations have common interests at stake.

Current technology makes it possible to utilise resources which were previously inaccessible. But we must not define “resources” in a narrow sense. The ecosystem, biodiversity, and human settlement and culture in the Arctic are also resources. Protection may sometimes comprise the best utilisation and resource exploitation must not be decided upon solely from traditional perspectives. The ideology of sustainable development must be ap-
plied, in order to prevent overexploitation, with a view to the interests of future generations. It is important to maintain an environmental, social and economic balance which will ensure welfare rather than short-term profit. Resource utilisation in the region must not disrupt the lifestyle and cultural balance of indigenous peoples who have made their homes in these regions for thousands of years.

Climate change does not only create risks, but also new possibilities. In the not-so-distant future, the Arctic may well prove to be a region of opportunities. Some experts are of the opinion that the Arctic Ocean could even be ice-free in late summer within a decade and that it might be relatively easy for vessels designed to sail through ice to navigate in the region.

If these forecasts prove correct, we could witness a major upswing in the Arctic when new northern sailing routes open up, connecting the older industrialised nations of the North Atlantic to rapidly growing economies in the Far East. This could reduce the sailing time from Central Europe to Asia by over 40% and from Norway to the US West Coast by around 30%.

Improved access to Arctic nature also increases possibilities in tourism. Interest in natural life and communities in the Arctic is growing and has boosted the number of travellers in regions which until very recently were well off the beaten path. The travel industry can provide a strong stimulus where business and industry lack diversity, creating the basis for service industries which serve local residents as well as tourists. The high cost and infrequency of air travel in the Arctic, however, definitely impedes the growth of the travel industry. There are few direct connections between Arctic destinations, which are clearly an obstacle to many people wishing to do business in the region.

Recent years have witnessed a strong increase in cruise ships sailing in Arctic regions. It is a cause for concern, however, that many of these vessels are not outfitted for sailing in ice and may not be equipped to deal with possible mishaps. While these new opportunities should be used to good advantage, it is important to ensure that travel in the Arctic is environmentally sound and complies with specific rules. The objective is to protect the vulnerable natural environment of the Arctic while at the same time ensuring the safety of travellers.

The Arctic appears clearly to be rich in both oil and gas resources. They are, however, not unlimited – eventually these energy supplies will be exhausted. Even if the best available technologies for extraction are applied, such undertakings are not without risk, as the latest example from the Bay of Mexico shows only too clearly. Failure to comply with strictest environmental requirements there will have horrific consequences for people and the environment. The Arctic includes some of the world’s largest fishing grounds, which we definitely wish to maintain in perpetuity, long after the oil and gas reserves are exhausted, and this also requires a strategy of sustainable development.
It is worth bearing in mind that the Arctic is also rich in renewable resources, including forests, wind power, geothermal and hydropower, as well as containing much of the world’s reserves of fresh water. Renewable resources can be harnessed efficiently to provide support for economic development in the region. Iceland has a long and positive experience of this, as 80% of all energy used in Iceland comes from renewable sources. Icelanders only use fossil fuels for transportation and the fishing fleet.

Few regions have welcomed Internet communications as warmly as the sparsely settled Arctic. In today’s global information society, effective Internet communications make all the difference. All Arctic states therefore emphasise the development of a high-speed fibre-optic network throughout the region. The Arctic Portal demonstrates clearly how the Internet can link together residents in the region, providing a general forum for Internet communication and information dissemination on the current situation and changes in the Arctic. The importance of robust Internet links for the entire business environment in the Arctic goes without saying.

Ladies and gentlemen, like other Arctic nations, it is to Iceland’s direct advantage to ensure that natural resources in the region are utilised sustainably and that extraction of fossil fuels and other large-scale industrial development does not destroy the sensitive terrestrial and marine environments, including rich fishing banks. We must not forget that although various states and federations of states may participate in developing a strategy for the Arctic, the prime concern is to enable the region’s indigenous peoples to maintain their cultural traditions and right to self-determination, while at the same time benefiting from industrial development and new technologies. These are the concerns Iceland will emphasise wherever and whenever Arctic issues are up for discussion.

Panellist 2: Strategies for oil and gas development in the Arctic

Ms. Hege Marie Norheim,
Senior vice president, Corporative Initiative Northern Areas, Statoil ASA, Norway

*Business concept for petroleum activities in the Arctic*

Estimates prepared by the US Geological Survey indicate that the world’s total undiscovered resources are equivalent to 1500 years of the current Norwegian production. It is expected that more than 20 per cent of these resources are found north of the Arctic Circle – that is to say, in Arctic and sub-arctic areas. This equals nearly 300 years of production from the Nor-
The Norwegian shelf. More than two-thirds of this volume is probably gas and nearly 85 per cent of the resources are expected to be found offshore.

The Norwegian authorities opened the Barents Sea for exploration in 1981 and the same year, Statoil discovered the huge Snøhvit gas fields. Over the course of these thirty years, Statoil, the authorities and a number of international players have developed fields and a strong foothold in the North, in part through the drilling of more than 80 exploration wells.

On the Norwegian shelf the areas off Lofoten and Vesterålen is the most attractive acreage in terms of the possibility of finding large new fields that can warrant independent developments and new infrastructure. Statoil wants the authorities to give careful consideration to how such a portfolio of projects and resource volumes can be realized.

The clarification of potential new acreage through the new demarcation line with Russia is of great interest for Statoil. In terms exploration this is an interesting but very immature area, with a high level of uncertainty. A major discovery in the area may be far from shore and potentially face technological challenges associated ice and darkness. A potential development project will take many years.

**Technology and opportunities**

Step-by-step technological development characterises the Norwegian shelf, Statoil and Norwegian supplier companies. We have a 40-year history of industrial development which has seen us move from the south towards the north, from shallow to deep waters, and from fixed installations to subsea and remote-controlled solutions. The direction and speed have been determined by market demand, access to resources, new challenges and fields that are large enough to finance new technology.

Major challenges in the Arctic are ice, continuous darkness are primary factors as well as long periods of continuous darkness, cold, very little infrastructure, vast distances at sea, and rich, important ecosystems. The Norwegian Arctic shelf is unique with its access to infrastructure and no issues of ice due the Gulf Stream.

Statoil is well-positioned in Arctic petroleum activities. First and foremost, Statoil has experience from nearly 30 years of activity in the Norwegian part of the Barents Sea. On the Russian sector Statoil participates in onshore Kharjaga field as well as development of the gigantic Stockman gas field, located 600 km from shore in the Barents Sea. Other international Arctic assets in which Statoil is active are in Newfoundland and Alaska, and we are considering participating in the Greenland authorities’ plans to conduct exploration drilling off their east coast.

So far, we have developed the world’s only Arctic LNG facility to process production from the Snohvit gas field. The field itself is developed using seabed installations situated 150 kilometres from land, in water depths of 100 metres.
Subsea or downhole separation of water with associated direct injection back into the field will also be essential in handling production both above and below ice. Strong technological development in multiphase transport of mixtures of oil, gas and water is expected to further increase transportation distances. And on top of all this comes electrification and remote-operation from shore.

The way forward in the Arctic will be dictated by market demand and available technology.

*The market for Arctic resources*

European countries will have to make decisions that will have large consequences for the future energy mix. Significant new power capacity must be built in the near future to replace existing old capacity and to fulfill new environmental requirements. Gas is the obvious energy choice for the power sector. It is competitive in terms of price and supply security, has lower greenhouse gas emissions and a long-term potential.

Statoil is the second largest supplier of gas to Europe. Through our flexible and integrated gas pipeline infrastructure and LNG, Statoil can reach large parts of the European markets. The system is also very cost-effective. We exploit economies of scale and keep unit costs low. This means that we are able to develop smaller fields that could not have developed their own transport solution if they had been independent. These system properties do not exist to the same degree in other locations, which makes the Norwegian infrastructure unique in a global context.

Statoil believes that demand for gas for power generation will increase in Europe and the USA towards 2030. We have a strong position in gas, and work actively to position itself in relation to Arctic gas opportunities. We also have the necessary commercial expertise and the right market positions to take part in this growth.

**Panellist 3: Large scale activities and small scale communities – experiences from East Iceland**

*Mr. Hjalti Jóhannesson,*

Assistant director and researcher, University of Akureyri Research Centre, Iceland

15 March 2003 contracts were signed on a large hydropower project, Kárahnjúkar and the Alcoa Fjarðaál aluminium plant in East Iceland, the single largest construction project in Iceland’s history. Estimated resources were 6,300 man years during the construction period and a cost of 2.5 billion USD. The decision was controversial and the project was protested,
especially on the basis of nature conservation. In East Iceland the project was however long awaited for.

RHA – University of Akureyri Research Centre studied the social impacts on the local communities during the period 2004–2008. This was carried out in cooperation with the Ministry of Industry, the Icelandic Regional Development Institute and the Development Centre of East Iceland. The project was initiated by the parliament and funded by the state.

Kárahnjúkar power station was connected to the electricity grid to deliver energy to the Alcoa Fjarðaál plant in April 2007 and was formally opened 30 November 2008. In December 2008 a total of six dams and 73 km of tunnels were finished in the eastern part of the highland. Main contractors were foreign companies, the single largest being the Italian firm Impregilo. The power station produces 690 MW / 4,600 Gwh of electricity. Only 13 employees are needed to run the power plant.

The aluminium plant was built just outside the town Reyðarfjörður in East Iceland with just over 600 inhabitants when the project commenced. At the height of the project there were around 1,700 workers on site, 17 % of them were Icelandic and thus greatly outnumbered by the Polish who were 70 % of the workers. Globalization, size of the projects, construction work in other locations in the country and high value of the ISK are among the reasons for much influx of foreign workers. The Icelandic system of governance was not prepared for this. Smelting of aluminium began in April 2007 and in 2008 the plant had reached full capacity, producing 350,000 tons of aluminium annually. Today employees in the factory are 450 and additional 300 are employed in companies providing direct services to the plant. The labour shed of the plant within 45 minutes commuting distance consists of some 8,000 inhabitants.

During the construction period, the region of East Iceland witnessed huge changes but impacts were observed to be primarily confined to two municipalities where the projects are located. Sample surveys indicated positive attitude towards impacts on economic conditions in the area and increased diversity of jobs. Population in the area within less than 2 hours driving distance from the projects is 9,000 inhabitants and has increased by 1,300 since 2002. Population decrease has however continued in adjacent areas similar as in most of rural Iceland. The structure of the local economy changed during the construction period and beginning of the operation period. Jobs decreased in fisheries and fish processing, even if this can not be directly related to the advent of the aluminium plant but is more likely due to continued rationalization and automation. The relative size of the aluminium plant compared to the size of the local labour market makes it important for the social rhythm. Issues such as work shift schedules may become more pronounced due to this fact and in the case of this plant a system of 12 hours shifts appears to be less suitable, e.g. for parents of young children. Another indicator of impact on the local labour market is unusually high participation of women. Women were 32 % of the workers soon after the aluminium plant
began operating in 2007 but this dropped to 26% in 2009, this is however much higher ratio than in the other two aluminium plants in the country with less than 20%.

The housing market and land use planning is where the most obvious mistakes were made during the construction period. Most striking was the excessive building of residential housing. This applied especially to apartment buildings but single family houses have traditionally been the most important building type in the area. Planning of new building areas could have been carried out more carefully and increased cooperation between municipalities on planning issues desirable. Infrastructure was considerably strengthened as a result of the projects. This applies especially to a new export harbour at the site of the aluminium plant and a number of new roads. Such impacts are generally pronounced where megaprojects are being built.

Income of municipalities rose considerably but their economic condition did not change similarly due to costly investment in infrastructure and services. For the municipality Fjarðabyggð where the plant is located revenues continue to be high. There was much competition between the two main municipalities for new inhabitants and companies during the construction phase.

During the construction phase, Icelandic society was in an unusual state of turmoil. Much expansion took place in the economy of the country with rising housing prices and a credit bubble which burst in October 2008. Also there were cuts in fishing quotas and other negative changes in the traditional economy. Taking this into account, cause and effect concerning the megaprojects becomes more blurred.

It appears that the burden of the construction work was not too much for the communities in East Iceland to shoulder and the area seems to have survived this phase satisfactorily. On the other hand, various social institutions, both municipal and state, do not appear to have been sufficiently prepared to bear the weight of the strain placed on them during the construction period.

Concerning the regional development, it appears that the construction has strengthened the main service centre of the region Egilsstaðir but the lack of a strong regional centre has been an Achilles heel of the region. The interests of the different communities of the central impact area appear to converge to a significant extent, and therefore it is possible that these communities will either continue to work closely, or even merge to form larger units.
Panellist 4: New approaches to management of Arctic living resources

Dr. Tatiana Saksina
Arctic Governance Officer, WWF International, Arctic Program, Norway

New Arctic, New Rules

This is an urgent problem and a unique opportunity to manage the last emerging ocean wisely for the benefit of present and future generations. The melting of the arctic ice is opening a new ocean, bringing new possibilities for commercial activities in a pristine and biodiversity rich part of the world that has previously been inaccessible. There is a growing demand on resources and space – they need to be managed sustainably. We have to ensure adequate protection of ecosystems and livelihoods that depend on them before the economic activities start in full. It is the time to put aside our regional and national differences to ensure that the ecosystems remain intact, that the Arctic remains healthy and habitable.

WWF has commissioned three reports to examine how today’s international legal regime meets the challenges of managing the unprecedented rapid change taking place in the Arctic. The conclusion is that there are large gaps in the governance and management regimes, leaving insufficient protection for the vulnerable arctic environment. In many areas, either there is no legal protection, or it is too weak to be effective.

These reports show that it is not possible to simply deny that problems exist, or to insist that there are already adequate responses to the problems. We need to adapt the current governance and regulatory regime in the Arctic as a consequence of the change. Building on existing tools, we need a more comprehensive, holistic solution for the protection of the arctic marine environment and sustainable ecosystem-based management of the arctic marine resources.

A solutions-oriented organization, WWF offers a potential solution to address the current gaps, protect the environment and sustainably develop the arctic resources. This solution entails:

- The protection and preservation of the arctic marine environment
- Long-term conservation and sustainable and equitable use of arctic marine resources, marine ecosystems and their functions
- Maintaining peace, order and stability in the Arctic
- Ensuring socio-economic benefits for present and future generations, with special reference to indigenous arctic peoples

The framework agreement would be based on the following principles:
- A precautionary approach
- An adaptive management
- Integrated, cross-sectoral ecosystem-based ocean management
- Good governance
- A polluter pays principle
- The use of best available techniques and best environmental practice
- The use of traditional knowledge of indigenous peoples

Benefits are numerous including (i) a regional level playing field with regional uniformity pursuing integrated, cross-sectoral ecosystem-based ocean management; (ii) a holistic approach to the protection of the marine environment that will allow to maintain healthy ecosystems and prosperous livelihoods in the Arctic.

This approach is one of the best solutions, in WWF’s view, for the wise management and environmental protection of the Arctic Ocean. We are suggesting this as one, but not the only possible solution. We challenge the stakeholders in the Arctic to advance alternatives that would work equally well to safeguard the region.

WWF believes that the arctic states have a primary stewardship responsibility to ensure a safe future for the arctic marine environment. Their leadership is critical for the survival of this global public good. We urge arctic states to take a lead on the discussion on how to sustainably develop the Arctic and its resources and sufficiently protect its marine environment. We urge them to consult on how to address the gaps, and tackle the responsible management and marine environmental protection issues through appropriate regulation or otherwise.
Panel 3: Living in the Arctic

Introduction:
Merging tradition and change
Mr Johan Tiedemann, State Secretary for Nordic Cooperation, Sweden

Panellist 1:
A threatened culture in new times
Ms Gunn-Britt Retter, Head of Arctic- and Environmental Unit, Saami Council

Panellist 2:
Demographic change – urbanisation and new industries
Mr Birger Poppel, international project director, Survey of Living Conditions in the Arctic (SLiCA), Greenland

Panellist 3:
Coping with social challenges in the high north
Ms Vappu Sunnari, University Lecturer in Gender Studies, University of Oulu; Professor in Pedagogy, Luleå Technical University

Panellist 4:
Facilitating capacity building in the Arctic
Mr Hans Hinrichsen, responsible inspector for mining-entrepreneur capacity building courses, Building & Construction Centre, Greenland
Panel 3 – Living in the Arctic

Introduction: Merging tradition and change

Mr. Johan Tiedemann,
State Secretary for Nordic Cooperation, Sweden

My name is Johan Tiedemann and I work as a State secretary in the Swedish government office. My responsibility is Nordic affairs. Thank you for inviting me to come here today!

It feels good to see that so many committed to the development of our northerly part of the Nordic.

I am very pleased to be here to talk about the merging of tradition and change in the Arctic.

The interest in the Arctic has risen dramatically in the last couple of years. The Arctic has a unique nature and wildlife which is very sensitive to changes in the environment. This means that people, nature and wildlife have to adapt to changed conditions. The increased interest is an effect of exploring natural resources and the possibility of new shipping lanes for the maritime traffic. Changes like these will also have an impact on the arctic nature.

The Nordic countries are very much involved in the Arctic, as it is a large part of our region. One of two major tasks for the Nordic cooperation is to improve the quality of life for the indigenous people in the northern areas and to promote social and cultural development for the Arctic people. The other major task is to protect the sensitive and characteristic Arctic nature, and to ensure sustainable use of the region's resources, and protection of its biological diversity.

Increased environmental pressures not least climate change constitute severe problems for all people living in the Arctic. Climate change is much faster in the Arctic than in other parts of our globe. The processes are reinforcing. We very much look forward to the assessments now being done in the different bodies within the Arctic Council. The assessment on biodiversity (ABA) is expected in a couple of years but the first studies show that habitats for flora and fauna are under severe pressure already today because of the changed climate. Traditional industry will be affected by this.

Living conditions in the Arctic are also related to how chemicals are diffused by air and concentrated in biomass. Mercury and halogenated flame retardants should be under special observation and measures taken globally to prevent them from diffusing into the vulnerable Arctic environment.
Melting of ice and thawing of permafrost will create large negative impacts on infrastructure. Shipping, oil and gas exploration and fishing will be easier with less ice but we do not yet know what the environmental limits are for these activities. We need more assessments and we need impact assessments for all new activities. There is also an assessment going on about the regulatory framework. We need to protect the environment and need to know more about what is possible and viable today and if any complementary measures are needed. All this results in a clear recommendation to use a precautionary attitude.

A number of these important matters will be highlighted during the Swedish presidency of the Arctic Council 2011 – 2013. During the Swedish Presidency in 2008, Sweden organised an Arctic Conference in Greenland, together with the European Commission, with the aim of increasing knowledge of conditions for the environment and the people living in the Arctic.

The Arctic Council is of great importance in shaping the future of the Arctic. It’s a unique forum where indigenous peoples are represented as permanent participants together with state actors. They are thus granted higher status than observer states and other observers. This provides an important tool for taking into account the traditional knowledge of the indigenous peoples when elaborating modern methods of preserving the Arctic flora and fauna in today’s world.

For many people living in the Arctic natural resources are the main source of livelihood. There is a need to allow for traditional means of support, such as hunting and fishing, while also exploring ways of using modern technology in everyday life, something that I’m sure that the next speaker, Gunn-Britt from the Sami Council will discuss.

Even though the Arctic region is of global importance, the indigenous peoples are the ones directly affected by increased environmental pressures – and also by any measures to counter these challenges, for example policies for preservation of wildlife. It is important to strike a balance between the interests of the indigenous people, their own environmental concerns, and the global challenge posed by climate change in the Arctic.

The traditional way of life in the Arctic will not go unaffected by the challenges that face the whole region, or by our attempts to meet these challenges. It is therefore paramount that we face these challenges in common, and develop a common understanding with the indigenous people. This is also why the Arctic Council remains the unique forum for these matters.

The Nordic countries have shown a great ability to overcome problem obstructing development through ingenuity and the ability to adapt. I believe that we together can overcome the threats against our environment by changing our lifestyles and using environmentally-friendly technology.

Thank you for your attention.
Panellist 1: A threatened culture in new times

Ms. Gunn-Britt Retter,
Head of Arctic- and Environmental Unit, Saami Council

I would like to start off with a little story from home. About a year ago, the local children’s theatre showed a play called “Eatnanspåppastallan”, in English it would translate “Playing with the globe”. In brief it is about the Christian God and the Sun losing hope in the human being due to their accelerating energy consumption on the globe having devastating impacts on life. Not being in the position to instruct the human to stop up to think about their behaviour, God and the Sun allies with the underground people, Ulda, who finds a child to help.

The play was created by the children through improvising, while the play writer took notes. I spoke with the writer, she told me the children were very good in improvising the parts concerning the consequences of the overconsumption and climate changes, but when it came to solutions, they were stuck. In the play they use magic to solve the situation. This raises for me a number of questions: Can we – or rather the politicians in the Nordic council of Ministers – use magic to face the changing realities in the Arctic? Or do we have tools and solutions at hand to help us? And on the other side, what do we really communicate to the public about climate change, when the children do not even see any solutions to the challenges?

Thank you for the opportunity to share our perspectives at this important conference. The Saami Council is an indigenous peoples’ organisation, our members are 9 national level Saami organisations and associations based in all the four countries the Saami people live in today: Finland, Norway, Russia and Sweden. While the Nordic Council was established in 1952 to facilitate cooperation among the Nordic states, the first Saami Conference took place in 1953 to unite the Saami people that lived within four national states. The Saami Council was established at the second Saami conference in 1956. We represent the Saami civil society and have status as Permanent Participants to the Arctic Council and roster status in the United Nations Economic and Social Committee (ECOSOC) and participate actively in various UN processes concerning indigenous peoples, but we have never achieved any status with the Nordic Council.

Adaptation – Ceavccageadgi

At the cultural historic site of Ceavccageadgi/Mortensnes, in Unjárga/Nesseby municipality, archaeological investigations prove that the site has been continuously settled from about 11,000 years ago until the present. After the ice retreated 13,000 years ago the land has been rising. This land rise can be seen with the human eye, as natural terraces in the landscape.
People traditionally settled at the sea shore, on the terraces. Today we can read the history of the settlements by walking from the highest hill down towards today’s sea level – one step being a step in 100 years of history.

The Ceavcageagdi site, being very interesting for historical reasons, is in fact also a walk through a history of climate adaptation.

Archaeologists can tell a lot about the diet at a certain time in history by investigating domestic waste. Remains of fish, sea mammals and birds tell us what kind of species our ancestors depended on during various periods. Their diet mainly consisted of cod, seal and whale, as well as birds, mostly migratory birds such as kittiwake, red knot, common redshank and European widgeon. Investigation of domestic waste from settlements from a warmer period also reveals fish species normally found in warmer water than we have today, which are thus no longer found in the fjord, such as whiting and moonfish or cusk. As with the contemporary fjord fisheries, the past taught us not to simply rely on one species for survival, but rather to depend on the diversity of species available throughout the year.

This is only one example to show that the Saami people have faced many changes through history, based on this I would claim we have the capacity to adapt to environmental changes. We have done that before, and we are still there. It is in fact embedded in the nature of the culture and this is what makes us resilient towards changes. Climate Change and globalization pose challenges never faced before; the challenge is how to prepare our culture to live through also these challenges. For us it is not a question about how to preserve the culture, we are not strawberrys. The Saami culture is a vital and living culture and constantly changing, and it is our right to develop our culture for future generations.

Traditional Knowledge

The Saami culture faces new challenges with globalization and increased resource development, decision making has to be based on the best available knowledge, both traditional knowledge and science. Describing TK’s relevance to adaptation, I draw extensively from Johan Mattis Turi, director of the World Reindeer Herding Association, reflections in the EALÁT project book presented to the Arctic Council Ministerial in April last year.

Reindeer herding peoples have lived and worked across wide areas of the north since time immemorial and have accumulated unique knowledge about the natural environment in which they live. Today, reindeer herding communities everywhere are facing profound changes in their societies. The challenges of climate change, increased development and globalization are of such proportions that we need to use the best available knowledge in order to adapt to the future. Obviously, scientific research has been and will continue to be very important. But often the best available knowledge is the knowledge embedded within reindeer herding communities: TK developed by centuries of close observation of reindeer and nature which has been
handed down from generation to generation. Reindeer herding peoples have always known that they must work in collaboration with nature, not against it. TK is based on experience and is knowledge that is accumulated in people's memory and actions over multiple generations. It is validated in the same way that scientific knowledge is found valid through trial and error. The crucial difference between them lies in how knowledge is obtained. Turi talks from the reindeer herders’ perspective, but this is valid also for the Saami culture as a whole.

It is important to remember that knowledge grow roots where it is developed and used. Indigenous peoples must therefore have the right to develop their own strategies for adapting to climate change and this goes hand in hand with the right to develop their own knowledge and research institutions. We must see the implementation of traditional knowledge alongside scientific knowledge in governance, public plans and industrial projects. We need to establish our own research institutions along side documenting the traditional knowledge, our researchers and students should test and proof our TK and develop Saami science that is equally valued with any other kind of science. Based on this the Saami children might see solutions for the challenges they will inherit from our over consumptive generation.

Mitigation

As indigenous people in the high north, we already face many challenges related to climate change, not only to the biodiversity the environment and living resources that our culture still depend upon, but also related to the intensive change in land use when finding solutions to the challenges and in developing mitigation strategies.

The efforts to mitigate climate change causes almost as great a problem to the Saami people as climate change itself. The exploding interest in renewable resources such as windmills, hydroelectric dams and nuclear power plants intensify pressure on our lands never seen before. When our national states are exploring increased use of renewable resources, they wish to concentrate such industrial plants, with associated roads, power cords, mines and other infrastructure, on Saami traditional land.

We see not only a race for oil and gas resources in the Arctic, but also a race for development of renewable resources. Is that a more fair game?

Our message is that our traditional knowledge has to be recognized equally with western science as basis for management and developing of mitigation and adaptation strategies. Further, the parties have to protect and promote the full enjoyment of indigenous peoples’ rights through respect for human rights standards and obligations, in all climate change matters, ensuring indigenous peoples’ full and effective participation, including free, prior and informed consent consistent with the UN Declaration on the Rights of Indigenous Peoples.
Conclusions

To achieve balance between tradition and change, we need to strengthen the Saami knowledge institutions to match the knowledge production of the majority society, before the integration of knowledge systems can happen in the most respectful manner. That implies that the Saami University College has to be enabled to match the Tromsø University, Luleå University and University of Lapland in Rovaniemi, in order to integrate science and TK on equal terms.

Saami people has to be equal partners in Governance of the high north, being it in Protected Areas, like in Lapponia in Sweden, in consultations in matters that concerns the Saami people, like the Consultation agreement between the Norwegian Government and Saami Parliament.

Ratification of the Nordic Saami Convention would be one important step in streamlining the Saami policies in the Nordic countries.

So what am I trying to say:

The Saami Culture a live and vital culture, we are not looking for preservation, as that is what you do with strawberries. We have the right to continue to develop our culture also through the present and future changes, and we would like to be part of or decide how to develop.

Arctic Council serves as a good model for tri-partner partnership at an international level, between states, indigenous peoples and research institutions. It is not perfect, but shows it is possible.

Panellist 2: Demographic change – urbanisation and new industries

Mr. Birger Poppel,
International project director, Survey of Living Conditions in the Arctic (SLiCA), Greenland

Business related, economic, social, cultural and political conditions in the Arctic have undergone intense changes since World War II not least due to rapid technological developments and other dimensions of globalization. And, the climate changes have within a short number of years contributed to accelerate the rushed turnabout in livelihoods and living conditions for the indigenous peoples of the Arctic and other Arctic residents.

The man made climate changes will among other impacts result in accelerated melting of the ice cap, more unstable seasonal activity and a destabilization resulting from the thawing of permafrost. The withdrawal of glaciers and shrinking of the ice cap will facilitate resource exploration and the establishment of new mines, extraction of oil and natural gas and, for example, the opening of new shipping routes when ice conditions in the northern Arctic allow them.
These activities and other societal stressors will all mean greater pressures on the pristine Arctic environment and the people living there – including impacts on the dominant form of living among the indigenous peoples of the Arctic: a combination of subsistence and market economy activities. Thus, the impacts of change will also have social and cultural aspects.

The presentation will give a brief overview of some of the drivers for societal change (e.g. industrial expansion – non-renewal resource exploitation) and the interaction with demographic developments.

Furthermore the presentation will discuss potential consequences for sustainable development, social cohesion and individual well-being based on findings from the Survey of Living Conditions in the Arctic, SLiCA.

The international core questionnaire applied in the Survey of Living Conditions in the Arctic, SLiCA offers opportunities to examine the respondents’ satisfaction with e.g. the actual composition of the different activities as well as the preferred composition and the relationship to the overall well-being and the individual. The SLiCA questionnaire further makes it possible to analyse aspects that are important to the individuals’ well-being and to the social cohesion of.

The analysis is based on more than 8,000 personal interviews with Inuit and Sami adults in Greenland, Canada, Alaska, Norway and Sweden and indigenous adults in Chukotka and Kola Peninsula.

Panellist 3: Coping with social challenges in the high north

Ms. Vappu Sunnari,
University Lecturer in Women’s Studies, University of Oulu, Finland; Professor in Pedagogy, Luleå Technical University, Sweden

I will concentrate in my presentation on one social challenge; gendered and sexualized violence targeted especially against women and girls. As for example WHO (2005) argues, violence against women is the most pervasive yet under recognized human rights violation in the world. Across countries, almost 20% to 25% of all women have experienced physical intimate partner violence at least once during their adult lives, according to studies conducted in varied countries of Europe. Furthermore, more than one-tenth has suffered sexual violence involving the use of force. The Arctic North is not outside the problem. Sooner the problem is bigger according to information received for example from the Arctic Canada and Greenland last decades.

Forms of violence that women experience on the basis of their gender are plentiful. They include marital rape, rape by other men known to them and by strangers, incest, sexual harassment, trafficking for the purposes of
forced labour or prostitution, dowry-related violence, honour killing and other forms of femicide, acid attacks, female genital mutilation.

Violence saps women’s energy, compromises their physical and mental health, and erodes their self-esteem. In addition to causing injury, violence increases women’s long-term risk of a number of other health problems, including chronic pain, physical disability, drug and alcohol abuse, and depression. Women with a history of physical or sexual abuse are also at increased risk of unintended pregnancy, sexually transmitted infections, and miscarriages.

Violence against women and other types of gender/sexuality-based violence are old as phenomena, although publicity around them is not. Twenty – thirty years ago, violence against women was not considered as an issue worthy of international attention or concern. Victims of violence suffered in silence, with little public recognition of their plight. Silence around experienced violence in adult intimate relationships is common also these days, although gradually, the form of violence has come to be recognized as a significant threat to women’s health and well-being.

Sexual violence among adults, especially in intimate relations, and the difficulties to eliminate it, challenged us in Women’s Studies, Oulu, to reflect what schools should do to support the development of safety, justice, and equality in pupils’ cross gender orientations and relationships. We focused in our research on physical sexual harassment. There were 1738 children, aged from 11 to 12 years from the Arctic North, from 36 northern Finnish and 22 North-western Russian school classes, who answered a group of questions concerning their experiences on physical sexual harassment at school or on the way to school.

The research indicates that physical sexual harassment is common in schools even in the northern peripheries of Europe. On the basis of the children’s answers to the question about whether they had been groped, and the case descriptions the children wrote, it was shown that at least one-fifth of the Finnish girls, and one fourth of the Russian girls, had experienced physical sexual harassment at school or on the way to school. More than one tenth of the Russian boys, and a little less than one twentieth of the Finnish boys, had partly corresponding experiences. A very clear difference between the Russian and Finnish children’s descriptions of physical sexual harassment was that for the Russian children it was clearly more difficult to write about the issue.

Typically, groping occurred in hallways, in front of the restrooms, in the gym, on the school bus and bus stop, or on the road to school or from school. But it also occurred in classrooms. Girls constituted the vast majority of the victims of physical sexual harassment and boys constituted the vast majority of the perpetrators. A girl was groped in nine cases out of ten by a male classmate in both the Russian and Finnish data. In the cases where a girl was harassed by a boy classmate, it was often possible to infer messages of an attempt to exercise masculinist power over girls.
The boys’ harassers were not very commonly girls. The harasser of the Finnish boy was more often another boy than a girl. In the Russian data, the perpetrator was in six cases out of ten, one girl acting alone or with somebody else.

The type of groping that was the most surprising was groping perpetrated by an adult towards a pupil, a boy or a girl. This is not to say that sexual violence perpetrated by adults against children is a new issue. What was surprising was that it became visible in the context of researching 11 to 12 years old children’s experiences of groping in school. Six Finnish and seven Russian pupils described their experiences of groping perpetrated by adults. As previous research results indicate, tolerance of sexual harassment is critical in determining whether harassment will occur, especially in educational settings involving children.

The pupils’ written opinions about what stopped harassment are not promising. Although the children were not asked whether the harassment had stopped and what had stopped it, some children wrote about the matter. Almost one half of them wrote that the harassment was still going on. Some children had successfully managed to stop harassment by using violence as a defence against the harassment, and only one child having stopped harassment through conversation with the perpetrator. Furthermore, the pupils very rarely reported the harassment to the teacher.

Violence in intimate relationships of adults manifests itself, to a great extent, as boundary maintenance, control and discipline, or as a punishment of the partner for challenging authority. Furthermore, it represents mistreatment that threatens the realisation of human rights, full citizenship, safety, dignity and equality of the people. At school the characteristics of sexual harassment include corresponding components. Sexual harassment represents the learning of heteronormative dominance in cross-gender relationships – and also in same-gender relationships. But the problem is even more hidden, and less noticed for example in legislation than violence against women.

Panellist 4: Facilitating capacity building in the Arctic

Mr. Hans Hinrichsen,

Responsible inspector for mining entrepreneur capacity building courses, Building & Construction Centre, Greenland

In 2007, on the basis of activities in the field of minerals and prognoses from the Bureau of Minerals and Petroleum, the Home Rule government then in place predicted that there would be a rapid expansion of the mining industry in Greenland. They also envisioned that this growing industry could have a positive influence on the Greenlandic employment situation if steps
were taken to ensure educational possibilities within this field. The Bureau of Minerals and Petroleum expects that 7 – 8 mines will be established during the next 7 or 8 years, creating 1500 new jobs.

Accordingly, in 2007 the Home Rule Government decided that the Building and Construction School in Sisimiut was to be expanded with a new Mining and Contracting School which would be responsible for the educational efforts aimed at the expanding mining industry. This will help to fulfil the Greenlandic government’s aim that mining companies operating in Greenland primarily use Greenlandic workers and sub-contractors.

The building of the new Mining and Contracting School, which will be able to teach 80 students at any given time, will be completed in August 2010. The challenge for the Mining and Contracting School is to give Greenlandic people an educational foundation that will allow them to fill jobs at an international level. This educational lift is a necessity if Greenlandic labourers are to compete with foreign workers in an almost 100% English speaking business.

In the spring of 2008 the Mining and Contracting School joined forces with the Language Center in Sisimiut and developed courses in English suited for the minerals field. The purpose of the so-called ‘Mining English’ courses is to give Greenlandic workers the necessary linguistic skills to complete an education at the Mining and Contracting School.

In August 2008 the first Common Core, a 10 week course in basic mining skills, was started with 18 students who had passed their courses in English for the minerals field.

The Common Core, which is a re-training program for Greenlandic adults, has been developed in cooperation with the Ole Vig Upper Secondary School in Norway, the Colorado School of Mines in the USA and NORCAT in Canada.

Of the 64 students who have started on the Common Core, 60 have passed the course. A further 18 are currently studying to pass the Common Core.

The Common Core provides the basis for specializing within the fields of surface mining, underground mining and survey. Specialized courses are:

- Blasting course with certificate – 2 weeks, first courses started in 2008
- Heavy machine operator with international certificate – 4 weeks, first course starts September 13th 2010
- Diamond core drilling – 6 weeks, first course starts May 18th 2010
- Underground search and rescue – currently under development
- Tunnel blasting – currently under development

Further specialized courses will be developed, dependent on which grants the Mining and Contracting School receive for machinery and equipment from Naalakkersuisut, the government of Greenland.

Other initiatives from the Mining and Contracting School:
A Knowledge Center for the Development of Skills for the field of Raw Materials (VKR) will be started at the Mining and Contracting School in June 2010. This center is to be a coordinating body between the school and local employment offices, the mining industry and the authorities, in order to secure that educational programs aimed at the mining industry meet international standards.

Previously the Mining and Contracting School and local employment offices have worked together on examining possible students for the school. In future, the VKR will be responsible for this.

Furthermore, the VKR will play a key role in promoting a 4-year education resulting in a certificate of apprenticeship for mining. This education, which will be aimed at the young, is still under development. It is expected that the first students can start the 4-year program in August 2011.

What if they find oil in Greenland?

Cairn Energy will be completing the first sea based exploratory drillings near Disko this summer and if oil is found, a new industry will need to be developed in Greenland. This would of course have a significant impact on the development of educational opportunities in Greenland.

Currently the Mining and Contracting School are in contact with the College of North Atlantic, New Foundland, Canada, trying to reach an agreement on a cooperation regarding educational programs aimed at the oil industry.
Concluding remarks

Preserving and developing the Arctic
Mr Kim Luotonen, Nordic Committee for Co-operation, Finland
Finnish incoming Presidency of the Nordic Council of Ministers 2011

The Nordic involvement in the Arctic – now and in the future
Mr Halldór Ásgrímsson, Secretary General, Nordic Council of Ministers
4. Concluding remarks

Preserving and developing the Arctic

_Ambassador Kim Luotonen,_
Member of the Nordic Committee for Cooperation,
Chief of Secretariat for Nordic cooperation Ministry for Foreign Affairs,
Finland
Representing the incoming Finnish Presidency of the Nordic Council of Ministers 2011

- Regarding governance of the Arctic the general view was that the Arctic Council is the most relevant forum to discuss and solve issues related to the Arctic region. It composition secures a balanced approach as it includes all partners of the Arctic, including the indigenous people at their own right.

- There were differences as regards the necessity to strengthen the Arctic Council. It was seen as a policy shaping not policy making body. The views expressed as to the desirability to enlarge the membership of the Council differed. Its present composition was seen adequate but multilateral solutions or sub-regional levels were also mentioned as possible combinations depending on the questions at hand. Reference was made to international conventions like UNCLOS and IMO. Cooperation limited to the costal states was seen instrumental in some question whereas concern was voiced by others that e.g. indigenous people were not included and in general that a limited membership in a way undermined the legitimacy of the Arctic Council to govern the Arctic. Some saw no need to include more actors as the area covered already belongs to somebody – there is hardly any no man’s land contrary to Antarctica.

- Natural resources in the area are estimated to be very promising. With the change of climate, the possibilities to access these resources will improve but many environmental risks were also underlined, especially with the backdrop of the oil catastrophe in the Mexican gulf. Ice was seen as the primary issue for drilling, not so much cold and wind. The Arctic region is estimated to have 20 % of all undiscovered sources of oil and gas. On the other hand it would take many years from exploration to economic production due to the many technical questions and legal formalities like environmental impact studies.
• The right to use the natural resources and continue traditional ways of harvesting by the indigenous people was brought up. Restrictions should be based on science and not ethical considerations. The risk of overfishing and the need to secure effective monitoring and surveillance of quotas was seen as essential to enable sustainable management of fishing stocks.

• The impact of some large scale projects on small scale communities was described. The build-up period with a temporary influx of large amounts of foreign labour caused some tensions. But in general the balance was assessed positive as the communities had been strengthened with new permanent job opportunities and thus improved income generation. On the negative one could see a decrease in traditional sectors, but this might have occurred anyhow.

• The discussion concerning living in the Arctic concentrated on the challenges modern life and climate change have on the way of life of the indigenous people. The vulnerability of the environment must be taken into consideration. In developing the Arctic the traditional fishing and hunting rights should be respected. It was also emphasized that the cultures of the indigenous people do not need preservation but room and possibilities to develop and strengthen. Modern life and new opportunities that come with the industrial exploitation of natural resources has both positive and negative socio-economic impacts. However, studies on demographic trends show similar developments in sparsely populated regions in general. Thus, the problems are not unique for the Arctic.

• One particular issue of concern was violence in the societies in the high north. Violence inside the families, child abuse and the practice of silence about violence in intimate relationships makes it difficult to address. These kinds of abuses are found in all societies, but they seem to be more pronounced in societies in transition like the Arctic is today.

The Nordic involvement in the Arctic – now and in the future

Mr Halldór Ásgrímsson,
Secretary General, Nordic Council of Ministers

Ministers, ambassadors, ladies and gentlemen, dear friends of the Arctic!

It is with great pleasure that the Nordic Council of Ministers has the honour of hosting another conference on the Arctic. Our first conference “Common Concern for the Arctic” held in Ilulissat, Greenland, in September 2008 raised a number of questions and highlighted
a number of challenges. It has been the intention of this conference: “Arctic – changing realities” to take a step further and not only state the facts but show a path – a path that can lead to innovative solutions and change for the Arctic that we have all committed to preserve and sustainably develop.

In the Nordic Council of Ministers we have sought to add value to the “path of solution” – not only by hosting conferences – but by allocating funds for a whole range of activities in the Arctic.

Let me give you a few examples from the areas of research, energy, fishery health, and international cooperation.

The Nordic Top-level Research Initiative in climate, energy and environment is the largest ever joint Nordic research and innovation effort.

The Arctic is one of three horizontal priorities within the initiative. Efforts are now being made to build new strong Nordic Centres of Excellence and networks on scientific observations, analyses and modelling on cryosphere climate interactions focusing on the Arctic regions.

Energy in sparsely populated areas is in itself a challenge, adding a harsh climate makes it even more complicated.

This year our Nordic task-force on energy in sparsely populated areas is publishing a white book on the energy sources and energy efficiency in transportation more specifically in shipping.

We need knowledge about the impact of climate change on the primary sectors, fisheries, forestry and agriculture. It is therefore, the Nordic Council of Ministers decided in 2008 to launch a four year research programme, with the purpose to create the necessary knowledge base for taking decision how we best can adapt our primary industries to the changing natural conditions.

In September this year, the Nordic Council of Ministers has invited to a conference on the Faroe Islands, to address the challenges we are facing in the pelagic complex.

Indigenous peoples living in remote northern areas are facing many similarities with regard to health and social challenges.

The Nordic Council of Ministers has therefore together with Canada Health taken an initiative to use the Northern Dimension Partnership in Public Health and social wellbeing as a common platform for cooperation to address the health concerns and social issues among indigenous peoples.

Let me finish by mentioning the NMC’s Arctic Cooperation Programme. In this programme we have intended to provide substance to decision making in the Arctic. The Nordic Council of Ministers wants to add value to the solutions for the Arctic and does not pretend to provide the one and only answer. The changes we face must be dealt with in a collaborative, maybe even communitarian, spirit. And therefore cooperation within the international community is necessary.

This is why we gathered the international community in 2008 in Ilulissat. This is why we are gathering the international community today. And this is why we have approached the EU Commission with a suggestion of having an expert level workshop this fall.
We would like to discuss the possibilities of a constructive collaboration between the initiatives of the Nordic Council of Ministers and the EU with the hope of providing tangible responses to the challenges in the Arctic.

I would like thank all speakers of today. It is encouraging to hear the overall positive signals which the Nordic Council of Ministers note with appreciation and full respect. We will take our responsibility and engage further in the sustainable development of the Arctic.

Let me comment on some issues:

I welcome the engagement and constructive role of the indigenous peoples and note especially the challenge to combine clean technology with traditional knowledge. As was said by one speaker: to bridge the international to the local. This is really worth a discussion in order to build Arctic governance based on sustainable frameworks for the future.

I note that Statoil believes that the way forward concerning exploration of energy resources in the Arctic will be dictated by market demand and available technology.

I agree with the Swedish state secretary, the Danish minister and the Icelandic minister on the need to take a precautionary approach concerning exploration of natural resources and the risks with increased maritime transport. Environmental impact assessments for new activities in the Arctic are fundamental and will create international trust. We welcome if Sweden will prioritise this during their coming presidency in the Arctic Council.

The conference today shows me that there is and must be a strong link and connection between governing the Arctic, harvesting the Arctic and living in the Arctic.

We must remember that there are people living in the Arctic who need to be involved in the decisions made for their livelihood. This can be done through means of direct involvement and consultation of the Arctic resident as well as supporting their social and metal capital through health, social and educational initiatives and much more. The peoples of the Arctic have to benefit from the future initiatives in the Arctic.

We must – in other words – commit to empathy.

We must admit that the engine of the western world is based on energy and industry and there are interests in the Arctic on this point. However, if we can harvest the Arctic sustainably and with the right regulation and governance we have come a way also.

We must – in other words – commit to sustainability. The utilization of resources in the arctic is sensitive. Be it fish stocks or marine mammals. We must also commit to science.

We must respect, that we all have different interest, different abilities, different tasks and different competencies. However, we must first and foremost respect the Arctic. That is why we must work together for the Arctic, in the Arctic out of respect for each other and the Arctic. If we do so, the regulation and governance emanating from such an approach will create (?) sensible solutions for the Arctic.
We must – in other words – commit to cooperation.

With these words I hope that the ideas shared today can show us a path to solutions in the Arctic. Thank you for sharing this day with us and have a safe trip home.
Annexes

Annex 1
Conference Programme

Annex 2
Biographies of speakers

Annex 3
List of registered participants
Annex 1
– Conference programme

Nordic Council of Ministers’ Conference: “Arctic – Changing Realities”
Eigtveds Pakhus, Copenhagen 26 May 2010

8.30 – 9.00 Registration

Setting the Stage

9.00 – 9.25 Arctic on the threshold of change
Danish Presidency of the Nordic Council of Ministers 2010:
Ms Karen Ellemann, Minister for Nordic Cooperation and Environment, Denmark
Ms Maliina Abelsen, Minister for Social Affairs, Greenland
Mr Jørgen Niclasen, Minister for Foreign Affairs and Nordic Cooperation, Faroe Islands

9.25 – 9.35 An Arctic state’s view of development and cooperation in the Arctic
Ms Sheila Riordon, Senior Arctic Official of the Arctic Council, Canada

9.35 – 10.00 Break

Panel 1: Local and global governance in the Arctic

10.00 – 10.10 Introduction: How should we govern the Arctic?
Ms Sinikka Bohlin, Member of the Presidium of the Nordic Council and Member of the Standing Committee of Parliamentarians of the Arctic Region, Sweden

10.10 – 10.30 Panellist 1: Is the Ilulissat declaration adequate?
Mr Anton Vasiliev, Senior Arctic Official of the Arctic Council, Russian Federation

10.30 – 10.50 Panellist 2: International cooperation in the Arctic
Mr Eddy Hartog, Head of Unit, DG Maritime Affairs & Fisheries, EU Commission
10.50 – 11.10  **Panellist 3: Differences in local governance**  
Ms Jessica Shadian, Ph.d., Senior Researcher, High North Center for Business and Governance, Bodo, Norway

11.10 – 11.30  **Panellist 4: Visions for governance in the Arctic?**  
Dr Robert Corell, Arctic Governance Project, USA

11.30 – 12.00  Q&A (moderated by journalist Martin Breum)

12.00 – 13.00  Buffet lunch

**Panel 2: Resources in the Arctic**

13.00 – 13.10  **Introduction: A new Arctic business environment**  
Ms Katrín Jakobsdottír, Minister for Nordic Cooperation, Iceland

13.10 – 13.30  **Panellist 1: Traditional resources in a globalised context**  
Mr Karsten Klepsvik, Senior Arctic Official of the Arctic Council, Norway

13.30 – 13.50  **Panellist 2: Strategies for oil and gas development in the Arctic**  
Ms Hege Marie Norheim, Senior vice president, Corporative Initiative Northern Areas, Statoil, Norway

13.50 – 14.10  **Panellist 3: Large scale activities and small scale communities**  
Mr Hjalti Jóhannesson, Assistant director and researcher, University of Akureyri Research Centre, Iceland

14.10 – 14.30  **Panellist 4: New approaches to management of Arctic living resources**  
Dr Tatiana Saksina, Arctic Governance Officer, WWF Arctic Program, Norway

14.30 – 15.00  Q&A (moderated by journalist Martin Breum)

15.00 – 15.15  Break
Panel 3: Living in the Arctic

15.15 – 15.25  Introduction: Merging tradition and change
Mr Johan Tiedemann, State Secretary for Nordic Cooperation, Sweden

15.25 – 15.45  Panellist 1: A threatened culture in new times
Ms Gunn-Britt Retter, Head of Arctic- and Environmental Unit, Saami Council

15.45 – 16.05  Panellist 2: Demographic change – urbanisation and new industries
Mr Birger Poppel, international project director, Survey of Living Conditions in the Arctic (SLiCA), Greenland

16.05 – 16.25  Panellist 3: Coping with social challenges in the high north
Ms Vappu Sunnari, University Lecturer in Gender Studies, University of Oulu; Professor in Pedagogy, Luleå Technical University

16.25 – 16.45  Panellist 4: Facilitating capacity building in the Arctic
Mr Hans Hinrichsen, responsible inspector for mining-entrepreneur capacity building courses, Building & Construction Centre, Greenland

16.45 – 17.15  Q&A (moderated by journalist Martin Breum)

Concluding remarks

17.15 – 17.30  Preserving and developing the Arctic
Mr Kim Luotonen, Nordic Committee for Cooperation, Finland
Finnish incoming Presidency of the Nordic Council of Ministers 2011

The Nordic involvement in the Arctic – now and in the future
Mr Halldór Ásgrímsson, Secretary General, Nordic Council of Ministers
Annex 2 – Biographies of speakers

Ms Karen Ellemann is the Danish Minister for Environment and Nordic Cooperation. She was appointed in February 2010 and has been a member of parliament from the Liberal Party, Venstre, since 2007.

Ms Maliina Abelsen is the Greenlandic Minister for Social Affairs and Gender Equality and was appointed in June 2009. She is a member of the party “Inuit Ataqatigiit”. As well as a B.A. in sociology, Maliina Abelsen holds an M.A. in Politics and Social Science from Macquarie University in Australia. She is a trained and internationally certified coach and has passed the United Nations’ National Competitive Recruitment Examination.

Mr Jørgen Niclasen is the Faroese Minister for Foreign Affairs and Nordic Cooperation and was appointed in 2008. He is the leader of the Conservative party in the Faroe Islands.

Ms Sheila Riordon is the Canadian Senior Arctic Official to the Arctic Council and leads for Canada on a range of Circumpolar and international aboriginal issues. She is the Director General of the Environment, Energy and Sustainable Development Bureau in the Department of Foreign Affairs and International Trade. In this capacity she is responsible for the formulation and delivery of Canada’s foreign policy across a wide range of issues including climate change, international energy matters, trade and the environment and sustainable development. Previously, Ms. Riordon held a number of positions in the Government of Canada. Recently, as the Director General of the Northern Oil and Gas Branch in the Department of Indian and Northern Affairs Canada, she held broad responsibilities related to Northern Oil and Gas policy. She also previously held the position of Director General of Energy Policy Branch in the Department of Natural Resources for the Government of Canada, where she was responsible for international and domestic energy and environmental issues. She has a BA in Political Science and an M.B.A.

Ms Sinikka Bohlin is a member of the Swedish parliament, Riksdagen, and has been so since 1998. She is the Chair of The Swedish Delegation to the Nordic Council and member of the Standing Committee of the Arctic Parliamentarians.

Mr. Anton Vasiliev is Russian Ambassador at Large (Arctic Cooperation) and Senior Arctic Official of Russia in the Arctic Council, Senior Official of Russia in the Barents Euro-Arctic Council (BEAC) and Chairman of
the Committee of Senior Officials of BEAC for the period of Russian Chairmanship of the Council in 2007–2009. He has since 1976 held different positions in the Foreign Ministry of Foreign Affairs of the Russian Federation. Mr. Vasiliev has an academic background in international relations and holds a PhD in economics.

**Mr Eddy Hartog** is the Head of Unit of the Arctic and Antarctic Unit at the General Directorate for Maritime Affairs and Fisheries in the European Commission. He has had various positions in the European Commission since 1989 and before that in the Ministry of Economic Affairs in the Netherlands. Mr. Hartog has an academic background in political economics from the Erasmus University Rotterdam and College of Europe of Bruges, Belgium. **Ms Jessica Shadian, Ph. D.** is a Senior Research Fellow at the High North Center for Business and Governance at the Bodø Graduate School for Business in Bodø, Norway. She has a PhD in Global Governance from the University of Delaware, USA. Her dissertation investigated the implications of indigenous autonomy on Western conceptions of sovereignty and Arctic governance as manifest in the work of the Inuit Circumpolar Conference. Dr. Shadian’s current research explores the emerging political changes in the Arctic including the historical, legal and political issues of industrial development and sustainable resource management with a view towards understanding and mitigating relations between policy makers, private industry and local communities. Her academic publications include her recent work on the International Polar Year as a book co-editor entitled: Legacies and Change in Polar Science: Historical, Legal and Political Reflections on the International Polar Year by Ashgate Press and her forthcoming book co-authored with Rob Huebert which is a University textbook entitled: The Arctic in Global Affairs: A Region in Transformation by Continuum Press.

**Mr Robert Corell** is the Principal for the Global Environment & Technology Foundation, and represents the H. John Heinz III Center for Science, Economics, and the Environment in the Arctic Governance Project. Dr. Corell is actively engaged in research concerned with the sciences of global change and the interface between science and public policy, particularly research activities that are focused on global and regional climate change, related environmental issues, and science to facilitate understanding of vulnerability and sustainable development. He co-chairs an international strategic planning group that is developing a strategy designed to harness science, technology, and innovation for sustainable development. He served as the Chair of the Arctic Climate Impact Assessment.

**Ms Katrín Jakobsdóttir** is the Minister of Nordic Cooperation and Minister of Education, Science and Culture of Iceland. Mrs. Jakobsdóttir has a Bachelor’s Degree in Icelandic with French as minor subject and a Master’s Degree in Icelandic Literature from the University of Iceland. Alongside her studies and during her professional career, she has been politically active, within the Student Council of the University of Iceland and subse-
Katrín Jakobsdóttir became a Member of Parliament in 2007, representing the Left Green Movement, and in 2009 was appointed Minister of Education, Science and Culture as well as Minister of Nordic Cooperation.

**Mr. Karsten Klepsvik** is Norway’s Senior Arctic Official in the Arctic Council. He is furthermore the Polar Affairs Advisor and Norwegian Commissioner/Ambassador to the International Whaling Commission. Mr. Klepsvik has held different positions in the Ministry of Fisheries and the Foreign Affairs Ministry of Norway since 1990 and has an academic background in political science and international economics.

**Ms Hege Marie Norheim** is a graduate of economics and business administration from the Norwegian School of Economics in Bergen and Business Administration and St Gallen University in Switzerland. For several years she worked as advisor at the Norwegian Prime Minister’s Office. In 2000 she was state secretary to the Prime Minister and in 2001 state secretary to the Minister of Finance. She joined Norsk Hydro in 2002 as Director of Communication for the oil and gas division, and later Partner Operated Licenses. In 2005 Hege Marie Norheim was elected as the first female vice president in the WPC executive committee, a position she held until 2007. When Norsk Hydro merged with Statoil she took over the responsibility for business development on the Norwegian Continental Shelf in the new company. Since 2009 she had been the head of Statoil’s strategic agenda of arctic and sub-arctic business development activities.

**Mr. Hjalti Jóhannesson** holds a MA degree in economic geography from York University Toronto 1990 and finished his undergraduate studies in geography from University of Iceland 1987. He has a professional experience from municipal government, research and government. Since December 2000 Mr. Jóhannesson has been working as a researcher and assistant director at the University of Akureyri Research Centre and a lecturer at the University of Akureyri. Between 1998 and 2000 he was a specialist at the Planning Department of Akureyri municipality and 1993–1998 he was a manager for the association of municipalities in Northeast Iceland. Mr. Jóhannesson was a specialist at the Ministry of communications 1990–1992.

**Dr Tatiana Saksina** is a Russian national and is the Arctic Governance Officer at the WWF International Arctic Initiative. She leads WWF’s work to promote the closure of the Arctic governance gaps, protection and preservation of the Arctic Ocean and sustainable ecosystem-based management of its resources. In this capacity she leads WWF’s efforts on improvements to the arctic governance and regulatory regime. Before joining WWF, Dr. Saksina worked for the Russian Academy of Sciences as a Senior Legal
Adviser responsible for marine policies. She holds a Ph.D. in International Law from the Moscow State Institute of International Relations and an LL.M. degree in International Maritime Law from the IMO International Maritime Law Institute. She specializes in the Law of the Sea and International Law.

Mr Johan Tiedemann is the State Secretary to the Swedish Minister for Nordic Cooperation, Cristina Husmark Pehrsson. He has been Federation Secretary of the Moderate Party Youth Organization, Assistant Secretary at the Stockholm Municipality Council, and held several positions in the Municipality of Sigtuna. Between 1982 and 2003 he was Member of the Governing Board of the Municipality of Sigtuna. He has also worked many years at the Parliament Cabinet of the Moderate Party, where he held positions such as Vice Council Director and Administrator of Cultural Policy. Since 2006 he has been first State Secretary of Culture, and now State Secretary of Nordic Cooperation. He studied language at Stockholm University.

Ms Gunn-Britt Retter is a Saami from Unjärda / Nesseby in Varanger, northeast Norway. Retter is chair of the local Saami association, vice-chair to the Norwegian Saami Association and Member of Saami Parliament, Norway. In her position as head of the Arctic and Environmental Unit in the Saami Council, Retter has been involved in issues related to indigenous peoples and climate change, biodiversity, language, pollution and management of natural resources. Retter is a teacher of training and holds a Master of Arts in Bilingual Studies from the University of Wales.

Mr Birger Poppel is Research Project Chief of the Survey of Living Conditions in the Arctic, SLiCA at Ilisimatusarfik, the University of Greenland. He is currently engaged in different research projects such as the SWIPA-IT (Snow, Water, Ice, Permafrost in the Arctic Integration), Human dimensions of changes in the cryosphere; Understanding Migration in the Circumpolar North (UMCN) and team member of the Arctic Council project: Arctic Social Indicators (ASI) as well as of the Political Economy of Northern Regional Development). Since 2004 he has been serving as a member of the Editorial Board of Social Indicator Research, SIR (An International and Interdisciplinary Journal for Quality of Life Measurement). He has been a member of the IASSA (International Arctic Social Sciences Association) council since 2001 and served in the term 2004–2008 as vice president of the association and was the convener of the sixth International Congress on Arctic Social Sciences, ICASS VI (Nuuk, August 2008). He was the chairman of the Greenland IPY Committee since 2005 and served as a member of the IPY Data Sub Committee. He is currently a member of the Board of Governors of Ilisimatusarfik, University of Greenland. He was the first head of Statistics Greenland and served as Chief Statistician from 1989–2004. He received an MA in Economics from the University of Copenhagen (1978).
Ms Vappu Sunnari is a University Lecturer in Women’s Studies, University of Oulu, Finland and is a doctor of Education. She is specialised in women and gender studies and is engaged in a network is concentrating on researching violence in schools and in teacher education with a special focus on power and representations of femininity, masculinity and sexuality. The network is organised between research groups from Finland, Norway, Sweden and North-West Russia, and with financial support from the Nordic research programme "Gender and Violence".

Mr Hans Hinrichsen is the manager of the Mining & Contracting School in Sisimiut, Greenland and has been a project manager and technical coordinator at Centre of Arctic Technology. He has 4 years experience as a course manager at technical school in Greenland and has been teaching 12 years at the technical school in Greenland. He has an educational background as a technical installation designer.

Mr Kim Luotonen is the Finnish Head of Secretariat for Nordic Cooperation at the Ministry for Foreign Affairs and has held several positions within the Finnish Foreign Ministry since 1975, including ambassador to the Republic of Korea and to Singapore. He has an academic background in Economics and Business Administration from the Helsinki School of Economics and Business Administration.


Mr Martin Breum – the moderator of the conference – is a Danish journalist and news host at the Danish Broadcasting Corporation (DR). He is currently on leave from DR and working on media projects in China related to International Media Support as well as working a book on the Arctic.
Annex 3 – List of Registered Participants
**List of Participants: The Nordic Council of Ministers' conference “Arctic – Changing Realities” 26 May 2010 in Copenhagen**

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<thead>
<tr>
<th>Surname</th>
<th>Name</th>
<th>Job Title</th>
<th>Government/Organization</th>
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<tr>
<td>Abelsen</td>
<td>Maliina</td>
<td>Minister for Social Affairs</td>
<td>Government of Greenland</td>
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<tr>
<td>Airoldi</td>
<td>Adele</td>
<td>Advisor</td>
<td>Scott Polar Research Institute Cambridge UK</td>
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<tr>
<td>Alftthan</td>
<td>Björn</td>
<td>Research Assistant, Polar Programme</td>
<td>UNEP/GRID-Arendal</td>
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<tr>
<td>Allansson</td>
<td>Jónas Gunnar</td>
<td>Desk Officer Arctic Affairs</td>
<td>Ministry for Foreign Affairs Iceland</td>
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<tr>
<td>Asgrimsson</td>
<td>Halldór</td>
<td>Secretary General</td>
<td>Nordic Council of Ministers</td>
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<tr>
<td>Bagge Steenberg</td>
<td>Eva Marie</td>
<td>Head of Section</td>
<td>Ministry for Foreign Affairs Denmark</td>
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<tr>
<td>Barry</td>
<td>Tom</td>
<td>Executive Secretary</td>
<td>Arctic Council</td>
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<td>Bauer</td>
<td>Irene</td>
<td>Deputy Director General</td>
<td>Ministry of the Environment, Norway</td>
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<td>Behnke Hjorth</td>
<td>Christina</td>
<td>Political &amp; Public Affairs Program Officer</td>
<td>Embassy of Canada</td>
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<td>Beitnes</td>
<td>Amund</td>
<td>Investment Manager</td>
<td>NEFCO</td>
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<td>Belyshev</td>
<td>Victor</td>
<td>Third secretary</td>
<td>The Embassy of the Russian Federation in Denmark</td>
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<td>Bianco</td>
<td>Nauja</td>
<td>Conference manager</td>
<td>Nordic Council of Ministers</td>
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<tr>
<td>Birk</td>
<td>Kristian</td>
<td>Head of dep. for Growth and Climate</td>
<td>Nordic Council of Ministers</td>
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<td>Blichfeldt</td>
<td>Ane Cecilie</td>
<td>Web coordinator</td>
<td>Nordic Council of ministers</td>
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<td>Bock</td>
<td>Nikolaj</td>
<td>Special Advisor on International Affairs</td>
<td>European Environment Agency</td>
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<td>Bohlin</td>
<td>Sinikka</td>
<td>Member of the Presidium of the Nordic Council</td>
<td>Nordic Council and the Standing Committee of Parliamentarians of the Arctic Region</td>
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<td>Bonefeld-Jørgensen</td>
<td>Eva C.</td>
<td>Professor, Director,</td>
<td>University of Aarhus</td>
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<td>Breum</td>
<td>Martin</td>
<td>Journalist</td>
<td>Danish parliament</td>
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<td>Brunk</td>
<td>Ann-Katrine</td>
<td>Consultant</td>
<td>Danish Agency for Science, Technology and Innovation</td>
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<td>Campredon</td>
<td>Francois</td>
<td>Journalist</td>
<td>British Antarctic Survey</td>
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<td>Kirsten E.</td>
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<td>Carlson</td>
<td>David</td>
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<td>Nordic Council of Ministers</td>
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<td>Deleuran</td>
<td>Pernille</td>
<td>Head of International Division</td>
<td>Faroe Islands/Ministry of Foreign Affairs</td>
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<td>Edman</td>
<td>Patrik</td>
<td>Communication adviser</td>
<td>Nordic Council of Ministers</td>
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<td>Pål E.</td>
<td>Desk officer</td>
<td>Faroe Islands/Ministry of Foreign Affairs</td>
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<td>Senior Advisor</td>
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<td>Ekmeheg</td>
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<td>North Atlantic Conference</td>
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<td>Elleman</td>
<td>Karen</td>
<td>Minister for Nordic Cooperation and Environment</td>
<td>Danish Government</td>
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<td>Engell</td>
<td>Mikaela</td>
<td>Consultant on Greenland Affairs</td>
<td>Ministry of Foreign Affairs Denmark</td>
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<tr>
<td>Fisker Henriksen</td>
<td>Tine</td>
<td>Student employee</td>
<td>Nordic Council of Ministers</td>
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<tr>
<td>Frederiksen</td>
<td>Anthon</td>
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The changing realities of the Arctic are creating an imperative for deeper understanding of the current situation as well as to the responses and actions needed for the region to cope with these changes. The Nordic Council of Ministers wishes to contribute to a constructive and creative dialogue between different stakeholders of the Arctic in order to highlight necessary adaptation measures to the changing realities in the Arctic.

“Arctic – Changing Realities” was an attempt to move beyond some of the articulated questions, needs and challenges presented at the conference “Common Concern for the Arctic” held in Ilulissat, Greenland, in September 2008. It was also an attempt to identify in which areas the Nordic Council of Ministers could create added value to a sustainable development in the Arctic.

The conference presented three main themes:
1) Local and global governance in the Arctic
2) Resources in the Arctic
3) Living in the Arctic

The conference report is a testimony of this dialogue.

For more information visit:
Conference website: www.norden.org/arctic_changing_realities
http://www.norden.org/en/areas-of-co-operation/the-arctic