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Office of the Auditor General of Norway

The Office of the Auditor General's investigation of the authorities' work with the Arctic Council

Document 3:3 (2014–2015)

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The Office of the Auditor General's investigation of the authorities' work with the Arctic Council

Document 3:3 (2014–2015)

To the Storting

The Office of the Auditor General hereby submits Document 3:3 (2014–2015) *The Office of the Auditor General's investigation of the authorities' work with the Arctic Council.*

The Office of the Auditor General, 17 December 2014

For the Board of Auditors General

Per-Kristian Foss
Auditor General

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Ministry of Foreign Affairs
The Office of the Auditor General's investigation of the authorities' work with the Arctic Council

The Arctic Council was established in 1996 to promote cooperation, coordination and interaction between the Arctic states, particularly within sustainable development and environmental protection.

The Arctic Council is a central forum for addressing the environmental challenges and economic opportunities in the Arctic; the Council is the only cooperative body where all eight Arctic countries and Arctic indigenous peoples' organisations meet to discuss matters of common interest. The member countries are Norway, Sweden, Denmark, Finland, Iceland, Russia, Canada and the United States, and in addition, six indigenous peoples' organisations are Permanent Participants. A total of 32 countries and organisations have observer status in the Council.

The formal work of the Arctic Council takes place in Ministerial Meetings at which the eight states' foreign ministers meet every other year, and the ongoing dialogue takes place between officials at the ambassadorial level, Senior Arctic Officials (SAO), from the respective countries. The largest part of the work of the Arctic Council is carried out by six working groups that carry out technical programmes and projects of relevance to the Arctic. Based on the working groups' technical work, the Arctic Council prepares recommendations through ministerial declarations. Recommendations to the member states are not binding under international law, but are politically binding. The recommendations can also be aimed at the SAOs and working groups on further technical work. All decisions of the Council are based on consensus.

The chairmanship of the Council rotates among member states every other year. Norway's last chairmanship was in 2006–2009[1]. In 2013, all of the countries had completed one chairmanship period each.

Norwegian authorities stressed that the Arctic Council is the leading political body for Arctic issues and the most important forum for addressing common challenges.

The Ministry of Foreign Affairs has overall responsibility for the implementation and coordination of the High North policy, including international cooperation in the Arctic Council. The Ministry is thus also responsible for coordinating Norway's participation in the Arctic Council with the relevant sector ministries.

The purpose of this audit has been to evaluate the Norwegian authorities' work with the Arctic Council and illustrate how the authorities are dealing with the areas cited as key by the Arctic Council through the Council's recommendations to the member states. The audit also includes matters concerning the intergovernmental work in the Arctic Council. The audit covers the period from the establishment of the Arctic Council in 1996 and until mid-2014.

The audit is part of a multilateral audit of the Arctic Council, in which the Supreme Audit Institutions (SAIs) of Denmark, Norway, Russia, Sweden and the United States participated. The Canadian and Finnish SAIs have been observers. It is a process originally initiated jointly by the Russian and Norwegian auditors general.

1) Under Norway's chairmanship, the Ministerial Meeting was moved from the autumn of 2008 to the spring of 2009; Norway's chairmanship therefore lasted two and a half years.

The national audit is based on the following decisions and intentions of the Storting:

- Recommendation No. 264 (2004–2005) to the Storting, cf. Report No. 30 (2004–2005) to the Storting *Opportunities and Challenges in the North.* Ministry of Foreign Affairs.

- Recommendation No. 306 (2008–2009) to the Storting, cf. Report No. 15 (2008–2009) to the Storting *Interests, Responsibilities and Opportunities. The main features of Norwegian foreign policy.* Ministry of Foreign Affairs.

- Recommendation 236 S (2011–2012), cf. the white paper *The High North. Visions and strategies* (Meld. St. 7 (2011–2012)). Ministry of Foreign Affairs.

- The Ministry of Foreign Affairs' budget propositions (Prop. 1 S) with associated recommendations for 2006–2014.

The OAG's report was submitted to the Ministry of Foreign Affairs, Ministry of Climate and Environment, Ministry of Trade, Industry and Fisheries, Ministry of Local Government and Modernisation, Ministry of Petroleum and Energy, Ministry of Transport and Communications and Ministry of Justice and Public Security in a letter dated 7 March 2014. The titles of the ministries as they were at the time the data was collected are used in this document and in the report.[2]

The Ministry of Foreign Affairs coordinated the input from the other specialist ministries and commented on the report in a letter dated 25 April 2014. The comments have largely been incorporated in the report and in this document.

The report, the Board of Auditors General's cover letter to the Ministry of Foreign Affairs dated 20 May 2014 and the Minister's reply dated 4 June 2014 are enclosed as appendices.

1 Key findings

- The Arctic Council has helped strengthen cooperation in the Arctic and increase knowledge about key issues, particularly the environment and climate change in the Arctic.

- The organisation of the Arctic Council is impractical and the management of the work is inadequate in terms of priorities, funding and reporting.

- The Arctic Council has not adequately facilitated participation by indigenous peoples in the Council's work.

- There are weaknesses in the coordination and follow-up of the Norwegian work related to the Arctic Council.

2) This applies to: The Ministry of Climate and Environment – Ministry of the Environment; Ministry of Trade, Industry and Fisheries – Ministry of Trade and Industry and Ministry of Fisheries and Coastal Affairs; Ministry of Local Government and Modernisation – Ministry of Government Administration, Reform and Church Affairs. In addition, the Ministry of Transport and Communications took over responsibility for the Norwegian Coastal Administration from the Ministry of Fisheries and Coastal Affairs on 1 January 2014.

2 The Office of the Auditor General's comments

2.1 The Arctic Council has helped strengthen cooperation in the Arctic and increase knowledge about key issues, particularly the environment and climate change in the Arctic

As the only cooperative body in the Arctic with members from all the Arctic states, the Arctic Council has played an important role in strengthening cooperation and interaction between the Arctic states and the Arctic indigenous peoples in areas of common interest.

In the OAG's opinion, the member states help uphold and develop the management of the Arctic through the Arctic Council. It is particularly important that the Arctic Council member states and observers recognise the significant international regulations applicable in the Arctic, not least that the UN Convention on the Law of the Sea shall be applied in the management of the Arctic coastal and marine areas. Through its unique position, the Arctic Council can also be an important actor in safeguarding security policy stability in the Arctic.

Furthermore, under the initiative of the Arctic states, two legally binding agreements on, respectively, search and rescue and oil spill response in the Arctic, have been negotiated between the member states of the Arctic Council. These agreements are based on existing international rules, but nevertheless help to strengthen operational cooperation in these areas. The agreements can contribute to clarifying areas of responsibility, implementation of joint exercises and exchange of experiences. In the OAG's opinion, these types of agreements can be important in underscoring the importance of the Arctic Council, and for further strengthening the management regime of the Arctic. This is especially true if the agreements negotiated through the Council help to reinforce existing agreements or concern areas where international regulations of relevance to the Arctic are lacking.

The audit shows that the working groups of the Arctic Council have prepared many reports, standards and guidelines that help to collate and strengthen the knowledge base in the Arctic. The reports document both environmental conditions and causes of environmental challenges in the Arctic. The Arctic Council has thus evolved into a body for accumulating considerable knowledge in ever more areas – especially on environmental and climate issues. The Council has also been important in the development of key knowledge about the health of indigenous peoples in the Arctic. It is particularly important that this knowledge contributes to a common understanding of the challenges in the Arctic, and what measures should be taken.

The Arctic Council has prepared eight ministerial declarations with recommendations to parties including the member states, where the recommendations are based on this knowledge. While the Arctic Council's recommendations are not binding under international law, it is, in the opinion of the OAG, important that the Arctic states together – including through the Council – can show that they take responsibility for ensuring sustainable development in the Arctic.

The audit also shows that the knowledge obtained by the Arctic Council has been used in input on the further development of general international cooperation and international conventions in different areas. Through documentation of the effects of transboundary pollution in the Arctic, the Arctic Council has, for example, played an integral role in the development of regional and global mechanisms for reducing emissions of pollutants and heavy metals. The Arctic Council's documentation

of the significant climate change in the Arctic has also been important knowledge in the Intergovernmental Panel on Climate Change (IPCC).

2.2 The organisation of the Arctic Council is impractical and the management of the work is inadequate in terms of priorities, funding and reporting

Organisation and coordination

Since 1996, there has been an ongoing discussion in the Arctic Council about the need to change the organisational structure so that the Council can become a more effective body. During their chairmanship periods, both Finland (2000–2002) and Norway (2006–2009) initiated a review of the Arctic Council's organisation and work processes in order to improve the Council's efficiency and performance, without reaching a consensus. According to the Norwegian Chairmanship, it would be possible to streamline the Council's work with regard to coordination of the working groups, funding, prioritisation and external communication.

The organisation of the Arctic Council is essentially a continuation of the Arctic Environmental Protection Strategy (AEPS) from 1991. However, the Arctic Council's work now includes a far broader range of issues than it did when it was established in 1996. In the first period, the Council placed most emphasis on pollution, while today it works with and is heavily involved in a number of fields such as climate change, climate adaptation, safety at sea, oil production, search and rescue, living conditions, culture, health and economic development. With the exception of the establishment of the Arctic Council's permanent secretariat in 2013 and a sixth working group (ACAP[3]), and more use of task forces and expert groups, the Arctic Council has largely retained its original organisational structure.

The main focus of five working groups is the environment and climate, while one working group has sustainable development as its area of responsibility. The audit also shows that the working groups function very differently: Some working groups, such as AMAP[4], produce a lot of technical work of importance for the management of the Arctic, while others have not worked as well as intended. There is some overlap between many of the working groups. The audit also shows that while the Sustainable Development Working Group (SDWG) has completed many small projects, not all of them have a pan-Arctic perspective. SDWG also has a broad and unclear mandate that partially overlaps with the mandates of the other working groups. It also emerged in the audit that the Arctic Contaminants Action Program (ACAP) working group has not been very active and has not adequately achieved its goals.

The audit shows that within the existing organisational structure the Arctic Council has made changes to improve coordination and communication between the working groups – including in terms of more information and more common meeting venues. This has led to more meetings and extensive travel, which is resource and time-consuming.

Norwegian authorities have proposed specific measures aimed at improving the organisation of the Arctic Council, and the Ministry of Foreign Affairs states that it has regularly raised the need for merging the working groups. The audit shows that it is difficult to make organisational changes in a collaborative forum that requires consensus decisions, and where the chairmanship rotates every two years. The Norwegian authorities have found that there is no collective desire among the eight member states

3) *Arctic Contaminants Action Program*
4) *Arctic Monitoring and Assessment Programme*

to amend the organisational structure, and are therefore working to ensure the best possible efficiency under the existing organisation.

The OAG acknowledges that an organisational change in the Arctic Council must be based on a consensus among all member states. Nevertheless, the OAG points out that the organisation of the Arctic Council does not seem to be suited to the Council's current tasks, and that the consequences of this may be decreased effectiveness.

Prioritisation and funding

The audit shows that the Arctic Council does not have a strategy for steering the technical and financial resources towards long-term goals. The member countries' official representatives (SAOs) in the Arctic Council have an important role in managing the work of the Arctic Council. The SAOs are the link between the ministers and all six permanent working groups and the task forces of the Arctic Council. The SAOs are also responsible for coordinating, guiding and monitoring the work of the Arctic Council. This includes prioritisation of projects and coordination of the overall efforts of the working groups.

The working groups' two-year work plans are approved at the Ministerial Meetings after discussion by the SAOs. The premise of the work is largely determined by the working groups themselves, and working groups are given considerable technical freedom. Such independence can be positive, but in the opinion of the OAG, it must be assessed at the same time against the technical gain and the huge financial resources spent in the Arctic Council. At mid-2014, between 80 and 90 projects are in progress under the auspices of the Arctic Council, and the overall assessments behind the initiation of so many projects are often unclear. Even though small projects may also be important in building knowledge and collaboration in research and management, not all of them have a pan-Arctic perspective, and only a few of them form the basis for recommendations in the ministerial declarations.

In light of the high number of projects and limited resources, the OAG believes there is a need for stronger prioritisation of working group efforts. In this respect, the SAOs have a special responsibility to ensure better coordination and follow-up of work in the Arctic Council.

The audit shows that there has been agreement on strengthening the financial mechanisms of the Council since its establishment. Nevertheless, there has been a lack of predictability in the funding of working group secretariats, projects and participation of indigenous peoples' organisations. Since 2003, there have been efforts to establish a funding mechanism – Project Support Instrument – to ensure funding for the highest priority projects in the Arctic Council. The funding mechanism did not become operative until the autumn of 2014 after the Russian authorities disbursed funds at that time to the scheme as planned. However, the scheme will only cover a small part of the activities of the Arctic Council. In the OAG's opinion, it is a weakness that the Arctic Council does not have more predictable funding of the working group secretariats and projects so as to avoid compromising effectiveness in the implementation of the Council's activities.

It also emerges from the audit that the Arctic Council does not have an overview of its use of resources, although efforts are under way to develop a system to resolve this matter. Norwegian authorities have at present some idea of Norway's use of resources, and it is thought that with the new resource overview system the authorities will gain a better overview of Norway's use of resources in the Arctic Council.

In the opinion of the OAG, the establishment of a permanent secretariat should ensure better administrative management in the Arctic Council, and it is believed that the Ministry of Foreign Affairs will continue to be key in this effort.

In further development of the Arctic Council, which will include increasing numbers of technical subjects, there may in the OAG's opinion be a need for an overall strategy for the Council which better steers the technical and financial resources towards long-term and specific goals.

Reporting

The work of the Arctic Council is primarily based on dialogue, cooperation and volunteerism. Based on the working groups' technical reports, the ministers have given a large number of recommendations to, among others, the member states through the eight Ministerial Meetings in 1998–2013. While the recommendations are not binding under international law on the member states, they are politically binding. Nor is there an expectation in the Ottawa Declaration and the Arctic Council's rules of procedure that member states must document the extent to which the recommendations are followed up.

The audit shows that extensive efforts are invested in generating the knowledge that underlies the Arctic Council's recommendations to member states. The Arctic states have a major shared responsibility to ensure the sustainable development of the Arctic region. There is little information on how member states follow up the key recommendations, and whether the work has an effect. Reference is also made here to the Arctic Council's own initiative to follow up the recommendations issued to both working groups and member states in the reports on Arctic shipping (cf. AMSA, 2009) and biodiversity in the Arctic (cf. ABA, 2013). Without some form of follow-up work, it will be difficult in the OAG's opinion for the Arctic Council to develop into an effective body with even greater technical and political impact.

2.3 The Arctic Council has not adequately facilitated indigenous peoples' participation in the Council's work

The importance of the participation of indigenous peoples in the broad cooperation in the Arctic Council is clearly expressed in the Ottawa Declaration and reiterated in the ministerial declarations. The audit shows that six indigenous organisations are Permanent Participants of the Arctic Council. They attend all Ministerial Meetings and are free to participate in the work of the working groups. All the working groups favour such participation. The audit shows, however, that actual participation in projects varies, partly due to lack of resources – both financial and in terms of available expertise and personnel.

The Arctic Council has not established a funding mechanism that can ensure the participation of indigenous peoples in the work of the Council, and each country is responsible for funding the participation of indigenous peoples. The audit shows that participation is important because both changes and initiatives in the Arctic can greatly affect indigenous peoples' way of life. It is emphasised that the traditional knowledge indigenous people naturally possess must be an important platform in Arctic cooperation. Norwegian authorities want a system where the projects that are proposed must also include funding to ensure adequate participation of indigenous representatives, but the basic funding of indigenous peoples' organisations should be guaranteed by national authorities.

Norwegian Sami are formally represented in the Arctic Council through the Saami Council. Representatives of the Sami Parliament participate as part of the Norwegian delegation to the Ministerial Meetings and SAO meetings. The Ministry of Foreign Affairs also contributes financially to enable the Sami to participate in the work. The Sami Parliament wants even closer integration of the work of the Arctic Council.

2.4 There are weaknesses in the coordination and follow-up of the Norwegian work related to the Arctic Council

The Arctic Council is an important body in Norway's work on High North policy, and there is broad consensus that the Arctic Council should be the leading political body for Arctic issues. Much of the technical work of the Arctic Council has so far been under the Ministry of Climate and Environment's sector of responsibility. The Ministry of Climate and Environment and subordinate agencies are heavily represented in the various working groups and projects in the environmental and climate area in the Arctic Council.

The audit shows that working with the Arctic Council and the technical issues that the council raises involve several ministries' disciplines and responsibilities. Compared with the Ministry of Climate and Environment and Ministry of Foreign Affairs, the other relevant ministries are not equally engaged in the work of the Arctic Council. The other ministries have placed little emphasis on the information and knowledge provided by the Arctic Council because these ministries have largely found it more practical to emphasise other international processes and national knowledge. In the OAG's opinion, the function and role of the various Norwegian expert authorities in Arctic Council work is therefore somewhat unclear, especially in light of the fact that the technical scope of the Arctic Council is growing increasingly broader.

Because the Arctic Council is currently working on many more issues than before, it will, in the OAG's view, become even more important to ensure good involvement and coordination of the work of Norwegian actors with the Arctic Council. This also applies to the use of the knowledge that the Norwegian government has in a number of areas that are of interest to the other Arctic states. The OAG therefore believes it is positive that the Ministry of Foreign Affairs wants closer collaboration with relevant ministries and agencies in matters raised by the Arctic Council.

The OAG also notes that the Ministry of Foreign Affairs has not established a regular practice of keeping track of the extent to which the responsible sector ministries follow up the relevant recommendations of the Arctic Council, or whether relevant recommendations are already incorporated in the Norwegian government.

The audit shows that the lack of a follow-up system does not necessarily mean that the recommendations are not followed up, or whether the recommendations are already part of existing Norwegian policy. It is mainly international law obligations and national goals that govern the Norwegian administration's work in the Arctic. This takes place independently of the Arctic Council.

3 The Office of the Auditor General's recommendations

The OAG recommends that the Ministry of Foreign Affairs

- facilitate even better coordination of the work of the Arctic Council with the relevant sector ministries
- initiate various measures so that all relevant ministries increasingly find work with the Arctic Council expedient both to utilise the work of the Arctic Council and to provide relevant expertise in areas of importance to the Arctic.
- reinforce efforts, including through the permanent secretariat, to make the Arctic Council a more efficient and effective body with emphasis on better management, organisation, funding and reporting

4 The Ministry's follow-up

The Minister stresses that the Arctic Council is a political cooperation. It is not an internationally binding cooperation, nor is it an international organisation. This, combined with the fact that the Arctic Council is consensus-driven, puts limits on what the Council can do and achieve.

The Minister appreciates that the OAG's investigation shows that the Arctic Council has helped to strengthen cooperation in the Arctic and increase knowledge about the Arctic. The Minister shares this view.

In the Minister's opinion, the Arctic Council has been successful in the cooperation on environmental and climate issues and believes that the Council is appropriately organised for this purpose.

The Arctic Council has not delivered equally well on sustainable development in regard to cultural and economic development. The Ministry of Foreign Affairs is assessing how this can be improved, including the organisation of the Sustainable Development Working Group.

The Arctic Council has nevertheless still managed to reflect the states' priorities as they have evolved in response to changes in the Arctic. In the Minister's opinion, the Arctic Council is putting greater emphasis on cooperation in facilitating sustainable development, and that this trend will continue.

The Minister points out that the participation of indigenous peoples in the Arctic Council should be the responsibility of the states, and notes that the Ministry will continue the good cooperation with the Saami Council and the Sami Parliament in the Arctic Council. Norway wants to strengthen the capacity of indigenous peoples by assisting in the relocation of the Indigenous Peoples Secretariat (IPS) from Copenhagen to Tromsø, and by contributing to IPS' funding.

The Minister agrees with the OAG that since the Arctic Council is now working on more issues than in the past, it will become even more important that the Ministry ensures good involvement and coordination of Norwegian actors' work with the Arctic Council. The Minister points out that in recent years, closer cooperation has been developed between the relevant authorities, and that more and more ministries are engaged in the authorities' work with the Arctic Council.

Good coordination is therefore important, and the Ministry of Foreign Affairs is assessing how coordination with relevant ministries can be improved. The Ministry has recently given priority to strengthening dialogue with the specialist ministries to ensure that the breadth of the Government's priorities in the Arctic Council is safeguarded. It has been agreed for several years that the Arctic Council is important for Norway, and it has been a priority for the Ministry to bolster the work of the Council. In this context the establishment of the Arctic Council Secretariat was important and a milestone for Norway when it was agreed to locate it in Tromsø.

The Secretariat must be used to streamline the work of the Arctic Council. Together with the other member states, the Ministry will also look at how cooperation can be made as efficient and effective as possible.

5 The Office of the Auditor General's closing comments

The Office of the Auditor General has no further comments.

A joint memorandum summarising the key findings and conclusions from the national audits conducted by the SAIs of Denmark, Norway, Russia, Sweden and the United States has been submitted to the countries for approval. The memorandum will be forwarded to the Storting as an unprinted appendix as soon as it is ready.

The case will be submitted to the Storting.

Adopted at the meeting of the Office of the Auditor General, 9 December 2014

Per-Kristian Foss **Karl Eirik Schjøtt-Pedersen**

Beate Heieren Hundhammer **Gunn Karin Gjul** **Arve Lønnum**

Bjørg Selås

Annex 1

The Office of the Auditor General's letter to the Minister

Riksrevisjonen

Executive officer
Bjørn Martin Ørvim +47 22 24 11 84
Our date 20.05.2014
Our reference 2012/01773-270

Delayed exemption from public disclosure cf. Section 18(2) of the Auditor General Act

Ministry of Foreign Affairs
P.O. Box 8114 Dep
0032 OSLO
Att.: Minister Børge Brende

The Office of the Auditor General's investigation of the authorities' work with the Arctic Council

Enclosed please find the draft Document 3:x (2013—2014) *The Office of the Auditor General's investigation of the authorities' work with the Arctic Council.*

The document is based on a report submitted to the Ministry of Foreign Affairs, Ministry of Climate and Environment, Ministry of Trade, Industry and Fisheries, Ministry of Local Government and Modernisation, Ministry of Petroleum and Energy, Ministry of Transport and Communications and the Ministry of Justice and Public Security with our letter of 7 March 2014 and the Ministries' collective response dated 25 April 2014.

The Minister is requested to give an account of how the Ministry will follow up the Office of the Auditor General's comments and recommendations, and whether, if applicable, the Ministry disagrees with the Office of the Auditor General.
The Ministry's follow-up will be summarised in the final document submitted to the Storting. The Minister's entire response will be enclosed with the document.

Response deadline: 3 June 2014.

For the Board of Auditors General
Per-Kristian Foss
Auditor General

Enclosure:
Draft Document 3:x (2013—2014) *The Office of the Auditor General's investigation of the authorities' work with the Arctic Council*

The original letter in Norwegian has been translated into English.

Annex 2

The Minister's response

NORWEGIAN MINISTRY OF FOREIGN AFFAIRS

Minister of Foreign Affairs

The Office of the Auditor General of Norway
Auditor General Per-Kristian Foss
P.O. Box 8130 Dep
0032 Oslo

Delayed public disclosure, cf. Section 5(2) of Freedom of Information Act

Your reference: 2112/01773-270 Our reference: 12/00180- Date: 4 June 2014

Office of the Auditor General's investigation of the authorities' work with the Arctic Council

I refer to the letter from Auditor General Per-Kristian Foss dated 20 May 2014 with attached draft Document 3:X (2013–2014) The Office of the Auditor General's investigation of the authorities' work with the Arctic Council. The Auditor General has requested me to give an account of how the Ministry will follow up the Office of the Auditor General's comments and recommendations, and whether, if applicable, the Ministry disagrees with the Office of the Auditor General (OAG).

Let me first underline that the Arctic Council is a political cooperation. It is not an internationally binding cooperation nor is it an international organisation. This combined with the fact that the Arctic Council is consensus-driven also places some limits on what the Council can do and achieve, which are important aspects to consider in the assessments.

The OAG presents four main findings in Document 3:X:

1 The Arctic Council has helped strengthen cooperation in the Arctic and to increase knowledge about key issues, particularly about environmental and climate change in the Arctic.

2 The organisation of the Arctic Council is impractical and management of the work is deficient – in terms of priorities, funding and reporting.

3 The Arctic Council has not adequately facilitated the participation of indigenous peoples in the Council

4 There are weaknesses in the coordination and follow-up of the Norwegian work in the Arctic Council.

I appreciate that through the audit the OAG finds that the Arctic Council has helped to strengthen cooperation in the Arctic and to increase knowledge of the Arctic. This is a view I share.

The original letter in Norwegian has been translated into English.

Regarding the organisation and management of work, I refer to the Arctic Council's governing document, the Ottawa Declaration of 1996, which states that the Arctic Council shall promote cooperation to protect the Arctic environment and promote sustainable development. In my opinion, the Arctic Council has been successful with respect to cooperation on environmental and climate change issues and is for this purpose *appropriately* organised, cf. finding 1) above. These topics were also the states' main priorities in the Arctic Council for the first 10–15 years after its establishment in 1996.

As for the two components of sustainable development that include cultural and economic development, I agree with the OAG's finding that the Arctic Council has not delivered equally well on these topics. The Ministry of Foreign Affairs is now assessing how this can be improved, including the organisation of the Sustainable Development Working Group that is specifically mentioned in Document 3:X.

That said, it is my view that the Arctic Council has been able to reflect the states' priorities as these have evolved in response to changes in the Arctic. What began as a purely environmental programme has gradually evolved to emphasise cooperation on climate issues. In recent years, the Arctic Council has put more emphasis on adaptation to climate change. I believe the Arctic Council now increasingly emphasises cooperation on facilitating sustainable development and dialogue with industry, and is committed to continuing this development.

To the Auditor General's finding that the Arctic Council has not sufficiently facilitated the participation of indigenous peoples in the Council, I believe that it is the states' responsibility to fund the participation of indigenous peoples in the Council's work. The Ministry of Foreign Affairs will continue its good cooperation with the Saami Council and the Sami Parliament in the Arctic Council. Norway also wants to strengthen the capacity of indigenous peoples by assisting in the relocation of the *Indigenous Peoples Secretariat* (IPS) from Copenhagen to the Arctic Council Secretariat in Tromsø, and helping to fund the IPS.

I agree with the OAG that as the Arctic Council is now working on more issues than before, it is all the more important that we ensure good involvement and coordination of Norwegian actors' work with the Arctic Council. Also, in recent years closer cooperation has developed between relevant authorities and by the fact that steadily more ministries are engaged in the authorities' work with the Arctic Council.

I fully agree with the OAG's recommendations about the importance of good coordination. The Ministry of Foreign Affairs is considering how to improve coordination with relevant ministries. We have recently given priority to strengthening the dialogue with the specialist ministries to ensure that the breadth of the Government's priorities in the Arctic Council is safeguarded. There has been agreement for many years that the Arctic Council is important for Norway, and it has been a priority for us to strengthen

the work of the Council. In this context, the establishment of the Arctic Council Secretariat was important to us. It was a milestone for Norway when it was agreed to locate it in Tromsø. I completely agree with the OAG that we must now use the Secretariat to streamline the work of the Arctic Council. Together with the other member states we will also look at how we can make the cooperation as efficient and effective as possible.

Sincerely,

(Signed) Børge Brende

Børge Brende

Annex 3

Report: The Office of the Auditor General's investigation of the authorities' work with the Arctic Council

The audit has been conducted in accordance with the Office of the Auditor General's statutes and instructions, and with the guidelines for performance audits that are consistent with and based on ISSAI 300, INTOSAI's international standards for performance audits.

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Fact boxes

Abbreviations

ACAP, *Arctic Contaminants Action Program*. One of the Arctic Council's six working groups, ACAP works to reduce emissions of pollutants into the environment.

ACIA, *Arctic Climate Impact Assessment*, 2004. Arctic Council climate study on the impact climate change may have on the environment and society in the Arctic.

AEPS, *Arctic Environmental Protection Strategy*. The Arctic Environmental Protection Strategy from 1991. The Arctic Council was established in 1996 as an extension of the Arctic environmental protection cooperation.

AIS, *Automatic Identification System*. An automatic identification system for ships adopted by the International Maritime Organization to increase safety for ships and the environment and to improve traffic surveillance and vessel traffic services.

AMAP, *Arctic Monitoring and Assessment Programme Working Group*. One of the Arctic Council's six working groups, AMAP monitors environmental impacts and climate change.

CAFF, *Conservation of Arctic Flora and Fauna*. One of the Arctic Council's six working groups, CAFF works to conserve natural diversity.

CBD, *Convention on Biological Diversity*.

CBMP, *Circumpolar Biodiversity Monitoring Program*. Monitoring programme for biodiversity in the Arctic, under the direction of CAFF.

DN, *Directorate for Nature Management*. Merged on 1 July 2013 with the Norwegian Climate and Pollution Agency (Klif) to become the Norwegian Environment Agency.

EMSA, *European Maritime Safety Agency*.

EPPR, *Emergency Prevention, Preparedness and Response Working Group*. One of the Arctic Council's six working groups.

IASC, *International Arctic Science Committee*. A non-governmental organisation to promote and facilitate cooperation between all countries engaged in Arctic research. The organisation has observer status in the Arctic Council.

ILO, *International Labour Organization*.

IMO, *The International Maritime Organization*. UN organisation responsible for the safety and security of shipping and prevention of marine pollution from ships. The organisation has been working since 2009 on the development of a Polar Code, which will outline safety and environmental rules for ships operating in polar waters. The Polar Code was adopted November 21 2014.

IPS, *Indigenous Peoples Secretariat*. The Arctic Council's secretariat for international indigenous peoples' organisations that have Permanent Participant status in the Arctic Council. Located in Copenhagen, the IPS will be moved to Tromsø.

Klif, *Norwegian Climate and Pollution Agency.* On 1 July 2013 the Agency was merged with the Directorate for Nature Management (DN) to become the Norwegian Environment Agency.

LRTAP, *UNECE's Convention on Long-range Transboundary Air Pollution*.

NILU, *Norwegian Institute for Air Research*. NILU is an independent, non-profit institution whose purpose is to increase our understanding of the processes and effects of climate change, the composition of the atmosphere, air quality and hazardous substances.

PCB, *Polychlorinated biphenyl*.

POP, *Persistent Organic Pollutant*. This is an umbrella term for many different pollutants that contain the element carbon. Pollutants found in the Arctic include organochlorine pesticides, industrial chemicals such as PCBs and PFOS, brominated flame retardants and certain by-products of industrial activities and combustion.

PAME, *Protection of the Arctic Marine Environment*. One of the Arctic Council's six working groups.

Paris MoU, *The Paris Memorandum of Understanding on Port State Control*. International agreement on port state control.

PSI, *Project Support Instrument*. A project management instrument established by the Arctic Council as a mechanism to identify, mobilise and channel financial resources to special priority Arctic Council projects.

SAO, *Senior Arctic Officials*. High-ranking officials (usually at the ambassador level) from Arctic Council member states who meet at least twice a year. The main task of SAOs is to ensure that the mandates issued by the ministers at Ministerial Meetings are followed up.

SDWG, *Sustainable Development Working Group*. One of the Arctic Council's six working groups.

SOLAS, *International Convention for the Safety of Life at Sea*, 1974. IMO convention.

SWIPA, *Snow, Water, Ice and Permafrost in the Arctic*, 2011. Arctic Council report on changes in the extent of snow and ice.

UNEP, *United Nations Environmental Programme*.

UNESCO, *United Nations Educational, Scientific and Cultural Organization*.

UNFCCC, *United Nations Framework Convention on Climate Change*, 1992. The objective of the UN climate convention is to stabilise greenhouse gas concentrations in the atmosphere at a level that will prevent dangerous anthropogenic interference with the climate system.

1 Introduction

1.1 Background

The High North is the most important strategic foreign policy priority area for Norway,[1] and Arctic issues have increasingly become an integral part of the authorities' High North policy.[2] The Arctic represents some of the last large areas of unspoiled nature at the same time as the region faces significant challenges largely due to external influences such as pollution and climate change. The Arctic is a region rich in natural resources that will become more accessible as a result of climate change and the subsequent deglaciation. The fact that the natural resources in the Arctic will become more accessible provides major new opportunities for resource extraction and economic activity in the region. Greater utilisation of natural resources will, however, amplify the environmental impact, increasing the risk of environmental damage.

ARCTIC COUNCIL

The Arctic Council was established in 1996.

The Arctic Council consists of eight member states: Canada, Denmark, Finland, Iceland, Russia, Sweden and the United States, and has Permanent Participants from six indigenous peoples' organisations. A total of 32 countries and organisations have observer status in the Council. Photo: © Arctic Council Secretariat

1) Proposition No. 1 (2006–2007) to the Storting – Ministry of Foreign Affairs and Innst. 236 S (2011–2012) Recommendation to the Storting.
2) Proposition No. 1 (2008–2009) to the Storting – Ministry of Foreign Affairs.

Many of the challenges and economic opportunities in the Arctic require common approaches and solutions across the Arctic states. Because some challenges also require solutions outside the Arctic, dialogue and cooperation with other states is also key. Norway's overriding objective for Arctic cooperation is "to maintain the Arctic as a peaceful and stable region and meet the challenges of increased activity resulting from the retreat of the sea ice, and to ensure sustainable development in the North and protect the area's significant environmental values"[3].

The bulk of this cooperation takes place through the Arctic Council, which, according to the Ministry of Foreign Affairs, is the main arena for discussing the common challenges.[4]

The Arctic Council was established in 1996 through the Ottawa Declaration. The Council is the only government-level circumpolar forum for political cooperation, and the only body that gathers all the Arctic states and representatives of indigenous peoples. The Arctic Council works for cooperation, coordination and interaction between the Arctic states with the participation of Arctic indigenous peoples in areas where they have common interests, particularly with respect to sustainable development and environmental protection.[5] Member States of the Arctic Council are Canada, Denmark (including Greenland and the Faroe Islands), Finland, Iceland, Norway, Russia, Sweden and the United States.

Cooperation in the Arctic Council is based on politically binding recommendations. Many of the recommendations are directed at the member states but may also be intended for observer countries. The Arctic Council's recommendations are not binding under international law. Ever since the Arctic Council was established, the recommendations have been aimed at a wide range of issues and are generally formulated and vary in strength. Work on measures and management practices that the Arctic Council emphasises as key through its recommendations is usually governed by international law obligations and national objectives. The recommendations can also be directed at the working groups of the Arctic Council.

The Ministry of Foreign Affairs has overall responsibility for the coordination of the High North policy and the related international cooperation and dialogue with other states, including through the Arctic Council. As the entity constitutionally responsible for the Arctic Council, the Ministry of Foreign Affairs coordinates the work with the Arctic Council in public administration.

1.2 The multilateral audit of the Arctic Council

Given that many of the challenges and opportunities in the Arctic require cooperation and common solutions across the Arctic states, in the autumn of 2012 the Supreme Audit Institutions (SAIs) of Denmark, Norway, Russia, Sweden and the United States decided to implement a coordinated audit of the respective authorities' work with the Arctic Council. The SAIs carry out national audits based on their own risk and materiality assessments.

3) Meld. St. 7 (2011–2012) Report to the Storting (white paper) *The High North* and the Ministry of Foreign Affairs' information about the grant scheme for Arctic cooperation.
4) Prop. 1 S (2012–2013) Proposition to the Storting (draft resolution) – Ministry of Foreign Affairs and the minister's speech during the interpellation debate on the Arctic Council, the Storting, 17 January 2013.
5) Ottawa Declaration, 1996.

The coordinated joint audit has been governed by a *strategic plan* (see Annex 1) signed by the auditors general in the participating countries. The strategic plan defines *four overarching issues* to which the participating countries have been bound.

Norway and Russia have been the audit *coordinators*, and have been responsible for answering some of the questions on behalf of all countries. Canada and Finland have been *observers* and contributed basic data for the international part of this common audit.

Each of the SAIs participating in the coordinated audit have prepared national audit reports[6]. On the basis of these and additional information from both the administrations of the participating countries and information from administrations of observer country governments, a *joint memorandum* has been prepared which summarises the common findings and conclusions from the national audits.

This report is the Norwegian contribution to the international audit.

1.3 Objective and audit questions

The purpose of this audit is to evaluate the Norwegian authorities' work with the Arctic Council and illustrate how the authorities are dealing with the areas cited as key by the Arctic Council through the Council's recommendations to the member states.

The audit is based on the following main questions:

1 What is the development and status in the Arctic in key areas of the environment and economic activity?

2 To what degree does the Arctic Council address environmental challenges, economic opportunities, sustainable development and the situation of indigenous peoples in the Arctic?

3 To what degree do the Norwegian authorities follow up the Arctic Council's key recommendations?

4 How do the work processes and organisation of the work of the Arctic Council function?

Audit questions 1, 2 and 4 are part of the multilateral audit and in accordance with the strategic plan; the OAG has a special responsibility to answer these questions on behalf of the other SAIs participating in the multilateral audit. In addition to national questions, audit questions 1, 2 and 4 consequently also deal with matters regarding the intergovernmental work of the Arctic Council. Audit question 3 is only directed at national issues.

6) The Swedish, Danish and US Supreme Audit Institutions have published their national reports. The Russian Federation's national audit report will be published at the time the memorandum is signed.

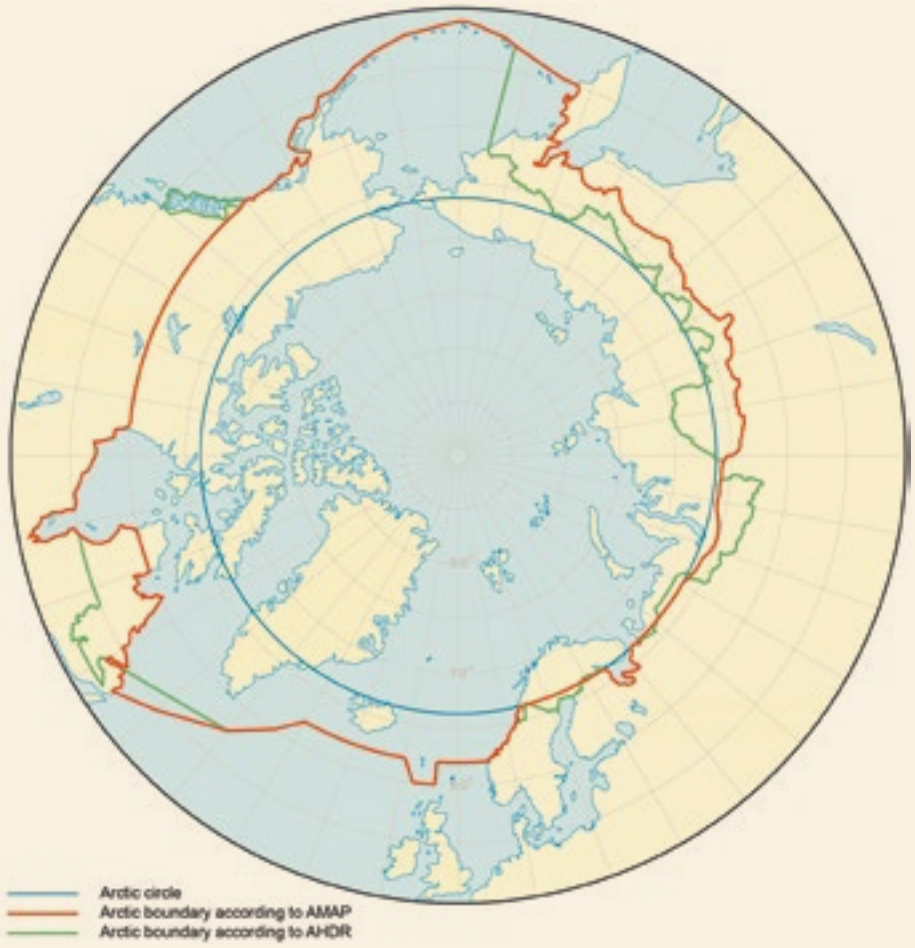
Fact box 1 Definitions of the Arctic

The definition of which areas are Arctic is not uniform and different definitions are used. In the Arctic Council it is up to the member states to define the Arctic. In the Norwegian context, the political definition of the Arctic is the areas north of the Arctic Circle – by which Finnmark, Troms and part of Nordland counties are considered Arctic, cf. the blue circle on the map.

The working groups can also define the geographic area that their work covers, cf. the red line on the map – AMAP covers both high Arctic and sub-Arctic areas. The marine areas that are covered include the ocean area as far south as 51.1 degrees N by James Bay, Canada. The green line shows the areas that were included in the survey of living conditions for people who live in the Arctic (Arctic Human Development Report, 2004).

The climate north of the Arctic Circle varies and the definitions of the Arctic are therefore related to climatic conditions. For example, the Arctic is defined as areas where the average temperature is below 10° Celsius in July or areas north of the tree line. With the climatic definitions, the boundaries of the Arctic range as far south as 52° N in Labrador (Canada) and the Aleutian Islands (Alaska) (about the same latitude as London) and only just touch Mainland Norway at about 71° N.

Figure 1 Definitions of the Arctic



Source: Prepared by Winfried K. Dallmann, Norwegian Polar Institute, obtained from the Arctic Council's website.

2 Methodological approach and implementation

The audit questions are illuminated through document analyses, written questions, quantitative data and interviews. The audit period mainly covers the period from when the Arctic Council was established in 1996 until 2014.

Draft audit criteria were submitted to the Ministry of Foreign Affairs for consultation in a letter dated 9 October 2012. The Ministry of Foreign Affairs coordinated input to the draft criteria from the other ministries concerned and submitted comments in a letter dated 4 December 2012.

Delimitations

Arctic is the term used to describe the land and sea areas around the North Pole. The Arctic Council's definition of the term is all the land and ocean areas north of the Arctic Circle. The members of the Arctic Council all have land and ocean areas in the Arctic.

Geographically, this audit mainly concerns the Norwegian High Arctic, consisting of the Svalbard archipelago and Jan Mayen island. The northern coastal areas are discussed in connection with shipping and petroleum activities, and Mainland Norway is included concerning the rights and living conditions of the Sami in Norway.

Document analysis

White papers, propositions to the Storting and associated recommendations have been reviewed to illuminate the various audit questions. Letters of allocation, national strategies, government agencies' annual reports and several other reports and studies were also used (see reference list for a complete overview). Information was also collected from ministry and agency websites. In addition, information from websites such as the UN Environment Programme (UNEP), UN climate convention (UNFCCC), UN climate panel (IPCC), Stockholm Convention, Convention on Long-range Transboundary Air Pollution and Convention on Biological Diversity was used.

All of the Arctic Council ministerial declarations and SAO reports[7] were used to answer audit questions 2, 3 and 4. In addition, the Ottawa Declaration, the Arctic Council's rules of procedure and Norway's chairmanship programme were reviewed to answer audit question 4, along with the working groups' governing documents and various reports prepared by or on behalf of the Arctic Council. All the technical reports and studies referred to in ministerial statements were reviewed in connection with audit questions 2 and 3.

Joint set of questions

In the multilateral audit, a set of questions was prepared that each of the SAIs that participated in the coordinated audit was requested to respond to in its national audit. These questions were used in the interviews and written questions to the relevant undertakings. The questions concern the Arctic Council's role and function, the Arctic Council's organisational structure, environment monitoring in the Arctic, research, information and knowledge, agreements negotiated through the Arctic Council, indigenous peoples, reporting and funding of Arctic Council activities.

7) Minutes of meetings where all the top representatives of the Arctic Council from each member state attend at the administrative level.

Interviews and written questions

As part of efforts to shed light on all four main audit questions in the audit and to elaborate on the information from the document review, many of the joint questions and other questions were answered in writing or in interviews with ministries and authorities involved in the Arctic Council:

- The Ministry of Foreign Affairs
- The Ministry of the Environment[8]
  - Norwegian Polar Institute
  - Norwegian Environment Agency[9]
- The Ministry of Fisheries and Coastal Affairs[10]
  - Institute of Marine Research
  - Norwegian Coastal Administration[11]
- The Ministry of Trade and Industry
- The Ministry of Government Administration, Reform and Church Affairs[12]
- The Ministry of Petroleum and Energy
- The Ministry of Justice and Public Security

The Sami Parliament, the Arctic Council Secretariat for the Scandinavian countries[13] and the Fridtjof Nansen Institute were also interviewed.

The Arctic Council Indigenous Peoples Secretariat and the Saami Council were interviewed in part to gain insight into the Arctic Council's organisation and work on Arctic issues. Indigenous representatives were also interviewed to elucidate the involvement of indigenous peoples in the work of the Arctic Council.

A focus group meeting was conducted with Norwegian representatives of five of the Arctic Council's working groups – Arctic Contaminants Action Program (ACAP), Arctic Monitoring and Assessment Programme (AMAP), Conservation of Arctic Flora and Fauna (CAFF) Emergency Prevention, Preparedness and Response (EPPR) and the Protection of the Arctic Marine Environment (PAME) – to get an overview of the working groups' activities, working methods, role and function and development and challenges in the Arctic.

In addition, the Arctic Council's six working groups answered the joint questions, either in writing or in interviews. Their answers do not necessarily represent the opinion or position of the entire working group. The following representatives answered the questions at the time in question:

- AMAP : executive secretary
- ACAP : chair
- CAFF : chair and executive secretary
- EPPR : chair and executive secretary
- PAME : acting chair
- SDWG : the recently departed chair following the allotted two-year period

The minutes of all of the interviews were verified by the interview objects.

8) On 1 January 2014 the Ministry of the Environment changed its name to the Ministry of Climate and Environment (KLD).
9) On 1 July 2013 the Norwegian Directorate for Nature Management and the Norwegian Climate and Pollution Agency were merged, forming the Norwegian Environment Agency.
10) The Ministry of Trade, Industry and Fisheries (NFD) was established on 1 January 2014. The Ministry of Fisheries and Coastal Affairs and Ministry of Trade and Industry were closed at the same time.
11) On 1 January 2014, the Ministry of Transport and Communications took over responsibility for coastal and environmental affairs from the Ministry of Fisheries and Coastal Affairs.
12) The Ministry of Government Administration, Reform and Church Affairs (FAD) was closed on 1 January 2014. At the same time the Ministry of Local Government and Regional Development changed its name to the Ministry of Local Government and Modernisation (KMD) and took over the Department of Sami and Minority Affairs from FAD.
13) The Arctic Council opened its permanent secretariat in Tromsø on 21 January 2013. The Secretariat has followed the chairmanship of the Arctic Council, but Tromsø has hosted the Secretariat for the Chairmanship periods of Norway, Denmark and Sweden since 2006.

Quantitative information
To describe the state of the environment (including with respect to emissions and hazardous substances), information was collected from Statistics Norway and ministry and agency websites, including State of the Environment Norway, the Norwegian Biodiversity Information Centre and Environmental Monitoring of Svalbard and Jan Mayen (MOSJ). In the petroleum sector, figures from the Norwegian Petroleum Directorate were used, and for accidents among Norwegian vessels, figures from the Norwegian Maritime Directorate were used.

With respect to Sami rights and living conditions, data was collected from reports to the UN and ILO, Statistics Norway, the statistics series *Samiske tall forteller* (Sami by the numbers) and statistics from the Norwegian Directorate of Education and Training.

Secondary literature in the form of various social science articles and reports on the Arctic Council were also used. Also used were the results of a questionnaire survey on the Arctic Council conducted by Paula Kankaanpää and Oran Young (2012).[14]

Concerning the recommendations in the ministerial declarations
To identify the Arctic Council's recommendations, all the ministerial declarations since the Arctic Council was established have been reviewed (1998–2013), cf. audit question 3. The Arctic Council makes recommendations to members and other parties in several areas of Arctic issues. The recommendations vary in strength; some recommendations are repeated at several ministerial meetings. How each recommendation is formulated indicates how it is emphasised in the ministerial declaration; it may vary from that the ministers strongly recommend something to that they only take note of, welcome or consider the advice.

The recommendations that have been used in the audit are the recommendations that are directed at member states and they are at a senior level in the areas where the Arctic Council has prepared several technical reports. In the environmental area this applies to pollution and climate. For economic activity, primarily shipping and petroleum, the recommendations relate primarily to safety and emergency preparedness and environmental protection. In the indigenous peoples' area, the recommendations have generally related to indigenous rights and living conditions, including health and language. The document review to identify key recommendations is supplemented with interview information.

14) Paula Kankaanpää and Oran R. Young (2012) *The effectiveness of the Arctic Council.* Arctic Centre University of Lapland, Finland.

3 Audit criteria

3.1 Overall goals for the High North: protect the environment and sustainable development and promote international cooperation and stability

According to several parliamentary documents, the High North is Norway's most important strategic priority.[15] For many years, the overall objectives of the High North policy have been to secure sustainable development and political stability in the North.[16]

Report No. 30 (2004–2005) to the Storting *Opportunities and Challenges in the North* states that the sustainable development of the High North can be ensured by sound management of resources and conservation of biodiversity [...] and that environmental challenges will be dealt with by imposing strict requirements and high standards for the use of resources and other activities in the High North. In its discussion of Report No. 30 (2004–2005) to the Storting, cf. Recommendation No. 264 (2004–2005) to the Storting, the Standing Committee on Foreign Affairs supported the contents of the report, citing "Norway, through active use of natural resources, proactive foreign policy and strict environmental standards can make the High North a pioneer area for sustainable development, where culture and nature are the basis for innovative commercial activity and co-operation between nations."[17] The Committee also emphasises that an objective of sustainable development requires significant international effort.

In its discussion of the white paper *The High North – Visions and strategies* (Meld. St. 7 (2011–2012)), cf. Recommendation 236 S (2011–2012), the Standing Committee on Foreign Affairs and Defence supports the ambition that Norway should be a leader in integrated, ecosystem-based management of marine areas, and notes that the Government will work within the relevant fora to promote ecosystem-based management of the environment throughout the Arctic region, cf. also the white paper Meld. St. 7 (2011–2012).[18]

3.2 The High North policy and Arctic Council

The Ministry of Foreign Affairs has stated for many years that the Arctic Council is the main multilateral forum for the Arctic part of the High North, and that there is broad consensus that the Arctic Council is the leading political body for Arctic issues, cf. for example the white paper *The High North – Visions and strategies* (Meld. St. 7 (2011–2012)). The white paper Meld. St. 7 (2011–2012) states that the High North is a natural item on the agenda in political fora and talks at different levels and that Norway maintains particularly close contact with the member states of the Arctic Council. "These countries have the strongest and most wide-ranging interests in the High North and it is with these countries in particular that Norway must work to find

15) Proposition No. 1 (2006–2007) to the Storting – Ministry of Foreign Affairs, Report No. 15 (2008–2009) to the Storting *Interests, Responsibilities and Opportunities*, Recommendation No. 306 (2008–2009) to the Storting and Meld. St. 7 (2011–2012) Report to the Storting (white paper) *The High North – Visions and strategies* and also Innst. 236 S (2011–2012) Recommendation to the Storting.

16) Report No. 30 (2004–2005) to the Storting *Opportunities and Challenges in the North* and Recommendation No. 264 (2004–2005) to the Storting and also the white paper Meld. St. 7 (2011–2012) and Innst. 236 S (2011–2012) Recommendation to the Storting.

17) The Committee refers in this context to NOU (2003: 32) *Mot nord! Utfordringer og muligheter i nordområdene* (Opportunities and Challenges in the High North)

18) Similar objectives are described in Proposition No. 1 (2008–2009) to the Storting and Prop. 1 S (2009–2010) Proposition to the Storting (draft resolution) – Ministry of Foreign Affairs.

In Storting documents such as the white paper Meld. St. 7 (2011–2012), Report No. 30 (2004–2005) to the Storting and the Storting recommendations concerning them, the High North is described as Norway's most important strategic foreign policy strategy, where the overall goals are to ensure sustainable development and political stability.

effective and comprehensive solutions in the future to achieve the overall aims of maintaining peace and stability and ensuring sustainable resource development in the region."

In its discussion of the white paper Meld. St. 7 (2011–2012), cf. Recommendation 236 S (2011–2012), the Standing Committee on Foreign Affairs and Defence noted that Arctic issues that require international solutions should preferably be resolved within the framework of the Arctic Council. In its discussion of the white paper on Nordic Cooperation (Meld. St. 6 (2009–2010)), the Standing Committee on Foreign Affairs and Defence noted that it "… supports the political measures that are being taken to protect the Arctic, not least through the Arctic Council …" However, in Recommendation 236 S (2011–2012), the Committee also notes that the Arctic Council needs to be a clearer organisation in terms of current issues, and that the Arctic Council chairmanship, and thus the entire organisation, lacks visibility.

Report No. 30 (2004–2005) to the Storting *Opportunities and Challenges in the North* (p. 35) states that the most important areas in Arctic Council cooperation are environmental protection, climate change issues and sustainable development of the Arctic region. The white paper Meld. St. 7 (2011–2012) states that good environmental and resource management requires strengthened cooperation among the Arctic states and with the states and actors operating in the North. Cooperation, including in the Arctic Council, is essential for harmonising standards and regulations for the proper management of the northern seas.

The white paper Meld. St. 7 (2011–2012) states that Norway is a driving force in strengthening the Arctic Council.[19] According to the report, the Government will work to ensure that the Arctic Council will actively meet any such challenges so that the new opportunities can be exploited in a sustainable manner.[20] According to the white paper on Nordic cooperation (Meld. St. 23 (2009–2010)), the biggest challenge for

19) See also Meld. St. 6 (2009–2010) *Nordisk samarbeid,* white paper on Nordic cooperation, where the efforts to strengthen the Arctic Council are mentioned. In its discussion of the report, the Standing Committee on Foreign Affairs and Defence supports the political measures taken to protect the Arctic, not least through the Arctic Council, cf. Innst. 125 S (2009–2010) Recommendation to the Storting.

20) Similar goals are described in Proposition No. 1 (2007–2008) and (2008–2009) to the Storting and Prop. 1 S (2009–2010), (2010–2011) and (2011–2012) Proposition to the Storting (draft resolution) – Ministry of Foreign Affairs.

the members of the Arctic Council is to strike a balance between conservation and use of areas in the Arctic that may be left open when the sea ice has receded.[21]

3.2.1 The Arctic Council as an international forum

According to Report No. 30 (2004–2005) to the Storting *Opportunities and Challenges in the North,* the Government considers that the Arctic Council's sphere of responsibility should be expanded to include political and project-related cooperation. This would involve initiating studies on issues of interest to the Arctic as a whole. The Arctic Council should contribute to shaping the framework for national and international measures.. According to Report No. 15 (2008–2009) to the Storting *Interests, Responsibilities and Opportunities – The main features of Norwegian foreign policy*, it will be important for the Arctic Council to improve its capacity to share guidelines and knowledge with international fora.

The white paper *The High North – Visions and strategies* (Meld. St. 7 (2011–2012)) states that "Broad-based international agreements that regulate releases of pollutants and activities in different sectors are needed for management of the environment and to deal with environmental pressures that are mainly due to activities outside the region. Norway's High North policy has an important role to play here through knowledge development and the provision of input to relevant forums, for example as part of Arctic Council initiatives. The knowledge generated and compiled must also be communicated to forums for regional and global environmental agreements, so that environmental problems in the High North can be taken more fully into account. Norway will continue its efforts in this field in cooperation with the other Arctic countries."

In connection with Norway's chairmanship of the Arctic Council in the period 2006–2009, the Ministry of Foreign Affairs notes that Norway wants to strengthen/has strengthened Arctic cooperation within integrated resource management and climate change. Another goal during the chairmanship period was to help streamline the Council's work.[22]

3.3 Further details on the cooperation subjects in the Arctic Council

3.3.1 Climate

According to Report No. 30 (2004–2005) to the Storting *Opportunities and Challenges in the North*, the Arctic Council and its member states have an important role to play in describing, assessing and imparting knowledge about the impact of climate change on the Arctic, and the consequences this may have for the global environment. The Government considers it desirable that the Arctic Council continually update the scientific knowledge base on climate change in the Arctic, for example, through a continuation of the Arctic Council's *Arctic Climate Impact Assessment* (ACIA) report. In accordance with the same report, a decision was made to continue this climate study in part through a national follow-up programme (NorACIA) to provide public administration with a better basis for policy decisions.[23]

21) Similar goals are described in Prop. 1 S (2010–2011) and (2011–2012) Proposition to the Storting (draft resolution) – Ministry of Foreign Affairs.
22) See Proposition No. 1 (2006–2007) (p. 76), (2007–2008) (p. 88), (2008–2009) (p. 106) to the Storting and Prop. 1 S (2009–2010) (p. 106), (2010–2011) (p. 124–125) and (2011–2012) (p. 105–106) Proposition to the Storting (draft resolution) for the Ministry of Foreign Affairs.
23) Similar objectives are described in Proposition No. 1 (2006–2007), (2007–2008) and (2008–2009) to the Storting and Prop. 1 S (2009–2010), (2010–2011) and (2011–2012) Proposition to the Storting (draft resolution) – Ministry of Foreign Affairs and also the white paper Meld. St. 7 (2011–2012).

In addition to CO_2, soot and pollutants such as methane and ground-level ozone are affecting deglaciation in the Arctic. The white paper *The High North – Visions and strategies* (Meld. St. 7 (2011–2012)) states that it is a priority to take steps to reduce emissions of short-lived climate forcers in the High North. Similar targets for reducing emissions of particulates and gases with short atmospheric lifetimes that may have a significant warming effect, are also formulated in the Ministry of Foreign Affairs' budget propositions for the years 2007–2012. According to the white paper *Norwegian climate policy* (Meld. St. 21 (2011−2012)), Norway shall be a driving force in such areas as the Arctic Council for increased cooperation on reducing emissions of soot and other short-lived climate forcers in the High North and other areas through which pollutants reach the Arctic.[24]

The Gothenburg Protocol, a protocol to the 1979 Convention on Long-range Transboundary Air Pollution, deals with various gases leading to acidification, eutrophication and ozone formation, and is key in securing international reductions of emissions of soot (black carbon) and short-lived climate forcers. Commitments to reduce emissions of particulates were incorporated in the Gothenburg Protocol in May 2012. Countries are encouraged to reduce particulate emissions from sources where reduced emissions of soot are also achieved.[25] Countries must otherwise continue to keep emissions below the levels of 2010 for sulphur dioxide, nitrogen oxides, ammonia and volatile organic compounds. In addition, new emissions targets were set for 2020.[26]

3.3.2 Pollution

Report No. 30 (2004–2005) to the Storting *Opportunities and Challenges in the North* notes that the efforts to limit the supply of long-range environmental pollutants transported by air and ocean currents to the High North, which accumulate in animals, birds, fish and seafood, are a high priority for the Norwegian government and an important common concern of member states of the Arctic Council.

According to the white paper *The High North – Visions and strategies* (Meld. St. 7 (2011–2012)), there is a great need for cooperation among the Arctic States on long-range pollutants carried by air and ocean currents. "This includes cooperation on monitoring of levels of pollutants, on assessments of whether action is needed to deal with inputs of new pollutants to the Arctic environment, and on action to deal with specific sources of pollutants within the Arctic region."[27]

In its discussion of the white paper Meld. St. 7 (2011–2012), the Standing Committee on Foreign Affairs and Defence noted that matters such as air pollution can be addressed by each Arctic state even if no international climate agreement is in place. The Committee refers in this context to the fact that the flaring of gas has very negative environmental impacts in the Arctic areas. "The Committee believes that it would be an advantage to lift this type of pollution issue to a high political level in the Arctic Council", cf. Recommendation 236 S (2011–2012).

3.3.3 Biological diversity

Report No. 30 (2004–2005) to the Storting *Opportunities and Challenges in the North* notes that the Arctic Council is working to preserve biodiversity in the Arctic by supporting the creation of an international network of protected areas and more effective laws and conservation practices. The white paper *The High North – Visions and*

24) Meld. St. 21 (2011–2012) Report to the Storting (white paper) *Norwegian Climate Policy* (p. 81).
25) Soot in the atmosphere has a warming effect on the climate. Black carbon also contributes to increased melting of ice in the Arctic, as deposits on snow and ice cause the heat to be absorbed rather than reflected. The Arctic is an area that is particularly vulnerable to soot emissions from the oil and gas industry, cf. www.cicero.uio.no/webnews/index.aspx?id=11703.
26) State of the Environment Norway, www.miljostatus.no/Tema/Luftforurensning/Goteborgprotokollen/.
27) Similar objectives are specified in Proposition No. 1 (2006–2007), (2007–2008) and (2008–2009) to the Storting and Prop. 1 S (2009–2010) Proposition to the Storting (draft resolution) – Ministry of Foreign Affairs.

strategies (Meld. St. 7 (2011–2012)) states that it is a priority for the Government to establish targeted global and regional cooperation to ensure protection of particularly vulnerable areas and species.

3.3.4 Sustainable economic development and commercial activities

The white paper *The High North* (Meld. St. 7 (2011–2012)) refers to the issues related to opportunities for new economic activities such as shipping and oil and gas recovery in a fragile environment like the Arctic. Any development will be accompanied by a need to find the right balance between exploiting the new opportunities, environmental considerations and how to maintain the natural resource base on which the livelihoods of the indigenous peoples depend. According to the report, these issues are given high priority by the Arctic Council.

In Recommendation 236 S (2011–2012), the Standing Committee on Foreign Affairs and Defence noted that the petroleum activities in the Barents Sea and the Norwegian Sea are the single factor that is most likely to be able to contribute new value creation and employment in Northern Norway. The Standing Committee on Foreign Affairs and Defence furthermore noted "Norway's strict environmental standards for petroleum production, and believes that these should form the basis of common standards for all petroleum-related activities in the Arctic. Such common environmental standards must not entail less stringent requirements, but an environmental regulation that fully takes into account the specific challenges and risks that are related to petroleum activities in these northern waters. The Committee believes that the Arctic Council is a suitable forum for developing such standards."

3.3.5 Maritime safety and emergency preparedness

National priorities for the Arctic Council's work on maritime safety and emergency preparedness

The white paper *The High North* (Meld. St. 7 (2011–2012)) states that the new opportunities for economic activity in the Arctic are increasing the need to regulate human activities with an emphasis on measures that reduce the risk of accidents and pollution. This area is a priority nationally and internationally, including in the Arctic Council and through international organisations such as the International Maritime Organization (IMO).[28]

In its discussion of the report, cf. Recommendation 236 S (2011–2012), the Standing Committee on Foreign Affairs and Defence appealed to the members of the Arctic Council to "work diligently and adopt a common position in IMO to achieve a binding Polar Code." According to the Committee, the Arctic Council should prioritise work on maritime safety in Arctic waters.

The white paper Meld. St. 7 (2011–2012) also notes that the Government will be a driving force for strengthened regional cooperation on oil spill preparedness through the Arctic Council and negotiate an Arctic oil spill response instrument. In its discussion of the white paper Meld. St. 7 (2011–2012), cf. Recommendation 236 S (2011–2012), the Standing Committee on Foreign Affairs and Defence supports the Government's views and stated that in the future the Arctic Council should prioritise work on oil spill preparedness. In that connection the Committee notes that "amplified requirements for oil spill preparedness in Arctic waters must be considered. The Committee welcomes the efforts made in the Arctic Council as regards oil spill prepared-

28) Similar objectives are cited in Proposition No. 1 (2008–2009) to the Storting and Prop. 1 S (2009–2010), (2010–2011) and (2011–2012) Proposition to the Storting (draft resolution) – Ministry of Foreign Affairs.

ness with a view to a binding agreement that sets standards for preparedness and ensures cooperation."

3.3.6 Indigenous peoples

Report No. 30 (2004–2005) to the Storting *Opportunities and Challenges in the North* notes that the Government attaches great importance to the role the Arctic Council can play as a forum for strengthening the position of indigenous peoples. Given the unique experience of indigenous groups, having indigenous representatives participate fully in the Arctic cooperation is a significant strength. In the work of the Arctic Council, the Government will therefore prioritise cases involving the living conditions and traditional industries of indigenous peoples.

Report no. 28 (2007–2008) to the Storting on Sami policy states that Sami affairs ministers and Sami Parliament Presidents believe it is important to strengthen the status of the Sami and other indigenous peoples in the Barents region, and they have encouraged the Arctic Council and others to raise awareness of the situation of indigenous peoples and provide support for measures that ensure the livelihood, language and culture of indigenous peoples. According to the report, the Government will in close cooperation with relevant Sami institutions and organisations help to develop and implement specific projects and initiatives that contribute to knowledge and skills development in the High North, including in the Arctic Council and in the project collaboration with Northwest Russia. The Government will also work to ensure that the knowledge and observations of indigenous peoples will be given a central role in following up the Arctic Council's Climate Impact Assessment (ACIA). Such goals are also asserted in the white paper *The High North – Visions and strategies* (Meld. St. 7 (2011–2012)) and in the Standing Committee on Foreign Affairs and Defence's recommendation to the white paper Meld. St. 7 (2011–2012), the Committee recommended that indigenous peoples should have good conditions to participate in processes and assist in planning, decision-making, management, monitoring and research to make use of the opportunities in the future development of the High North, cf. Recommendation 236 S (2011–2012).

3.3.7 Knowledge development and monitoring environmental and biological diversity

According to Report No. 30 (2004–2005) to the Storting *Opportunities and Challenges in the North,* the major challenges facing the Arctic can only be solved with in-depth knowledge of causal relations. The Government will therefore help strengthen international collaboration on research within the framework of the Arctic Council. Research activities related to climate, pollutants, biodiversity and indigenous peoples are key.[29] In Recommendation No. 264 (2004–2005) to the Storting, the Standing Committee on Foreign Affairs stated that it shares the Government's view that research and science are a condition for protection and sustainable development of land, coastal and ocean areas in the North. The Committee notes that environmental monitoring and expertise is the most important instrument for also succeeding in international negotiations on agreements and regulations.

The white paper *The High North – Visions and strategies* (Meld. St. 7 (2011–2012)) states that monitoring provides "important information on changes in Arctic ecosystems, including changes that affect economically valuable species and environmental impacts on threatened species. In the Government's view, this work must continue to have high priority, both within the Arctic Council and in Norway's environmental cooperation with Russia."

29) Similar objectives are described in Proposition No. 1 (2008–2009) to the Storting and Prop. 1 S (2009–2010), (2010–2011) and (2011–2012) Proposition to the Storting (draft resolution) – Ministry of Foreign Affairs.

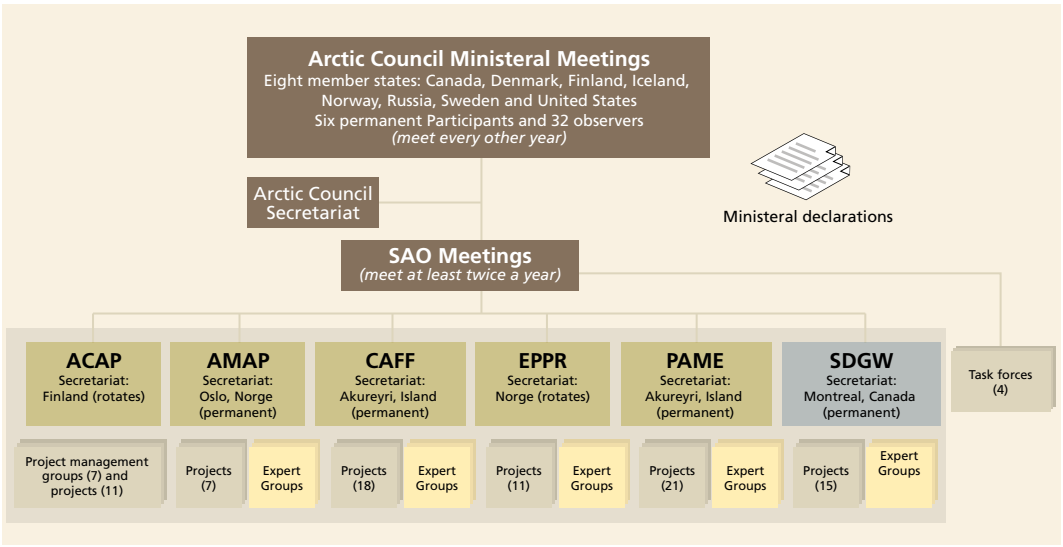
4 Organisational structure, reporting system and funding scheme in the Arctic Council

4.1 Organisational structure in the Arctic Council

The Ottawa Declaration of 1996 and the Arctic Council's Rules of Procedure[30] of 1998 (updated in 2013) are the Arctic Council's general governing documents. According to the Ottawa Declaration, the Arctic Council shall work for cooperation, coordination and interaction among the Arctic states and indigenous peoples in areas where they have common interests, particularly in sustainable development and environmental protection.[31] The Arctic Council builds on an environmental protection cooperation established among the Arctic states in 1991, the *Arctic Environmental Protection Strategy* (AEPS).

The formal work of the Arctic Council is carried out at ministerial meetings attended every other year by the foreign ministers from the eight member states. Meetings are also held at the Deputy Minister level every other year; the first meeting was held in 2010. Figure 2 describes the main structure of the Arctic Council.

Figure 2 The Arctic Council's organisational structure in 2014



The ongoing formal dialogue in the Arctic Council is carried out by Senior Arctic Officials (SAO) – senior officials from the respective member states. The SAOs meet at least twice per year, and more frequently in years with ministerial meetings. In addition, six indigenous organisations are permanent members of the Council.[32] They have full consultation rights in connection with the Council's proceedings and decisions and can participate in all meetings and activities organised by the Arctic Council. As of 2014 there are 32 observers to the Arctic Council. The observers are non-Arctic states and international organisations.[33]

30) Arctic Council (1998) *Arctic Council Rules of Procedure.*
31) Arctic Council (1996) *Declaration on the establishment of the Arctic Council.*
32) The Permanent Participants are the *Saami Council*, *Russian Association of Indigenous Peoples of the North (RAIPON), Aleut International Association, Arctic Athabaskan Council, Gwich'in Council International* and *Inuit Circumpolar International.*
33) See Annex 2 for a complete list of the observers as of June 2014.

The operational work is done through the Arctic Council's working groups, expert groups and task forces, see Fact boxes 2 and 3. Five working groups deal mainly with issues related to the environment and climate and are closely linked to central government agencies and research institutions, while the Sustainable Development Working Group (SDWG) is closely connected to the SAOs and the respective countries' foreign ministries. The expert groups are under the permanent working groups, while the task forces report directly to the SAOs. The chairmanship rotates among member states for two-year periods. In 2013 a permanent secretariat for the Arctic Council was established in Tromsø.

Fact box 2 The six working groups in the Arctic Council

The working groups of the Arctic Council are headed by an executive committee. Participants are member states, indigenous organisations and observers. The representatives come from sector ministries, subordinate agencies, research institutions and non-governmental organisations (NGOs).

1 Arctic Monitoring and Assessment Programme Working Group, AMAP
Established under the *Arctic Environmental Protection Strategy* (AEPS) in 1991, the mandate of *the Arctic Monitoring and Assessment Programme* is to monitor pollution, climate change and effects on the environment and human health. AMAP will also provide member states with advice and recommendations on environmental measures in the Arctic.

2 Protection of the Arctic Marine Environment Working Group, PAME
The Program for the Protection of the Arctic Marine Environment was established under the AEPS in 1991. PAME's mandate is to protect the marine environment in the Arctic. PAME's remit covers sources of pollution from land and sea-based activities.

3 Conservation of Arctic flora and Fauna Working Group, CAFF
The Program for the Conservation of Arctic Flora and Fauna was established under the AEPS in 1991. CAFF's mandate is to protect biodiversity in the Arctic and disseminate knowledge about biodiversity to authorities and populations in the Arctic. According to CAFF, this will help promote a sustainable approach to the management of living resources in the Arctic.

4 Emergency Prevention, Preparedness and Response Working Group, EPPR
The Emergency Prevention, Preparedness and Response Working Group was established under the AEPS in 1991. EPPR deals with preparedness against acute pollution and radiation accidents, and works on collaborative efforts to deal with environmental disasters in the Arctic. EPPR's goal is to protect the Arctic environment from threats or impacts resulting from accidents involving the emission of pollutants or radionuclides. EPPR's responsibility also includes assessing the consequences of natural disasters.

5 Sustainable Development Working Group, SDWG
The Sustainable Development Working Group was established in 1998. SDWG's goal is to help develop and exploit opportunities for advancing sustainable development in the Arctic states. SDWG will help protect and enhance the environment and the economies, culture and health of indigenous peoples and Arctic communities, as well as improve the environmental, economic and social conditions of Arctic communities as a whole.

6 Arctic Contaminants Action Program Working Group, ACAP
The Arctic Contaminants Action Program was formally given working group status in 2006. Prior to that, ACAP had operated as a steering committee called the Arctic Council Action Plan to Eliminate Pollution in the Arctic with a mandate to increase efforts to limit and reduce emissions of pollutants into the environment and promote international cooperation. ACAP acts as a strengthening and supporting mechanism to encourage national actions to reduce emissions and other releases of pollutants.

4.1.1 Arctic Council recommendations on organisational structure in ministerial declarations in the period 1998–2013

Ministerial declarations, SAO reports and minutes from SAO meetings show that from the time the Arctic Council was established to the present day (2014) there has been an ongoing discussion about the need to change the organisational structure so that the Arctic Council can be a more effective body with better achievement of goals.

Several ministerial declarations contain recommendations concerning organisational structure and work processes, and these issues are often raised in the SAO meetings.[34] Nevertheless, the organisational structure of the Arctic Council is essentially the same today as when the Council was established, with the exception that a sixth working group (ACAP, 2006) was created[35] along with a permanent Arctic Council Secretariat (2013) and several limited-time task forces after 2009.

Two chairmanships in particular, Finland's and Norway's, took the initiative to evaluate and streamline the organisational structure of the Arctic Council. The Swedish chairmanship (2011–2013) also emphasised measures to strengthen the internal collaborative processes in the Arctic Council. In 2001, the Finnish Chairmanship (2000–2002) prepared the report *Review of the Arctic Council Structures*. The report addresses several organisational challenges, including that the working groups have too much independence, the instructions given by the SAOs are too general and that decision-making occurs through a bottom-to-top process. The Arctic Council lacks central secretariat functions and institutional memory. The working groups received positive mention for creativity and effort, but lack of communication and coordination leads to duplication of work, overlapping, unnecessary competition and low cost-effectiveness.[36]

Improving the efficiency of the Arctic Council was also given high priority in the Norwegian Chairmanship programme from 2006 to 2009.[37] One of the measures that was implemented was the establishment of a secretariat in Tromsø that would serve the Norwegian, Danish and Swedish Chairmanships in 2006–2013. Norway called for regular evaluations of the work processes in the Arctic Council so that the limited resources could be spent in the most efficient manner. Norway also wanted to initiate a process to consider how the Arctic Council could best be organised to become more efficient and increasingly able to reach its goals.[38] At the ensuing SAO meetings, Norway, the indigenous organisation *The Arctic Athabaskan Council and others* presented discussion notes on organisational challenges.[39] Norway suggested specific improvements at several levels in the Arctic Council. The measures proposed included funding, prioritisation of the Arctic Council's work, coordination and communication between the working groups and external communications.[40] However, because no agreement on the proposals could be reached by all the states no change was made in the main structure of the Arctic Council.

4.1.2 Cooperation and coordination between working groups: The Arctic Council has more areas of cooperation, but the organisational structure is essentially unchanged

When the Arctic Council was established in 1996, the organisational form under the Arctic Environmental Protection Strategy (AEPS) was largely retained, and the

34) Several ministerial meetings have prepared recommendations concerning the need for a more efficient organisational structure of the Arctic Council, see, e.g., the Barrow Declaration (2000), Inari Declaration (2002), Salekhard Declaration (2006), Tromsø Declaration (2009), Nuuk Declaration (2011) and Kiruna declaration (2013).
35) ACAP was established in 1996 as a programme called the *Arctic Council Action Plan to Eliminate Pollution in the Arctic.* In practice, it functioned like a working group, and received formal working group status in 2006.
36) Pekka Haavisto (2001) *Review of the Arctic Council Structures.*
37) The three main priorities during the Norwegian Chairmanship of the programme were 1) integrated resource management, 2) climate change and 3) streamlining of the cooperation.
38) Arctic Council (2006) *Programme for the Norwegian chairmanship of the Arctic Council (2006–2008).*
39) Arctic Athabaskan Council (2007) *Improving the Efficiency and Effectiveness of the Arctic Council: A Discussion Paper.*
40) Draft Discussion Paper by the Norwegian Chairmanship: *Improving Effectiveness and Efficiency of the Arctic Council*, 29 October 2007.

agenda was narrower than today. Early on, the Arctic Council put special emphasis on pollution, while today cooperation takes place in several areas, such as climate, emergency preparedness, living conditions, culture and health.

Five of the working groups still work primarily on environmental issues, while the remit of the sixth working group is sustainable development. In interviews, several ministries and other actors[41] expressed the view that the organisational structure of the Arctic Council was not well enough adapted to the tasks and challenges the Council faces today, and that the Arctic Council could be organised in a better way, especially the working groups.

According to the Ministry of Foreign Affairs, Norway places continuous emphasis on streamlining the Arctic Council's working groups and making them more relevant, and the issue of merging the working groups has been raised on several occasions. The Ministry notes that in practice it proved difficult to implement the changes Norway proposed during its chairmanship period. The other member states have their respective views on the roles of the working groups, which Norway has taken under advisement. Norway has instead focused on achieving better coordination between the working groups.[42]

According to the Secretariat of the Council, the biggest challenge of changing the current organisation of the Arctic Council is that all member states must agree before anything can be done (consensus procedure), and that a chairmanship only lasts for two years. Because it is time consuming for a chairmanship to work on organisational development, technical and political issues are prioritised.[43] While the Ministry of Foreign Affairs stressed that achieving consensus is not a challenge, but the framework for cooperation.

The foreign ministers meet every other year at the Arctic Council's Ministerial Meeting. The most recent meeting was in Kiruna in 2013. Photo: U.S. Department of State

41) The Ministry of Foreign Affairs, Ministry of the Environment, Ministry of Fisheries and Coastal Affairs, AMAP and the Arctic Council Secretariat for the Scandinavian chairmanships.
42) Interview with the Ministry of Foreign Affairs on 14 June 2013.
43) Interview with the Arctic Council Secretariat for the Scandinavian countries on 13 September 2012.

Mandates of the working groups

Each working group has its own mandate and overarching governing documents based on the procedural rules of the Arctic Council.[44] The governing documents vary between the groups in terms of both content and structure.[45] The Ministry of Foreign Affairs stated that the Canadian Chairmanship wants to streamline the documents and has started to do so.

In interviews with the Ministry of the Environment, Ministry of Fisheries and Coastal Affairs, Norwegian Environment Agency and Norwegian Coastal Administration, it emerged that the mandates of the working groups are not clear and delimited , which in practice may cause an overlapping of areas of responsibility. For example, the Arctic Monitoring and Assessment Programme (AMAP) has an interface to all the working groups. Both the Conservation of Arctic Fauna and Flora Working Group (CAFF) and Protection of the Marine Environment Working Group (PAME) have responsibilities within biodiversity, while PAME and the Emergency Prevention, Preparedness and Response Working Group (EPPR) have overlapping fields of responsibility within shipping and safety. The projects of the Sustainable Development Working Group (SDWG) may also overlap with other groups.[46] The Norwegian Environment Agency believes that a certain degree of overlap can be an advantage in that it prevents the occurrence of major gaps in the work being carried out.[47]

It is claimed that the Arctic Council's working groups do not have clear mandates and consequently have overlapping areas of responsibilities. Among other things, the Arctic Monitoring and Assessment Programme (AMAP) working group has tasks interfacing all five other working groups. The photo is from a meeting in May 2012 of all Arctic Council working group chairs as part of coordination work.

Photo: © Arctic Council Secretariat

44) Arctic Council (1998) *Rules of Procedure and* Arctic Council (2013) *Revised Arctic Council Rules of Procedure.*

45) The governing documents of the working groups: AMAP: *Strategic Framework 2010–2018,* CAFF: *Program for the Conservation of Arctic Flora and Fauna Framework Document (1991)*, *Strategic Plan for the Conservation of Arctic Biological Diversity (1998)*, *Arctic Flora and Fauna Recommendations for Conservation (2002)* and *Arctic Climatic Impact Assessment*, PAME: *Arctic Marine Strategic Plan*, EPPR: *Strategic Plan of Action*, ACAP: *ACAP Overall Strategy (2000)* and SDWG: *SDWG Terms of Reference (1998)* and *SDWG Framework Document (2000).*

46) Interview with Ministry of the Environment on 7 May 2012, interview with the Norwegian Environment Agency on 13 June 2013, interview with the Ministry of Fisheries and Coastal Affairs and Norwegian Coastal Administration on 2 May 2012 and interview with the Norwegian Coastal Administration on 8 May 2013.

47) Interview with the Norwegian Environment Agency on 13 June 2013.

There are still different views on whether the working groups have a clear mandate or not, and whether their mandate overlaps with other working groups' areas of responsibility. Representatives from three of the working groups believe the mandates overlap, and are critical to how the mandates work in practice. Although overlapping mandates was a major challenge in the past, it is still a challenge, because it can take a lot of time and resources to clarify which working group is responsible for following up individual projects. It is emphasised that such challenges are always resolved in practice, but it may involve unnecessary coordination work – time and resources that could rather be spent on technical issues.[48]

The Ministry of Foreign Affairs noted that the Sustainable Development Working Group (SDWG) has a broad mandate that encompasses social science issues that can be challenging to define.[49] In interviews, SDWG claims that it is not necessarily sustainable development that is the key word for the working group, but rather the human dimension. The human dimension is a comprehensive term that includes everything from society, health, indigenous peoples, and oil and gas to shipping. SDWG notes that many working groups would like to work on topics that lie within SDWG's mandate, and since SDWG has not always fulfilled its function, it has been possible for other working groups to do so.[50]

The other three working groups (ACAP, PAME and CAFF) believe that they have clear mandates that do not overlap with the mandates of other working groups. It was pointed out, however, that environmental issues are an interdisciplinary matter where it can be difficult to draw clear boundaries in certain matters, such as oil pollution. The working groups work well together and achieve synergies through various approaches to a subject. In cases where a project can in principle be chaired by several working groups, they choose cooperation rather than competition.[51] These three working groups have no objections to the current organisation of the Arctic Council.

The Arctic Council has made several adjustments to the working groups' work processes in recent years, which has led to better coordination and communication. For example, the chairmanships of the various working groups meet prior to the SAO meetings, in addition to having two phone meetings per year. Representatives from one working group attend the meetings of other working groups. Information memos (two pages) from the meetings are prepared so that everyone can easily access information about the activities of the working groups. The groups also collaborate on projects, and they hold joint symposia and seminars.[52]

Working groups without a permanent secretariat

There are considerable differences between the working groups. This is evident, among other things, from the scope of projects and expert groups that are under the individual working groups, and whether they have a permanent or rotating secretariat. According to a survey in Kankaanpää's and Young's 2012 Arctic Council study, AMAP, CAFF and PAME are considered to be the three working groups with the greatest influence and achievement.[53]

Four working groups have a permanent secretariat, while EPPR's and ACAP's secretariats rotate with the chairmanship. CAFF and PAME both have a secretariat consisting

48) Based on interviews with AMAP, EPPR and SDWG.
49) Interview with the Ministry of Foreign Affairs on 13 September 2012 and interview with AMAP on 13 June 2013.
50) Interview with SDWG on 10 June 2013.
51) Interview with CAFF and PAME letter from ACAP.
52) Interview with the Ministry of Foreign Affairs on 13 September 2012, interview with CAFF on 29 August 2013, interview with EPPR on 8 May 2013 and interview with the Ministry of the Environment on 26 August 2013.
53) Paula Kankaanpää and Oran R. Young (2012) *The effectiveness of the Arctic Council*. Arctic Centre University of Lapland, Finland.

Formally established in 2013, the Arctic Council Secretariat has offices in the Fram Centre in Tromsø. The Ministry of the Foreign Affairs believes a permanent secretariat can foster better continuity and administration in the Arctic Council. Photo: Ann Kristin Balto, Norwegian Polar Institute

of a total of approximately seven full-time employees, while AMAP's secretariat has four employees. In comparison, SDWG's secretariat has one position while EPPR uses staff who total one position. The Ministry of Foreign Affairs noted that a position has been created in 2014 in the Arctic Council Secretariat in Tromsø that will provide secretariat functions for ACAP and EPPR.

It was pointed out in interviews that rotating secretariats are an organisational weakness that places limitations on the work of the individual working group. Contacts and working methods must be rebuilt with each change of chairmanship, and institutional memory is insufficient. Working groups with a permanent secretariat have greater implementation capability because they usually have more resources available and knowledge of how work in the Arctic Council takes place. Permanent secretariats often receive extra support and attention from their host country.[54]

These views are consistent with Kankaanpää's and Young's 2012 Arctic Council study, which concludes that a permanent secretariat for the Arctic Council and stronger secretariats in the working groups have great significance for improving the efficiency and performance of the Arctic Council.

In 2013, a permanent secretariat was formally established for the Arctic Council in Tromsø, where Norway, as the host country, foots almost 50 per cent of the total cost. The majority of stakeholders (administration and working groups) that have been interviewed in this audit are in favour of the establishment of the secretariat. The Ministry of Foreign Affairs believes that the permanent secretariat can provide continuity and expertise in organisational issues, which will make up for the lack of continuity due to change of the chairmanship of the Arctic Council every two years. It was noted that ACAP and EPPR have placed administrative functions with the secretariat in Tromsø.[55] Both ACAP and EPPR believe that the permanent secretariat will help strengthen the work of the working groups.[56]

54) Interview with EPPR on 8 May 2013, answers to list of questions from ACAP on 7 June 2013 and interview with the Norwegian Environment Agency on 13 June 2013.
55) Interview with the Ministry of Foreign Affairs on 14 June 2013.
56) Answers to list of questions from ACAP on 7 June 2013 and interviews with EPPR on 8 May 2013.

Increased use of task forces

The Ministerial Meeting has been appointing task forces since 2009. According to the Ministry of Foreign Affairs, a task force has a time-limited mandate and is focused on achieving concrete results within this period in priority areas, where the SAOs have more direct input on the process than in the working groups. A total of eight task forces have been established; four have completed their work, and four were established at the Ministerial Meeting in Kiruna in 2013, see Fact box 3[57]

Fact box 3 Task forces of the Arctic Council

Task forces at March 2014:

- Task Force on Arctic Marine Oil Pollution Prevention
- Task Force on Black Carbon and Methane
- Scientific Cooperation Task Force
- Task Force to Facilitate the Circumpolar Business Forum

Task forces that have concluded their work:

- Task Force on Search and Rescue, 2009
- Task Force on Arctic Marine Oil and Pollution Preparedness and Response, 2011
- Task Force for Institutional Issues, 2011
- Task Force on Short-Lived Climate Forcers (2009–2013)

In interviews, differing views emerged on the use of task forces. On the one hand, it is argued that task forces are an efficient way of making progress in specific subjects prioritised by the Arctic Council.[58] Such groups can provide a good link and foundation with the Arctic Council if relevant expertise from both the working groups and the task forces are involved.

On the other hand, it was pointed out that the use of task forces can result in overlapping work. As an example, reference is made to the mandates of the Task Force on Black Carbon and Methane and AMAP's work in this area and the task force on ecosystem-based management and PAME. If the permanent working groups have a long-term mandate and work within defined areas, this may be a more efficient way of organising work, rather than creating task forces that require staff, new management and financing.[59] The Norwegian Polar Institute adds that although the specific working groups can be effective, they could also undermine some of the position of the permanent working groups. The work of the task forces does not provide the same degree of continuity as work in the permanent working groups.[60]

4.1.3 Follow-up and the management of the working groups

Another aspect emphasised in the interviews is the overall management and follow-up of the working groups. The six permanent working groups have 10 expert groups attached to them,[61] and the groups are responsible for 80 registered projects (as at May 2014, for an overview, see Annex 3).[62] The question that arises is how the Arctic Council's high-level representatives, the SAOs and ministers, follow up the work of the Arctic Council.

57) Interview with the Ministry of Foreign Affairs on 14 June 2013.
58) Interview with the Ministry of Foreign Affairs on 14 June 2013 and interview with EPPR on 8 May 2013.
59) Interview with the Norwegian Environment Agency on 13 June 2013.
60) Interview with the Norwegian Polar Institute on 7 May 2013.
61) Arctic Council website at February 2014.
62) *Tracking Pool for Arctic Council Ongoing Projects and Deliverables*. Information in e-mail of 27 June 2014 from the Arctic Council Secretariat.

Start-up of projects

The working groups prepare biennial work plans that are approved at the Ministerial Meetings after initial processing by the SAOs.[63] While the working groups point out that projects can be initiated by several parties, projects are generally proposed by the working group itself or one or more member states. The projects can also be generated as a result of work by other working groups or at a senior level.[64] Each project that is proposed must be approved – actively or tacitly – by all member states of the individual working group.[65]

The Ministry of Foreign Affairs believes that the working groups have great professional freedom to define the work programmes, but the Chairmanship Programmes are also of importance for the topics emphasised by the working groups. The Chairmanship Programme must be accepted by all member states, and is regarded as a joint Arctic Council programme, not a national programme. The two-year Chairmanship Programmes coincide with the working groups' two-year work plans, so the Chairmanship's priorities are reflected in the working groups' projects.[66]

The Arctic Council Secretariat is in the process of preparing an overview of all Arctic Council projects (*Tracking Tool for Arctic Council Ongoing Projects and Deliverables*). Of the 80 ongoing projects at May 2014, the working groups are responsible for between 7 and 21 projects (for an overview, see Figure 2). There is wide variation between the projects in terms of scope, number of participants and implementation time.

Despite the large number of projects, a limited number of projects have been highlighted as important. Which projects are considered key will depend on who is asked. The respondents highlighted 5–6 reports as particularly important, including the *Arctic Climate Impact Assessment* (ACIA), *Snow, Water, Ice and Permafrost in the Arctic* (SWIPA), AMAP's status reports, *The Arctic Biodiversity Assessment* (ABA), *Arctic Ocean Acidification Assessment* and *Arctic Marine Shipping Assessment* (AMSA).[67] This is essentially in line with the 2012 study by Kankaanpää and Young on the effectiveness and performance of the Arctic Council. In the study, ACIA, AMAP reports, AMSA and the Arctic Human Development Report received the highest score in response to the question of which projects or reports have made a difference in sustainable development and environmental protection in the Arctic.

The Ministry of the Environment and one working group referred to the high number of projects and questioned whether this is too many, not least in light of how few projects lead to the major fact finding reports that are involved in setting the agenda for the management of the Arctic. According to the Ministry of the Environment, one of the reasons for the high number of projects is that each Chairmanship wants to make its mark, and there is limited possibility of implementing major projects over a two-year period, which is the length of each chairmanship.[68]

Internal reporting and follow-up within the Arctic Council

Internally, the Arctic Council has drawn up a practice under which the working groups report via the SAOs to the ministers, according to the approved work plan.[69]

63) Interview with the Arctic Council Secretariat for the Scandinavian countries on 13 September 2012.
64) Minutes and written feedback from the six working groups.
65) The Norwegian Environment Agency on 13 June 2013.
66) Interview with the Ministry of Foreign Affairs on 14 June 2013.
67) Interview with the Arctic Council Secretariat for the Scandinavian countries on 13 September 2012, interview with the Ministry of Foreign Affairs on 14 June 2013 and interview with the Ministry of the Environment on 31 May 2012.
68) Interview with the Ministry of the Environment on 26 August 2013.
69) Interview with AMAP on 13 May 2013.

Despite these formal reporting and follow-up mechanisms between the working groups and the SAOs and ministers, several pointed out that the working groups play a much too independent role in the Arctic Council.[70] Three working groups pointed out that the internal management of the Arctic Council can be a challenge, and that the SAOs follow up the working groups in varying degrees. While the SAOs' report to the ministers is viewed as an important document in the management of the working groups, the SAOs could increasingly consider the contents of the working groups' work schedules and provide clearer advice on future project priorities.[71] However, two working groups believe that communication and coordination between the working groups and the SAOs is good.

Kankaanpää's and Young's 2012 study of the Arctic Council cites a lack of sufficient commitment on the part of the SAOs as a factor that negatively affects the effectiveness and performance of the Arctic Council.

When it comes to the work processes of the Arctic Council, the Ministry of the Environment points out that there is no common template for how processes and projects should be designed and carried out. Consequently, there is a tendency for individual projects to live a life of their own to a certain extent. In the Ministry of the Environment's view, it would be better if the different processes in the Arctic Council were more predictable. The work processes may take a long time and if the participants do not come to an agreement at a Ministerial Meeting or SAO Meetings, it may take six months to make progress on a given matter. The Ministry of Fisheries and Coastal Affairs noted that the relationship between the SAOs and working groups appears to be unresolved.[72]

The Ministry of Foreign Affairs notes that from Norway's perspective, stronger administrative control of the working groups is desirable. The member states agree on this, and the Canadian Chairmanship will prioritise the streamlining of working groups. There are also plans to prepare joint criteria for follow-up and coordination, both between the different working groups and vis-à-vis the SAOs. Furthermore, the Ministry of Foreign Affairs says that there is agreement among the SAOs to reduce the number of projects and achieve better management. In 2013, a list of projects (*Tracking Tool for Arctic Council Ongoing Projects and Deliverables*) was prepared that maps large and small projects with a view to reducing the number of projects in the Arctic Council.

The Ministry of Foreign Affairs also has a long-term desire for the permanent secretariat to have the resources to follow up the work of the working groups. In the Ministry of the Environment's opinion, the permanent secretariat in Tromsø will help to ensure more systematic processes and coordination between the working groups and in the Arctic Council as a whole.[73]

4.2 Reporting from the member states

Many Arctic Council projects culminate in recommendations to member states in the ministerial declarations (this is discussed further in Chapters 5 to 7). The Arctic Council has not established a system to record how the member states follow up

70) Interview with the Ministry of the Environment on 26 August 2013, Norwegian Polar Institute on 7 May 2013 and SDWG on 10 June 2013.
71) Interview with PAME, EPPR, SDWG.
72) Interview with the Ministry of Fisheries and Coastal Affairs on 1 February 2013.
73) Interview with the Ministry of Foreign Affairs on 14 June 2013 and interview with the Ministry of the Environment on 26 August 2013.

recommendations,[74] and it is therefore difficult to assess the status of implementation of Arctic Council recommendations.[75] Nor has a reporting system been established for the two binding agreements that the Arctic states have negotiated (these agreements are discussed in Chapter 6).[76]

According to Kankaanpää's and Young's 2012 study of the Arctic Council, an important reason for the lack of effectiveness and achievement in the Arctic Council is that the Council does not follow up on whether member states have implemented the recommendations, and to what extent Arctic Council reports and guidelines are used.

The Arctic Council is not an international organisation that can criticise the possible failure of member states to follow up recommendations. The Arctic Council is not per se a legal entity and has no power to impose sanctions for failure to implement and follow up recommendations. These circumstances are underlined by the Arctic Council Secretariat.[77] In line with this, the Ministry of Foreign Affairs emphasised that the Arctic Council is not formally an executive body, the recommendations are not legally binding, and follow-up must be done nationally, not by the Arctic Council. Although the Arctic Council does not have the power to impose sanctions vis-à-vis member states, the Council exerts some degree of pressure on countries to get them to follow the recommendations.[78]

In general, the Ministry of the Environment is of the opinion that member states follow up the Arctic Council's recommendations to varying degrees. The Ministry stated that there has not been systematic follow-up of the ministerial declarations by the Council and that the Council has not followed up on the extent to which the member states follow up the decisions in practice.[79]

On the other hand, it was pointed out that stringent reporting requirements may be undesirable because they can cause the country to feel stigmatised, and in addition it is costly to follow up such requirements. The Ministry of Foreign Affairs believes that good cooperation in the Arctic Council is, e.g., the result of member states not "challenging each other", but rather cooperating as equal parties. The use of reporting must be balanced against the desire to achieve consensus.[80] The Ministry of the Environment adds that comprehensive reporting may make it harder, if not impossible, to achieve consensus on difficult issues and which recommendations should be given. The reporting must have the practical application of providing a form of feedback from the recipient, and the reporting must be used for something real.[81]

Several representatives from the Norwegian government and working groups are nonetheless positive to some form of national reporting in the Arctic Council. The Ministry of Foreign Affairs and the Ministry of the Environment believe some reporting of national follow-up could be appropriate. The working groups believe that national reporting may lead to increasing follow-up and implementation of the recommendations by the countries. Furthermore, working groups claim that without a reporting system it is not possible to say anything about the status of the countries' follow-up of the recommendations, and the reporting must be done in full transparency.[82] The Saami Council agrees that a reporting system that includes

74) See the Ottawa Declaration and the Arctic Council's rules of procedure.
75) Interviews with the Ministry of the Environment, the Ministry of Foreign Affairs, ACAP, AMAP, CAFF and PAME.
76) *Agreement on cooperation on marine oil pollution, preparedness and response in the Arctic* and *Agreement on cooperation on aeronautical and maritime search and rescue in the Arctic*.
77) Interview with the Arctic Council Secretariat for the Scandinavian countries on 13 September 2012.
78) Interviews with the Ministry of Foreign Affairs on 9 February 2012 and 14 June 2013.
79) Interview with the Ministry of the Environment on 7 May 2012.
80) Interview with the Ministry of Foreign Affairs on 14 June 2013.
81) Interviews with the Ministry of the Environment, Ministry of Foreign Affairs, ACAP, AMAP and CAFF.
82) Interviews with the Ministry of the Environment, Ministry of Foreign Affairs, ACAP, AMAP and CAFF.

reporting from member states will be a strength for the Arctic Council as long as the permanent members' strong position in the Council is not weakened. If, on the other hand, such a reporting system causes the Arctic Council to become more like a legally binding body, the Saami Council believes that it could weaken the position of the permanent members.[83]

4.2.1 Can AMSA function as a model for reporting in the Arctic Council?

Several representatives from the Norwegian government and working groups referred to the Arctic Council's reporting requirements for a larger project on Arctic shipping, *the Arctic Marine Shipping Assessment* (AMSA) (2009), cf. Chapter 6 on Arctic shipping, as a model for other projects under the aegis of the Arctic Council. AMSA follow-up reports from 2011 and 2013 describe how the recommendations are followed up by working groups, SAOs and member states.[84]

Representatives from the Norwegian government (the Ministry of Foreign Affairs, Ministry of the Environment, Norwegian Coastal Administration and Norwegian Environment Agency) and four working groups believe that AMSA can be used as an example for other large and important projects. Some emphasised that a rigid follow-up system can lead to fewer and more general recommendations and that the processes will take longer. The recommendations must also be based on comprehensive and thorough reports, and there must be a realistic view of how many recommendations are appropriate to include.[85]

The Ministry of Fisheries and Coastal Affairs and the Norwegian Coastal Administration, which has national responsibility for parts of AMSA's advice and recommendations in Norway, said that each country still has a large degree of freedom to adapt the recommendations and their implementation within its national framework. According to the Ministry, real follow-up of the extent to which the recommendations are followed up by each member state, and their impact, will be achieved through more thorough studies.[86]

According to the Arctic Council Secretariat, AMSA is the best example of the fact that follow-up is taking on a stronger role in the Arctic Council. The Secretariat believes it may be an admission that the Arctic Council prepares many recommendations that are difficult to build on without knowing the status of the member states' national follow-up.[87]

CAFF points out that their major study of biodiversity in the Arctic (*The Arctic Biodiversity Assessment* (2013), cf. Section 5.3) embodied a number of recommendations which will be followed up using an implementation plan for member states.

4.3 Funding of Arctic Council activities

4.3.1 General observations

Activities of the Arctic Council are funded by the Arctic states, which voluntarily provide financial contributions towards technical and administrative tasks and the participation of indigenous peoples' organisations. With the exception of the Arctic Council Secretariat, the Arctic Council does not have a joint budget. There are no regular transfers to the Council, and not all states allocate money to all projects or

83) Response of 24 June 2013 from the Saami Council to list of questions.
84) Interview with EPPR on 8 May 2013.
85) Interview with the Ministry of Foreign Affairs, Ministry of the Environment, Norwegian Environment Agency and Norwegian Coastal Administration.
86) Interview with the Ministry of Fisheries and Coastal Affairs and the Norwegian Coastal Administration on 2 May 2012
87) Interview with the Arctic Council Secretariat for the Scandinavian countries on 13 September 2012.

secretariats.[88] Funding of the Arctic Council must, in the opinion of the Ministry of Foreign Affairs, be viewed in the context of the Ottawa Declaration, which emphasises that the Arctic Council shall be a forum that promotes cooperation and consultations between the Arctic states. The different Arctic states are free to allocate funds based on their priorities, as well as contribute to funding certain joint measures.[89]

The lack of predictable funding can pose an obstacle to implementing working groups' activities and projects and ensuring the participation of the permanent members. Kankaanpää's and Young's 2012 study on the effectiveness of and achievement of goals by the Arctic Council shows that the lack of secure funding for Arctic Council activities is the main obstacle associated with the Council's effectiveness and achievement of goals.

4.3.2 Recommendations on funding in ministerial declarations in 1998–2013

Ministerial declarations, SAO reports and minutes of SAO meetings show, in the same manner as the discussions about organisational structure, that there have been continued and ongoing discussions about the funding schemes in the Arctic Council ever since it was established. As is evident from the recommendations of all Ministerial Meetings, there has been agreement since the start to strengthen the funding scheme for all Arctic Council activities. This also applies to the work of securing support from other international institutions and the importance of funding the participation of the permanent representatives. For many years, the funding of projects has also been a central theme, and in this context measures to create a project fund have been discussed.[90]

4.3.3 Further details on the funding of technical and administrative tasks in the Arctic Council

Each project, each working group and each working group secretariat prepares their own budgets and accounts, but no single financial overview of all activities under the Arctic Council has been prepared. Many working groups say it is difficult to provide an overview of the costs of projects,[91] and the Arctic Council Secretariat states that it does not have a list of budgets for the Arctic Council as a whole.[92] The Canadian Chairmanship has started a process of mapping the funding of the working groups and projects.

Funding of working groups and projects

The Ministry of Foreign Affairs stated that there are different practices in the working groups with regard to submission of a financial plan before projects are commenced. In EPPR, for example, a country that proposes a project must also present a funding plan, but this does not apply in ACAP. Projects can also be presented at the SAO level without the existence of any funding plan. The member state that proposes the project can, for example, fund the entire project, or the country can get other countries to make a financial contribution. Often, support is in the form of the provision of resources,[93] for example in the form of research institutes and specialist agencies funding the project's activities through their own budgets and ordinary activities.[94]

The working groups may also apply for funding from various international organisations and funding institutions, such as the Nordic Council of Ministers, the Global Environment Facility and the United Nations Foundation. Observer states may also

88) Pekka Haavisto (2001) *Review of the Arctic Council Structures.*
89) Interview with the Ministry of Foreign Affairs on 14 June 2013.
90) Ministerial declarations in the period 1998–2013.
91) Interviews with AMAP, EPPR, SDWG, PAME and ACAP.
92) Interview with the Arctic Council Secretariat for the Scandinavian countries on 13 September 2012.
93) Such support is usually referred to as in-kind contributions.
94) Interview with the Arctic Council Secretariat for the Scandinavian countries on 13 September 2012

contribute financially to the projects, but the proportion of a project financed externally cannot exceed the percentage that member states contribute.[95]

According to the Ministry of Foreign Affairs, it is difficult to achieve joint funding of the activities of working groups because the countries want to finance their own priority projects and activities based on different priorities in each member state. While a different form of funding would require a different form of decision-making in the Arctic Council, the Ministry of Foreign Affairs does not rule out that a new form of funding may eventually be launched. For its part, Norway is concerned that there should be transparency in the funding of the activities of the working groups.[96]

While the working groups have different funding needs, they all cited weaknesses and undesirable consequences of the funding system. One working group highlighted as a weakness the lack of connection between the ministerial declarations and funding of projects to follow up on these. There is currently an ad hoc approach to project funding, and unnecessary time and resources are spent on finding sources of funding for projects.[97] Some groups pointed out that under the current funding system, a large number of small projects have been implemented, in part, as individuals' favourite projects.[98] In line with this, the Indigenous Peoples Secretariat (IPS) also stated that a national form of support largely promotes projects that protect national interests, rather than projects that safeguard a unified circumpolar Arctic perspective. In the opinion of the IPS, there should be collective funding that ensures a greater share of circumpolar projects. The permanent members have proposed central funding – a collective funding mechanism.[99]

Initiative for a joint project funding scheme

In 2003, on the initiative of ACAP, a proposal was submitted to create a special fund to secure funding for the implementation of projects under the Arctic Council, particularly ACAP. The funding mechanism is known as PSI (Project Support Instrument).[100] In Reykjavik (2004), ministers gave their support to the development of PSI as a voluntary system for identifying, mobilising and channelling financial resources for special priority Arctic Council projects.

PSI will enter into force when at least five donors have joined as contributors, including Russia.[101] So far, Russia, Norway, Iceland, Sweden, Finland, the US and also the Sami Parliament support the scheme. Commitments total approximately NOK 25 million. The funding mechanism did not become operative until the autumn of 2014 as the Russian authorities did not disburse funds to the scheme as planned until that time.

The Ministry of Foreign Affairs noted that there is an ongoing debate about whether the Arctic Council shall have its own budget, but since there is currently no agreement or willingness in the Arctic Council to establish such a budget, the Ministry assumes it will not happen for some time.[102] The Ministry of the Environment also does not see that it will be possible to create a scheme where all states contribute to basic funding that covers all or part of the Arctic Council's expenses. Based on the experience with

95) See requirements for observers that were adopted at the Ministerial Meeting in Nuuk in 2011.
96) Interview with the Ministry of Foreign Affairs on 14 June 2013.
97) Interview with EPPR on 8 May 2013.
98) Interview with SDWG on 10 June 2013.
99) Interview with IPS on 24 June 2013.
100) The SAO meeting in Reykjavik, April 2003, and Document No. apr 08-12.2 of the SAO meeting in Svolvær in April 2008.
101) Russia wanted to support the funding scheme with EUR 2 million annually in the period 2009–2013, for a total of EUR 10 million (equivalent to NOK 8.2 million. Norway supported the proposal with USD 200,000 (NOK 1.23 million) in 2007/2008. Iceland pledged NOK 50,000 in support, the Sami Parliament NOK 100,000, Sweden EUR 200,000 (NOK 1.65 million) and Finland EUR 200,000 (NOK 1.65 million). The US has pledged USD 2 million (NOK 12.3 million).
102) Interviews with the Ministry of Foreign Affairs on 13 September 2012 and 14 June 2013.

PSI is it hard to believe that an attempt will be made to create other funding schemes on a larger scale when not even the one initiative (separate budget) has been put in place after so many years.[103] The mechanism has subsequently been put in place, cf. the paragraph above.

4.4 Norwegian participation in and work with the Arctic Council

4.4.1 Involvement and duties of specialist ministries

The Ministry of Foreign Affairs reports that the Norwegian participation in the Arctic Council has increased in step with the expansion of the Council's agenda.[104] While Arctic Council work affects many Norwegian ministries and subordinate agencies, participation and use of resources varies considerably.[105] The Ministries noted that environmental protection dominates the work of the Arctic Council. The Ministry of Climate and Environment estimates that to date 80–90 per cent of the work of the Arctic Council has been related to environmental protection and climate change.

The Ministry of Climate and Environment and its subordinate agencies are actively involved in four of the six working groups and is responsible for practical follow-up of a number of cooperation projects, including Norway's work within AMAP, CAFF and ACAP, and is the Norwegian delegation leader for PAME and ACAP (from 1 January 2014). The Norwegian Environment Agency has delegation responsibility for CAFF and AMAP. The environmental protection authorities are also represented in a large number of groups under the working groups (30 at August 2013) and in projects. Activities vary – some groups are very active, while others function as more of a network (see Annex 3).

The Ministry of the Environment expressed that working with the Arctic Council is resource-intensive. The Arctic Council's organisation, with multiple levels and working groups that require representation, means that meeting activities are very time-consuming, as these meeting activities take place in different Arctic states. The Ministry of the Environment would prefer that the meetings were coordinated in terms of time and place, to make participation more effective.

Involvement with the Arctic Council is not equally high in the other ministries. However, the Ministry of Transport and Communications is highly active, in part because the Norwegian Coastal Administration chairs the EPPR Working Group. The Norwegian Coastal Administration also participates in projects under PAME, in a task force and in cooperation projects carried out by AMAP.

The Ministry of Petroleum and Energy states that neither the Ministry nor subordinate agencies have been involved in any of the working groups or other Arctic Council groups.[106]

The Norwegian Maritime Directorate is actively involved in PAME, and heads many of the projects. In recent years the Ministry of Trade and Industry has also participated actively in PAME.[107]

103) Interview with the Ministry of the Environment on 26 August 2013.
104) Interview with the Ministry of Foreign Affairs on 14 June 2013.
105) Relevant ministries are the Ministry of the Environment, Ministry of Fisheries and Coastal Affairs, Ministry of Petroleum and Energy, Ministry of Consumer Affairs and Government Administration, Ministry of Trade and Industry and Ministry of Justice and Public Security.
106) Response of 18 February 2013 from the Ministry of Petroleum and Energy to list of questions.
107) Response of 2 April 2013 from the Ministry of Trade and Industry to list of questions.

The Ministry of Justice and Public Security has participated in PAME. The Directorate for Civil Protection and Emergency Planning has been somewhat involved in EPPR work, but does not play an active role. The Ministry of Justice and Public Security headed the Norwegian negotiations delegation in connection with the preparation of the search and rescue agreement in the Arctic Council (cf. Chapter 6). Representatives from the Joint Rescue Coordination Centre and Ministry of Foreign Affairs participated in the delegation. The Ministry also participates regularly in the meetings of the Arctic Council as part of the Norwegian delegation due to its coordinating role in the central administration's management of Arctic issues.[108]

In interviews, the Ministry of Government Administration, Reform and Church Affairs noted that the Ministry of Foreign Affairs is in general responsible for the administration of indigenous peoples' issues outside Norway or between states. The Ministry of Government Administration, Reform and Church Affairs has consequently played a lesser role and has not been involved in the Arctic Council, but says that this has changed in part because indigenous peoples will be a priority under the Canadian Chairmanship.[109]

The Ministry of Foreign Affairs is delegation leader for Norway's participation in the SDWG and is responsible for coordinating the work of the SDWG in Norwegian public administration. The Ministry of Government Administration, Reform and Church Affairs also usually participates in the Norwegian delegation to the SDWG meetings. Depending on the agenda, the Ministry of Health, along with other ministries and agencies, also takes part in the preparatory meetings for SDWG meetings.

The Norwegian and Russian SAOs head a task force on the prevention of oil spills in the Arctic, in which the Ministry of Transport and Communications and Ministry of Labour and Social Affairs, in close cooperation with the Petroleum Safety Authority and Norwegian Coastal Administration, have technical responsibility for technical coordination with the other countries.

The Ministry of Foreign Affairs noted that the development of collaboration in the Arctic Council has led to greater inter-ministerial coordination of issues under the Arctic Council and that the involvement of many relevant ministries has increased over the past year (2013–2014).[110]

There is no overview of what Norway spends in terms of financial resources on the work of the Arctic Council. Norway's direct payments to the work of the Arctic Council amounts, according to the Ministry of Foreign Affairs, to approximately NOK 50 million annually. In addition to the funds allocated directly to the work associated with the Arctic Council, many areas charged to other budget items are of importance to the Arctic areas, and more research institutions provide some funding through their own budgets and ordinary activities (this is called in-kind contributions[111]). The Ministry of Foreign Affairs stated that Norway expends significant resources on the work of the Arctic Council.

4.4.2 The Ministry of Foreign Affairs' coordination of the work with the Arctic Council in Norwegian public administration prior to key meetings of the Arctic Council

The Ministry of Foreign Affairs is responsible for coordinating the authorities' work with the Arctic Council and has the formal responsibility for following up through

108) Response of 15 April 2013 from the Ministry of Justice and Public Security to list of questions.
109) Interview with the Ministry of Government Administration, Reform and Church Affairs on 14 June 2013.
110) Letter from the Ministry of Foreign Affairs dated 25 April 2014.
111) Interview with the Ministry of the Environment on 31 May 2012.

Norway's SAO. The duty of the SAO is to participate in the preparation of the draft ministerial declarations and to coordinate the Norwegian input with relevant ministries. Norwegian viewpoints are clarified at the political level and in cooperation with relevant ministries. The Ministry of Foreign Affairs invites ministries involved and other relevant representatives from the authorities and voluntary organisations for preparatory meetings to discuss and coordinate technical matters and issues of fundamental importance before the SAO meetings and Ministerial Meetings – in practice about once every six months.[112] The Ministry of Foreign Affairs clarified that more meetings are called during years with Ministerial Meetings. In addition, there are regular meetings and coordination in the public administration in connection with the Norwegian participation in the Arctic Council's working groups and projects.

The Ministry of the Environment believes that the general lines of conflict related to protection and use found in the Norwegian public administration, also become visible with the development of Norway's positions in the Arctic Council. The Ministry points out that there will therefore be a need for close contact and coordination between relevant ministries.[113]

According to the Ministry of Foreign Affairs, continuous follow-up of the declaration and preparations for the next declaration take place at several levels during the periods between the Ministerial Meetings: between top-level officials (the SAOs), in working groups and at expert level, and at the national public administration level.[114] For its part, the Ministry of the Environment convenes coordination meetings with subordinate agencies – and with other ministries if there is a need for that in connection with certain processes or projects.[115]

4.4.3 Norwegian follow-up of recommendations in ministerial declarations

According to the Ministry of Foreign Affairs, the recommendations from the ministerial declarations vary widely, from comprehensive political objectives to minor projects. The way the recommendations are followed up in the public administration depends on the type of recommendation in question. Some recommendations are already part of Norwegian policy, while others require that the Ministry of Foreign Affairs coordinate the cooperation between the relevant ministries.

No national system has been established to document how the Arctic Council's technical recommendations are followed up by the public administration. The Ministry of Foreign Affairs added that it is mainly the specialist ministries that draft and negotiate these types of recommendations, and are the best qualified to evaluate how such recommendations should be followed up nationally.

The Ministry of the Environment states that it would be practical if a separate coordinated system was established to ensure follow-up and implementation of the ministerial declarations' technical recommendations on the environment, and that a discussion is under way to establish such a system. The Ministry emphasises, however, that the lack of a formal follow-up system does not mean that the recommendations that emerge through the Arctic Council, are neglected.[116] Nor are regular formal meetings held in the administration after Arctic Council meetings,[117] but sporatic follow-up meetings have been held with the Norwegian actors, most recently in September

112) Interview with the Ministry of Foreign Affairs on 14 June 2013 and interview with the Ministry of the Environment on 31 May 2012.
113) Interview with the Ministry of the Environment on 7 May 2012.
114) Interview with the Ministry of Foreign Affairs on 14 June 2013.
115) Interview with the Ministry of the Environment on 7 May 2012.
116) Interview with the Ministry of the Environment on 31 May 2012.
117) Interview with the Ministry of the Environment on 26 August 2013.

2013. The Ministry of the Environment noted that there has also been extensive informal contact with the Ministry of Foreign Affairs regarding Arctic Council work.

Regarding follow-up of the work to be done in the Arctic Council, the Ministry of Foreign Affairs said that after the Ministerial Meeting it coordinates specific follow-up of various projects by submitting concept papers and project proposals for consultation with relevant ministries, or that the responsible ministry does this.[118]

The Ministry of Foreign Affairs said that it would like to see even closer collaboration with relevant ministries and agencies in matters raised in the Arctic Council. For Norway's part, considerable resources are being invested in the Arctic Council, and the Ministry of Foreign Affairs emphasises that the work of the Arctic Council must be as transparent and effective as possible.[119]

4.4.4 The Arctic Council's recommendations and influence on the work of Norwegian authorities

According to the Ministry of Foreign Affairs, Norway is working actively to communicate Norwegian viewpoints to the Arctic Council. Norway has often been in the forefront of policy development in the Arctic Council, and much of what is adopted there is already Norwegian policy.

The Ministry of the Environment elaborated that even though the Arctic Council, and particularly the assessment reports, provide a good foundation for the development of Norwegian policies, there is no direct connection between the Arctic Council's work and national goals. The Arctic Council may be one of the factors that influence the goals, but will usually not be a decisive factor. Many of the national goals are directly derived from international agreements or obligations.[120]

For the Ministry of the Environment's part, the Arctic Council is, however, a venue to discuss current environmental issues within the administration, particularly in relation to other adjacent specialist ministries. The Ministry of Foreign Affairs is also a key ministry, and can in collaboration with the Ministry of the Environment put the Arctic climate and environmental issues on the international agenda. The strategies, policies and action plans the Arctic Council prepares may have some significance for Norwegian public administration, but in the same way as with advice and recommendations, Norway is usually ahead of the Arctic Council.[121]

The Ministry of the Environment noted that it is difficult to measure the degree to which the Arctic Council and its recommendations are decisive for the management of the Arctic as a whole. However, the Ministry noted that AMAP has played a very important role in summarising knowledge of the Arctic, and pointed out the importance of summarising and disseminating knowledge about the challenges in the Arctic. The Arctic Council's large catchment area is helping to create broad understanding for the environmental challenges facing the Arctic, which in the Ministry's assessment could be said to be the most important practical result for the Arctic Council.[122]

The other ministries that have been asked said that the recommendations have no significance for their management of the areas. The Arctic Council can, however, be an important forum for amassing knowledge and exchanging experience among the Arctic states. This subject is also discussed in Chapter 6.

118) Interview with the Ministry of Foreign Affairs on 14 June 2013.
119) Interview with the Ministry of Foreign Affairs on 14 June 2013.
120) Interview with the Ministry of the Environment on 26 August 2013.
121) Interview with the Ministry of the Environment on 26 August 2013.
122) Interview with the Ministry of the Environment on 7 May 2012.

5 Climate and environment

This part of the audit covers climate (5.1), pollution (5.2) and biological diversity (5.3) in the Arctic. Each section describes the status of and technical activities the Arctic Council has carried out to increase knowledge about the challenges in each area, along with the measures the Arctic Council recommends vis-à-vis the member states to meet these challenges. The Arctic Council's activities in connection with relevant international conventions are furthermore reviewed. In conclusion, the manner in which Norway works within each of the areas that the Arctic Council has emphasised as important is described, and goals that have been achieved in the areas where the Arctic Council has made recommendations are presented. Goal attainment details are given in Annex 4.

The sea ice that is disappearing due to increasing temperatures is threatening animal life in the Arctic.

Photo: Sebastian Gerland, Norwegian Polar Institute.

5.1 Climate challenges in the Arctic – The Arctic Council's work and national climate policy

5.1.1 Climate challenges in the Arctic

In recent decades, the temperatures in the Arctic have risen twice as fast as the global average, cf. the white paper on climate adaptation in Norway (Meld. St. 33 (2012–2013)). The total volume of ice in the Arctic has been reduced by two-thirds since 1979, and there are indications that the Arctic ocean areas may be virtually free of ice during the summer by the middle of this century.

The white paper *Norwegian Climate Policy* (Meld. St. 21 (2011–2012)) emphasises that the rapid climate change in the Arctic will have major consequences for both the environment and social development in the Arctic region. Climate change in the Arctic is also a relevant topic for international cooperation including within the Arctic Council to curb global warming.

The Arctic Council's founding document, the Ottawa Declaration (1996), does not explicitly mention climate change and the challenges arising from it. However, in 2000, on the initiative of the United States, the Arctic Council Ministerial Meeting agreed to initiate the *Arctic Climate Impact Assessment* (ACIA) project. The objective of the project was to compile information on climate change and increased ultraviolet radiation and to support political decision-making processes and the work of the IPCC.[123] The Arctic Council's ACIA report was published in 2004 and, according to the Ministry of Foreign Affairs, this report was crucial in putting the Arctic on the agenda of the IPCC (see discussion in Section 5.4).[124]

Climate change in the Norwegian Arctic

A Norwegian follow-up of the Arctic Council's ACIA report (NorACIA's *Climate Change in the Norwegian Arctic. Consequences for life in the north*) shows that the average temperature in Northern Norway has increased by approximately 0.1 degrees Celsius per decade over the last hundred years, corresponding to the average for the Arctic as a whole.[125] The Norwegian High Arctic weather stations also show rising temperatures. In Longyearbyen, the average annual temperature has increased by approximately 0.23 degrees Celsius per decade since measurements began in 1912, i.e. more than the average for the Arctic as a whole during the same period. Annual precipitation has also increased throughout the Arctic, including in Svalbard and on Bear Island. The Norwegian Polar Institute said that climate change in Norway's Arctic neighbouring areas is greater than in the other areas of the Arctic.[126]

Fact box 4 Main conclusions on climate change in the Norwegian Arctic

- The Norwegian Arctic is getting warmer and wetter, with large local variations.
- Self-reinforcing processes in the Arctic increase global climate change.
- Climate change makes the Arctic more vulnerable to environmental pollutants and ultraviolet radiation.
- Sea ice is diminishing, threatening ice-dependent species.
- The ocean is getting warmer and the ecosystems are changing.
- The acidity of the ocean is increasing and coral species may disappear.
- Forests are spreading northwards and to higher elevations.
- Freshwater ecosystems are vulnerable to climate change.
- The infrastructure in the north is vulnerable.
- Nature-based enterprises will gain new opportunities – and face new challenges.
- Society can – and must – adapt.

Source: NorACIA / Norwegian Polar Institute (2010) *Climate change in the Norwegian Arctic. Consequences for life in the north.*

123) 2nd Ministerial Meeting in Barrow, United States (2000). The Barrow Declaration.
124) Interview with the Ministry of Foreign Affairs on 19 January 2012.
125) NorACIA/Norwegian Polar Institute (2010) *Climate Change in the Norwegian Arctic. Consequences for life in the north.*
126) Interview with the Norwegian Polar Institute on 7 May 2013.

5.1.2 Emissions that affect the climate in the Arctic: greenhouse gases and short-lived climate forcers

Greenhouse gases
There are clear indications that there is a correlation between warm periods and high levels of carbon dioxide (CO_2) in the atmosphere, cf. the white paper Meld. St. 21 (2011–2012). Emissions of methane, nitrous oxide and three groups of fluorinated gases[127] also contribute to global warming. The effect of these gases is independent of where the emissions take place.[128]

The Arctic countries account for a substantial part of the total global emissions of greenhouse gases – about 23 per cent.[129] By comparison, less than eight per cent of the world's total population lives in the Arctic states.

Short-lived climate forcers
Air pollution[130] can also affect the climate, cf. the white paper Meld. St. 21 (2011–2012), in that some pollutants contribute to increased warming of the atmosphere, while the emissions of other pollutants contribute to cooling. The gases that are the source of such air pollution, are often referred to as short-lived climate forcers. Like, for example, CO_2, short-lived climate forcers affect the climate, but while CO_2 has a very long lifetime in the atmosphere, short-lived climate forcers have an atmospheric lifetime of between one week and ten years.[131]

Recent research suggests that short-lived climate forcers, particularly soot (fine particles resulting from the incomplete combustion of fossil fuels or biomass), are responsible for a significant portion of the temperature increase in the Arctic over the past ten years and is the cause of much of the deglaciation in the Arctic.[132] The Arctic states are significant sources of emissions of soot.[133]

5.1.3 The Arctic Council and the climate challenges in the Arctic
Climate has become an increasingly important issue for the Arctic Council. The focus has been on technical fact finding work, international cooperation on climate change through the United Nations and advice and recommendations to member states on measures to limit greenhouse gas emissions and adapting to the effects of climate change.

Several of the Arctic Council working groups deal with climate change in the Arctic. Particularly the AMAP Working Group, which has monitoring climate change as one of its three main work areas,[134] has published several studies on the topic. AMAP was working on climate issues even before the Arctic Council was established (cf. AEPS). Other working groups that work on Arctic climate issues are CAFF, ACAP and SDWG.

ACIA is the first major report on climate in the Arctic, and it is being cited as a key element in the Arctic Council's contribution to climate work.[135] Published in 2004,

127) Perfluorocarbons, hydrofluorocarbons and sulphur hexafluoride.
128) Carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs) and sulphur hexafluoride (SF_6).
129) UNFCCC (2012) *National greenhouse gas inventory data for the period 1990–2010* and World Resources Institute, http://cait2.wri.org/ [retrieval date 13 September 2013]. Based in the US, the World Resources Institute is an independent, globally respected institute that collects and analyses global greenhouse gas emissions.
130) For example, ozone, nitrogen dioxides (NOx), NMVOCs (which are volatile organic compounds except methane, where the significant emission sources include solvents, petrol, and oil and gas production), carbon monoxide (CO) and sulphur dioxide (SO_2).
131) Norwegian Institute for Air Research. *Short-lived climate forcers*. www.nilu.no [retrieval date 12 September 2013]. Tropospheric aerosols, such as soot, have a lifetime of one week, and methane has a lifetime of approximately 10 years.
132) Norwegian Polar Institute, Norwegian Institute for Air Research, *Short-lived climate forces*, www.nilu.no (2013).
133) Effects of black carbon on the Arctic climate, AMAP, 2011.
134) Interview with AMAP on 13 June 2013.
135) Several respondents, Norwegian and foreign, and secondary literature cite the significance of ACIA.

the report is the result of a collaboration between AMAP and CAFF in the Arctic Council and the International Arctic Science Committee. The ACIA report shows that climate change is occurring faster than expected, and that it is happening *much* faster in the Arctic than anywhere else on the planet.[136]

The pervasive climatic change in the Arctic documented by ACIA also had significance for the work on the reports of the other working groups (cf. SAO reports and reports from working groups). It concerns in this context climate change impacts on e.g. biodiversity, commercial activities and indigenous communities and lifestyles (cf. also the chapters that follow).

In the years that followed, the Arctic Council initiated work on the significance of the short-lived climate forcers. These forcers account for around 45 per cent of total greenhouse gas emissions, and a reduction in emissions will, because of the short lifetime these forcers have in the atmosphere, have an immediate effect in the Arctic.[137] A direct descendant of the ACIA work was a new, larger climate report following a Norwegian initiative, SWIPA[138], where a final report was presented in 2011.

Both the Ministry of Foreign Affairs and the Ministry of the Environment noted that AMAP is key to the Arctic Council's work. The Ministry also noted that AMAP has brought forth many important results through its many projects and related reports and is a major player in monitoring environmental and climatic conditions in the Arctic.[139] The Ministry of the Environment cited the Arctic Council's work on climate through ACIA and SWIPA as crucial to efforts to generate knowledge about the environmental situation in the Arctic.[140] ACIA is considered one of the most important technical products in the Arctic Council as a whole.[141]

5.1.4 The Arctic Council's recommendations on climate measures

Based on the work of the working groups – reports, findings and recommendations – the ministers have for many years pointed out the importance of nations working on climate change in several areas. The Arctic Council's recommendations on climate measures are summarised in Table 1.

Table 1 The Arctic Council's recommendations and advice on climate work
Mention in the ministerial declarations is indicated by +

Ministerial declaration	Reduce greenhouse gases	Adapt society to climate change	Support UN climate work	Reduce short-lived climate forcers
1998, Iqaluit				
2000, Barrow				
2002, Inari	+	+		
2004, Reykjavik	+	+	+	
2006, Salekhard	+	+	+	+
2009, Tromsø	+	+	+	+
2011, Nuuk	+	+	+	+
2013, Kiruna	+	+	+	+

Source: Arctic Council Ministerial Meetings in 1998–2013

136) Interview with the Ministry of Foreign Affairs on 19 January 2012.
137) Norwegian Institute for Air Research. *Short-lived climate forcers*. www.nilu.no [retrieval date 12 September 2013].
138) AMAP (2012) *Arctic Climate Issues 2011: Changes in Snow, Water, Ice and Permafrost.* SWIPA 2011 Overview Report.
139) Interview with the Ministry of the Environment and press release from the Ministry dated 24 May 2012.
140) Interview with the Ministry of the Environment on 7 May 2012.
141) Paula Kankaanpää and Oran R. Young (2012) *The effectiveness of the Arctic Council.* Arctic Centre University of Lapland, Finland.

The Arctic Council Ministerial Meeting in 2004 confirmed that the findings from the scientific ACIA report represent an important information base for the implementation of actions by state authorities against global climate change and the development of future measures. Among other things, the ministers stated in 2009 that anthropogenic climate change is one of the greatest challenges in the Arctic.

Table 1 shows that the ministers have agreed for many years that countries must reduce their emissions of greenhouse gases. With increased knowledge of the effects of short-lived climate forcers, this has also been raised as a climate measure. Work on climate adaptation has been raised by the ministers since 2002. The table also shows that Arctic Council ministers prefer to use ministerial declarations to highlight shared viewpoints on the obligations and efforts of member states in international conventions and agreements in various areas. The table shows that this was done in the climate area at the Ministerial Meetings in 2006, 2009, 2011 and 2013.

As recently as the ministerial declaration from Kiruna in 2013, Arctic Council ministers acknowledged that the Arctic states account for a considerable contribution to global greenhouse gas emissions. The greenhouse gas emissions of Arctic countries,[142] as presented by the UN climate convention (UNFCCC), are listed in Table 2. In the period 1990–2010 the Arctic countries' share of global greenhouse gas emissions decreased from 32 to 23 per cent.

The ministers point to the Arctic countries' commitment to cooperate with each other and other states covered by the UN Framework Convention on Climate Change (UNFCCC), to establish either a protocol, a different legal instrument or a negotiated legal binding result by the end of 2015. The ministers furthermore urge all parties to the Convention to introduce immediate measures to address the long-term goal of limiting the increase in the average global temperature to less than 2 degrees Celsius above pre-industrial levels.[143]

Table 2 The Arctic countries' emissions of greenhouse gases, not including land use and forestry, in millions of tonnes of CO_2 equivalents

Country	1990	Share in 1990 (%)	2010	Share in 2010 (%)
United States	6,161	19.2	6,802	15.5
Russia	3,350	10.5	2,208	5
Canada	589	1.8	692	1.6
Finland	70	0.2	75	0.2
Sweden	73	0.2	66	0.2
Denmark	70	0.2	63	0.1
Norway	50	0.2	54	0.1
Iceland	4	0.0	5	0.0
Total emissions among the Arctic states	10,367	32.4	9,964	22.7
Total global emissions	32,043	100	43,967	100

Source: UNFCCC (2012) *National greenhouse gas inventory data for the period 1990–2010* and World Resources Institute, http://cait2.wri.org/ [retrieval date 13 September 2013].

142) Not including LULUFC (*Land Use and Land Use Change and Forestry*).
143) Arctic Council (2013) Kiruna, Sweden, the Kiruna Declaration.

5.1.5 The Arctic Council's work on international conventions and climate agreements

The Ministry of Foreign Affairs stated that the international conventions provide the Arctic Council with a good basis on which to provide advice and recommendations.[144] The Ministry of Foreign Affairs also noted that it is difficult to document the Arctic Council's direct impact and influence on other international processes. Both the Ministry of Foreign Affairs and the Ministry of the Environment emphasise, however, that the Arctic Council has been a key actor in the international climate efforts. Both ministries noted that knowledge from the Arctic Council's climate report (ACIA) has been shared with key international forums in the area, such as the UN climate convention (UNFCCC).[145] A study of ACIA's impact also points out that this can contribute information and knowledge of regional conditions in a global perspective.[146]
The Ministry of Foreign Affairs believes that the ACIA report was essential for putting the Arctic on the agenda of the UN climate work.[147] The IPCC report from September 2013 also refers to the results of the Arctic Council's SWIPA work.[148]

The Ministry of Foreign Affairs further notes that in the area of climate change, the same researchers often work on the Arctic Council's technical reports and serve on the expert committees on international environmental protection activities. For example, many of the roughly 200 experts who worked on the ACIA are also involved with the UN's climate work. The Arctic Council consequently contributes to much indirect transfer of knowledge and influence.[149]

Another example of Arctic Council reports shared with other international bodies is the summary report on the Greenland ice sheet and climate change[150], which was presented at the Arctic Council's Ministerial Meeting in 2009. The Council of Ministers decided with its declaration to deliver this report to the 15th Conference of the Parties under the UN climate convention (UN CoP15). At the same time, the member states of the Arctic Council are encouraged to work with relevant international institutions[151] that promote measures to reduce methane and other short-lived climate forcers.

At the other Conference of the Parties meetings on the climate convention, the Arctic Council has also been an active participant in presenting knowledge that the Council has developed and updated on the climate situation in the Arctic. The Arctic states have also submitted joint statements at these meetings, such as the 16th and the 18th Conference of the Parties under the climate convention (cf. CoP16 Cancun, Mexico, 2010, and CoP18 Doha, Qatar, 2012).

5.1.6 Norwegian authorities' prioritisation of the Arctic Council's climate change work

Climate change in the Arctic was an important issue for the Norwegian Chairmanship of the Arctic Council in 2006–2009. According to the Norwegian Chairmanship programme, Norway wanted to prioritise the implementation of the recommendations in the ACIA report and initiate new studies and reports to fill gaps in priority areas. Norway emphasised studies of short-lived climate forcers and initiated SWIPA.

144) Interview with the Ministry of Foreign Affairs on 9 February 2012.
145) Interview with the Ministry of Foreign Affairs on 13 September 2012, interviews with the Ministry of the Environment on 7 May and 31 May 2012 and Meld. St. 21 (2011–2012) Report to the Storting (white paper) *Norwegian Climate Policy.*
146) Annika E. Nilsson (2007) *A changing Arctic Climate. Science and Policy in the Arctic Climate Impact Assessment.* Linköping Studies. In Arts and Science No. 386. Linköping University.
147) Interviews with the Ministry of Foreign Affairs on 19 January and 13 September 2012.
148) See the working group's contribution to the climate panel's fifth study.
149) Interview with the Ministry of Foreign Affairs on 13 September 2012.
150) AMAP (2011) *The Greenland Ice Sheet in a Changing Climate.*
151) Mentioned here is the *Methane to Markets Partnership*, later called the *Global Methane Initiative (GMI),* which was established in 2004 and obligates 42 countries (including Norway, Finland, Russia, Canada and the United States) to reduce methane emissions from some key sectors, namely agriculture, coal mining, waste management, oil and gas industry and wastewater. Source: https://www.globalmethane.org/index.aspx [retrieval date 18 September 2013].

The white paper *The High North* (Meld. St. 7 (2011–2012)) states that the Government will work towards the inclusion of climate change adaptation as a key topic for the Arctic Council and other cooperation forums in the High North. This is also stated in the documents of the Arctic Council, including the SAO report in 2009 and the ministerial speeches at Ministerial Meetings in 2009 and 2011. The emphasis on climate also emerges in internal notes from the Ministry of Foreign Affairs where work on climate change issues was high on the agenda in preparation for the Ministerial Meeting in Tromsø in 2009.

5.1.7 National efforts to reduce the emissions of short-lived climate forcers

The ministers in the Arctic Council have agreed to work to reduce emissions of short-lived climate forcers. The Ministry of Foreign Affairs noted in draft resolution Prop. 1 S (2012–2013) that measures to combat soot, methane and tropospheric ozone were highlighted as one of several priority areas of focus in 2013 for Norway in the Arctic co-operation.[152] In the 2012–2013 budget proposition, the Ministry of the Environment also pointed out the importance of national and international work on short-lived climate forcers.

Through the Arctic Council and other means, Norway has promoted the importance of knowledge of the short-lived climate forcers (cf. SAO Report 2009). The Norwegian Environment Agency pointed out that there is no international agreement on the calculation of the climate impact of any short-lived climate forcers.[153]

There are multiple short-lived climate forcers. Methane and chlorofluorocarbons (CFCs) are regulated under the Kyoto Protocol. Beyond this, there are several types of air pollution that as well as being harmful to health and the environment can also affect the climate.

These substances are ozone, nitrogen oxides (NOx), volatile organic compounds (NMVOCs), sulphur dioxide (SO_2) and soot, cf. the white paper *Norwegian Climate Policy* (Meld. St. 21 (2011–2012)). Internationally, emissions of these substances are regulated through the Convention on Long-range Transboundary Air Pollution and the Gothenburg Protocol (cf. Fact box 5).

Fact box 5 Convention on Long-range Transboundary Air Pollution and the Gothenburg Protocol

The Convention on Long-range Transboundary Air Pollution was established in 1979 and has been signed by 51 countries. Several protocols have been established with specific emission commitments (two of which are discussed in more detail in Section 5.2 on heavy metals and persistent organic compounds). The main protocol in this context is the Gothenburg Protocol, which commits countries to keep emissions of sulphur dioxide (SO_2), nitrogen oxides (NOx), volatile organic compounds (NMVOCs) and ammonia (NH_3) below a quantified level from 2010. All are termed short-lived climate forcers.

The Gothenburg Protocol was adopted in 1999 and has been ratified by a number of European countries and the United States. Iceland and Russia have not signed, while Canada has signed but not ratified the protocol. The objectives of the Gothenburg Protocol were determined based on the principle that a given environmental improvement shall be achieved at the lowest possible cost. The extent of the environmental impact, geographical distribution in Europe and North America and how the emissions are transported from country to country, determine which countries must reduce emissions. The obligations are consequently individual.

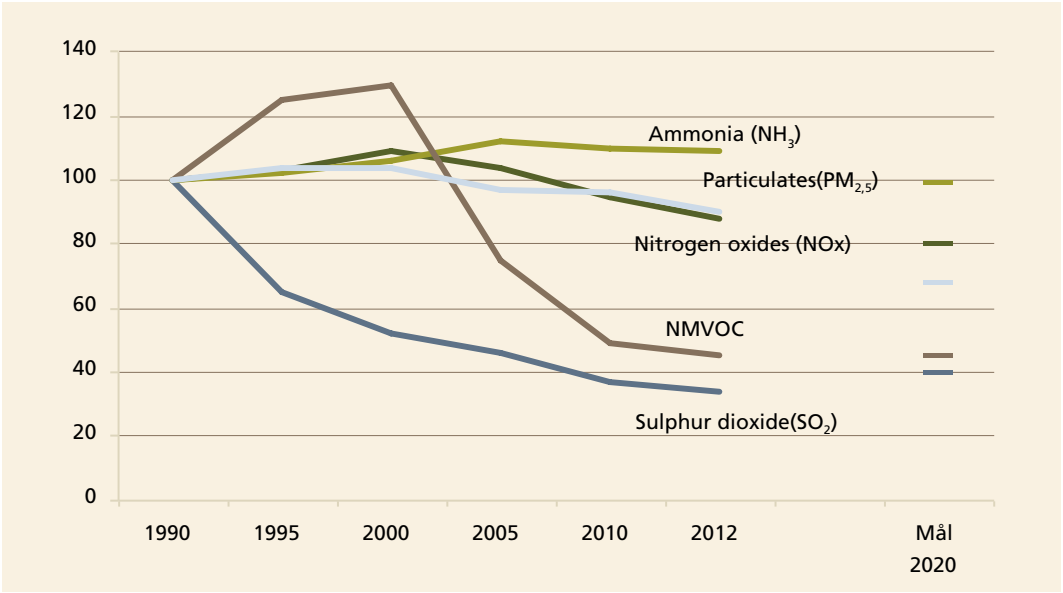
152) Prop. 1 S (2012–2013) Proposition to the Storting (draft resolution) – Ministry of Foreign Affairs.
153) Norwegian Environment Agency (2013) *Forslag til handlingsplan for norske utslipp av kortlevde klimadrivere.* (Proposal for action plan for Norwegian emissions of short-lived climate forcers.) Preliminary report. M89/2013.

During the revision of the Gothenburg Protocol in 2012, the parties agreed to start work on reducing emissions of particulates and soot simultaneously.[154] The EU has included the obligations of the Gothenburg Protocol in its environmental regulations (the Ceiling Directive), which are incorporated into the EEA Agreement[155] and thus also binding for Norway.

National emissions figures for short-lived climate forcers

Figure 3 shows emissions of short-lived climate forcers in Norway compared with Norway's obligations in the Gothenburg Protocol. The sources of emissions vary based on the type of pollutant, but industry, aviation, shipping and road traffic are important sources.

Figure 3 Emissions of ammonia, nitrogen oxides, particulates, NMVOCs and sulphur dioxide
Index 1990 = 100



Source: Statistics Norway

The Norwegian Environment Agency pointed out that reducing soot is the most important in terms of the climate. Particulates ($PM_{2.5}$, of which soot is a subset) are included in the revised protocol. Countries are encouraged to reduce particulate emissions from sources where it also reduces emissions of soot.

While there are no statistics on Norwegian emissions of soot, Statistics Norway has made a calculation of emission levels and emission development.[156] The analysis shows that soot emissions in 2011 amounted to about 5,100 tonnes. This was the same level as in 1990. According to Statistics Norway, there have been considerable changes in emissions from the various sources in the period 1990–2011. For example, emissions from road traffic have been cut by more than half, emissions from manufacturing and mining have declined by 40 per cent, while emissions from oil and gas production have increased by 35 per cent.[157]

154) Ministry of the Environment (2012) *Nye tiltak for betre luftkvalitet.* (New measures for better air quality.) Press release dated 8 May 2012.
155) Directive 2001/81/EC of the European Parliament and of the Council of 23 October 2001 on national emission ceilings for certain atmospheric pollutants. http://europalov.no/rettsakt/takdirektivet-nasjonale-utslippstak-for-visse-forurensende-stoffer-til-luft/id-491.
156) Statistics Norway (2013) *Emissions of black carbon and organic carbon in Norway 1990–2011*. Documents 2013/13.
157) Statistics Norway (2013) *Uendret nivå på utslipp av svart og organisk karbon*. (Unchanged level of emissions of black and organic carbon.) Article. Published on 12 April 2013.

Wood burning accounts for a significant share of Norwegian emissions of soot, almost one quarter. Other major sources are motorised equipment (24 per cent), road transport (15 per cent), shipping (18 per cent) and oil industry (12 per cent).

The Norwegian Environment Agency pointed out that the Arctic Council has helped strengthen Norwegian public administration in this field. The task force for the short-lived climate forcers has urged member states to put in place an accounting system for emissions of short-lived climate forcers. Norway was put under some pressure as several of the other Arctic countries (Canada, USA, Denmark and Finland) already had such accounting systems in place.[158]

The Norwegian Environment Agency referred to the Arctic Council's report,[159] which shows that Norwegian soot emissions are in line with emissions in the other Nordic countries. The Agency also emphasised that measured per person, Norwegian emissions mirror the global average. However, Norway's proximity to the High North makes it especially important to reduce soot emissions affecting the Arctic.[160]

The Norwegian Environment Agency has carried out a project on soot and other short-lived climate forcers with a number of collaborating institutions. A proposed action plan for emissions of short-lived climate forcers was submitted on 6 December 2013. The goal is that the recommended measures and instruments will provide effective emission reductions of short-lived climate forcers by 2030.[161]

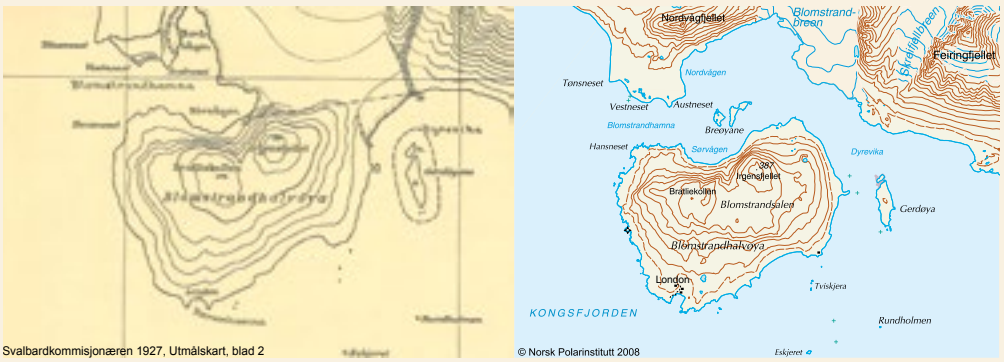
Wood burning is a major source of soot emissions in the Arctic, and Norway leads a climate project under the ACAP Working Group relating to reducing emissions of soot from burning wood. All of the Arctic countries except Iceland and Russia are participating in the project. The project will present recommendations on measures to reduce emissions of soot from burning wood in the Arctic countries. The project's first phase is expected to be completed in 2014.[162]

Norwegian emissions of nitrogen oxides (NO_x) have fallen since 2000, and if the decline continues at the same pace, Norway will meet its international obligations in 2014.[163]

Emissions of sulphur dioxide have declined sharply since 1990, and in 2006 Norway met its commitments in the Gothenburg Protocol. Norwegian emissions of volatile organic compounds without methane (NMVOCs) are approaching the Gothenburg Protocol's 2020 targets. Since 2008, emissions of ammonia have seen a slight downward trend, and in 2012 Norwegian emissions were 17 per cent above obligations.

158) The Norwegian Environment Agency (2013) *Forslag til handlingsplan for norske utslipp av kortlevde klimadrivere* (Proposed action plan for Norwegian emissions of short-lived climate forcers) preliminary report, M89/2013, and interview with the Norwegian Environment Agency on 13 June 2013.
159) AMAP (2011) *The Impact of Black Carbon on Arctic Climate.* AMAP Technical Report No. 4 (2011).
160) Norwegian Environment Agency (2013) *Første steg mot sottiltak*. (A first step towards soot reduction measures) Article. Published on 12 April 2013.
161) Norwegian Environment Agency (2013) *Første steg mot sottiltak*. (A first step towards soot reduction measures) Article. Published on 12 April 2013.
162) Interview with the Norwegian Environment Agency on 13 June 2013.
163) Statistics Norway (2014) *Emissions of acidifying gases and ozone precursors, 1990–2012, final figures.* Statistics published on 29 January 2014.

Figure 4 Blomstrand Peninsula in Svalbard



The map on the left is from 1927 and shows the whole of the Blomstrand Peninsula covered by a glacier. The map on the right shows the glacier snout as it was in 1998. The Peninsula has now melted completely out of the glacier and proved to be an island.

Illustration: Norwegian Polar Institute.

5.2 Pollution and monitoring in the Arctic

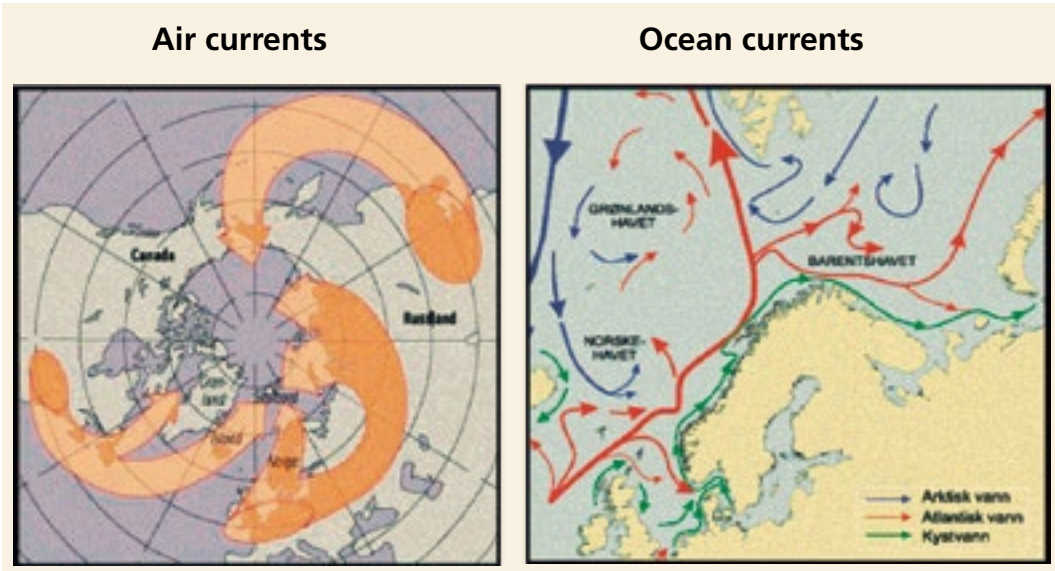
Pollution in the Arctic has been one of the most important fields of work in the Arctic Council since the Council was created in 1996, and was a continuation of the Arctic Environmental Protection Strategy from 1991.[164] Over the years, the Arctic Council has developed several reports on environmental toxins in the Arctic, a topic which is discussed in Section 5.2.3.

The Arctic contains all common main groups of pollutants, such as persistent organic pollutants[165] (such as pesticides, industrial chemicals and by-products from industry and combustion), heavy metals (such as mercury, lead and cadmium) and radioactive substances.

This type of pollution is not very degradable. The substances can accumulate in living organisms and are toxic and can cause adverse health effects. The Arctic is basically a very clean area. There are few local sources of pollution in Svalbard and the Arctic in general. The contamination that is detected there is transported over long distances by winds and ocean currents, and is derived from human activities and industrial operations in more densely populated areas and from the industrialised world.[166]

164) The *Arctic Environmental Protection Strategy* (AEPS) was formally established by the Rovaniemi Declaration in 1991. The purpose of the AEPS was to have a collaborative forum to discuss and collaborate on the Arctic environment, and all eight of the Arctic states were part of this.
165) The English term POP (*persistent organic pollutant)* is also used in Norwegian.
166) There are several reports about this including AMAP studies. Information on the topic also came up in the interview with AMAP on 13 June 2013.

Figure 5 Air and ocean currents carry environmental toxins to the High North



Blue arrows: Arctic waters. Red arrows: Atlantic waters. Green arrows: Coastal waters

Source: NILU and the Institute of Marine Research.

Photo of normal conditions and long-range polluted air at Zeppelin research station in Svalbard. Right: Result of stubble burning in agriculture in Eastern Europe, mainly in Russia.

Photo: Norwegian Institute for Air Research

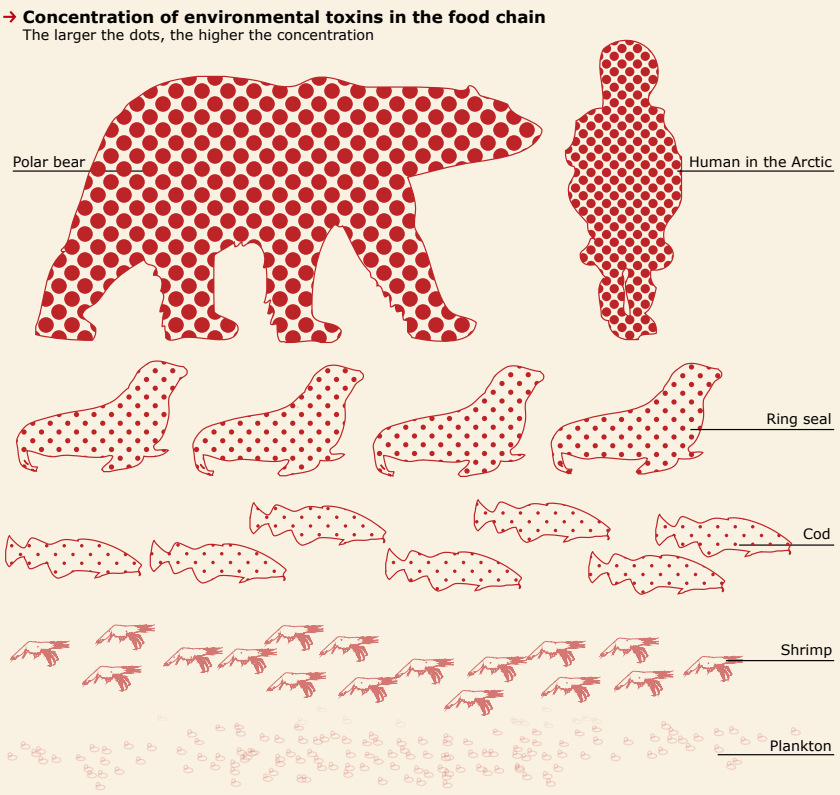
5.2.1 Environmental toxins and heavy metals in the Norwegian Arctic, and monitoring of them

According to Miljøstatus.no[167] Svalbard is globally considered to be one of the cleanest areas on the planet. The Norwegian Polar Institute pointed out that international regulations and bans on selected pollutants produced good results. However, the Norwegian Environment Agency[168], Norwegian Polar Institute and AMAP[169] pointed out that ever more new chemicals are being produced and used, and that it is therefore

167) Miljøstatus.no was developed by the environmental agencies at the request of the Ministry of the Environment. The website contains the latest information about the state of the environment and development, and is regularly updated.
168) The Norwegian Environment Agency in cooperation with the Norwegian Food Safety Authority and the Norwegian Foundation for Environmental Labelling. *Er det farlig? – om farlige stoffer i forbrukerprodukter.* (Is it harmful? – Hazardous substances in consumer products) www.erdetfarlig.no.
169) Interviews on 7 May and 13 June 2013, respectively.

necessary to monitor the development of pollution resulting from new pollutants. In November 2013, a report was published showing that there are high levels of some of these new contaminants in animals and in human milk.[170]

Figure 6 The highest concentrations of environmental toxins are usually at the top of the food chain



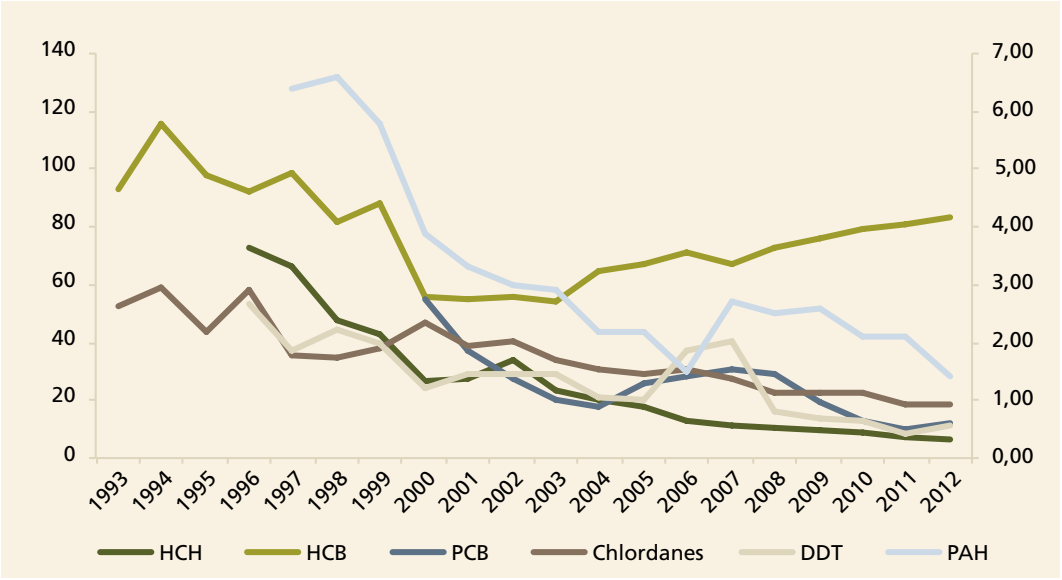
Source: Miljøstatus.no

Although there has been positive change in many areas, the Norwegian Polar Institute also noted that contamination from pollutants in the air and animals varies in scope and development. Some of this development in Svalbard is shown in Figure 7.

Figure 7 shows a pronounced decline in the incidence of the main pollutants HCH, PCBs, chlordanes, DDT and PAHs in Svalbard. Measurements for the pesticide HCB have not fallen despite the fact that there is an international ban on its use.

170) Chlorinated paraffins, see the Norwegian Environment Agency (2013) *Perfluorinated alkylated substances, brominated flame retardants and chlorinated paraffins in the Norwegian Environment-Screening 2013*. Report M40-2013.

Figure 7 Level of key environmental toxins* in Svalbard, measured in the air in the period 1993–2012



* Hexachlorocyclohexane (HCH), hexachlorobenzene (HCB), polychlorinated biphenyls (PCBs), chlordanes, dichloro-diphenyl-trichloroethane (DDT) and polyaromatic hydrocarbons (PAH).

Source: NILU

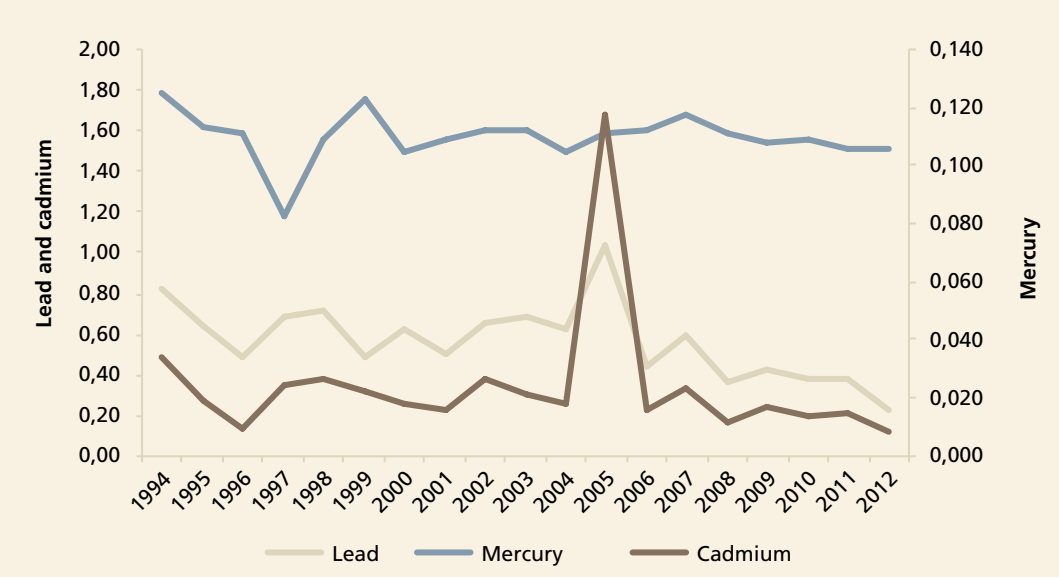
The presence of PCBs in the air has gone down along with the incidence of PCBs in polar bears. The Norwegian Polar Institute nevertheless pointed out that PCB levels in polar bears in Svalbard are two to six times higher than in polar bears in Alaska and Canada.

Polar bear research in Svalbard. In Svalbard, the incidence of PCB fell from 1993 to 2012. However, according to the Norwegian Polar Institute, it is still two to six times higher than in Polar bears in Alaska and Canada.

Photo: Nick Cobbing, Norwegian Polar Institute

The measurements in Svalbard show that for the key heavy metals there has been a pronounced[171] decline in the incidence of lead, while in the last 20 years there has been no clear tendency for cadmium and mercury[172], cf. Figure 8.

Figure 8 The occurrence of heavy metals in the air in Svalbard in the period 1994–2012, ng/m³



Source: NILU, updated figures at August 2013

In an interview, the Norwegian Polar Institute pointed out that increased commercial activity farther north in shipping, petroleum, fisheries and tourism will also increase local environmental impacts. Local pollution in Svalbard is caused by mining activities in particular.[173]

According to the Ministry of the Environment, environmental monitoring in the Norwegian Arctic is included in ordinary environmental monitoring (cf. state programme for pollution, nature index, Red Lists and environmental indicators). Within this nationwide monitoring system, a subsystem was also established that was specifically targeted at the ice-covered parts of the Norwegian Arctic, namely Svalbard and Jan Mayen (Environmental Monitoring of Svalbard and Jan Mayen (MOSJ)). The Polar Institute is responsible for MOSJ. Separate indicators were prepared in this monitoring work. The atmosphere, land and ocean areas are environmentally monitored through MOSJ. In addition, a number of thematic monitoring programmes are carried out: *Overvåking av luftforurensning fra Zeppelinstasjonen i Ny Ålesund* (Monitoring of air pollution from the Zeppelin station in Ny Ålesund), *Fangst og bestander for kommersielle fiskeslag* (Catches and stocks of commercial fish species) and *Temperatur og nedbør på de meteorologiske stasjonene* (Temperature and precipitation at the meteorological stations). In areas where there are thematic programmes, MOSJ selects key indicators and puts them in context across disciplines and topics. According to the Ministry of the Environment, this helps create a new understanding of the relationships between different types of environmental impacts and the effects of them in nature.[174]

171) Significant in statistical terms.
172) MOSJ, NILU, measurements at 2012 with comments and measurement data updated at August 2013.
173) State of the Environment Norway, www.miljostatus.no.
174) Interview with the Ministry of the Environment and *Environmental Monitoring of Svalbard and Jan Mayen* (MOSJ), www.mosj.npolar.no.

5.2.2 Work on environmental toxins in the Arctic Council

In the Arctic Council, it is particularly the AMAP and ACAP working groups that work on the issues of pollution and environmental toxins in the Arctic.

The Arctic Monitoring and Assessment Programme Working Group (AMAP)

According to AMAP's strategic plan, one of the objectives is to ensure a robust circumpolar monitoring network that efficiently detects changes and negative trends throughout the Arctic region for a number of environmental factors – including contaminants, climate change and combinations of these. AMAP has also established an expert group on environmental toxins.

AMAP prioritises the following issues in contaminants:

- persistent organic pollutants (POPs)
- heavy metals (particularly mercury, cadmium and lead)
- radioactivity
- acidification and Arctic haze (i.e. visible air pollution)
- contamination by petroleum hydrocarbons (oil and gas pollution)
- combined effects of pollutants and other factors that affect both ecosystems and people in the Arctic[175]

AMAP is an extension of the Arctic environmental protection cooperation from 1989 (cf. AEPS) and since the establishment of the Arctic Council in 1996 has produced several reports on pollution and contaminants in the Arctic and how this affects people and animals living in the Arctic.

Table 3 provides an overview of AMAP's key reports in this context and the manner in which the reports are referred to in the ministerial declarations.

Table 3 AMAP's work on contaminants in the Arctic and discussion at Ministerial Meetings

Ministerial declaration	Type of report and contents	Report recommendations adopted at Ministerial Meeting
1998	Report on POPs, heavy metals, radioactivity, acidification and impact of environmental toxins on nature and humans	The Iqaluit Declaration, 1998
2002	Updating of data and information about POPs, heavy metals, radioactivity and impact on human health	The Inari Declaration, 2002
2006	Updating of data and information on acidifying pollutants in the Arctic	The Salekhard Declaration, 2006
2009	Updating of data and information about POPs, radioactivity and human health	Only generally, no mention of this update explicitly (Tromsø, 2009)
2011	Mercury	General support for efforts to establish an international agreement on mercury (Nuuk, 2011)
2013	Acidification of the oceans	Kiruna, 2013

Source: AMAP's list of reports and studies on pollution in the Arctic and the ministerial declarations

AMAP's first report is a status report which established a basis for knowledge about pollutants throughout the Arctic. Later studies have concentrated on updating knowledge of environmental toxins and reports on specific topics such as mercury. Many parties have pointed out that this work has been of great importance for knowledge about pollutants in the Arctic. [176]

175) Interviews with AMAP on 28 February 2012 and 13 June 2013 and www.amap.no.
176) In addition to Norwegian authorities, the European Science Foundation pointed out the same.

As for climate change, both the Ministry of Foreign Affairs and the Ministry of the Environment pointed out in general that AMAP is key to the Arctic Council's work.[177] The Ministry of the Environment noted that AMAP has brought forth many important results through its many projects and related reports and is a major player in compiling the monitoring of environmental conditions in the Arctic.[178]

Arctic Contaminants Action Program Working Group (ACAP)

While the AMAP's role is to compile information about the sources and effects of pollution, the role of the ACAP Working Group (Arctic Contaminants Action Program) is to promote and support national efforts to reduce pollution in the Arctic.[179] ACAP was established in 1996 as a direct result of pollution in the Arctic. The Ministry of the Environment added that ACAP was created on the basis of environmental problems in Russia, which consistently has had the greatest environmental challenges among the Arctic states. The working group has therefore mainly had projects in Russia.[180]

ACAP's paramount goal is to prevent adverse effects, reduce and ultimately eliminate pollution in the Arctic environment.[181] According to ACAP's overall strategy from 2000, the mandate of the working group is to be a support mechanism for promoting national initiatives to reduce emissions and pollution.

ACAP is divided into project steering groups that coordinate several smaller projects under the same topic. At 2013/2014, ACAP has the following project steering groups in the following technical areas:

- pesticides
- mercury
- PCBs
- hazardous waste
- dioxines
- action programme to combat pollution that affects indigenous peoples in the Arctic
- brominated flame retardants (closed, without result)
- short-lived climate forcers

The Norwegian Environment Agency, however, pointed out that activity and the number of projects in the different groups varies, partly based on the interest in the work among the different countries. The Ministry of the Environment added that as of September 2013 several of these groups were inactive, and that this Russia-focused working group largely exists on the periphery of the other working groups.
The Ministry stated that in the future, ACAP should include projects in all the Arctic states, and should no longer be aimed only at Russian affairs. The Ministry of Foreign Affairs noted that the working group has had a lack of implementation capacity and low achievement.

The Norwegian Environment Agency stated that ACAP is different from the other working groups because it is supposed to implement specific pollution-reducing measures. The work programme is still general and discusses only the topics ACAP is to work on – specific project descriptions are not enclosed.

In recent years, only one new specific project has been submitted for approval in ACAP. The project concerns work to reduce emissions of soot as a result of burning

177) Interview with the Arctic Council Secretariat for the Scandinavian countries on 13 September 2012.
178) Interview with the Ministry of the Environment and press release from the Ministry dated 24 May 2012.
179) Interview with the Norwegian Environment Agency on 13 June 2013.
180) Interview with the Ministry of the Environment on 7 May 2012 and interview with the Ministry of Foreign Affairs on 9 February 2012.
181) ACAP website.

wood, and it was presented and chaired by Norway. The project is still an indication that ACAP can take on a more pan-Arctic approach (see discussion in Section 5.1.7).

The Ministry of the Environment pointed out that some of the projects, such as the collection of PCBs and pesticides in Russia, were nevertheless partially implemented. Establishing a PCB disposal facility is a challenge. The United States has offered to establish and pay for a turnkey destruction facility in Russia, but work on the project has stalled, partly because the countries failed to agree on where such a facility should be located.

ACAP and the Norwegian Environment Agency pointed out that, in recent years, ACAP reports to the SAOs and the ministers have not contained any recommendations to the member states. The Agency stated that this is because ACAP has few active projects. In a letter, ACAP stated that it had made only one general recommendation about waste related in part to findings in ACAP studies. The Agency added that since there are few active projects under ACAP, project reports with recommendations from this working group have not been submitted in the same manner as from the other working groups.

The Ministry of Foreign Affairs added that the ACAP Working Group has been well attended to under the Finnish Chairmanship, which took over in March 2012.[182]

5.2.3 The ministers' follow-up of the working groups' technical reports

Much of the knowledge about the environmental challenges that the working groups, particularly AMAP has produced, has been incorporated at all Ministerial Meetings of the Arctic Council. Table 4 shows that countries have agreed at every meeting that the Arctic states should work to reduce and limit emissions of pollutants, often with reference to AMAP reports. The table also shows that the ministers have agreed to work for, or enter into and implement international conventions that regulate the discharge of pollutants.

Table 4 Advice and recommendations on environmental toxins in the ministerial declarations
Discussion in the ministerial declarations is indicated by a + sign, or discussion of mercury only, if applicable

Ministerial declaration	Reduce pollutants	Ratify and implement protocols for elimination/reduction of emissions of POPs, including the Stockholm Convention	Ratify/implement LRTAP – heavy metals and POPs, and working with mercury
1998	+	+	+
2000	+	+	+
2002	+	+	Mercury
2004		+	+
2006	+	+	Mercury
2009	+	+	+
2011	+	+	+
2013	+	+	Mercury

Source: The ministerial declarations for the respective years

5.2.4 Work on pollutants and heavy metals including within the Arctic Council

When the pollution in the Arctic is largely due to winds and ocean currents that transport pollution from industrialised and densely populated areas outside the Arctic to

182) Interview with the Arctic Council Secretariat for the Scandinavian countries on 13 September 2012.

the Arctic areas, international cooperation is imperative. The Arctic Council has used the ministerial declarations to emphasise common positions on the member states' commitments and efforts in international conventions and agreements.

In the pollution area, the following three international agreements in particular have been used to highlight these common positions:

1 The Stockholm Convention on Persistent Organic Pollutants[183]

2 The Convention on Long-Range Transboundary Air Pollution[184] and protocols on heavy metals and POPs, which are both placed under this Convention

3 The Minamata Convention on Mercury

The Ministry of Foreign Affairs noted on a general basis that it can be difficult to document the Arctic Council's direct impact and influence on other international processes.[185] Both the Ministry of Foreign Affairs and the Ministry of the Environment noted that, in international processes, the Arctic Council contributes knowledge that it produces about environmental conditions in the Arctic. The Ministry of the Environment noted that through its accumulation of knowledge, the Arctic Council has without a doubt directly contributed to the shaping of international agreements and conventions. The Arctic Council is also important in efforts to improve and develop existing conventions so that they are as comprehensive as possible with regard to safeguarding the environment in the Arctic in the best possible manner.[186] The Ministry of Foreign Affairs noted that the Arctic Council thus helps to strengthen agreements which in turn become legally binding for the member states of the Arctic Council.[187]

The Stockholm Convention and Convention on Long-range Transboundary Air Pollution

The Stockholm Convention refers to AMAP as one of its partners in its efforts to monitor, evaluate and report on the occurrence of contaminants in the Arctic.
The Ministry of the Environment noted that Norway's National Implementation Plan for the Stockholm Convention states that AMAP is particularly important for obtaining monitoring information on persistent organic pollutants (POPs) and heavy metals in the Arctic. AMAP has provided valuable data on levels of POPs in humans and the environment in the Arctic, and has discovered serious effects in humans, mammals and birds. AMAP's work is particularly important since the presence of POPs in humans and animals in the Arctic, where there are no local sources, documents the properties of the substances in terms of persistence and their capacity to be transported long distances and accumulate in the environment.

The Arctic Council Secretariat, in addition to AMAP, noted that this documentation was important for the development of the Stockholm Convention. Several also noted the correlation between the work of the AMAP and the development of the Stockholm Convention.[188] The Norwegian Polar Institute also highlights AMAP's importance for the development of the POPs Protocol under the Convention on Long-range

183) This international environmental agreement was prepared by the United Nations and signed in Stockholm 23 May 2001. It went into effect on 17 May 2004. The agreement has been signed by 152 states and has 169 affiliates. The purpose of the agreement is to terminate or restrict use of persistent (permanent) organic contaminants in industry and agriculture.
184) This is a European-North American environmental agreement prepared by the Economic Commission for Europe in 1979. The convention has been signed by 51 states. The purpose of the convention is to protect human environments against air pollution and gradually reduce and prevent air pollution, including long-range transboundary air pollution.
185) Interview with the Arctic Council Secretariat for the Scandinavian countries on 13 September 2012.
186) Interviews with the Ministry of the Environment on 7 May 2012 and 26 August 2013.
187) Meeting with the Ministry of Foreign Affairs on 9 February 2012.
188) Paula Kankaanpää and Oran R. Young (2012) *The effectiveness of the Arctic Council*. Arctic Centre University of Lapland, Finland.

Transboundary Air Pollution. The Ministry of the Environment noted that AMAP will continue to be important in discovering new POPs and assessing the effectiveness of existing international agreements.[189]

The Minamata Convention on Mercury

The Mercury Agreement, which will be administered by the UN Environment Programme (UNEP), was signed in October 2013, but will not take effect until at least 2016. Norway and Switzerland took the initiative to draft the agreement in 2003.

The Ministry of the Environment, Norwegian Polar Institute, Arctic Council Secretariat and AMAP all cite the Minamata Convention on Mercury as a good example of the Arctic Council's importance for the development of international conventions. The Ministry of the Environment pointed out that the data and information from AMAP and UNEP[190] has been used in efforts to identify the extent and harmful effects of mercury deposits in the Arctic. The data has been used directly in the negotiations and has influenced the content of the Convention. Prior to entering into the agreement, UNEP and AMAP also collaborated on the preparation of reports on mercury.[191]

5.2.5 Norwegian work on environmental toxins in the Arctic Council

The platform of the Norwegian Chairmanship of the Arctic Council in 2006–2009 cited the role of the Arctic Council in accumulating knowledge about pollution and that the Norwegian Chairmanship would promote and continue this work.[192] The same was stated in the SAO report to the ministers at the conclusion of Norway's Chairmanship in 2009.[193]

According to the Ministry of the Environment, Norwegian authorities worked to include prohibitions and limitations on numerous substances through the Stockholm Convention on Persistent Organic Pollutants and the UNECE Protocols on respective organic pollutants and heavy metals. Several substances are under consideration, and Norway recently proposed to add a new brominated flame retardant to the Stockholm Convention.

5.2.6 National goals and measures to limit emissions of pollutants and contaminants

Phasing out and reducing the emissions of harmful pollutants is a key goal for Norwegian authorities. Norway is obliged to implement EU regulations on chemicals through the EEA agreement. The national legislation is provided through the *Act relating to protection against pollution and relating to waste* (Pollution Control Act) and the *Act relating to the control of products and consumer services* (Product Control Act) with associated regulations.

Many of the substances regulated by the Stockholm Convention and the *Convention on Long-Range Transboundary Air Pollution* (LRTAP) are prohibited in Norway. The substances that are still in use or circulation are on the Norwegian government's so-called priority list of substances that are to be eliminated by 2020. While there has been a major reduction in these substances since the 1990s, it will be a challenge to meet the 2020 target for all chemicals. The frequent appearance of new chemicals is also a challenge (for details, see Annex 5).

189) Ministry of the Environment (undated) *Norwegian Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants (POPs).*
190) United Nations Environment Programme (UNEP).
191) AMAP/UNEP (2008) *Review of draft Technical Background Report to update the 2008 report: "Global Atmospheric Mercury Assessment: Source, Emissions and Transport"* and AMAP/UNEP (2013) *Technical Background Report for the Global Mercury Assessment 2013*.
192) Arctic Council (2006) *Programme for the Norwegian chairmanship of the Arctic Council 2006–2008.*
193) SAO report to the Ministerial Meeting 2009.

5.3 Work on biological diversity in the Arctic Council

Biodiversity is a third environmental area that the Arctic Council has been working on since the Council was created. However, biodiversity has not been addressed in the ministerial declarations to the same extent as climate and pollution. But in 2013 the Arctic Council presented a major status report on biodiversity in the Arctic.

Biodiversity was not one of the areas Norway prioritised the highest in its Chairmanship Programme. Norway did, however, emphasise introducing the principle of ecosystem-based management in the Arctic Council. This principle is discussed in more detail in the section on petroleum (Section 6.2).[194]

Many animal and plant species in the Arctic have adapted to life in the harsh environment, and some are so specialised that they can only exist there. Arctic ecosystems often have few species – there are few levels from the bottom to the top of the food chain. Although the species diversity is low, each species includes several million individuals.[195]

In Svalbard, the walrus was protected in 1952. It is one of the species considered endangered in some areas, but measures have led to growth in most colonies.

Photo: Harald Faste Aas, Norwegian Polar Institute

According to the Norwegian Biodiversity Information Centre, 71 out of 270 assessed species in Svalbard are on the "Red List" of species considered to be at risk of extinction; most are vascular plants (49). Among all species, 47 are defined as endangered (10 as critically endangered, 15 as highly endangered and 22 as vulnerable) and 24 defined as near threatened.[196] The endangered species include polar bears, walruses and harbour seals. Climate change and land-use changes are the factors specified as affecting most of the Red List species in Svalbard.[197]
The Greenland whale is one of the most endangered whale populations in the world, and habitats are reduced because the pack ice in the Arctic is disappearing.[198]

194) *Norway's Chairmanship Programme 2006–2008* (2009) and SAO report to the ministers in Tromsø, 2009.
195) Norwegian Polar Institute (2008) *The Arctic System.* Fact sheets.
196) Norwegian Biodiversity Information Centre, www.artsdatabanken.no.
197) Norwegian Biodiversity Information Centre, *Rødlistete arter på Svalbard* (Red-Listed species in Svalbard), http://artsdatabanken.no/Article/Article/478. [Retrieval date 16 September 2013].
198) Proposition 1 S (2012–2013) Proposition to the Storting (draft resolution) – Ministry of the Environment.

Arctic ecosystems are still relatively pristine, seen from a global perspective. Large parts of Svalbard are protected (around 67 per cent), and only a small part of the archipelago is affected by major interventions in the landscape. Biodiversity is largely intact, and the populations of most species that have previously been subjected to over-exploitation, have been rebuilt.[199] According to the Norwegian Environment Agency, it is important to continue to keep the Arctic ecosystems as intact as possible. The areas also serve as key reference sites for other ecosystems in the world, since pristine areas are becoming steadily rarer. According to the Norwegian Environment Agency, more knowledge about how ecosystems work is needed to protect the ecosystems in the Arctic and the biodiversity of this region.[200]

5.3.1 The Arctic Council's work on biological diversity

The Arctic Council working group, Conservation of Arctic Flora and Fauna (CAFF), is particularly involved in the work on biological diversity in the Arctic.
The Norwegian Environment Agency heads the Norwegian delegation in the working group, while the Norwegian Polar Institute serves as technical adviser.

According to its mandate, CAFF works on issues related to preserving biodiversity in the Arctic and disseminating knowledge and findings to the authorities and the general public in the Arctic. The working group also works to promote the sustainable use of all living resources in the Arctic. CAFF has its own expert groups[201] that map Arctic flora and fauna, as well as seabirds and marine mammals. National monitoring data is an important source in the work of the working group.

Biodiversity in the ministerial declarations

Biodiversity has been a recurring central theme of the Arctic Council and since its creation, CAFF has published several reports on biodiversity in the Arctic. The reports span the gamut from mapping individual species to major reports on the status and trends of ecosystems and biological diversity in the Arctic. However, only two of these reports have been directly mentioned in the ministerial declarations – in addition to ACIA (cf. Section 5.1 on the climate). The ministers also emphasised CAFF's efforts to achieve monitoring of the biodiversity throughout the Arctic.

In 2001, CAFF published the report *Arctic Flora and Fauna: Status and Conservation*[202], which contains a number of recommendations to safeguard biodiversity in the Arctic. This report presents, for the first time, a comprehensive overview of Arctic ecosystems, habitats and species, as well as threats and challenges associated with their management. In 2002, the Ministerial Meeting agreed with the report's recommendations as a strategy for the Arctic Council's efforts to conserve Arctic biodiversity.

The ACIA report emphasises the need to increase awareness of the impact of climate change on Arctic flora and fauna and Arctic habitats and improve the monitoring of biodiversity in the Arctic. The Arctic Council asked two of its working groups, CAFF and AMAP, to consider the findings of the report and develop follow-up programmes to meet the challenges of the future Arctic. In that connection, CAFF proposed the establishment of the *Circumpolar Biodiversity Monitoring Program* (CBMP).[203]

199) Report No. 22 (2008–2009) to the Storting *Svalbard*.
200) Norwegian Environment Agency (2013) *Miljøsamarbeid i Nord /Arktis* (Environmental Cooperation in the North/Arctic), http://m.gazettebeta.no/no/Tema-dirnat/Naturmangfold/Internasjonalt-miljosamarbeid/Miljosamarbeid-i-nordomradene/Arktis/.
201) CAFF has six expert groups: 1) *Circumpolar Flora Group*, (CFG), 2) *Seabirds* (CBird), 3) *Circumpolar Protected Areas Network* (CPAN) (active 1996–2010), 4) *Marine Ecosystems Monitoring*, 5) *Freshwater Ecosystems Monitoring*, 6) *Terrestrial Ecosystems Monitoring.*
202) CAFF (2001) *Arctic Flora and Fauna: Status and Conservation*.
203) Need for the CBMP, www.caff.is/about-the-cbmp.

CBMP is an international network of scientists, public authorities, indigenous peoples' organisations and environmental protection organisations whose purpose is to coordinate and integrate measures for monitoring living resources in the Arctic. The ministers support the CBMP as CAFF's cornerstone programme, and the Arctic states are encouraged to actively contribute to monitoring.

Since the establishment of the CBMP, the ministers have supported CAFF in the need to provide decision-makers and management with a summary of available scientific and traditional ecological knowledge of Arctic biodiversity.[204] Efforts to create such a summary resulted in the *Arctic Biodiversity Assessment* (ABA) in 2013, with an interim report in 2010.

The Conservation of Arctic Flora and Fauna (CAFF) working group has contributed much information on biodiversity, particularly with the study published in 2013. In the opinion of the Norwegian Environment Agency, the Arctic Council does not cover the connection between use and protection well enough.

The ministers support the recommendations of the report in the Kiruna Declaration (2013). The SAOs were instructed to prepare a plan to follow up the report's recommendations and deliver a progress report at the next Ministerial Meeting in 2015.

The ministers are concerned about the degradation of biodiversity, and that climate change is the greatest threat. The ministers encourage the Arctic states to implement measures to maintain biodiversity in the Arctic and to implement internationally agreed biodiversity targets. The countries are encouraged to collaborate on management measures for vulnerable species and ecosystems, and to continue both the existing research on Arctic biodiversity and monitoring efforts through the CBMP.

Norwegian authorities' assessment of the Arctic Council's work on biodiversity
In the opinion of the Ministry of the Environment, the Arctic Council's technical production has not been equally distributed among the different areas covered by the Arctic Council. According to the Ministry, the activity level within biodiversity has been low for some time, both because the field is technically demanding, and because politically speaking, it is more difficult for the Arctic Council to handle. The situation

204) CAFF (2010) *Arctic Biodiversity Trends 2010 – Selected indicators of change.*

makes it harder to initiate circumpolar projects on biodiversity, according to the Ministry. CAFF has had fewer resources than the other working groups in addition to that it is very costly to monitor biodiversity.

While biodiversity projects are usually concerned with how the individual member states manage their own natural environment, climate challenges are global and largely caused by sources outside the Arctic region. According to the Ministry, CAFF's report on Arctic biodiversity, *Arctic Biodiversity Assessment* (2013), has, however, given biodiversity work in the Arctic Council a solid boost. The Ministry views the report as an important work and a basis for fostering more extensive cooperation in this area.[205]

The Norwegian Environment Agency noted that in recent years CAFF has undergone a positive transformation by which the working group largely fulfils its mandate of promoting sustainable exploitation of biodiversity in the Arctic, and disseminating knowledge on the status of and trends of these resources. The trend towards larger projects, such as the report from 2013 and the CBMP, contributes, in the Agency's view, to better products and more visible results. According to the Agency, CAFF and the Arctic Council have, through their work, contributed considerable information about biodiversity in the Arctic, which would have been very costly in terms of resources for Norway to obtain alone.

The Agency, however, pointed out that the relationship between biodiversity and the economic value biodiversity represents is not sufficiently incorporated into the work of CAFF and the Arctic Council. The Agency also noted here that the organisation of the Arctic Council is not in line with the Convention on Biological Diversity and Norwegian policy. An unfortunate distinction is drawn in the Arctic Council between CAFF and the Sustainable Development Working Group (SDWG) – where the relationship between the use of biological resources and protection of biodiversity is not sufficiently considered.

CAFF and international conventions on biological diversity

In contrast to what is the case in the climate and pollution area, the Arctic Council – apart from referring to the 2009 Agreement on the Conservation of Polar Bears – has not given any recommendation to the member states to participate in any explicit international convention on biodiversity. However, the Arctic Council has, as noted above, recommended that countries work together on international conventions. In addition, CAFF directs much of its outreach activities at international organisations and conventions relevant to the protection of biodiversity in the Arctic.

The Norwegian Environment Agency and CAFF pointed out that the working group provides information to international conventions such as the Convention on Biological Diversity (CBD). The Agency added that CAFF is recognised as a key provider of information on Arctic biodiversity to the Convention's scientific body. CAFF also provides technical contributions to the Convention on the Conservation of Migratory Species of Wild Animals (the Bonn Convention) and the Agreement on the Conservation of Polar Bears. Data from the CBMP will also be used in such contexts, and is offered to other organisations outside the Arctic Council, such as the European Environment Agency.[206]

205) Interview with the Ministry of the Environment on 26 August 2013.
206) Interview with the Norwegian Environment Agency on 13 June 2013.

The Norwegian Environment Agency stated that CAFF also works to ensure national implementation of the Convention on Biological Diversity and the Ramsar Convention. A decision has also been made to cooperate with the African-Eurasian Waterbird Agreement (AEWA) to protect aquatic birds migrating between Africa, Europe and Asia.[207] For a description of the conventions and agreements, see Fact box 6.

CAFF also noted that an important follow-up study on biological diversity (ABA, 2013) is to consider the international fora to which the various recommendations can be addressed.[208]

CAFF presents its work at various international meetings,[209] and is in the process of establishing an open online data system, the Arctic Biodiversity Data Service, with updated information on biodiversity in the Arctic.

Fact box 6 Conventions and agreements on biodiversity

The Convention on Biological Diversity (CBD) is the most important global agreement for protecting biodiversity, ensuring sustainable use of biological resources and ensuring that the benefits from utilisation of genetic resources are shared equally among the countries. All Arctic states, with the exception of the United States, have signed the treaty, but the United States is considering ratifying it.* In CAFF's view, however, the United States is very active in the Convention. The Ministry of the Environment is the management authority and national liaison for the Convention in Norway.**

The Ramsar Convention is a global treaty whose purpose is to protect wetlands through conservation and sustainable use. Wetlands provide vital ecosystem services such as carbon sequestration, water supply, flood control, filtering and decomposition of pollutants and excess nutrients. Furthermore, wetlands are breeding and nursery grounds for a variety of waterfowl species and resting grounds for migratory birds.*** The Norwegian Environment Agency is the management authority and scientific authority for the Convention.

The Convention on the Conservation of Migratory Species of Wild Animals (the Bonn Convention) is a global agreement whose purpose is to protect populations of migratory wild animals that regularly cross national borders. The Convention does not distinguish between terrestrial and marine animals, and it also includes the protection of animal habitats. Of the members of the Arctic Council, Norway, Denmark, Sweden and Finland have signed the agreement, while Iceland, Greenland, Canada, Russia and the United States have not. The Convention is a framework agreement that for many species only becomes binding through special agreements. *The African-Eurasian Waterbird Agreement* (AEWA) on the protection of migratory waterbirds in the Western Palaearctic and throughout Africa is a special agreement under the Bonn Convention. The Norwegian Environment Agency is the Norwegian management authority for both the Bonn Convention and agreements under this Convention.

The Agreement on the Conservation of Polar Bears for the protection of polar bears and their habitats is an international agreement that obligates Norway and the other four polar bear countries, Canada, the United States, Greenland and Russia, to protect the ecosystems of which polar bears are a part.

* United Nations Association. ***Convention on Biological Diversity.*** www.globalis.no.
** Norwegian Environment Agency. ***Convention on Biological Diversity*** (CBD). www.miljodirektoratet.no.
*** Ministry of the Environment. *Miljøkonvensjonene*. (The environmental conventions.) www.regjeringen.no.

207) Focus group meeting with the Norwegian Environment Agency et al on 9 March 2012 and interview with the Agency on 13 June 2013.
208) Interview with the Norwegian Environment Agency on 13 June 2013.
209) Focus group meeting on 9 March 2012.

The Arctic Council's work on biodiversity and Norwegian environmental protection management in the Arctic

The Ministry of the Environment noted that the Arctic Council has little influence on Norwegian management of biodiversity. The Ministry stated that the strategies, policies, action plans etc. prepared by the Arctic Council may have some significance for Norwegian management, but in the same manner as with the Arctic Council's recommendations, Norway is usually ahead of the Arctic Council. However, there have been examples of where an action plan from the Arctic Council has been used by environmental protection authorities, as in conjunction with the conservation plan in Svalbard in the 1990s. The Arctic Council's action plans concerning, for example, an individual species, are often very specific and thus easier to apply in an administration's own work, while it is more difficult to incorporate action plans on a more general level in practical work.[210]

The Norwegian Environment Agency believes that national implementation of the Arctic Council's recommendations and specific measures are essential for addressing transboundary challenges in the Arctic countries, including the conservation of migratory species. It should be noted, however, that Arctic Council recommendations are sometimes weaker than the regulations that Norway already has.[211]

The benefits can go both ways. On the one hand, through CAFF, Norway has, according to the Norwegian Environment Agency, made a positive contribution to raising awareness of the importance of protecting forests and wetlands in the Arctic. On the other hand, by increasing the knowledge base for seabirds, CAFF has helped bolster Norwegian management through the national action plans for various bird species. Thanks to CAFF, breeding areas and movement patterns of several species that move across the Arctic states have been mapped. This work has also been important in regard to drafting and implementing national measures. Under the auspices of CAFF, the Arctic Council has also helped to obtain sound information about several species, including polar bears and seabirds. According to the Norwegian Environment Agency, the information has been used in both national management and multipartite cooperation on polar bears.[212]

Mapping and monitoring of biodiversity in the Norwegian Arctic

The Arctic Council has emphasised the importance of monitoring biodiversity. The Ministry of the Environment states that the mapping of biodiversity on the Norwegian mainland follows the national programmes. For Svalbard, Jan Mayen and the surrounding ocean areas, the environmental monitoring system – *Environmental Monitoring of Svalbard and Jan Mayen* (MOSJ) – is followed. According to the Ministry of the Environment, the monitoring forms the basis for advice to management about the need for action, research or improved monitoring of Svalbard and Jan Mayen. MOSJ includes both mapping of a number of indicators for biodiversity and pollution. In addition, several programmes are aimed at biodiversity for both ocean and land areas in the Arctic, including seabirds (SEAPOP) and the seabed (MAREANO).[213] See Fact box 7.

210) Interview with the Ministry of the Environment on 26 August 2013.
211) Focus group meeting on 9 March 2012.
212) Interview with the Norwegian Environment Agency on 13 June 2013.
213) Interview with the Ministry of the Environment on 31 May 2012.

Fact box 7 National environmental monitoring programmes

Environmental Monitoring of Svalbard and Jan Mayen (MOSJ) is part of the state monitoring of the environment in Norway and the Norwegian Polar Institute has primary responsibility for the development and operation of MOSJ. The programme monitors the environment in the atmosphere, on land and in the sea areas around Svalbard and Jan Mayen. The largest suppliers of data to the monitoring system are the Governor of Svalbard, Norwegian Institute for Air Research, Meteorological Institute, Norwegian Institute for Nature Research and Norwegian Polar Institute.* According to MOSJ, this is the most comprehensive environmental monitoring programme in the Arctic. Its duties are to collect, process and interpret environmental data and advise management on the need for action, research or improved monitoring of Svalbard and Jan Mayen.**

SEAPOP is a comprehensive and long-term monitoring and mapping programme for Norwegian seabirds. The programme represents a new initiative for these activities along the Norwegian coast, in Svalbard and adjacent sea areas, and will provide and maintain base-line knowledge of seabirds to improve the management of these marine environments. Collecting data that will make it possible to model the effects of human intervention and distinguish these from those primarily caused by natural variation, is emphasised. Norwegian Institute for Nature Research, Norwegian Polar Institute and Tromsø Museum – The University Museum is responsible for carrying out the programme.***

MAREANO maps depth and topography, sediment composition, biodiversity, habitats and biotopes as well as pollution in the seabed in Norwegian coastal and marine areas. The Institute of Marine Research, the Geological Survey of Norway and the Norwegian Mapping Authority Hydrographic Service comprise the Executive Group which is responsible for carrying out MAREANO field sampling and other scientific activities. Executive responsibility for implementing MAREANO's activities lies with the programme group, which is led by the Directorate of Fisheries.****

* Norwegian Polar Institute. *Environmental Monitoring of Svalbard and Jan Mayen – MOSJ*, http://mosj.npolar.no.
** Norwegian Polar Institute. *Environmental Monitoring of Svalbard and Jan Mayen – MOSJ*, http://mosj.npolar.no.
*** SEAPOP, *a milestone for mapping and monitoring seabirds in Norway*, www.seapop.no.
**** MAREANO, *About MAREANO*, www.mareano.no/om_mareano.

The Norwegian Polar Institute's research and expedition vessel RV Lance is used mostly in the Arctic, but also in the Antarctic. In January 2015, the vessel will be frozen in the drift ice north of Svalbard and drift with the ice for six months. Photo: Sebastian Gerland, Norwegian Polar Institute

Mapping and monitoring biodiversity is a resource-intensive and complex area, and the Ministry of the Environment sees that it would be practical to have a better overview of the impact of and developments in this area. Climate change has a great and growing impact on biodiversity in the Arctic, and it is therefore particularly important to focus on monitoring and researching the effects of climate change. Special programmes for precisely this purpose have therefore been established at the Fram Centre in Tromsø. Collaboration is also taking place in monitoring and researching climate impacts on biodiversity throughout the Arctic, but the work is still in the development phase. Here is an overview of all relevant Norwegian monitoring measures in that regard.[214]

The Ministry of the Environment pointed out in general that the Norwegian environmental monitoring programmes were primarily created to meet national needs for knowledge. Much of Norwegian environmental monitoring is also adapted to international agreements and conventions. Environmental monitoring and collection of data take place independently of the Arctic Council, but the Arctic Council and its working groups can use the national data as a basis for their work.

The Ministry pointed out that the Norwegian mainland, Jan Mayen and Svalbard – and the ocean areas surrounding the mainland and up towards these archipelagos – is well-covered by monitoring programmes, and there is a good supply of data. The peripheral Arctic areas – the high Arctic areas – currently do not have sufficient monitoring and for these areas the monitoring data may be deficient. Whether that is the case, however, will vary geographically and depending on the type of data to be collected.

The Ministry also noted that although there is a lack of knowledge about the state of the environment in some areas, this must be weighed against the benefits and costs of securing a full overview and knowledge in all areas.

The Norwegian Environment Agency emphasises that it is essential for the Arctic Council to work with the individual countries to gain access to information from the national environmental monitoring systems. While Norway has made relatively good progress on marine monitoring, an effective system has not, in the Agency's opinion, been established for monitoring biodiversity in protected areas. Norway has therefore not been able to contribute to information sharing in this and other fields and corresponding challenges also apply to the other countries.[215]

214) Interview with the Ministry of the Environment on 31 May 2012.
215) Focus group meeting on 9 March 2012.

6 Economic activity and development in the Arctic

In the Ottawa Declaration, the member states agreed to ensure the sustainable development of the Arctic, including economic and social development.

In the Norwegian Chairmanship Programme, Norwegian authorities pointed out that the Arctic Council should initiate a broad policy debate on all matters of importance to the Arctic and those who live there. That includes economic activity such as energy, fisheries and mineral activities, and other matters of common interest affecting social and economic development. It was pointed out that the sustainable use of resources should be a key area for cooperation in the Arctic Council. Reference is also made in this connection to Norway's commitment to ecosystem-based management.[216]

There is general agreement that there is great potential for commercial activities in the Arctic – both the exploitation of natural resources (especially oil, gas and other minerals) and maritime transport. The same applies to tourism, including cruise operations. The climate changes described in Section 5.1 will probably intensify this development in that access to natural resources is increasing, and because the deglaciation that is taking place may provide a basis for increased ship traffic. Increased commercial activity will consequently require work on safety and environmental protection in vulnerable areas such as the Arctic.

This facts section will look at the economic activities the Arctic Council is examining. The activities are primarily related to safety and emergency preparedness – activities that will protect commercial operations and their employees and the environment from undesirable incidents. This chapter is further divided into the following areas: 1) shipping, 2) oil and gas production and 3) emergency preparedness against acute pollution.

At the Ministerial Meeting in Kiruna (2013) it was agreed to establish a task force[217] whose mandate was to facilitate the creation of a forum for dialogue with business and industry in the Arctic. The recommendation from the working group was discussed at the SAO meeting in March 2014 and agreement was reached on the principles for creating the *Arctic Economic Council* (AEC). All member states and indigenous peoples' organisations will appoint three business representatives each to attend a statutory meeting. The AEC is to be operated by the business community, and its mission is to strengthen industrial economic cooperation in the Arctic Council.

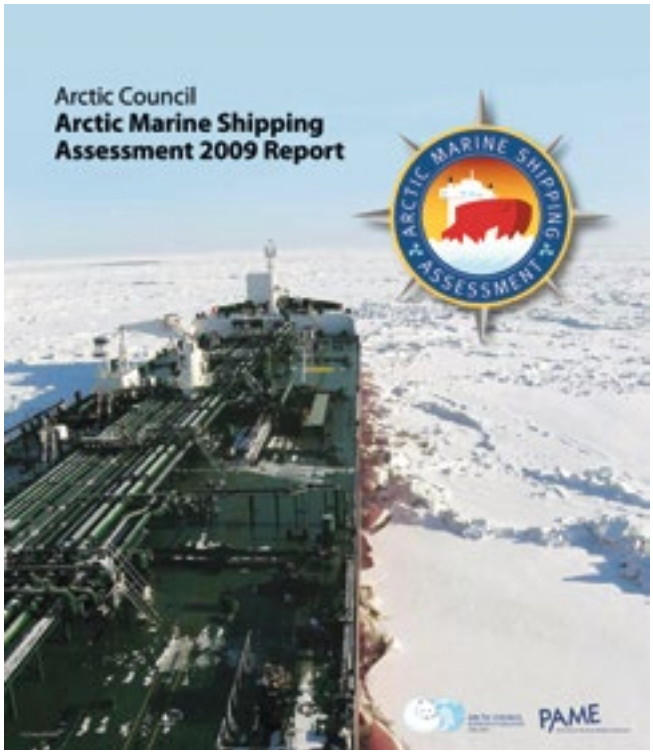
6.1 Shipping in the Arctic

Increased deglaciation and the possibility of increased ship traffic through the Arctic Ocean are key issues for the Arctic states – they present opportunities for increased commercial activities in shipping and create new challenges where safety and the environment must be safeguarded. Norway's geographical position at the entrance and exit to the Arctic Ocean and the gateway to the Northern Sea Route, and already considerable traffic in northern waters (80 per cent of all ship traffic in the Arctic takes place in Norwegian waters), make Norway a key coastal state in this context.

216) Norway's Chairmanship Programme in the Arctic Council, 2006–2008 (2009).
217) *Task Force to facilitate the creation of a circumpolar business forum.*

The development of more ship traffic in the Arctic waters also requires broader international cooperation.[218]

Shipping is a paramount issue for the Arctic Council. The Council has prepared several documents on the subject, and the *Arctic Marine Shipping Assessment* (AMSA) (2009) is cited in particular as being important to the Arctic Council. The Arctic Council's work on shipping is discussed in detail in Section 6.1.2.



The Arctic Council's *Arctic Marine Shipping Assessment* (AMSA 2009) contains recommendations on measures to improve safety, protect the environment and improve marine infrastructure.

6.1.1 Scope of ship traffic in the Arctic

In the Arctic, a distinction is made between *trans-Arctic traffic* – ship traffic between ports in Asia and ports in Europe and North America – and *destination traffic* – internal ship traffic between ports in Arctic waters.

Trans-Arctic traffic

The reason for the increasing and potential interest in using the Arctic Ocean for maritime transport is that it will result in considerably shorter distances between Asia and Europe (the Northeast Passage – also called the Northern Sea Route) and Asia and North America (the Northwest Passage) compared with the traditional routes through the Suez and Panama, see Figure 9.

For example, the sailing route between Rotterdam and Yokohama is over 40 per cent shorter through the Northeast Passage than a similar voyage through the Suez Canal.

218) *Økt skipsfart i Polhavet – muligheter og utfordringer for Norge* (Increased shipping in the Arctic Ocean – opportunities and challenges for Norway). This is a report prepared by an expert group appointed by the Ministry of Foreign Affairs. The report was published on 15 April 2013.

Figure 9 The Northwest Passage and the Northeast Passage (the Northern Sea Route) provide considerably shorter sailing distances compared with current sea routes

Source: AMAP, 2012

On the other hand, there may be greater risks – and other costs – with trans-Arctic shipping. Uncertainty about the extent of the ice and extreme weather conditions provide less regularity. Combined with less developed infrastructure[219] for shipping in large parts of the Arctic waters, these factors increase the risk of undesirable incidents. In particular, stricter ice classification requirements for vessels and higher insurance premiums could result in higher costs for shipping in Arctic waters.

Table 5 Trans-Arctic ship traffic. Number of sailings across the Arctic Ocean through the Northeast Passage and the Northwest Passage in 2005–2013

Year	Northeast Passage	Northwest Passage
2005	0	7
2006	0	6
2007	0	7
2008	0	14
2009	4	18
2010	5	26
2011	33	Not available
2012	46	Not available
2013	71	Not available

Sources: Norut 5/2012 and The Arctic Institute

Although there has been a relatively strong increase in the period 2005–2013, the number of sailings through both the Northeast Passage and the Northwest Passage has been limited, cf. Table 5. In comparison, for example, the number of voyages through the Suez Canal in recent years has totalled approximately 17,000 to 18,000 per year.[220] There are no reports of any serious accidents or incidents during trans-passage voyages through the Northeast Passage or the Northwest Passage. However, in September 2013, a Russian tanker, Nordvik, collided with ice in the Northeast Passage. The incident did not result in any injuries or acute pollution.

219) Interview with the Ministry of Fisheries and Coastal Affairs on 2 May 2012 and interview with the Ministry of Foreign Affairs on 9 February 2012.
220) Suez Canal Traffic Statistics *Briefly Year Statistics* www.suezcanal.gov.eg/TRstat.aspx?reportId=4.

Russia is laying the groundwork for increased traffic through the Northwest Passage and is building four bases along the coast of northern Russia to handle such ship traffic. The development includes port facilities, emergency equipment and oil spill response capability.[221]

Gas condensate, iron ore and frozen fish are the most typical products transported through the Northeast Passage. Cargo volume has been growing rapidly. Leisure boats account for about half of the voyages through the Northwest Passage.[222]

In North Russia, bases are now being established in the cities of Dikson, Tiksi, Pervek and Provideniya for handling shipping through the Northeast Passage. Source: NASA

Destination traffic

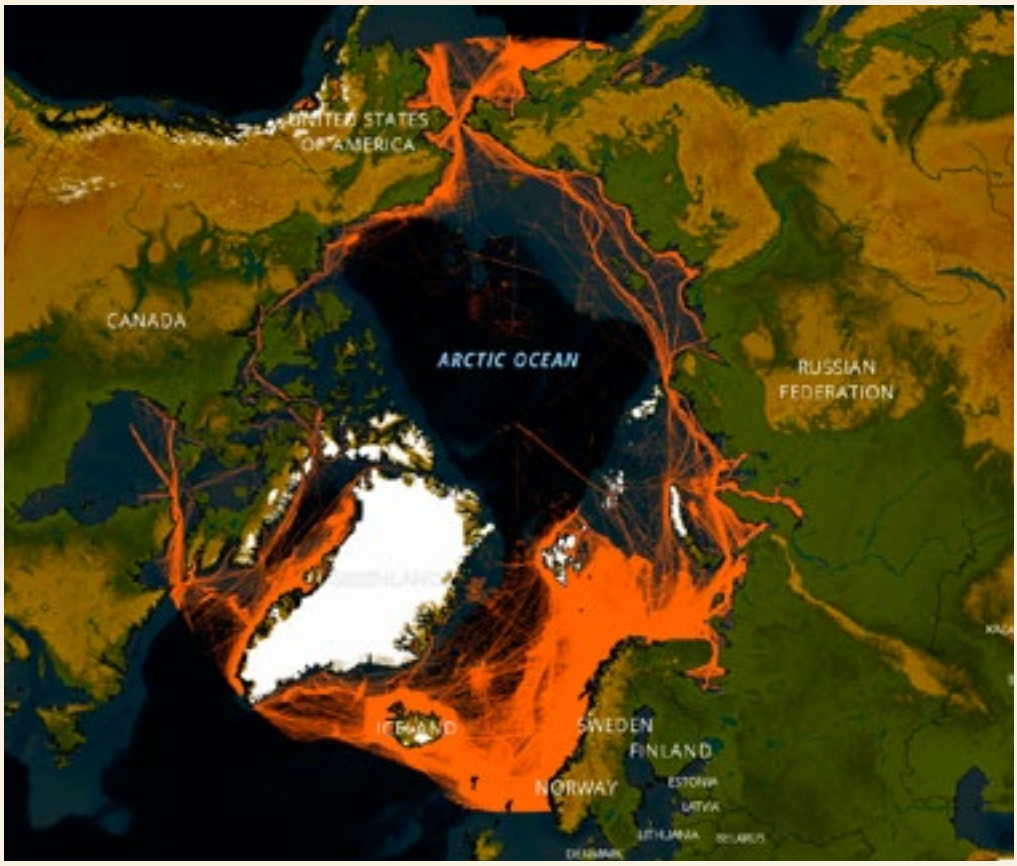
Although there has been an increase in trans-Arctic ship traffic and there is an expectation that it may continue to increase in coming years, destination traffic still constitutes the most significant shipping activity in the Arctic. Transport to and from destinations in the Arctic is termed as destination traffic in this context. The main reason for this traffic is the export of raw materials, such as metals, petroleum, fish and timber, from the Arctic. In addition, goods must be shipped in. Mining and petroleum fields require machinery and equipment, and settlements need supplies from the outside. Increasing cruise tourism also forms part of this traffic picture.[223]

It is also expected that this will increase further due to the economic development in the Arctic.[224] According to the Ministry of Foreign Affairs, destination traffic in the Norwegian Arctic waters accounts for more than 80 per cent of the total ship traffic in the Arctic.[225]

Figure 10 illustrates the scope of destination and transit traffic in the Arctic coastal and ocean areas.

221) The Accounts Chamber of the Russian Federation on 22 September 2013 and 27 February 2014. This applies to the cities of Dikson, Tiksi, Pervek and Provideniya.
222) Norut (2012) *Shipping i Polhavet – databehov og tilgjengelige data.* (Shipping in the Arctic Ocean – data needs and available data.) Rapport (Report) 5/2012.
223) Norwegian Polar Institute, *Økt skipstrafikk – men ikke omlegging av ruter med det første.* (Increased ship traffic – but no restructuring of routes just yet.) News item published on 24 August 2011. www.npolar.no/no/nyheter.
224) See, among other things, AMSA and *Økt skipsfart i nordområdene – muligheter og utfordringer for Norge.* (Increased shipping in the High North – opportunities and challenges for Norway.)
225) Ministry of Foreign Affairs, *The High North*.

Figure 10 Scope of destination and transit traffic in the Arctic coastal and ocean areas*



* The scope of transit traffic is limited. The illustration is based on data from systems not installed on all vessels sailing in the area. This will change the image to only a limited extent. 80–90 per cent of the ship traffic in the Arctic takes place in Norwegian waters.

Source: ArkGIS (Arctic Geographical Information Sysem), a map tool where the density plots for shipping is obtained from the Norwegian Coastal Administration's *Havbase* database. The data is based on AIS and processed by Det norske Veritas and the World Wide Fund for Nature (WWF).

Figure 10 shows that the traffic is heaviest along the Norwegian coast and in the area between and up towards Svalbard (strong red colour indicates higher traffic). There is also some traffic between Norwegian waters and the northwestern coasts of Russia, around Iceland and the west side of Greenland. There is less traffic in the waters off the coast of the other Arctic states.

Through the *Arctic Marine Shipping Assessment* (AMSA), the Arctic Council pointed out that the Arctic states generally do not collect and share information about shipping activity in the Arctic in a systematic manner.[226] The same is still true in 2014, although change is taking place. According to an expert committee established by the Ministry of Foreign Affairs, the traffic data for Arctic waters has yet to be systematically collected, uniformly presented or regularly shared among the Arctic states. The work of compiling time series for the activities in the Arctic marine and coastal areas is also only in its infancy, and it is difficult to compare information to support operational decisions.[227]

A similar conclusion was made in a study by the Northern Research Institute (Norut). The study pointed out that there should be a gradual build-up of a database of Arctic

226) PAME (2009) *Arctic Marine Shipping Assessment 2009 Report.*

227) *Økt skipsfart i Polhavet – muligheter og utfordringer for Norge.* (Increased shipping in the Arctic Ocean – opportunities and challenges for Norway.) This is a report prepared by an expert committee appointed by the Ministry of Foreign Affairs. The report was published on 15 April 2013.

ship traffic, and that it should also be possible to connect traffic data with other types of data relating to the environment, safety and emergency preparedness.[228]

The Norwegian Coastal Administration noted that the reason that the overview is not complete is that monitoring is limited to data received from *Long Range Identification and Tracking* (LRIT), tracking of fishing vessels and the satellite-based *Automatic Identification System* (AIS) (S-AIS)[229] (For details, see Fact box 8.) The data from these and other sources that provide an overview of Arctic ship traffic are not linked, and they can also be difficult to compare.[230]

Fact box 8 Monitoring of ship traffic in the Arctic

System	Requirements for following ships	Authority
Long Range Identification and Tracking (LRIT) is a global satellite-based system for identifying and tracking vessels. Reporting takes place at least four times a day. Introduced in Norway in 2009, the system is based on IMO's Solas, 1974, adopted in 2006.	• passenger ships including high-speed passenger vessels • cargo ships including high-speed cargo ships of 300 GT and up The requirement does not apply to fishing vessels or military vessels.	The database is operated by the European Maritime Safety Agency (EMSA) in Lisbon. The Norwegian Coastal Administration corrects and updates data for Norwegian ships. The Norwegian Maritime Directorate ensures compliance with the requirements.
Satellite-based monitoring of fishing vessels	Norwegian fishing vessels with a length of more than 21 metres	The Directorate of Fisheries
AIS (S-AIS) *Automatic Identification System*. The Automatic Identification System was introduced by the International Maritime Organization (IMO) (Solas 1974 with December 2000 amendments). AIS is land-based with a range of 40–60 nautical miles. The satellite-based S-AIS updates the position of ocean-going AIS-carrying vessels every 90 minutes.	• tankers: all in international traffic and all in traffic within the EU/EEA • passenger vessels: all in international traffic and all over 300 GT in traffic within the EU/EEA • high-speed vessels over 150 GT in national traffic • cargo vessels over 300 GT in international traffic and over 300 GT in traffic within the EU/EEA • fishing vessels over 300 GT/45 metres in traffic within the EU/EEA, the requirements will be changed to fishing vessels down to 15 metres in June 2014	Conventional AIS: Norwegian Coastal Administration AIS-S: The Norwegian Coastal Administration in cooperation with the Norwegian Space Centre, Norwegian Defence Research Establishment and Kongsberg Seatex

Sources: Norwegian Coastal Administration, Norwegian Maritime Directorate, Directorate of Fisheries and NOU (Official Norwegian Report) 2005: 14

228) Norut (2012) *Shipping i Polhavet – databehov og tilgjengelige data.* (Shipping in the Arctic Ocean – data needs and available data.) Rapport (Report) 5/2012.
229) E-mail with attachments dated 31 May 2013 from the Norwegian Coastal Administration.
230) Norut (2012) *Shipping i Polhavet – databehov og tilgjengelige data.* (Shipping in the Arctic Ocean – data needs and available data.) Rapport (Report) 5/2012.

The Norwegian Coastal Administration said that at the end of 2013/2014 an automated system was put in place that provides detailed statistics on overall ship traffic in the Arctic for all ships (Norwegian and foreign) that have AIS on board.[231]
The Norwegian Coastal Administration also states that a new satellite, AISSat-2, will be launched in 2014 as part of efforts to further develop the monitoring of all ship traffic in the Arctic.

The Arctic Council is also working to develop an overview of ship traffic in the Arctic with an Arctic database. According to PAME, the database was established in 2004 (cf. preparation by AMSA). The available database contains information on traffic from all Arctic states [232] in addition to Iceland. The base is currently updated with S-AIS satellite data collected by the Norwegian authorities. According to the head of PAME, it would be an advantage if the collected satellite data was made publicly available.[233] Currently, information about the traffic in the northern areas of the North Atlantic and Barents Sea is shared with Norwegian maritime authorities and other countries in the region through cooperation under the auspices of the European Maritime Safety Agency (EMSA).[234]

6.1.2 The Arctic Council and shipping in the Arctic – the preparation of AMSA and recommendations on shipping in the Arctic

Shipping has long been a key issue in the Arctic Council, and as early as the first Ministerial Meeting in 1998, the ministers called for an assessment of current and future shipping activities in the Arctic. The aim of the study was to assess the need for further action in the Arctic, including working with the International Maritime Organization (IMO) to develop an international code of safety for ships operating in Arctic waters (a Polar Code), and an assessment of whether existing international agreements and other programmes to protect the Arctic marine environment, were sufficient.[235] Such issues were discussed further in the Arctic Council by the SAOs [236] and at Ministerial Meetings in 2002 and 2004.[237]

At the 2004 Ministerial Meeting in Reykjavik, the PAME Working Group (*Protection of the Arctic Marine Environment*) was tasked with studying key issues on shipping in the Arctic.[238] The *Arctic Marine Shipping Assessment* (AMSA) report was submitted and approved at the Ministerial Meeting in Tromsø in 2009. It is the first analysis of shipping covering the entire Arctic, and the report is cited as the most important report on shipping prepared by the Arctic Council.[239] The work was led by Canada, Finland and the United States, and relevant Norwegian authorities contributed to the report.[240]

Given the expectation of increased ship traffic in the Arctic and the risk this may entail for the Arctic environment, AMSA gives recommendations to the Arctic

231) E-mail dated 15 November 2013 from the Norwegian Coastal Administration. The traffic density plot for 2012 can also be viewed in WWF's mapping tool (www.arkgis.org), which is based on data from the Norwegian Coastal Administration's *havbase* ocean database.
232) These are the states that have direct access to the Arctic Ocean, namely Canada, Denmark (Greenland), Norway, Russia and the United States. The Faroe Islands are also in the database.
233) Interview with PAME Chair on 21 June 2013.
234) E-mail dated 31 May 2013 from the Norwegian Coastal Administration with attachments.
235) The Arctic Council's first Ministerial Meeting in 1998 in, *Iqaluit*, *Canada*. The Iqaluit Declaration.
236) See also minutes from SAO meetings in November 1999, April 2000, May 2002 and April 2003.
237) The Arctic Council's third Ministerial Meeting in 2002 in *Inari, Finland*, the Inari Declaration, and the Arctic Council's fourth Ministerial Meeting in 2004 in *Reykjavik, Iceland*, the Reykjavik Declaration.
238) The Arctic Council's fourth Ministerial Meeting in 2004 in *Reykjavik, Iceland*, the Reykjavik Declaration. The recommendation is based on a report by the Arctic Council on shipping – *Arctic Marine Strategic Plan* (AMSP) – of 24 November 2004 which is based on consensus at the Ministerial Meeting in 2002 (Inari, Finland) on the need for a more coordinated and integrated strategic approach to meet the challenges facing the Arctic coastal and marine environment.
239) Meetings with the Ministry of Trade, Industry and Fisheries, Ministry of Foreign Affairs, Norwegian Coastal Administration, Arctic Council Secretariat and SDWG.
240) PAME (2009) *Arctic Marine Shipping Assessment 2009 Report* and letter of allocation to the Norwegian Maritime Directorate from the Ministry of the Environment for 2009.

states[241]. AMSA's recommendations received support at the Ministerial Meeting in Tromsø 2009. [242] At a general level the AMSA recommendations involve[243]
- strengthening the safety of Arctic shipping (maritime safety)
- protecting the population in the Arctic and protecting the Arctic environment
- building the Arctic marine infrastructure

In Norwegian public administration, it is particularly the Ministry of Trade and Industry and the Ministry of the Environment via the Norwegian Maritime Directorate and the Ministry of Fisheries and Coastal Affairs via the Norwegian Coastal Administration that have sector responsibility for the areas discussed by the Arctic Council in AMSA. However, it is a national responsibility to facilitate safe and secure ship traffic. The Norwegian Maritime Directorate is responsible for efforts to ensure the safety of ships and their crews, while the Norwegian Coastal Administration is responsible for coastal infrastructure and maritime services.

6.1.3 Norwegian authorities' work with following up AMSA's recommendations

AMSA's overarching recommendations are in line with Norwegian authorities' key objectives in the area. The overall key objectives for shipping in Norwegian waters are to facilitate safe and efficient maritime transport, safeguard life and health, protect the environment and achieve maritime safety and preparedness against acute pollution that results in the lowest possible risk to health and loss of life, and contributes to clean, abundant and productive seas.[244]

Strengthening of international regulations for shipping in Arctic waters

Shipping depends on joint international regulations. One of the Norwegian Maritime Directorate's key tasks is to contribute to the development of international rules[245]. The UN Convention on the Law of the Sea forms the legal platform for all uses of the ocean areas. Shipping is further regulated by a number of international conventions that deal with, among other things, requirements relating to ship construction, equipment and operation, environmental requirements, and education and training of seafarers and their working conditions. There are ongoing developments in this regulatory area, governed by, among other things, new knowledge following actual accidents and technological development. Internationally, the International Maritime Organization (IMO) is the main producer of regulations.[246] IMO has also developed guidelines for ships operating in Arctic waters. The Arctic Council emphasises that the Arctic states should get involved internationally through IMO to improve safety in Arctic shipping.

An important part of the recommendations on safety at sea raised through AMSA, is related to the work of the IMO. Through IMO, member states can strengthen and align regulations and management of the work on safety at sea by supporting and developing the requirements for technical specifications for vessels, equipment, crewing and training.[247]

The Arctic Council's importance to Norwegian public administration

The Ministry of Trade and Industry believes that the Arctic Council can be a key player in efforts to acquire knowledge about the fragile marine environment in the Arctic. However, the Ministry noted that IMO is the key international player for

241) PAME (2011) *Status on Implementation of the AMSA 2009 Report Recommendations*.
242) Arctic Council (2009) *6nd Ministerial Meeting in Tromsø, Norway.* The Tromsø Declaration.
243) PAME (2011) *Status on Implementation of the AMSA 2009 Report Recommendations*.
244) See for example Report No. 14 (2004–2005) to the Storting *På den sikre siden – sjøsikkerhet og oljevernberedskap* (On the safe side – safety at sea and oil spill preparedness) and annual budget propositions for the Ministry of Fisheries and Coastal Affairs and Ministry of Trade and Industry, *the National Transport Plan*, including the one for 2010–2019, and Meld. St. 7 (2011–2012) Report to the Storting (white paper) *The High North – Visions and strategies.*
245) See also the letter of allocation for 2013 from the Ministry of Trade and Industry to the Norwegian Maritime Directorate.
246) See NOU (2005: 14) *På rett kjøl* (On an even keel) and NOU (2012: 18) *Rett om bord* (Straight on board).
247) AMSA, topics in recommendations relating to improving the safety of Arctic shipping.

building knowledge and promoting the importance of sound maritime safety and developing international regulations based on this knowledge.[248]

According to both the Ministry of Trade and Industry and the Ministry of Foreign Affairs, the current international regulations are not adapted to the specific conditions prevailing in Arctic waters. Norway is working through IMO to develop binding global rules for sailing in polar waters – the Polar Code. According to the Ministry of Trade and Industry, the Polar Code will impose special requirements for ships and crews operating in these waters, such as requirements relating to construction, equipment, operations, environmental protection and limitation of damage. Training requirements for seafarers working in polar waters are also an important element with respect to safe operations in the polar regions.[249]

Via the Norwegian Maritime Directorate, Norway heads the IMO working group tasked with preparing a draft Polar Code. The Ministry stated that the Arctic states work well together in IMO, and that to the extent they share common viewpoints, are united when important proposals are discussed, including specifically in the work on the Polar Code. This is in line with AMSA recommendations, but takes place according to the Ministry independently of the Arctic Council. The Ministry stated that the final draft of the Polar Code will be ready in 2014.[250] The Polar Code was adopted by IMO November 21 2014.

One of the questions on which there is no consensus in the Arctic Council is whether heavy oil should be prohibited in Arctic waters. In the Ministry of the Environment's letter of allocation to the Norwegian Maritime Directorate, the Norwegian delegation in PAME is to assist the Ministry in following up the AMSA report in the areas that PAME must address. This applies to proposed measures, cooperation and development of common positions to other international organisations that affect shipping in the Arctic. The Ministry of the Environment has asked the Norwegian Environment Agency to particularly follow up Norwegian attitudes to the introduction of an early ban on the use and carriage of heavy fuel oil in Arctic waters, with a view to promoting a joint proposal to IMO.[251] Cleaner types of fuels, such as liquefied natural gas (LNG), produce lower local emissions and reduce the negative environmental consequences of acute discharges.

The Fridtjof Nansen Institute noted that the question can be asked whether the work on the Polar Code in IMO would have come as far as it has without the influence of the Arctic Council. The Arctic countries have been active in this field independently of the Arctic Council. The Institute points out, however, that the importance attached to the work increases as more coastal states, through the Arctic Council, stand united behind the demands.[252]

6.1.4 Arctic maritime infrastructure and coastal safety

The third main recommendation in the *Arctic Marine Shipping Assessment* (AMSA) – contributing to safe and secure shipping in Arctic waters – concerns building the Arctic marine infrastructure.

The ministers recognise through AMSA the need to improve the Arctic marine infrastructure both to ensure safety and protect the environment in accordance with sustainable development. AMSA also points out that the Arctic states should as needed

248) Letter from the Ministry of Trade and Industry dated 2 April 2013.
249) Ibid.
250) Ibid. and letter of 27 August 2013.
251) The Ministry of the Environment's letters of allocation to the Norwegian Maritime Directorate for 2012 and 2013.
252) Interview with the Fridtjof Nansen Institute on 17 February 2012.

significantly improve the level and availability of information to ensure safe navigation and planning of traffic in Arctic waters.

In interviews, the Ministry of Foreign Affairs stated that there is no overall plan for infrastructure for sea transport or development of this in the Arctic areas, but that some infrastructure is in place. Increased activity and increased shipping in the Arctic are leading to a greater need for improvement of communication systems, charts, lighthouses, oil spill preparedness and a system for search and rescue in case of accidents. The Ministry of Foreign Affairs also underlines that this is primarily a national responsibility.[253]

The Ministry of Fisheries and Coastal Affairs has the overarching responsibility for preventive safety at sea work through maritime infrastructure and facilitation of maritime services.

The Ministry of Fisheries and Coastal Affairs' assessment of AMSA and the Arctic Council's work

Many of the points in AMSA's recommendations (the points under main recommendations II and III) fall under the Ministry of Fisheries and Coastal Affairs' area of responsibility. When asked how important AMSA is to the work of the Ministry of Fisheries and Coastal Affairs, it was stated that the recommendations in AMSA have no bearing on the Ministry's work on maritime safety and emergency preparedness. The Ministry noted that the policies promoted by the Arctic Council are mostly followed, but that this takes place independently of the Arctic Council. Most of the Arctic Council's recommendations will probably also be followed, but it will happen as a result of the administration's general duties and responsibilities, and not as a result of the Arctic Council's activities. The Ministry of Fisheries and Coastal Affairs furthermore stated that since the advice and recommendations of the Arctic Council do not have any impact on the Ministry's work, no system had been established in the Ministry to systematise the advice and recommendations of the Arctic Council, and how they are followed up by the Ministry.[254] Nor does the Ministry seek information on whether the Norwegian Coastal Administration follows up the recommendations in AMSA. The Norwegian Coastal Administration generally agrees with the Ministry, but added that on a general basis AMSA may have had an impact on some of the work, due in part to the reporting requirements introduced through AMSA.[255]

Both the Ministry of Fisheries and Coastal Affairs and Norwegian Coastal Administration stated that international standards and formal agreements that can ensure a certain common level are important. For the Norwegian Coastal Administration's part, the standards, guidelines and recommendations of organisations such as the International Association of marine aids to navigation and Lighthouse Authorities (IALA) are more important than the advice and recommendations presented through the Arctic Council.[256] The Norwegian Coastal Administration also noted that, independent of the Arctic Council, Norway has done much to obtain data and knowledge about shipping, safety at sea and emergency preparedness against acute pollution in the Arctic.[257]

253) Interview with the Ministry of Foreign Affairs on 9 February 2012.
254) Interview with the Ministry of Fisheries and Coastal Affairs on 1 February 2013.
255) Interview with the Norwegian Coastal Administration on 8 May 2013.
256) According to Report No. 14 (2004–2005) to the Storting *På den sikre siden – sjøsikkerhet og oljevernberedskap* (On the safe side – safety at sea and oil spill preparedness) (p. 87), IALA's activities are particularly aimed at the development and co-ordination of equipment, systems and requirements for navigation guidance and ship traffic services. Virtually all states with national and international seaborne traffic participate in the organisation.
257) Interview with the Norwegian Coastal Administration on 8 May 2013.

The Ministry of Fisheries and Coastal Affairs believes, however, that the relevance of the Arctic Council compared with a number of other processes and agreements and international cooperation for the development of the Arctic can be questioned.[258] The Arctic Council has also discussed its role in this perspective. In its review of international conventions and agreements on maritime transport in the Arctic, one of the working groups noted that a comprehensive regulatory framework is already in place, and that most of the provisions and requirements for shipping in Arctic waters in the future will also be prepared under the direction of international collaboration.[259]

The Ministry of Fisheries and Coastal Affairs also pointed out that it is important to participate in the Arctic Council, because the Council has a function as a regular meeting place for experts and senior government officials. The Council is an international contact arena and both politically and technically, it offers good opportunities for exchanging experiences about management and systems that can be very useful in how an individual state shapes its policies and regulations.

Norwegian authorities' work with maritime services and infrastructure in the northern waters

Just as the Arctic Council has prescribed through AMSA, it has been a key goal for Norwegian authorities to increase safety along the coast and at sea in their work on facilitating efficient maritime transport. Good infrastructure and maritime services will prevent accidents and other incidents that can lead to acute discharges of oil and other contaminants.[260]

The Ministry of Fisheries and Coastal Affairs confirms that increased ship traffic in the Arctic will require better maritime infrastructure, but it also believes that other countries in the Arctic face far greater challenges than Norway in this area.[261]

The Ministry of Fisheries and Coastal Affairs states that in Norway's case the need for better maritime infrastructure will mainly concern Svalbard. As the ice melts, there will be an increased need to study new fairways, map navigable waters and mark shallows. In the Ministry's view, however, the lag in the maritime infrastructure is not critical. The lag has arisen as a natural consequence of the prioritisation of maritime infrastructure development in southern Norway, where ship traffic is heaviest.

However, the Ministry of Fisheries and Coastal Affairs points out that much has already been done in Svalbard: Emergency ports have been mapped, a lot of work has been done on charts, and compulsory pilotage has been introduced. Although there are deficiencies in the infrastructure in Svalbard, the limit for safe operation is not imminent in the opinion of the Ministry. The Ministry is planning further expansion of the maritime infrastructure and maritime services in Svalbard.

The Norwegian Coastal Administration noted that inadequate map data for certain coastal areas of Svalbard is a particular challenge for the ship traffic there. Western Svalbard is relatively well mapped. Eastern Svalbard, however, has not been adequately mapped. In addition, the drift ice and glaciers pose challenges for ship and boat traffic around Svalbard at certain times of the year. There are so far no reports of accidents or incidents resulting from deficiencies in maritime infrastructure and maritime services in Svalbard.

258) Interview with the Ministry of Fisheries and Coastal Affairs and Norwegian Coastal Administration on 2 May 2012.
259) PAME (2013) *Arctic Ocean Review. Phase I report (2009–2011).* The report was submitted and approved at the Ministerial Meeting in Kiruna in May 2013.
260) See for example the annual budget propositions for the Ministry of Fisheries and Coastal Affairs.
261) Interview with the Ministry of Fisheries and Coastal Affairs on 1 February 2013.

The Norwegian Coastal Administration also emphasised the increased cruise traffic to Svalbard as a risk factor. The number of cruise tourists increased from around 25,000 in the early 2000s to about 60,000 in 2012. The increase is primarily due to larger vessels, and not an increase in the number of voyages. The Norwegian Coastal Administration noted that while there have been accidents involving cruise ships, serious spills have never occurred. There are many examples of groundings. The Norwegian Coastal Administration noted that it would be a considerable challenge should there be a need to evacuate a large cruise ship carrying thousands of passengers. Even if the ship was located near populated land areas, it would be difficult for such small communities to receive so many people and provide for their needs.

To protect the environment in Svalbard, certain special measures have been introduced, such as bans on heavy oil and a ban on more than 200 passengers on ships sailing in the nature reserves in the east, and a traffic ban in certain places to protect the landscape and cultural heritage. Further details of the maritime infrastructure and maritime services are presented in Annex 7.

6.1.5 Agreement on search and rescue in the Arctic – the first legally binding agreement negotiated by the member states of the Arctic Council

In view of the long distances and the limitations of resources in the Arctic region, AMSA recommended developing a search and rescue system for all eight Arctic States. At the Ministerial Meeting in Tromsø in 2009, a task force was appointed and assigned the task of developing an international system for search and rescue operations in the Arctic.

The resulting agreement, Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic, was signed during the Ministerial Meeting of the Arctic Council in Nuuk in the spring of 2011, and it is the first legally binding agreement negotiated at the initiative of the Arctic Council. The Ministry of Justice and Public Security is responsible for implementing the agreement.

Fact box 9 Norway's international search and rescue services (SAR) obligations at sea and in the air

Under Article 98(2) of the Law of the Sea Convention, coastal states shall seek to establish, operate and maintain an adequate and effective search and rescue service. States shall cooperate with neighbouring States on this through regional arrangements as circumstances require. Coastal states' obligations related to search and rescue are defined in the Convention on International Civil Aviation of 1944 (the ICAO Convention)* and IMO's International Convention on Maritime Search and Rescue of 1979 (the SAR Convention).

The ICAO Convention is based on the principle that all airspace shall be divided between the different states. ICAO first regulated Flight Information Regions (FIR), which are specified airspaces where flight information and alerting services are offered, cf. ICAO Convention Annex 11. Annex 12 of the ICAO Convention on air rescue is based on the same principles as FIR and recommends that states' air SAR regions correspond with the states' FIRs. The existing FIR boundaries therefore formed the starting point for the air SAR regions. SAR Convention Rule 2.1.3 obligates parties to collaborate on establishing contiguous SAR regions that should not overlap. Under Rule 2.1.4, the regions shall be created by agreement between the parties concerned and reported to IMO. Under SAR Convention Rule 2.1.8, SAR sea and air regions should match. The same follows from the ICAO Convention rule 2.2.1.1, where it is recommended that SAR air regions, as far as practicable, should coincide with corresponding FIR and maritime SAR regions. SAR boundaries for both air and sea were largely determined when the FIR boundaries were established in connection with the signing of the ICAO Convention in 1944.

* ICAO is the International Civil Aviation Organization.

Source: The Ministry of Justice and Public Security.

An injured sailor on board a coast guard ship in the northern part of the Norwegian Sea is picked up by a rescue helicopter. Cooperation between vessel and helicopter is important in these types of operations. The helicopter was refueled with fuel from the vessel while airborne before returning to shore.

Photo: The Office of the Auditor General of Norway

In an interview, the Fridtjof Nansen Institute noted that the ambition level of the search and rescue agreement is relatively low and that the agreement itself is not believed to have budget-related consequences. Nor does the agreement define precise targets for the development of national capacity in the area. These elements make the agreement not very enforceable and less binding. The Institute believes that the agreement is an expression of how the Council intends to strengthen its role.[262]

Search and rescue areas are already regulated by existing international agreements (cf. Fact box 8). The Ministry of Justice and Public Security nevertheless believes that the new agreement through the Arctic Council has provided added value in that the Arctic states have established new and more appropriate search and rescue regions (SAR areas). The Ministry also points out that the agreement helps to clarify the parties' obligation under international law to cooperate. In the Ministry's assessment, the agreement goes somewhat further than is usual in other agreements, particularly with regard to sharing of information and exercises. The agreement also makes organisation and responsibilities clearer than is otherwise normal.

The agreement added provisions that nation states must have an adequate and effective emergency response system. The Ministry of Justice and Public Security states that what it means in practice to have such a system, either generally or in relation to the agreement, is not defined. The Ministry also noted that Norway's overall preparedness capacity has not been strengthened as a direct result of the agreement, and that it does not augment Norway's rescue resources. In the Ministry's opinion, it is therefore difficult to specify measurable effects of the agreement.

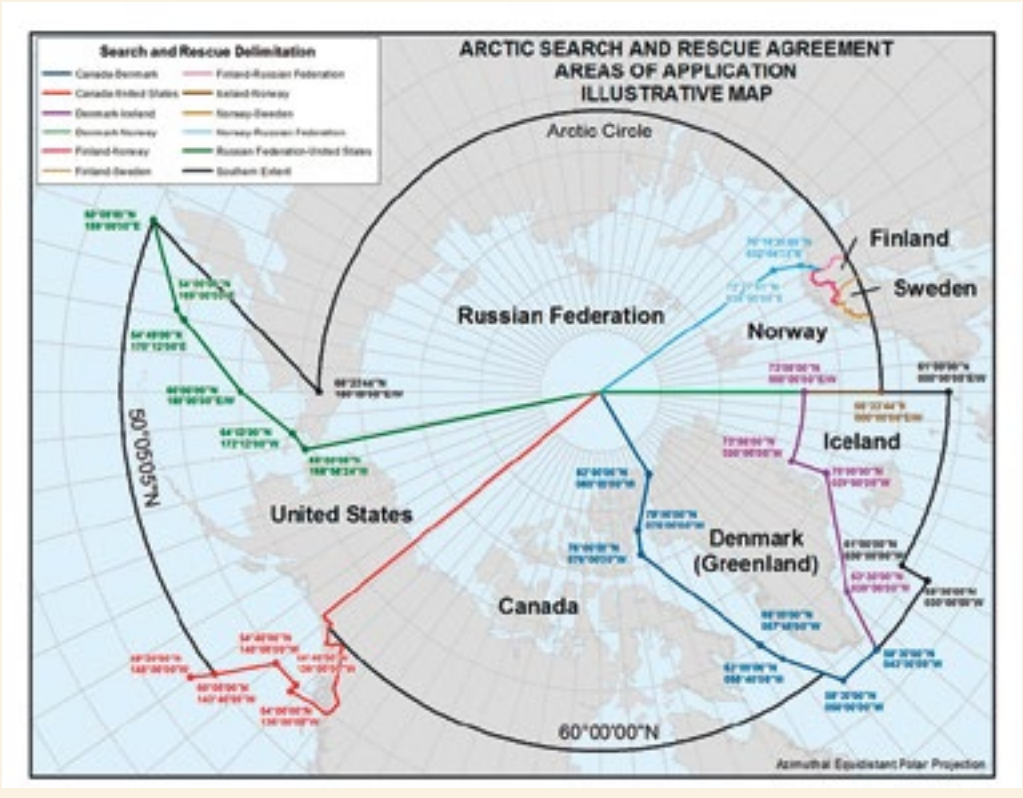
262) Interview with the Fridtjof Nansen Institute on 17 February 2012.

The Ministry of Justice and Public Security also pointed out that rescue helicopters are the most important resource in sea rescues. Rescue helicopters are the only public resources in Norway that are on call exclusively for search and rescue operations. The capacity of rescue helicopters is considered in connection with the acquisition of new helicopters[263]. These considerations form the basis of the minimum requirements for helicopter capacity in the ongoing procurement process, and a minimum standard for the future rescue service has therefore been defined.

The Ministry of Foreign Affairs stated that in light of the search and rescue agreement, the Ministry has provided financial support in order to use the integrated, collective knowledge and expertise on safety and emergency preparedness in the High North.[264]

The Ministry of Foreign Affairs, Ministry of the Environment, Norwegian Environment Agency and Norwegian Coastal Administration, and many of the Arctic Council's working group chairs, are positive to a development in which legally binding agreements are negotiated under the auspices of the Arctic Council. It was also noted that such agreements are a step toward boosting the political significance of the Arctic Council.

Figure 11 Areas of responsibility in the agreement on search and rescue in the Arctic



Source: www.regjeringen.no

263) Ministry of Justice and Public Security (2013) *Regjeringen har signert kontrakt om levering av redningshelikoptre.* (The Government has signed a contract for delivery of rescue helicopters.) Press release no. 123-2013, 19 December 2013.
264) Ministry of Foreign Affairs, press release, 22 October 2013.

6.2 Petroleum activities in the Arctic

There are large variations within what is normally defined as the Arctic as regards operational aspects of the petroleum industry. Some areas of the Arctic are covered by ice year-round, other places have ice some years or periods of the year, while other areas such as the Norwegian Barents Sea South, have no ice at all. Factors such as temperatures and ocean depths also vary widely. Consequently, the challenges in the Arctic as regards the petroleum industry cannot be generalised, but will vary greatly based in part on climatic conditions, available infrastructure, ocean depth and environmental values in the area.[265] Any pollution from spills and discharges can have serious consequences for a fragile environment. Since its establishment, the Arctic Council has compiled several reports about petroleum activities in the Arctic, and the ministers have referred to and endorsed the contents and recommendations of the reports at several Ministerial Meetings. Unlike shipping, exploration for and production of oil and gas are subject to coastal state jurisdiction. Petroleum activities are therefore largely a purely national matter.

There are no exact figures on oil and gas deposits in the Arctic. It is estimated that about 20 per cent of the world's undiscovered petroleum resources – 30 per cent of its gas and 13 per cent of its oil – is located in the Arctic.[266] Much of the resources are believed to be in Russia, especially gas.

The Norwegian Chairmanship Programme in the Arctic Council refers to the large petroleum resources and the values they may represent for society. Emphasis was also placed on sustainable utilisation of these resources and that Norway has established ecosystem-based management as a framework for the exploitation of petroleum resources in an area such as the Barents Sea.

6.2.1 Petroleum resources in the Arctic and the relationship to the states in the Arctic

The United Nations Convention on the Law of the Sea from 1982 stipulates the rights and obligations of coastal states on their own continental shelf and in their waters and zones.

The continental shelf is the natural extension of coastal states' land mass extending toward the ocean depths. Under the Law of the Sea, the continental shelf of all coastal states automatically extends to 200 nautical miles (nm). Since many coastal states have a continental shelf that extends beyond 200 nautical miles, the outer limits of such shelves must be separately documented vis-à-vis the Commission on the Limits of the Continental Shelf (CLCS) in New York. All five Arctic states have continental shelves that extend beyond 200 nautical miles.

Under the Law of the Sea Convention, coastal states have sovereign rights over their continental shelf to investigate and exploit its natural resources, including petroleum resources. Among the five Arctic states, only the United States has not ratified this convention. However, the Ministry of Foreign Affairs noted that the United States still complies with the Convention, and the Ministry considers the bulk of it to be customary international law. It was also pointed out that in a statement from 2008 (the Ilulissat Declaration), the five Arctic states expressed agreement that the Law of the Sea constitutes the international legal framework for all activity in the Arctic Ocean. Held during Norway's Chairmanship period in the Arctic Council,

265) Ministry of Petroleum and Energy, letter of 25 April 2014

266) *United States Geological Survey* (USGS), Science 29 May 2009, Vol. 324 no. 5931 p. 1175–1179. *Future emissions from shipping and petroleum activities in the Arctic.* Atmospheric Chemistry and Physics www.atmos-chem-phys.net/11/5305/2011/ 6. June 2011. Ministry of Petroleum and Energy 17 October 2011 (Europaportalen, 29 October 2013).

the conference at which the clarification was made was initiated by the Ministry of Foreign Affairs.

The Ministry of Foreign Affairs added that there are unresolved border issues between several of the Arctic Ocean states. The northern limit of the Norwegian continental shelf was clarified by the Commission in 2009.

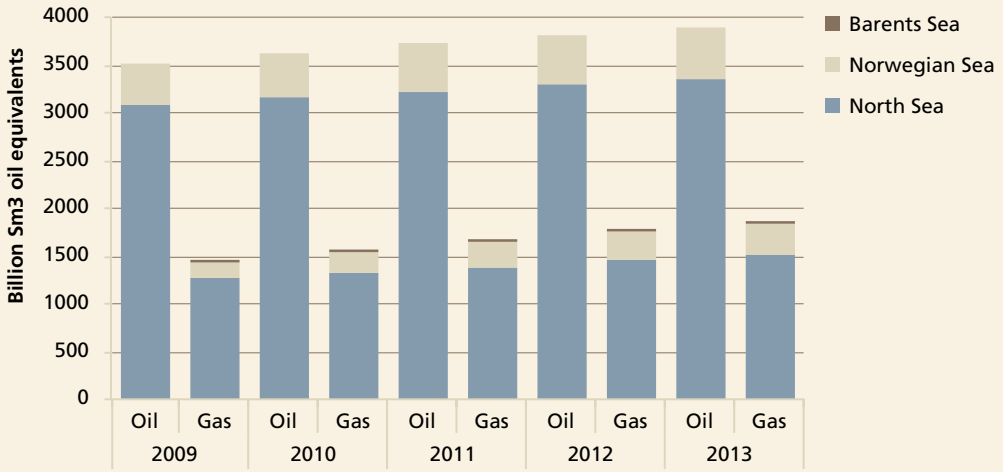
The Ministry of Foreign Affairs also referred to the Arctic Council's criteria for assessing applications for observer status. In order to become an observer, an applicant country must recognise the Arctic states' sovereign rights and accept the law of the sea as the basis for cooperation and activities in the Arctic. The countries that have accepted this criterion include China, India, Japan, Italy and South Korea, along with the EU.[267]

6.2.2 Oil and gas production in the northern ocean areas

Norwegian oil production underwent a gradual decline from 3.4 million barrels per day in 2001 to 1.8 million barrels per day in 2013. The Ministry of Petroleum and Energy expects oil production to increase somewhat over the next few years. In 2013, gas production amounted to 109 million standard cubic meters (Sm^3), i.e. it has more than doubled since 2001.[268]

Figure 12 shows that oil and gas production on the Norwegian continental shelf in the Barents Sea in 2009–2013 accounted for a very small portion of the total oil and gas production on the Norwegian continental shelf.

Figure 12 Oil and gas production on the Norwegian continental shelf, 2009–2013

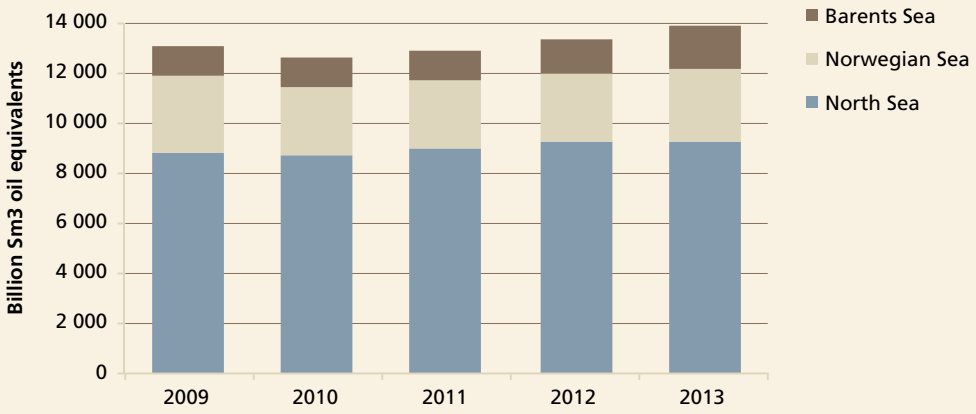


Source: Norwegian Petroleum Directorate

The Norwegian Petroleum Directorate's resource accounts show that the total recoverable petroleum resources in Norwegian waters are estimated at 14.2 billion Sm^3 oil equivalents at 31 December 2013. As shown in Figure 13, the estimates of petroleum resources in the Barents Sea account for a relatively small proportion of the total resource estimates (below 13 per cent).

267) Interview with the Ministry of Foreign Affairs on 14 June 2013.
268) Norwegian Petroleum Directorate production statistics (February 2014).

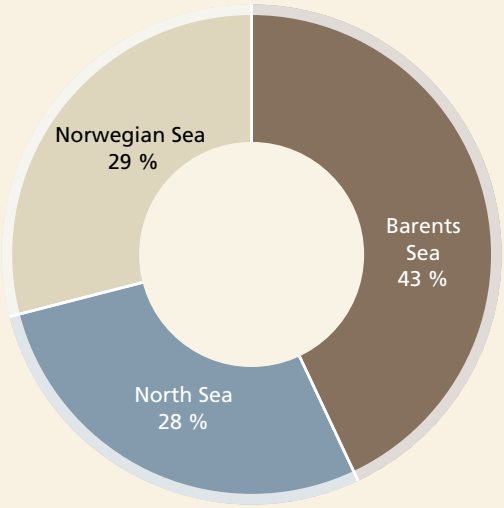
Figure 13 Total petroleum resources on the Norwegian continental shelf, 2009–2013



Source: Norwegian Petroleum Directorate

Emphasis is placed on contributing to the further development of petroleum activities in the Barents Sea, so that they can spur local and regional economic growth.
The Norwegian Petroleum Directorate estimates that 43 per cent of the undiscovered resources on the Norwegian continental shelf are found in the Barents Sea, as shown in Figure 14. The distribution of the undiscovered resources thus shows that there is significant potential for increased petroleum activity in the Norwegian part of the Barents Sea. According to the Ministry of Petroleum and Energy, extensive and sound regulations have been established to ensure proper resource management within the framework of sustainable development in these areas. The Ministry also notes that interest in the northern parts of the Norwegian continental shelf is high among oil companies, which the 22nd round of concessions showed with the awarding of 20 production licences in the Barents Sea and four in the Norwegian Sea.

Figure 14 Undiscovered resources divided by area, 2013



Source: Norwegian Petroleum Directorate

6.2.3 Petroleum-related activities in the Arctic Council

Several of the Arctic Council's working groups deal with issues related to the petroleum sector. According to the Norwegian Environment Agency, this is an area where several of the working groups complement each other. AMAP works on mapping petroleum activities in the Arctic and how these may affect the environment, PAME draws up guidelines for oil and gas activities in the Arctic, EPPR works on emergency preparedness against acute pollution and measures for handling environmental disasters, and CAFF assesses the effects of possible oil spills on biodiversity.

The AMAP, EPPR and PAME working groups have all published reports directly dealing with oil and gas activities in the Arctic. They are summarised in Table 6.

Table 6 Reports from the Arctic Council's working groups on petroleum activities in the Arctic

	Type of report and contents	Discussed at Ministerial Meeting	Comments on the report
1997	Guidelines for oil and gas activities in the Arctic	Yes, in 1998. It was said that the countries should promote the use of these guidelines.	This is a PAME report which includes impact assessment, discussion of the inhabitants of the Arctic, sustainability and conservation of flora and fauna, safety and environmental management and environmental monitoring.
2002	Guidelines for oil and gas activities in the Arctic, update	While the report was not directly discussed at the Ministerial Meeting, reference was made to the importance of good management in this area.	This is a PAME report that deals with the same subjects and discusses new ones such as operations and accidents.
2004	Guidelines for trans-shipment of refined oil and oil products in Arctic waters.	Yes, in 2004. It was said that the countries should disseminate the information.	This is a PAME/EPPR report on the step-by-step process for the deliveries of oil to industry and other ships in the Arctic.
2007	Oil and gas report	Yes, in 2009. The Ministerial Meeting endorsed the study and its conclusions.	The report is an AMAP summary of activity and risks associated with petroleum activities in the Arctic.
2009	Guidelines for oil and gas activities in the Arctic, update	Yes, in 2009. The countries were encouraged to use these guidelines as a minimum standard.	This is a PAME report that updates the information from the previous report in 2002.
2010	Oil and gas report, volumes I and II	No, not directly.	The study is published in two reports on activities and risks and a summary. The AMAP report concerns petroleum activities in the Arctic, social and economic effects of such activities, pollutants associated with such activity and effects on the environment and health as well as the Arctic ecosystem.
2011	Report on oil and other hazardous and toxic substances in Arctic waters	Yes, in 2011. The Ministerial Meeting welcomed the report and asked the SAOs about further follow-up.	This is an EPPR report that summarises the knowledge of how oil and other hazardous and toxic substances behave in icy waters.
2013	Recommended practice to prevent oil spills in the Arctic and summarising report and recommendations to prevent marine oil spills in the Arctic	Yes, in 2013. The Ministerial Meeting welcomed the reports and encouraged countries to continue working within the recommended areas.	The report describes several observations and practices that can be used to reduce the risk of oil spills.

Table 6 shows that several reports have been prepared on oil and gas activities in the Arctic. According to PAME, the guidelines drawn up in 2002 are intended for all Arctic states in the areas of planning, exploration, development, production and decommissioning. Activities, risks and effects of petroleum activities in the Arctic are mapped in AMAP's assessments.

None of the interviewees cited these reports as key to the same extent as reports on the environment and shipping. The Arctic Council Secretariat referred to the prepared guidelines, but added that these are only normative for the countries. The Norwegian Environment Agency noted that in the oil and gas sector, national policy in Norway is more stringent than the recommendations coming through the Arctic Council.

The Ministry of Petroleum and Energy referred to the Ottawa Declaration, which states that the work of the Arctic Council should be based on two pillars: sustainable development and the environment. In the Ministry's assessment, it appears that the Arctic Council has built up sound knowledge of environmental issues. At the same time, the work has not been concentrated to any great extent on economic activity and value creation, which is part of sustainable development.

The Ministry of Foreign Affairs also noted that although petroleum activity is a national concern, Norway cooperates with other Arctic countries through measures such as the Arctic Council to develop guidelines for oil and gas activities in the Arctic. The Ministry of Petroleum and Energy stated in this connection that it was consulted during the work on *Offshore Oil and Gas Guidelines* from 2009. The Ministry has otherwise not participated in drafting other documents or products from the Arctic Council. To the Ministry of Petroleum and Energy's knowledge, the Norwegian Petroleum Directorate has not been involved in the work of the Arctic Council.[269]

The Fridtjof Nansen Institute noted that in oil and gas areas the Arctic states have increasingly found their own solutions for their national administration.[270]

The Ministry of Foreign Affairs and the Ministry of the Environment also noted that comprehensive management plans for the Norwegian ocean areas have been presented. The management plan for the Barents Sea (and Lofoten) was last updated in March 2011. The purpose of the management plan is to facilitate the sustainable use of resources and ecosystem services while maintaining ecosystem structure, functioning, productivity and biodiversity. The Ministry of Fisheries and Coastal Affairs stated that work on ecosystem-based management has worked well in the Arctic Council – the Council has managed to produce different experiences from some of the Arctic States' administrations.

The Institute of Marine Research pointed out that the Barents Sea is a clean body of water with few pollution sources, but that long-range pollution can adversely affect the clean sea.[271] Nor have negative environmental effects of operational petroleum activities been proven in the Barents Sea.[272] According to the Institute of Marine Research, as of mid-2013 it was concluded that the management of the Barents Sea is sustainable and adapted to the environment. The management plan for the Barents Sea is an important step towards achieving holistic thinking about the overall impact and burden on the ocean areas. In practice, the management plan will help to regulate and harmonise the petroleum industry with other sectors and interests.[273]

269) Response from the Ministry of Petroleum and Energy on 18 February 2013.
270) Interview with the Fridtjof Nansen Institute on 17 February 2012.
271) The Institute of Marine Research (2013) *Havforskningsrapporten 2013*, *Fisken og havet*. (Marine Research Report 2013, The Fish and the Sea.) Special number 1-2013, p. 97. State of the Environment Norway refers to similar descriptions.
272) State of the Environment Norway [retrieval date 2 November 2013].
273) Interview with the Institute of Marine Research on 22 April 2013.

The ministers established an expert group for ecosystem-based management at the meeting in 2011, and a report on the subject was presented in Kiruna in 2013. The ministers endorsed the definitions, principles and recommendations of the report and urged the countries to implement this type of management for the marine environment.

6.3 Work on emergency preparedness against acute pollution

Increasing ship traffic and increasing petroleum activity places high demands on preparedness against acute pollution.[274] The Arctic environment is particularly vulnerable to this type of pollution, and conditions are demanding, with extreme cold, ice and polar nights for much of the year. Emergency preparedness against acute pollution is additional protection that will reduce any negative environmental consequences of acute spills caused by accidents involving ships or resulting from petroleum activities.

6.3.1 Increasing emphasis on preparedness against acute pollution in the Arctic Council

Preparedness against acute pollution has been a theme throughout the cooperation of the Arctic Council since the Council was created in 1996.

In the Arctic Council, it is particularly the EPPR Working Group that deals with prevention and preparedness against acute pollution in the Arctic. The goal is to help protect the Arctic environment from accidental discharges of polluting materials (including radioactive materials). The other working groups have, in some cases, also discussed oil spill preparedness in their work.

In the petroleum sector, Section 6.2, Table 6 showed an overview of key reports that the Arctic Council has prepared for the oil and gas sector. Several of these reports also discuss preparedness against acute pollution.

At the Ministerial Meeting in Tromsø in 2009, all the Arctic states agreed that the development of emergency response against pollution should continue, and that such emergency preparedness for the entire Arctic is important for protecting the environment. The states also agreed to strengthen Arctic cooperation on the prevention of and preparedness against acute pollution by oil and other hazardous pollutants. When the subject was raised again in 2011, the ministers established a task force to develop an oil spill response agreement for the Arctic states. At the Ministerial Meeting in Kiruna in 2013, the Arctic states signed a legally binding Marine Oil Pollution Agreement for the Arctic (the Arctic Council's second legal agreement). The agreement will include simplifying the management of international assistance in the event of extensive acute pollution in the Arctic.

Marine Oil Pollution Agreement negotiated through the Arctic Council

Through the Marine Oil Pollution Agreement, the Arctic states agreed to strengthen cooperation, coordination and assistance with regard to preparedness and response to acute oil pollution to protect the Arctic environment. EPPR noted that the reason no other acute pollution was included in the agreement was that the incorporation of emission substances other than oil would have made it difficult to finish the agreement in time for the Ministerial Meeting in Kiruna.

The Marine Oil Pollution Agreement, which was negotiated through the Arctic Council, states that the parties must have a national system that can quickly and

274) Acute contamination means significant contamination that occurs suddenly, and is not allowed by the provisions in or under the Pollution Control Act.

Oil spill response exercise. Through the Arctic Council, the Arctic countries have negotiated an oil spill response agreement under which they are, e.g., obligated to have national plans and systems for quick and efficient handling of oil spills. Imitation oil is used here. Photo: © Arctic Council Secretariat

effectively deal with oil spills, and that national plans are to serve as the basis for this work. The agreement also states that the parties may request assistance from each other in the event of an acute incident. The parties shall also promote cooperation, for example through joint exercises.

Several sources pointed out that the agreement is a step in the right direction for oil spill preparedness in the Arctic.[275] The Nordic Council and some conservation organisations pointed out that the agreement is not sufficient and that there is a need for a more binding agreement. The Nordic Council also noted that the Arctic states should make it legally binding to incorporate current best practice in national legislation on oil and gas production in the Arctic.[276] In response, the Ministry of Transportation and Communications commented that it fell outside the mandate issued by the Arctic Council member states to incorporate preventive measures in an agreement on oil spill preparedness.

The Ministry of the Environment is aware that some NGOs have criticised the agreement for being devoid of content, partly in light of the existing agreements in this field. But in the opinion of the Ministry of the Environment and EPPR, the Agreement provides a sound basis for clarification of responsibilities, coordination and cooperation in oil spill preparedness. The agreement also stipulated a permanent contact in each Arctic state in case of accidents.

The Ministry of Foreign Affairs stated that the Ministerial Meeting in Kiruna in 2013 decided to create a task force headed by Norway and Russia. The group's objective is to develop an action plan for preventing and handling oil spills from shipping and activities offshore and on land.[277] EPPR does not rule out that the states may agree on an Arctic agreement on the prevention of oil pollution.[278]

275) It applies to the Ministry of the Environment, Norwegian Coastal Administration and EPPR and also the Nordic Council. In addition, it applies to the World Wide Fund for Nature (WWF) and Greenpeace.
276) Nordic Council, news item dated 17 May 2013.
277) Interview with the Ministry of Foreign Affairs on 14 June 2013.
278) Interview with EPPR on 8 May 2013.

EPPR's other work on measures against acute pollution

In addition to the contributions in PAME's oil guides, EPPR has prepared several guides and reports on acute pollution, cf. Table 7.

Table 7 The EPPR Working Group's guides about and assessments of oil spill preparedness

Official name in English	Type of report and contents	Discussed at Ministerial Meeting
Environmental Risk Analysis of Arctic Activities (1998)	Risk analysis of Arctic activities (1998)	Yes, they noted this analysis.
Field Guide for Oil Spill Response in Arctic Waters (1998)	Guide for handling oil spills in Arctic waters	Yes, they welcomed it and expressed that it is a source of information about the topic in question.
Circumpolar Map of Resources at Risk from Oil Spills in the Arctic (2002)	Circumpolar map of Arctic resources at risk from oil spills	This is not discussed.
Arctic Shoreline Clean-up Assessment Technique (SCAT) Manual (2004)	Manual for cleaning the shoreline	Yes, they noted this manual.
Arctic Guide (updated document of December 31, 2008) – Information on emergency systems and contact points, overview of environmental risks, and applicable agreements	Arctic Guide, updated information on emergency preparedness systems and contact information, overview of environmental risks and applicable agreements	There was no direct reference to this document.
Guidelines and Strategies for Oily Waste Management in the Arctic Region featuring the Oily Waste Calculator Tool 2009	Guidelines and Strategies for Oily Waste Management in the Arctic Region	No, there was no direct reference to this document. It was mentioned in the SAO Report to the ministers at the Ministerial Meeting in 2011.
Behaviour of oil and other Hazardous Substances in Arctic waters (BoHaSA)	Oil and other hazardous substances in Arctic waters (BoHaSa)	Yes, they welcomed this report.
Recommended practices RP3-report	Recommended practices to prevent oil spills	Yes, they welcomed this report.
Agreement on Cooperation on Marine Oil Pollution, Preparedness and Response in the Arctic – signed version with original appendix	Marine Oil Pollution Agreement, referred to above	The agreement is referred to above.

Table 7 shows that many EPPR reports on the petroleum sector have been discussed at the Ministerial Meetings. Aside from the Marine Oil Pollution Agreement, the written products have not been given the same weight by the ministers as the Arctic Council's environmental and shipping-related reports. The ministers welcome these oil spill guides, or they take them under advisement. Some of the guides have not been directly mentioned by the ministers. This picture is also in line with Oran Young's study of the Arctic Council of 2012, which noted that as working groups go, EPPR, like ACAP and SDWG, has had less of an impact among the working groups. This study did not, however, capture the work on the oil spill agreement.

EPPR's general impression is that many of the policies and reports prepared by EPPR are used by different actors. It may, however, be challenging to disseminate this knowledge, which is collated by the Arctic Council, to a wider audience than the working groups.

According to EPPR, the reports contribute to new activities and development of oil spill preparedness work. As a follow-up of EPPR's report on recommended practices to prevent oil spills, *Recommended Practices for Arctic Oil Spill*, efforts are under way to carry out an environmental risk analysis for the circumpolar Arctic, as recommended in the report. Such an analysis would in this case include shipping and petroleum activities.

EPPR believes that cooperation with other international fora is also important for the Arctic preparedness efforts. For example, IMO has requested assistance from EPPR in its work on a new IMO manual regarding the handling of oil spills in snow and ice-filled waters. EPPR's Norwegian Chairmanship reported that there is an emphasis on providing information about the group's work in relevant international fora, such as meetings in connection with the Bonn Agreement[279], Copenhagen Agreement[280] and IMO's technical group that discusses issues associated with the OPRC Convention[281], and with the European Maritime Safety Agency, EMSA.

EPPR stressed that much work remains in order to better understand and handle oil in areas covered with ice. In this context it is important to cooperate with the oil industry and involve relevant technical experts in the work.

The relationship between Norwegian oil spill preparedness and the Arctic Council

The Norwegian Coastal Administration emphasised that, in their opinion, Norway already has an administrative practice that is in line with the guidelines prepared by the Arctic Council, and that Norway is often the initiator and driving force of the Arctic Council.

The Norwegian Coastal Administration believes that Norway benefits from the knowledge and guidelines obtained by the Arctic Council, either by bringing these into other international processes, or by these adding something in areas where Norway has no special experience. The Norwegian Coastal Administration cites specific examples, including the report on oil spills in Arctic waters[282], as being useful. The manual for cleaning shorelines after oil spills[283] has also been useful according to the Norwegian Coastal Administration. This manual was used in conjunction with a shoreline manual that the Norwegian Coastal Administration prepared in cooperation with the Norwegian Clean Seas Association for Operating Companies. The report on oil and other hazardous substances in the Arctic[284] also brought forth much information that the Norwegian Coastal Administration can make practical use of. As for further details, refer to Annex 7.

279) This is an agreement on notification, assistance and monitoring between the countries bordering the North Sea. The goal is to minimise damage from oil and other hazardous substances.
280) This is an agreement between Denmark, Finland, Iceland, Norway and Sweden on cooperation to combat pollution of the sea by oil or other harmful substances.
281) *International Convention on Oil Pollution Preparedness, Response and Cooperation* from 1990. See Report No. 93 (1992–1993) to the Storting *Consent for ratification of the International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990*.
282) EPPR (1998) *Field Guide for Oil Spill Response in Arctic Waters.*
283) EPPR (2004) *Arctic Shoreline Clean-up Assessment Technique (SCAT) Manual.*
284) EPPR (2011) *Behaviour of oil and other Hazardous Substances in Arctic waters, BoHaSa*.

7 The Arctic Council and indigenous peoples in the Arctic

The Arctic Council is the only body that brings together representatives of all the indigenous peoples in the Arctic. Through the foundational document of the Arctic Council, the Ottawa Declaration, the member states confirm their obligations to indigenous peoples in the Arctic in regard to their living conditions, and that the Arctic indigenous peoples and their communities represent a unique contribution in this area. The member states recognise the importance of the Arctic indigenous peoples' traditional knowledge in understanding the circumpolar Arctic. The member states also pointed out that indigenous peoples of the Arctic and their communities should be involved in efforts to foster co-operation, coordination and interaction among the Arctic states with regard to sustainable development and protection of the Arctic environment. Every biennial ministerial declaration in the period 1998–2013 has reiterated how important it is to protect the interests of indigenous peoples in the Arctic and the importance of their participation in the work of the Arctic Council.[285]

In every ministerial declaration since 1998, the Arctic Council has reiterated how important it is to protect the interests of indigenous peoples, and the importance of their participation in the work of the Arctic Council. Six indigenous peoples' organisations are Permanent Participants of the Arctic Council. In addition, the Sami Parliament President participates in the Norwegian delegation at Arctic Council Ministerial Meetings, here from Kiruna in 2013. Photo: Jonas Karlsbakk/BarentsObserver

Through their six special interest groups, Arctic indigenous peoples are also the only parties beyond the eight member states with the status of Permanent Participants in the Arctic Council. In Norway's case, the Saami Council, and not the Sami Parliament, represents the Norwegian Sami people in the Arctic Council. The Saami Council is a non-governmental organisation (NGO) representing Norwegian, Swedish, Finnish and Russian Sami organisations. The Saami Council notes that the Arctic Council is unique internationally as there is no other international body where

285) See various statements reserved for the indigenous groups in the Arctic ministerial declarations in the period 1998–2013.

indigenous peoples have a guaranteed place in the Council's highest assembly – the Ministerial Meetings.[286]

Fact box 10 The Saami Council

The Saami Council is a cultural policy and political organisation representing the Sami organisations in Finland, Norway, Sweden and Russia. The Council's objective is to protect the interests of the Sami as a people, strengthen Sami solidarity across borders and work for the continued recognition of the Sami as a people.

The Sami people's cultural, political, economic and social rights should be protected in part by each country's laws and partly in the agreements between the states concerned and Sami representative bodies.

The Saami Council was previously referred to as the Nordic Saami Council. The Nordic Saami Council was founded in 1956, but the first international Sami conference was held in 1953 in Jokkmokk, Sweden. A committee to establish a common Saami Council was appointed at this conference.

Source: UN report from the Special Rapporteur on the rights of indigenous peoples, 2011

It is also a political desire to involve the Sami Parliament as much as possible in the Arctic Council, and according to the Ministry of Foreign Affairs, this is one of the reasons why the Norwegian Sami Parliament President attends the Norwegian delegation to the Arctic Council's Ministerial Meetings. In addition, the Minister of Foreign Affairs allots part of his assigned speaking time at the Ministerial Meeting to the Sami Parliament President.[287]

Representatives from the Sami Parliament attend official meetings (SAO meetings) as part of the Norwegian delegation, but do not directly participate in the Arctic Council's working groups. In interviews, representatives of the Sami Parliament state that the Sami Parliament wants to be better integrated in the Arctic Council's work.[288]

Fact box 11 The Sami Parliament (Sámediggi)

The Sami Parliament was established on the basis of the Act concerning the Sami Parliament and other Sami legal matters (Sami Act). The Sami Parliament is a politically elected body representing the Sami, which performs administrative tasks delegated by law or by agreements with Norwegian authorities.

The purpose of the body is to strengthen the Sami's political position and promote Sami interests in Norway, contribute to equitable and fair treatment of the Sami people and work to safeguard and develop their language, culture and community.

The Sami Parliament has decision-making authority in matters where the central government has transferred such authority, such as Sami cultural heritage, education, language, industry and culture.

Source: www.sametinget.no

The Ministry of Government Administration, Reform and Church Affairs is responsible for ensuring that Sami interests are included in the formulation of policy in all relevant areas, and coordinates contact with the Sami Parliament. The Ministry is also responsible for coordinating Sami issues, but the main responsibility for specific issues often lies with the respective specialist ministries.

286) E-mail with attachments dated 24 June 2013 from the Saami Council.
287) Interview with the Ministry of Foreign Affairs on 9 February 2012.
288) Interview with Sami Parliament representatives on 31 May 2012.

The Ministry of Foreign Affairs is responsible for administering indigenous peoples' issues outside Norway or between states. The Ministry of Government Administration, Reform and Church Affairs stated that the Ministry has not played any key role in the Arctic Council, rather that it had a non-prominent role and was not involved. The Ministry of Government Administration, Reform and Church Affairs pointed out, however, that the Ministry had become more involved in 2013 in the administration's work on the Arctic Council.[289]

Fact box 12 Sami in Norway

The Sami in Norway are spread throughout the country. The most concentrated population areas, where the Sami are partly in the majority, are located in rural areas north of Saltfjellet. The Sami have traditionally been divided into four main groups based on lifestyle and settlements: coastal Saami, river and lake Sami, forest Sami and mountain Sami.

The traditional settlement areas of the Sami in Norway are in the three northernmost counties as well as North and South Trøndelag and Hedmark counties. There has been considerable migration since the 1970s from traditional Sami municipalities to more central regions and cities in Norway. There is consequently a significant Sami population living in Norwegian cities, but it is impossible to quantify the number of Sami who reside in these cities.

It is estimated that between 70,000 and 100,000 Sami live in Norway, but there are no records that can provide an exact figure of the Sami population.

Sources: http://snl.no/samer (3 April 2013) and Sørlie and Broderstas 2011, p. 13

7.1 The Arctic Council's work on issues that concern indigenous peoples

In the Arctic Council, it is particularly the Sustainable Development Working Group (SDWG) that works on issues pertaining to the indigenous peoples in the Arctic. One of the main goals of this working group is to contribute to efforts to protect and enhance the environment and the economies, culture and health of indigenous peoples and Arctic communities. The working group reported that more work is taking place across working groups, and that SDWG contributes to many of the other working groups.[290] The other working groups can also raise issues directly related to indigenous peoples. In particular, AMAP, which has a mandate to monitor and assess pollution and climate change, raises issues affecting indigenous peoples.[291] The other working groups' projects will also work on matters that directly or indirectly relate to indigenous peoples.

There is no complete list – in the form of records – of the number of projects that SDWG has conducted since the working group was established in 1998. According to SDWG, the working group's website provides the best overview, including of the largest projects implemented since 1998. However, post-filing work is being carried out under the auspices of the permanent secretariat in Tromsø.[292]

289) E-mail dated 27 September 2013 from the Ministry of Government Administration, Reform and Church Affairs.
290) Original text: "to protect and enhance the environment and the economies, culture and health of Indigenous Peoples and Arctic communities …". Arctic Council on SDWG.
291) AMAP has, for example, studied the correlation between diet and environmental toxins, cf. *Persistent Toxic Substances, Food Security and Indigenous Peoples of the Russian North*. Final Report. AMAP, Oslo, 2004. 192 p. AMAP Report 2004:2. Interview with the Ministry of the Environment on 26 August 2013.
292) Interview with SDWG Chair during Sweden's Chairmanship period.

According to SDWG's website, over 30 reports of varying scope[293] dealing with many disciplines and areas under SDWG's mandate, such as health, gender equality, general living conditions, language, economic aspects in the Arctic, climate change and resource management (fisheries, reindeer herding and mining) have been prepared. The reports also contain recommendations to member states on measures to strengthen efforts for indigenous peoples.

According to the former head of SDWG (2011–2013), the span of their projects is too wide. Reference was also made in this context to the difficulty of seeing a clear connection between SDWG's own projects, also limited to those currently under way. All the projects, however, raise issues relating to human conditions, which is in line with its intention. The fact that SDWG's projects are now too broad, is also confirmed by Kankaanpää's and Young's study. It shows that respondents believe that SDWG generally has little significance, and that the number of small and little-related projects must be reduced. The review of the ministerial declarations from the period 1998–2013 shows that very few of the reports and associated recommendations regarding indigenous peoples are addressed at ministerial meetings (for details, see Annex 8).

In interviews, the Ministry of Foreign Affairs related[294] that SDWG is the working group that faces the biggest challenges. This working group has a broad mandate, since it deals with social science issues that can be difficult to define. The Ministry of the Environment and the Arctic Council Secretariat also pointed out that the Arctic Council has carried out little specific study of indigenous peoples.[295]

The Ministry of Foreign Affairs and the Secretariat nevertheless emphasise that through SDWG the Arctic Council has initiated a major project, EALÁT, which addresses the challenges of reindeer husbandry in the Arctic (for review, see Annex 8). The Ministry of Foreign Affairs also pointed out that SDWG is doing important work on, for example, compiling comparable statistics for the entire Arctic region, including a number of health indicators.

In an interview, the Sami Parliament stated that, in their opinion, SDWG is functioning well, but they stress that it is important to strengthen the status of this working group. The Sami Parliament feels that SDWG does not have the same status in the Arctic Council as the other working groups.

7.2 General information on indigenous participation in Arctic Council projects

All of the Arctic Council's working groups state that indigenous organisations are always welcome to attend working group meetings, projects and other activities. The Saami Council states that it is well included in both the Arctic Council in general and in the working groups.[296] The Ministry of Foreign Affairs stated in an interview that it experiences cooperation between member states and indigenous organisations in the Arctic Council as very constructive.[297]

The Sami Parliament, however, noted that the actual participation of the six indigenous organisations is too weak. The Ministry of Foreign Affairs, Saami Council, Sami Parliament and several others pointed out that there are not sufficient funds to

293) The size and scope of the reports vary – some are summaries from professional symposia, while others are major studies of several hundred pages.
294) Interview with the Ministry of Foreign Affairs on 13 September 2012.
295) Interview with the Ministry of the Environment on 26 August 2013.
296) E-mail with attachments dated 24 June 2013 from the Saami Council.
297) Interview with the Ministry of Foreign Affairs on 9 February 2012.

ensure the participation of indigenous organisations in all activities of the working groups. Both the Ministry of Foreign Affairs and the Saami Council pointed out that the participation of indigenous peoples should have been included as part of the funding for each project.[298] The Ministry of Foreign Affairs also noted that each state should be responsible for the basic funding of their own indigenous peoples.

Several parties point out that participation in the working groups is also a matter of having sufficient knowledge. The Arctic Council's working groups are involved in a number of technical areas requiring special knowledge, and indigenous organisations may not have sufficient funds to recruit technical expertise that can contribute to the work of the various working groups.[299] It can also be a matter of priority between the Arctic Council's responsibilities and their own commercial interests.[300]

When the Arctic Council was established, the Ottawa Declaration referred to the importance of traditional knowledge possessed by indigenous peoples. The Saami Council and the Sami Parliament believe that the Arctic Council has not followed this up well enough. The Ministry of the Environment also noted that the integration of traditional knowledge can be demanding.

Annex 8 provides a description of what the Arctic Council has worked on in the indigenous peoples' area. In the description, the emphasis is on what is highlighted in the ministerial declarations, and the status of the Norwegian Sami within the different areas.

298) Interview with the Ministry of Foreign Affairs on 9 February 2012.
299) Saami Council, Sami Parliament, AMAP and SDWG.
300) Interview with SDWG on 10 June 2013.

8 Assessments

The High North is Norway's most important strategic priority area, and the Arctic represents a significant part of the overall High North policy. While ensuring sustainable development in the Arctic is primarily a national responsibility, several of the challenges require common solutions across the Arctic states. Nationally, there is broad consensus that Arctic issues that require international solutions should preferably be resolved through the Arctic Council, cf. Recommendation 236 S (2012–2013).

According to the Ottawa Declaration, the Arctic Council provides a means for promoting cooperation, coordination and interaction among the Arctic states in areas where they have common interests. This is particularly true of sustainable development and environmental protection.

A large number of recommendations, including from the member states, are discussed through the Arctic Council. These recommendations are not binding under international law. Norway's work on issues related to the Arctic is governed by international law obligations and national targets independent of the Arctic Council. However, at a political level, Norway undertakes to follow up recommendations raised in the Arctic Council's ministerial declarations.

8.1 The Arctic Council has provided knowledge about the environment in the Arctic

The audit shows that the Arctic Council has succeeded in many areas. Since it was established in 1996, the Arctic Council has evolved to become an important body for the accumulation of knowledge about the Arctic in ever more areas. The Arctic Council helps to align and strengthen the knowledge base in the Arctic by documenting the state of the environment, comparing data and establishing a common understanding of the environmental challenges and actions that must be taken. This is important in efforts to ensure sustainable development of the Arctic. The Arctic Council has also been important in advancing knowledge about the health of indigenous peoples in the Arctic.

The knowledge obtained through the Arctic Council has been used in the development of international conventions. Through documentation of the effects of long-range pollution in the Arctic, the Arctic Council has played an integral role in the development of global and regional mechanisms for limiting emissions of pollutants and heavy metals. Knowledge about climate change and biodiversity in the Arctic has also been an important contribution to the work on the relevant international agreements, although it cannot be said that the Arctic Council has been instrumental in their development.

8.2 The Arctic Council has helped to strengthen cooperation in the Arctic

Through its position as the only body that unites all the Arctic states, the Arctic indigenous groups and a large number of observers, including several key states, the Arctic Council can play a significant role in shaping the development of management solutions in the Arctic areas. Through the Arctic Council, the Arctic states have presented recommendations on how the Arctic should be managed. Particularly important is the recognition among Arctic Council members and observers that the

Law of the Sea shall be applied in the management of the Arctic coastal and marine areas.

Through its unique position, the Arctic Council can also be an important contribution in terms of security policy and in efforts to ensure stability.

It is also positive that through the Arctic Council the Arctic states have developed two legally binding agreements, one for search and rescue and one for oil spill response. There are already a lot of international regulations in these areas. However, the two agreements help to clarify the responsibilities and conduction of joint exercises. Development of this type of regional agreements may be important for strengthening the management regime in the Arctic even more. It appears that the Arctic Council can strengthen its role and importance, especially if the agreements negotiated by the Council are more conducive to strengthening existing international agreements in the affected areas.

8.3 More adapted organisation and predictable funding can strengthen the effectiveness of the Arctic Council

The organisation of the Arctic Council is largely based on the earlier environmental cooperation in AEPS (Arctic Environmental Protection Strategy). The Arctic Council has undergone extensive development since it was established in 1996. From placing the most emphasis on pollution, the Arctic Council gradually expanded its work to include far more issues. Nevertheless, the Arctic Council has largely retained its original organisational structure. The main changes that have been made are that a permanent secretariat has been established, and that task forces are increasingly being used to perform specific tasks.

There are still five working groups dealing with environmental issues, while one working group has sustainable development as its area of responsibility. The working groups work very differently – some have large technical production of importance for the measures in the Arctic, while others function less satisfactorily. The audit shows that the Sustainable Development Working Group (SDWG) has an unclear mandate, and that the working groups have partially overlapping mandates. The Arctic Contaminants Action Program Working Group (ACAP) has not been very active and has not adequately achieved its goals. Within the existing structure, changes have been made to improve coordination between working groups, but these measures are time-consuming and lead to more meetings and travel. It is in this context positive that the Arctic Council has established a permanent secretariat and it is expected that the Ministry of Foreign Affairs will continue to help ensure that the permanent secretariat will be central to efforts to strengthen and streamline the work of the Arctic Council.

The members of the Arctic Council have agreed since its creation to strengthen the financial mechanisms of the Council. The funding of working group secretariats, projects and participation of indigenous organisations is characterised by unpredictability. Since 2003, there have been efforts to establish a funding mechanism – Project Support Instrument – to ensure funding for the highest priority projects in the Arctic Council. The funding mechanism did not become operative until the autumn of 2014 after the Russian authorities disbursed funds at that time to the scheme as planned.

Both the Finnish and Norwegian Chairmanships wanted to make major changes in the Arctic Council's organisation, but no consensus was reached on this. Subsequently,

the Norwegian authorities have proposed specific measures on several occasions for streamlining the organisation and work processes.

It may appear that the Arctic Council's organisation is not practical considering its current tasks, which can result in reduced efficiency and goal achievement.

8.4 The Arctic Council needs more control through long-term planning and reporting

According to the Ottawa Declaration on the establishment of the Arctic Council, the Council shall work on sustainable development in the Arctic on a broad basis, so that environmental, social and economic development are seen in context. It is considered important that the Arctic Council undertakes its intended role as a key forum for promoting broad-range sustainable development of the Arctic region.

The audit shows that the Arctic Council does not have a strategy for steering the technical and financial resources towards long-term goals. The government officials who make up the group of Senior Arctic Officials (SAO) play, however, a key role in coordinating and streamlining the overall efforts of the working groups. Under the auspices of the working groups, a large number of projects (80 at May 2014) are being carried out at any given time and the Arctic Council's portfolio has increased as a result of the Council becoming involved in more disciplines. Some of the large, comprehensive Arctic Council reports have formed the basis for recommendations in the ministerial declarations, but otherwise, few of the large number of projects lead to reports that are central to the formulation of common issues for the management of the Arctic. Most projects deal with mapping environmental challenges, environmental protection and work on emergency and safety challenges associated with the development of economic activity in the Arctic areas.

In light of the high number of projects it may be appropriate to consider whether the SAOs have discharged their responsibility for overall management of the working groups well enough, also as regards prioritising projects and ensuring that the projects broadly cover High North issues.

8.4.1 There are no reports of member states' implementation of the Arctic Council recommendations

Over the years the Arctic Council has presented a large number of recommendations to member states. According to the Ottawa Declaration and the Arctic Council's rules of procedure, there is no expectation that member countries must document the extent to which the recommendations are followed up. Although the work of the Arctic Council is primarily based on dialogue, cooperation and volunteerism, it must be expected that with the considerable work underlying recommendations to member states, it should be known how the member states continue to work on these recommendations, and whether the work has any effect. Reference is also made here to the Arctic Council's own initiative to follow up the recommendations issued to both working groups and member states and particularly through the evaluation of Arctic shipping (cf. AMSA, 2009) and biodiversity in the Arctic (cf. ABA, 2013). Without some form of follow-up of the work it will be difficult for the Arctic Council to evolve into an effective political and project-related body, cf. Report No. 30 (2004–2005) to the Storting *Opportunities and Challenges in the North* and Recommendation 236 S (2011–2012) about the need to clarify relevant issues in the Arctic Council.

8.5 National work on the Arctic Council: inadequate coordination and follow-up

The Arctic Council is an important body in Norway's work on High North policy, and there is broad consensus that the Arctic Council should be the leading political body for Arctic issues. Norway contributes significant financial and professional resources to the work of the Arctic Council. In particular, the environmental authorities have a strong commitment through active participation in several working groups and in a large number of projects.

The Ministry of Foreign Affairs is responsible for following up and coordinating Norway's work on the Arctic Council. The Ministry of Foreign Affairs emphasised that they want to involve all the relevant ministries and subordinate agencies in the process of preparing key documents in the Arctic Council to coordinate Norway's positions ahead of key meetings of the Council. Apart from the Ministry of the Environment, the audit shows that all the relevant ministries have little involvement with the work of the Arctic Council. The function and role of the Arctic Council in the work of various Norwegian authorities appears to be somewhat unclear – especially in light of the Arctic Council's steadily broader technical scope.

The Arctic Council provides many recommendations and many are directed towards the member states. The recommendations may vary in both clarity and strength. The Ministry of Foreign Affairs has no established practice to keep track of the extent to which the responsible sector ministries follow up the relevant recommendations of the Arctic Council and whether relevant recommendations are already part of Norwegian practice. There may be reason to consider the purpose of presenting a large number of recommendations if it does not lead to better follow-up or documentation of Norwegian public administration compliance with these recommendations. Additionally, there is little that can document that Norway's significant technical efforts have any other positive effects on Arctic cooperation.

The audit shows that Norwegian authorities make great efforts to meet their international obligations and national goals in areas the Arctic Council has emphasised as key. Although the knowledge the Arctic Council generates can be important in many contexts, there is no direct link with international obligations and national targets. Except for the Ministry of Climate and Environment, the rest of the government with responsibility for sectors related to the Arctic Council have, to date, also placed little emphasis on the technical work of the Arctic Council. That cannot be consistent with the goal that the Arctic Council should be an important agenda setter for national action, cf. Report No. 30 (2004–2005) to the Storting.

8.5.1 Climate and environment

For years, the Arctic Council has documented the negative effects of pollution on the environment and people in the Arctic and causes and consequences of climate change. This work has helped to increase public understanding of the challenges facing the Arctic, and agreement on necessary measures. On this basis, the Arctic Council's member states have put forward several recommendations on measures to mitigate climate change and reduce emissions of pollutants.

The work on short-lived greenhouse gases is a relatively new field in the Arctic Council. Soot is emphasised as the main forcer in this context. The audit shows that the total emissions of soot in Norway have remained unchanged since 1990. In December 2013, the Norwegian Environment Agency presented a proposal for an action plan to reduce national emissions of soot. In line with the white paper *The High North – Visions and strategies* (Meld. St. 7 (2011–2012)) it is expected that

the work will culminate in emission reductions of short-lived climate forcers such as soot, and that Norway can utilise the knowledge of short-lived greenhouse gases in its work in the Arctic Council.

More worrying is that ever new types of pollutants, such as brominated and fluorinated compounds, which are not regulated by any international agreements, are being recorded in the Arctic. It should be possible for the Arctic Council to play an important role in the further development of international environmental agreements by addressing the consequences of this type of pollution, or other means that the Arctic states deem appropriate. It is believed that Norwegian environmental authorities will continue to work to develop international and regional agreements in this area, also as a common concern for the Arctic Council.

8.5.2 Economic activity: shipping and petroleum industry

According to the white paper Meld. St. 7 (2011–2012), issues related to new economic activities such as shipping and oil and gas production have high priority in the Arctic Council. The Arctic Council has given priority to maritime safety in Arctic waters. For example, the Council has prepared several reports on petroleum activity and one larger study on shipping. Interest in economic development in these sectors is great.

Shipping is highlighted as a possible major industry in the Arctic with the use of a shorter shipping route between Europe and Asia. Currently, such trans-Arctic traffic has been limited and the heavy ship traffic in the Arctic is mostly destination traffic within the Arctic areas. Norway's share of this traffic is significant. The Arctic Council has presented a lot of knowledge about Arctic shipping and through the Council member states have agreed on a number of recommendations on ship safety and security and coastal infrastructure.

Norwegian public administration stated that it largely works on ship safety and security and coastal infrastructure independently of the Arctic Council. The most important work aimed at establishing common international rules for shipping in Arctic waters occurs through the International Maritime Organization (IMO) and the development of the Polar Code. The Arctic states are working on common positions in the development of the Polar Code, but it is taking place largely independent of the Arctic Council.

Efforts to ensure effective coastal infrastructure and maritime services in the northern waters have also been further developed, including through shipping route systems, messaging systems with the Russian authorities and the general monitoring of and messaging service for ship traffic. The audit nevertheless shows that coastal infrastructure is not fully developed around Svalbard, that maps are inadequate, and that accidents have occurred in the area.

Petroleum activity in the Barents Sea is relatively small in a Norwegian context, but activity is increasing. There have not been any accidents leading to greater emissions in the area, nor has any negative impact on the marine environment been demonstrated as a result of petroleum activities. If an accident were to occur, the negative impact would be comprehensive. Great emphasis has been placed on ecosystem-based management of the Barents Sea – a holistic approach to environmental adaptation and utilisation of resources. It is positive that Norwegian public administration has been a driving force in bringing this subject up in the Arctic Council. Norway should also increasingly use its experience from the petroleum sector in the Arctic Council's work in this area.

8.6 Indigenous peoples can be better represented in the Arctic Council

The Arctic Council is the only forum that brings together all the indigenous peoples of the Arctic, who are Permanent Participants at all Ministerial Meetings and can participate in the work of the working groups. However, participation in the projects varies, partly due to lack of resources. The Arctic Council has not established a funding scheme that can ensure better participation of indigenous peoples in the work. It is noted that each country is responsible for funding the participation of its indigenous peoples and that one way of improving participation is to add requirements to each project to include funding for indigenous participation before the project starts. The participation of indigenous peoples is important because both the changes and initiatives in the Arctic can greatly affect how these population groups live.

The audit shows that the Arctic Council has produced few projects of significance to indigenous peoples, and that the working group primarily responsible for promoting the interests of indigenous peoples, has not functioned as intended. It is also noted that to date the Ministry of Government Administration and Reform has had little involvement in Norway's work with indigenous peoples in the Arctic Council.

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Annexes

Annex 1 Strategic Plan

Annex 1 Strategic Plan for a Multilateral Audit by the Supreme Audit Institutions of Denmark, Norway, the Russian Federation, Sweden and the United States of America

In coherence with the findings of the Joint Protocol for the Preliminary Analysis of the Norwegian and Russian Authorities' work related to the Arctic Council, carried out by the Office of the Auditor General of Norway and the Accounts Chamber of the Russian Federation and signed September 17th 2012 (Appendix no. 1), the Supreme Audit Institutions of Denmark, Norway, Russia, Sweden and the United States of America (the Parties) have decided to conduct a multilateral performance audit of the Arctic Council's Member States respective national authorities' work related to ensuring environmental protection and sustainable development in the Arctic and implementation of Arctic Council recommendations.

The Parties will follow relevant national or international auditing standards e.g. the external government auditing of the International Organization of Supreme Audit Institutions (INTOSAI). The European Parties will also follow the principles and standards defined by the European Organization of Supreme Audit Institutions (EUROSAI).

1. Outcome Objective for the Audit

The Parties consider, as a premise for the multilateral audit, that the audit will generate a positive effect on their respective authority's participation in the Arctic Council, and that the sum effect for the Arctic Council as an organization, will be equally positive.

The Parties agree that the outcome objective is also to ensure that national and international cooperation in the Arctic address the environmental challenges and economic opportunities in the region in a proper manner. The Parties consider this multilateral audit to be in a positive conjunction with the Arctic states' cooperative approach to the challenges and opportunities in the Arctic region.

2. General Framework for the Audit

The multilateral audit will be performed and reported within the legal framework of each participating Supreme Audit Institution (SAI).

The Parties will, separately and independently, within the general scope of the multilateral audit, conduct national audits of the effectiveness of their respective national authority's work related to the Arctic Council. Each SAI can however on its own discretion determine the scope of its participation. Audit questions that are not relevant for a SAI may be omitted in the national audit. Each Party may also include additional audit questions in their national audits. The Parties do however agree that all the main audit topics should be covered in the Joint Memorandum, c.f. Article 12 and that audit question 3 (cf. Article 6.3) should be included in all the national audits. The results of national audits are to be reflected in the Joint Memorandum. In the international multilateral audit some of the SAIs will conduct audit activities and prepare factual descriptions on behalf of all the Parties, as prescribed in Article 6.

The exchange of information is done by e-mail or other appropriate communicative means. The Parties may also arrange meetings if deemed necessary for instance in connection with the planning of particular audit activities, presentations of national audit findings, structuring of the Joint Memorandum and the signing of the Joint Memorandum.

3. Audit Objective

The main objective of the multilateral audit is to describe the environmental challenges and economic opportunities in the Arctic and to evaluate the efficiency of the Arctic Council Member States within the Council in their respective response to the challenges and opportunities in the Arctic including the implementation of Arctic Council recommendations regarding environmental protection and sustainable development in the Arctic and the possibility of improving the interaction of Arctic States in this field.

4. Audit Subject Matters

The following will be included within the multilateral audit:

- Descriptions of the development and status of the Arctic region (Arctic as defined by the Arctic Council, AMAP, cf. Appendix 3), in terms of the environment and economic activities and opportunities;
- analyses of environmental and biodiversity monitoring performance in the Arctic;
- determination and analyses of the activity of the Arctic Council;
- evaluation of the efficiency of the activity of the Arctic Council in order to respond to the environmental challenges and economic opportunities of the Arctic;
- performance evaluation of the organization of the Arctic Council;
- evaluation of the implementation of the Arctic Council's recommendations.

The last point includes the following goals:

- to determine the efficiency of the measures, including financial ones, regarding environmental protection and sustainable development in the Arctic
- to determine the sufficiency of the national regulatory framework regarding environmental protection in the Arctic and its correspondence to the Arctic Council's recommendations
- to analyze existing national programs and activities regarding environmental protection, development of maritime infrastructure and services, as well as support of the indigenous peoples, and to determine their performance and the sufficiency of funding
- to identify opportunities in improving the cooperation between Arctic states in the field of Arctic issues.

5. Audit Time Frame

The Audit time frame will vary according to the audit topics, c.f. article 6.

6. Audit Topics

The Parties have decided to consider the following audit topics:

6.1. What is the development and status in the Arctic concerning the environment and economic development and also for the indigenous peoples?

The Parties agree to include in the audit a short general description of the current environmental situation in the Arctic, as well as a description of the ensuing challenges and opportunities facing the region. The Parties agree that this background information is decisive in order to assess the Arctic Council and the measures taken by the Parties' national authorities and the organization itself in order to meet the challenges and opportunities of the Arctic. The descriptions may cover several years.

The Office of the Auditor General of Norway and the Accounts Chamber of the Russian Federation will be responsible for answering audit question no. 1 concerning the international parts of the Arctic on behalf of all the participating SAIs. Drafts will be prepared and shared with the other Parties in due course and will finally be reported in the Joint Memorandum, c.f. Article 12.

Each participating SAI may, if relevant, answer these audit questions in their national reports to cover national areas of the Arctic. National factual descriptions and analysis may also be used as part of the Joint Memorandum, c.f. Article 12.

Audit questions:

6.1.1. What is the development and status of climate change in national and international parts of the Arctic?
6.1.2. What is the development and status of pollutants in domestic and international parts of the Arctic?
6.1.3. What is the development and status of biodiversity in national and international parts of the Arctic?
6.1.4. What is the development and status of ship traffic, coastal infrastructure and emergency preparedness in national and international parts of the Arctic?
6.1.5. What is the development and status for other economic activity such as oil, gas, mining and fishing in national and international parts of the Arctic?
6.1.6. What is the development and status of the living conditions of indigenous groups in the national parts of the Arctic?
6.1.7. Are the environmental monitoring and biodiversity monitoring sufficient?

Methodology:
Each participating SAI will answer the audit questions on the basis of data made available through their independent national audits. When answering the audit questions concerning the international parts of the Arctic, the Office of the Auditor General of Norway and the Accounts Chamber of the Russian Federation will, on the basis of the results presented in the Joint Protocol for the Preliminary Analysis of the Norwegian and Russian Authorities' work related to the Arctic Council (Appendix 1) conduct a review of current, acknowledged scientific data from the Arctic Council's own assessments and other highly recognized reports and assessments.

6.2. To what degree does the Arctic Council efficiently address environmental challenges, economic opportunities and sustainability in the Arctic region?
The Parties agree that the Arctic Council is the only high-level intergovernmental circumpolar organization, and that this position gives the Arctic Council's member states a unique potential for influencing the future of the Arctic region. The Arctic Council's Ministerial Declarations, although non-binding, are considered by the Parties to be important, consensus based policy documents. This audit topic investigates the extent to which the policy statements of the Arctic Council are influential not only towards the Arctic states themselves, but also towards other international organizations and policy instruments. The audit will cover the years from the time the Arctic Council was formed till present, with emphasis on recent years.

Each participating SAI may answer some or all of these audit questions in their national reports. National factual descriptions and analysis may be used as part of the Joint Memorandum, c.f. point 12. The Office of the Auditor General of Norway and the Accounts Chamber of the Russian Federation will however be responsible for answering audit question no. 2 on behalf of all the participating SAIs. Drafts will be provided in due course and the other participating SAIs will at a later stage be asked

to provide specific information relevant for the factual analysis of this audit question. To be reported in the Joint Memorandum, c.f. point 12.

Audit questions:

6.2.1. To what extent does the Arctic Council acquire knowledge about environmental challenges, economic opportunities and sustainability in the Arctic region through studies and research?

6.2.2. Does the Arctic Council use its acquired knowledge to influence other international processes, agreements and conventions?

6.2.3. To what extent does the Artic Council present advice and recommendations on environmental challenges, economic opportunities and sustainability to Member States?

6.2.4. Does the Arctic Council develop binding agreements between the Member States of the Council?

6.2.5. To what extent does the Artic Council involve the indigenous peoples of the Arctic in these processes?

Criteria:

- The Arctic Council's Declarations
  - The 1998 Iqaluit Declaration, article 18, 30
  - The 2000 Barrow Declaration, article 4, 16 and 17
  - The 2002 Inari Declaration, article 9
  - The 2004 Reykjavik Declaration, pp. 1–2
  - The 2009 Tromsø Declaration, p. 7
  - The 2011 Nuuk Declaration, pp. 3–4
- Working, task and expert groups' reports
- Agreements between the Member States on ensuring environmental protection and sustainable development in the Arctic

Methodology:

The audit questions will be answered through document analysis of the Arctic Council's assessments, reports by Senior Arctic Officials (SAOs) and Ministerial Declarations and other documents deemed relevant. The audit questions will furthermore be answered through interviews with key informants.

6.3. To what degree do the Member States implement the Arctic Council's key recommendations and national goals and strategies relating to the environmental challenges and economic opportunities in the Arctic, and to what degree do the Member States ratify and/or comply with key international conventions?

In addressing this issue, the audit will render an opportunity to describe the various measures taken by the Arctic Council Member States, both nationally and internationally, in order to face the environmental challenges and the economic opportunities in the Arctic region. The audit may have to cover the years from when the Arctic Council was formed.

Audit question 6.3 is to be answered by each participating SAI. National factual descriptions and analysis will be used as part of the Joint Memorandum, c.f. point 12.

Audit questions:

6.3.1. Have the Member States ratified and/or do they comply with key international conventions and obligations according to the Arctic Council's recommendations?

6.3.2. Have the Member States established national goals and strategies for the various areas of challenges facing the Arctic? Including on recommendation by the Arctic Council?

6.3.3. Do the Member States initiate and implement national specific measures, such as national laws and financial resources, concerning the various areas of challenges facing the Arctic? Including recommendation by the Arctic Council?

6.3.4. What is the development and achievement of goals for the work on the various areas of challenges facing the Arctic?

6.3.5. To what extent are the interests of the indigenous peoples of the Arctic ensured in these national processes?

6.3.6. To what extent do the national authorities follow up the national goals and measures?

Criteria:

- Key international conventions and obligations in concurrence with the Arctic Council's recommendations:
  - United Nations Convention on the Law of the Sea (1982)
  - Intergovernmental Panel on Climate Change (IPCC, 1988)
  - United Nations Framework Convention on Climate Change (UNFCCC, 1992)
  - Kyoto Protocol to the United Nations Framework Convention on Climate Change (1997)
  - Copenhagen Summit (United Nations Climate Change Conference COP15, 2009)
  - Gothenburg Protocol (the 1999 Multi-effect Protocol, rev. 2012), a protocol to the Convention on Long-Range Transboundary Air Pollution
  - Vienna Convention for the Protection of the Ozone Layer (1985)
  - Montreal Protocol on Substances that Deplete the Ozone Layer (1987), a protocol to the Vienna Convention
  - Stockholm Convention on Persistent Organic Pollutants (2001)
  - Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (1989)
  - London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (1972)
  - Convention on Long-Range Transboundary Air Pollution (CLRTAP, 1979)
  - Convention on Biological Diversity (CBD, 1992)
  - Convention on Wetlands of International Importance, especially as Waterfowl Habitat (Ramsar Convention, 1971)
  - Convention concerning the Protection of the World Cultural and Natural Heritage (1972)
  - Legally binding treaties/instruments prepared by the International Maritime Organization (IMO), especially the International Convention for the Prevention of Pollution from Ships (MARPOL, 1973)
  - International Regulations for Preventing Collisions at Sea (COLREGS, 1972)
  - International Convention for the Safety of Life at Sea (SOLAS, 1914/1980)
  - The Arctic Council's Agreement on Cooperation in Aeronautical and Maritime Search and Rescue in the Arctic.
  - International Convention for the Prevention of Pollution from Ships (MARPOL, 1973)
  - International Convention on Oil Pollution Preparedness, Response and Co-operation (1990)
  - ILO Convention No 169, Indigenous and Tribal Peoples Convention (1989)

- Legislative and regulatory framework of the Member States in the field of environmental protection and sustainable development in the Arctic
- National strategies related to the Arctic, Government white papers and relevant national legislation.

Methodology:
These audit questions have a national focus, and will in full be analyzed by each participating SAI. The multilateral audit's coordinating SAIs, Norway and Russia, will be in charge of preparing a summary of the Parties' individual findings which will be included in the Joint Memorandum c.f. Article 12.

6.4. Does the Arctic Council fulfill its mission through an expedient and effective organization, structure and work processes?
The Arctic Council has largely had the same structure since the organisation was established in 1996. However, the basic mandate of the Council has changed somewhat over the years, which also entails that the working groups' mandate and tasks overlap to some degree. The objective of this audit topic is to evaluate the extent to which the Arctic Council's work processes and organizational structure and mandates are expedient and effective. The audit will cover recent years, for instance 2010–2012.

The Office of the Auditor General of Norway and the Accounts Chamber of the Russian Federation will together with at least one of the other SAIs answer audit question no. 4. Drafts will be provided in due course and the other participating SAIs will be asked to provide specific information for this audit question. To be reported in the Joint Memorandum, c.f. point 12.

Audit questions:
6.4.1. Does the Arctic Council follow up the extent to which Member States follow the advice, recommendations, etc. the Arctic Council has made?
6.4.2. Does the Arctic Council follow up how the Member States of the Council follow up international obligations the Council has contributed to or that the Council supports in general?
6.4.3. Does the Arctic Council follow up how the Member States comply with binding agreements negotiated by the Arctic Council?
6.4.4. To what extent does the Arctic Council have satisfactory follow-up of the work of the working groups and other groups (e.g. task force)?
6.4.5. Is the Arctic Council efficiently organized?

Criteria:
- The Arctic Council's Declarations
  – The 2000 Barrow Declaration, article 18 (on capacity building) and 19
  – The 2002 Inari Declaration, article 13 and the specified SAO-report.
  – The 2009 Tromsø Declaration, p. 8–9
  – The 2011 Nuuk Declaration, p. 2
- The Arctic Council's internal papers
- Legislative and regulatory framework of the Member States in the field of environmental protection and sustainable development in Arctic

Methodology:
The audit questions will be answered on the basis of document analysis and interviews. The document analysis will include the Arctic Council's Ministerial Declarations, SAO-reports and the Council's own internal documents and instruments concerning different follow-up strategies. Interviews will be held with key informants

among officials and administrative representatives of the Arctic Council's different bodies, as well as representatives of relevant national ministries.

7. Mandate
Each participating SAI acts within the existing authority under national laws.

8. Audit Coordinator
The Office of the Auditor General of Norway and the Accounts Chamber of the Russian Federation are the audit coordinators. The two coordinators will be responsible for the drafting of the Joint Memorandum.

9. Audit Period
3rd quarter 2012 – negotiation and signing of the Strategic Plan,
3rd quarter 2012 – 4th quarter 2013 – conducting of the national audit,
4th quarter 2013 – drafting of the Joint Memorandum,
1st quarter 2014 – signing and presentation of the Joint Memorandum.

SAIs national reports will be sent to the audit coordinators no later than December 31, 2013.

10. Meetings
10.1. Workshop (optional)
The audit coordinators (the Office of the Auditor General of Norway and the Accounts Chamber of the Russian Federation) will develop and propose a more detailed methodological framework for the audit that is to be discussed and amended at a workshop between the Parties' working groups, in order to ensure a common methodological approach to the national and international aspects of the audit questions. The workshop will be organized by the audit coordinators and will take place no later than mid-November 2012.

10.2. Presentation of the audit's preliminary findings
The audit coordinators (the Office of the Auditor General of Norway and the Accounts Chamber of the Russian Federation) will host a meeting by the end of October 2013, where the audit's preliminary findings are presented and discussed among the Parties.

11. Resources
The Parties are under obligation to ensure that sufficient budget resources are made available in order to safeguard the completion of the multilateral audit. Each participating SAI is responsible for its own expenses related to the multilateral audit.

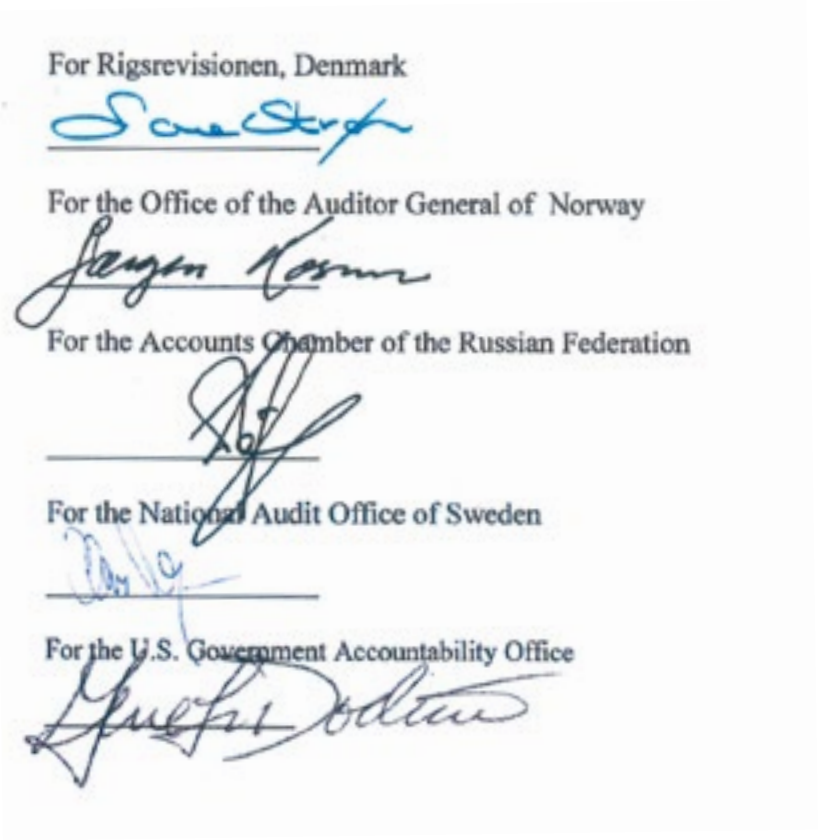
12. Reporting
The Parties agree that the multilateral audit will be reported to the SAIs' respective delegating authority through independent national audit reports and a Joint Memorandum primo 2014.

The Parties will, in compliance with this Strategic Plan and on the basis of their own independent analysis, communicate the main findings from their national audits to the SAIs in charge of drafting the Joint Memorandum – The Office of the Auditor General of Norway and the Accounts Chamber of the Russian Federation. The Memorandum, as well as the national reports, may also include data and findings from other SAIs. The Draft Joint Memorandum will then be discussed, amended and agreed upon by all Parties.

All changes of the Strategic Plan shall be done in writing in the form of an appendix to this Strategic plan and has to be signed by all the Parties before valid.

13. Language

The Parties agree that the working language shall be English, i.e., formal communication and written deliveries between the Parties shall be conducted in English.
This Strategic Plan is valid in English only.



Annex 2 Observers to the Arctic Council

Twelve non-Arctic states and the EU

1 France
2 Germany
3 The Netherlands
4 Poland
5 Spain
6 UK
7 China (2013)
8 Italy (2013)
9 Japan (2013)
10 South Korea (2013)
11 Singapore (2013)
12 India (2013)
13 EU (A decision in principle was made in 2013 that the EU is an observer to the Arctic Council. Formal clarifications remain).

Nine intergovernmental and interparliamentary organisations

1 International Federation of Red Cross & Red Crescent Societies (IFRC)
2 International Union for the Conservation of Nature (IUCN)
3 Nordic Council of Ministers (NCM)
4 Nordic Environment Finance Corporation (NEFCO)
5 North Atlantic Marine Mammal Commission (NAMMCO)
6 Standing Committee of the Parliamentarians of the Arctic Region (SCPAR)
7 United Nations Economic Commission for Europe (UN-ECE)
8 United Nations Development Program (UNDP)
9 United Nations Environment Program (UNEP)

Eleven non-governmental organisations

1 Advisory Committee on Protection of the Seas (ACOPS)
2 Arctic Circumpolar Gateway
3 Association of World Reindeer Herders (AWRH)
4 Circumpolar Conservation Union (CCU)
5 International Arctic Science Committee (IASC)
6 International Arctic Social Sciences Association (IASSA)
7 International Union for Circumpolar Health (IUCH)
8 International Work Group for Indigenous Affairs (IWGIA)
9 Northern Forum (NF)
10 University of the Arctic (UArctic)
11 World Wide Fund for Nature-Global Arctic Program (WWF)

Annex 3 Environmental authorities' participation in the Arctic Council's working groups

Table 8 Norwegian environmental authorities' participation in working groups under the Arctic Council

	Norwegian authorities represented
ACAP	Ministry of Climate and Environment (HoD), Norwegian Environment Agency
AMAP	Norwegian Environment Agency (*HoD*), Norwegian Polar Institute, Norwegian Radiation Protection Authority
PAME	Ministry of Climate and Environment (*HoD*), Ministry of Foreign Affairs, Ministry of Trade, Industry and Fisheries, Ministry of Defence, Ministry of Transport and Communications, Norwegian Environment Agency, Norwegian Polar Institute, Norwegian Maritime Directorate, Institute of Marine Research, Norwegian Coastal Administration
CAFF	Norwegian Environment Agency (*HoD*), Norwegian Polar Institute
EPPR	Norwegian Coastal Administration (HoD), Norwegian Radiation Protection Authority

Subgroup/expert group under the Arctic Council	
ACAP	
Project Steering Group on Dioxins/furans	Norwegian Environment Agency
Project Steering Group on Integrated Hazardous Waste Management Strategy	Norwegian Environment Agency
Project Steering Group on Mercury	Norwegian Environment Agency
Project Steering Group on Obsolete Pesticides	Norwegian Environment Agency
Project Steering Group on PCB	Norwegian Environment Agency
Project Steering Group on Short-Lived Climate Forcers	Norwegian Environment Agency
Indigenous Peoples Contaminants Action Program Project Steering Group	County Governor of Finnmark County
AMAP	
Expert group for POPs (persistent organic pollutants)	Norwegian Polar Institute, Institute of Marine Research, Norwegian Institute for Water Research, Norwegian Environment Agency, Norwegian Institute for Air Research
Expert group on ocean acidification	Institute of Marine Research, Norwegian Institute for Water Research
Expert group on climate	Norwegian Meteorological Institute, Norwegian Polar Institute, Norwegian Institute for Water Research, Norwegian Institute for Air Research, Institute of Marine Research, Norwegian Environment Agency
Expert group on human health	University of Tromsø, Norwegian Institute for Air Research
Expert group on short-lived climate forcers – black carbon/ozone	Norwegian Environment Agency, Norwegian Institute for Air Research
Expert group on short-lived climate forcers – methane	Norwegian Meteorological Institute
Expert group on mercury	Norwegian Institute for Air Research
Expert group on unmanned aircraft	Norwegian Institute for Air Research, Norwegian Air Traffic and Airport Management
Expert group on radioactivity	Norwegian Radiation Protection Authority, Norwegian Meteorological Institute

Subgroup/expert group under the Arctic Council	
CAFF	
CAFF: Project Steering Committee for the Circumpolar Biodiversity Monitoring Program (CBMP)	Norwegian Environment Agency, Norwegian Polar Institute
CMBP, expert group on freshwater	Norwegian Environment Agency
CMBP, terrestrial expert group	Norwegian Environment Agency
CBMP, marine expert group	Norwegian Environment Agency
CBMP, expert group on marine mammals	Norwegian Polar Institute
CBMP, expert group on sea-ice organisms	Norwegian Polar Institute
CMBP, expert group on plankton	Norwegian Polar Institute
CMBP, expert group on benthic fauna	Institute of Marine Research
Flora Expert Group	Norwegian Institute for Nature Research, Norwegian Environment Agency.
CBird (sea bird)	Norwegian Environment Agency, Norwegian Polar Institute
PAME	
Expert group on Ecosystem Approach	Norwegian Polar Institute, Institute of Marine Research
Subgroup for shipping	Ministry of Trade, Industry, and Fisheries, Norwegian Maritime Directorate
SDWG	
Project Steering Committee for Arctic Resilience Report	Norwegian Polar Institute
Task forces	
Task Force on short-lived climate forcers	Ministry of Climate and Environment, Norwegian Environment Agency
Task Force on Oil Pollution Prevention	Norwegian Environment Agency

Fact box 13 Expert groups in the Arctic Council

- Expert group on short-lived climate pollutants (methane)
- Expert group on short-lived climate pollutants (black carbon and ozone)
- Expert group on circumpolar flora
- Expert group on circumpolar seabirds
- Expert group on protected areas network
- Expert group on marine ecosystem monitoring
- Expert group on freshwater
- Expert group on terrestrial ecosystem monitoring
- Expert group on human health
- Expert group on Arctic human health
- Social, economic and cultural expert group

Annex 4 Climate

The Arctic Council's work on climate issues – working groups' work and ministers' advice and recommendations

The table provides an overview of climate reports and studies prepared by the Arctic Council. Much of this work was done by AMAP.

Table 9 The Arctic Council's technical work on climate issues in the Arctic

Ministerial declaration	Type of report and contents	Comments on the report
2004	ACIA, assessment of climate challenges in the Arctic	Numbering over a thousand pages, this study was prepared by AMAP in cooperation with IASC. Around two hundred authors were involved in the work.
2008	Sources of and possibilities for reducing emissions of short-lived climate forcers in the Arctic	This is a brief summary. AMAP's work concerned effect, sources and reduction.
2008	Impact of short-lived pollutants on the Arctic climate	This is a short summary. AMAP's work concerned effect, sources and reduction.
2009	Report on the Greenland ice and climate change (SWIPA)	This report is a subreport under AMAP's SWIPA programme. The report about the Greenland ice is approximately 100 pages long.
2009	Update on important climate issues	The report is a brief update of the main challenges. It was prepared by AMAP.
2009	Vulnerability and climate adaptation in the Arctic	This 72-page report was prepared by the Norwegian Polar Institute on behalf of the Sustainable Development Working Group (SDWG).
2011	Impact of black carbon on the Arctic climate	This report is approximately 70 pages long (AMAP Technical Report No. 4 - 2011). It consists of part of AMAP's work in connection with short-lived greenhouse gases.
2011	SWIPA	The report consists of a scientific report and is the starting point for three shorter summaries (various target groups) and videos. It updates and gathers research on climate change in the Arctic since ACIA.
2013	Acidification of Arctic ocean areas	This report consists of a longer study on acidification of the ocean and also short summary documents.

In 2004, the ministers endorsed the recommendations of the ACIA study on adapting to climate change, researching and monitoring climate change in the Arctic and engaging in information sharing and outreach, as per the recommendations in the SAOs' report to the ministers.[301] Furthermore, the ministers acknowledged the need to take the findings of the ACIA report and other relevant studies into account when the Arctic countries implement their commitments from the UN climate convention (UNFCCC) and other international agreements, including in the form of strategies to limit greenhouse gas emissions in the relevant sectors. The Ministerial Meeting urged the Arctic Council's member states to take measures to adapt to and address the environmental, economic and social impacts of climate change and ultraviolet radiation, including by improving the Arctic population's access to information, decision-makers and institutional capacity building.[302]

The ministers also urged the relevant national and international research institutions and their financial contributors to take into account the findings of the ACIA study in planning, developing and implementing the institutions' research programmes.

301) Arctic Council (2004) *Report of Senior Arctic Officials to Ministers at the Fourth Arctic Council Ministerial Meeting* (pp. 31–34).
302) Arctic Council (2004). 4th Ministerial Meeting, the Reykjavik Declaration.

The ministers agreed to promote global, national and local awareness of the ACIA study and the activities initiated in its follow-up. Moreover, they acknowledged the need to organise the work of the Arctic Council and subordinate bodies according to the findings of the ACIA report, and asked the SAOs to report on the progress of this work at the Ministerial Meeting in 2006.[303] The findings of the ACIA study formed the foundation for a series of recent studies conducted within the Arctic Council's various working groups, and the study can be said to have been crucial for the Arctic Council's work over the last ten years.

In the ministerial declaration of 2006, the ministers asked the SAOs and the Arctic Council's working groups to continue to promote, analyse and summarise Arctic climate research, including through collecting local and traditional knowledge about the effects of climate change, so that the exchange of expertise on the global level through the IPCC can better reflect the unique conditions in the Arctic, and so that global decision-making can take Arctic needs into account.[304]

At the Ministerial Meeting in 2009, a task force was established with the assignment of identifying existing and new measures to reduce emissions of short-lived climate forcers, and to recommend further steps. The task force was asked to report on its work at the Ministerial Meeting in Kiruna in 2013.

Arctic Cryosphere project: Snow, Water, Ice and Permafrost in the Arctic (SWIPA) was carried out as a follow-up of the ACIA study and reported to the Ministerial Meeting in Tromsø in 2011. The results of the SWIPA study show that the period from 2005 to 2010 was the warmest ever recorded in the Arctic. Global warming leads to higher temperatures, which cause a decrease in the spread and duration of snow cover in the Arctic. The snow is melting earlier and earlier in the spring, and since in contrast to light-reflecting ice and snow, land areas and open seas absorb heat during the summer, the early snowmelt increases the temperature of the air and sea. This in turn causes the sea ice to break up. According to the conclusions of the SWIPA report, it is anticipated that the Arctic Ocean will be more or less ice-free in summer within this century, probably within 30–40 years.[305]

The ministers noted with concern the accelerating changes in large parts of the cryosphere[306] and the far-reaching local, regional and global impacts of both the observed and the estimated changes. The ministers also underlined the need for prospective Arctic cooperation with the purpose of increasing the Arctic region's ability to adapt to change and strengthen the Arctic Council's leadership in efforts to minimise the impact of climate change on the environment and people. The ministers also asked the SAOs to assess how in its future work the Arctic Council could best follow up the recommendations in the SWIPA report.[307]

Continually greater emphasis has been placed on short-lived climate forcers in the ministerial declarations. In 2007, AMAP established an expert group to summarise the research on short-lived climate forcers. The group submitted the two first reports on Impact, Sources and Mitigation as early as 2008. In 2010, a special project steering committee was established under the ACAP Working Group to study steps for limiting emissions of short-lived climate forcers (SLCFC PSG). Many projects are under the project steering committee, including a project headed by Norway on reducing emissions of black carbon from wood burning, as well as a US-headed project on reducing

303) Arctic Council (2004). 4th Ministerial Meeting, the Reykjavik Declaration.
304) Arctic Council (2006). 5th Ministerial Meeting, Salekhard, Russia.
305) SWIPA, summary.
306) The *cryosphere* is the frozen part of the earth's surface, i.e., glaciers, snow cover, sea ice and permafrost.
307) Arctic Council (2011). 7th Ministerial Meeting, Nuuk, Greenland.

black carbon emissions from diesel vehicles.[308] AMAP's expert group on black carbon and ozone summarises new research and also assesses the effectiveness of various possible measures. In 2011 the group prepared the report *The Impact of Black Carbon on Arctic Climate.*

AMAP's expert group on black carbon and ozone together with the expert group on methane aims to examine the scientific evidence related to the short-lived climate forcers in the Arctic, as well as advise AMAP with respect to the measures that should be implemented to improve knowledge about short-lived climate forcers and how to translate this knowledge into political action. This expert group will also provide scientific advice on the fact finding work related to adaptation strategies implemented by the Arctic Council's task force on short-lived climate forcers.[309]

AMAP furthermore has an expert group focusing on acidification of the Arctic seas that submitted the *Arctic Ocean Acidification Assessment* report presented at the Ministerial Meeting in Kiruna in 2013.[310]

International climate conventions and agreements

The Kyoto Protocol from 1997 is an internationally binding international agreement under the UN climate convention. All industrialised countries – as they were defined at the time in Annex B of the Protocol – have, with the exception of the United States, a legal obligation to meet specific emission reduction targets in the first commitment period (a total of at least 5 per cent in the period 2008–2012 compared to 1990 levels). With this ceiling as a framework, each country was given a differentiated emission target for the period 2008–2012. The protocol also introduces the flexible implementation mechanisms of *international emissions trading, the Clean Development Mechanism* (CDM) and *Joint Implementation* (JI).[311]

The Kyoto Protocol also has common rules for how countries should calculate, report and record emissions, and common guidelines for how countries should record the use of the flexible implementation mechanisms. It also has a compliance regime that provides incentives for the parties to fulfil their obligations, cf. the white paper *Norwegian Climate Policy* (Meld. St. 21 (2011–2012)).

Norway has actively participated in the international climate negotiations in compliance with the UN climate convention (UNFCCC). For the period towards 2020 the international regulations will have two elements:

a) The Kyoto Protocol will be continued in a new obligation period. The EU, Switzerland, Australia, Norway and some other countries will undertake emission commitments for the period 2013–2020. Under the differentiated emission commitments, the countries will have reduced emissions by an average of about 20 per cent by 2020 compared with the 1990 level. However, the new commitment period under the Kyoto Protocol only covers just over 10 to 15 per cent of global emissions of greenhouse gases. The Storting consented to the approval of the Kyoto 2 agreement through its discussion of Prop. 173 S (2012–2013), the draft resolution on consent for approval of amendments of 8 December 2012 in the Kyoto Protocol of 11 December 1997, cf. Recommendation 60 S (2013–2014).

308) Meeting with the Norwegian Environment Agency on 13 June 2013.
309) AMAP (2011) *The Impact of Black Carbon on Arctic Climate*. Technical Report No. 4 (2011).
310) AMAP: http://www.amap.no/landingpage-photo-3 [retrieval date: 23 September 2013].
311) The flexible mechanisms contribute to a more cost-effective regime in that greenhouse gas emissions are reduced where it costs the least, while the combined total emissions under the Kyoto Protocol remain fixed, cf. the white paper Meld. St. 21 (2011–2012).

b) The countries that are not committed to the Kyoto Protocol, are subject to a political agreement that was signed in 2010, and its follow-up. The agreement is based on reported emission reduction targets until 2020 from around 90 countries. Parties to the climate convention voted to restrict global warming to under two degrees, but the ambitions of this agreement are too low to reach this goal, cf. draft resolution Prop. 1 S (2012–2013) from the Ministry of the Environment.

At the climate summit in December 2011, the parties agreed to start work on developing an agreement legally binding on all countries, cf. draft resolution Prop. 1 S (2012–2013) from the Ministry of the Environment and the white paper *Long-term Perspectives on the Norwegian Economy 2013 – a summary* (Meld. St. 12 (2012–2013)). The new agreement will apply from 2020 and the work will be completed in 2015. The parties also agreed to consider the possibility of increasing aspirations in a new agreement and to achieve higher emissions reductions even before 2020.

National goals and policy instruments

Targets

Efforts to reduce emissions of long-lived greenhouse gases – with emphasis on CO_2

In the climate change area, several national targets have been set for the reduction of emissions of greenhouse gases covered by the Kyoto Protocol. They can be divided into two groups: 1) targets until 2012 and 2) future targets.

National targets until 2012:

- limit the average greenhouse gas emissions in the period 2008–2012 to 1 per cent above the 1990 level (Norway's obligations under the Kyoto Protocol)
- exceed the commitment under the Kyoto Protocol by 10 percentage points to 9 per cent below the 1990 level

Other key climate targets after 2012 are as follows cf. Recommendation 390 S (2011–2012) and the Ministry of the Environment's draft resolution Prop. 1 S (2013–2014):

- Norway shall be carbon neutral in 2050.
- As part of an ambitious global climate agreement in which other countries also take on greater commitments, Norway shall have a binding target to achieve carbon neutrality by 2030 at the latest. This means that Norway will ensure emission reductions equivalent to Norwegian emissions in 2030.
- Norway shall achieve lower greenhouse gas emissions through reduced deforestation and forest degradation in developing countries and contribute to sustainable development and reduction of poverty.

Norway's Kyoto commitment for the period 2013–2020 entails a goal that its average annual emissions of greenhouse gases shall be limited to 84 per cent of emissions in 1990. According to the white paper on the 2013 revised national budget (Meld. St. 2 (2012–2013)), this goal is in line with the target of reducing emissions by 30 per cent by 2020. The national goal for 2012 is to limit average greenhouse gas emissions in the period 2008–2012 to 1 per cent above the level in 1990 (Norway's obligations under the Kyoto Protocol) and to exceed its emissions obligation by 10 percentage points to 9 per cent below 1990 levels.

In its discussion of the white paper Meld. St. 21 (2011–2012), cf. Recommendation 390 S (2011–2012), the Standing Committee on Energy and the Environment found

> "that the previous white paper on climate policy from 2007 proposed that a realistic goal would be to reduce emissions in Norway by 13–16 million tonnes of CO_2 equivalents relative to the reference scenario presented in the National Budget for 2007, when CO_2 uptake by forests is included. If realised, this would entail that around half to two-thirds of Norway's total emission reductions would be accomplished domestically. The Storting's consideration of the white paper on climate change entailed a further strengthening of measures through the broad political agreement. Based on a discretionary assessment, it was assumed that the new measures in this agreement would make it realistic to assume additional emission reductions in Norway, and that the interval for emission reductions could be increased to 15–17 million tonnes of CO_2 equivalents compared to the reference scenario as presented in the National Budget for 2007, when CO_2 uptake by forests is included. The majority notes that in the White Paper the Government states that slower progress than expected in the development of climate-friendly technologies, higher domestic mitigation costs, higher immigration and stronger economic growth and greater emissions from the oil sector will affect when the climate goals will be achieved, but that these factors will not alter the ambition to reduce national emissions."

National policy instruments

The Storting entered into a broad political settlement in 2008 in the Climate Compromise, cf. Recommendation No. 145 (2007–2008) to the Storting. The objectives and principles of Norwegian climate policy are rooted in this compromise, cf. the white paper Meld. St. 21 (2011–2012). The Climate Compromise included, among other things, an initiative later rooted in the fiscal budget to reduce CO_2 emissions from loss of forest and forest degradation in developing countries. The Climate Compromise contained several measures aimed at reducing Norway's greenhouse gas emissions. General economic instruments such as CO_2 taxes and the emissions trading scheme are key parts of the national climate policy, cf. draft resolution Prop. 1 S (2012–2013) from the Ministry of the Environment. The Government's view is that further regulation in areas subject to general measures is to be avoided. From 2013, about 80 per cent of all greenhouse gas emissions in Norway are subject to economic instruments, cf. the white paper *Long-term Perspectives on the Norwegian Economy 2013 – a summary* (Meld. St. 12 (2012–2013)). Other instruments used include direct regulation, standards, agreements and subsidies of mitigation measures. Investment in research and development is also important.

However, Norway is dependent on international arrangements to meet its emission commitments under the Kyoto Protocol and achieve its national targets. Such schemes go by the term *flexible mechanisms* (see Fact box 14 on the EU Emissions Trading System (EU ETS), which Norway was part of in the period 2008–2012; Norway had its own system in 2005–2007) and are key mechanisms for Norway. Under this scheme, allowance-subject enterprises can buy and sell rights to release CO_2. Norway will also be part of this system in the third trading period (2013–2020), but according to the Ministry of Climate and Environment, it is unclear how and to what extent the EU ETS will help achieve the target under the Kyoto Protocol.[312] According to the Norwegian Environment Agency, the carbon credit system covers about half of Norway's greenhouse gas emissions in this period.

312) *Norway's Sixth National Communication under the UN Framework Convention on Climate Change,* p. 139.

In the period 2008–2012 the carbon credit system covered about 115 allowance-subject enterprises that released about 40 per cent of Norway's total emissions of greenhouse gases. The OAG has assessed the implementation of the carbon credit system in Norway.[313] The main conclusion was that the Norwegian Environment Agency (formerly the Norwegian Climate and Pollution Agency) has implemented the carbon credit system in accordance with laws and EU regulations and has had sufficient control of the system. Good cooperation between the environment and tax authorities has helped to expose VAT-related fraud in emissions trading. An amendment has since reduced the risk of such fraud.

The allowance settlement for the trading period 2008–2012 was concluded on 30 April 2012.[314] Norwegian allowance-subject enterprises submitted 95.6 million credits. The companies were awarded 40 million credits free. They had to purchase the remainder. Most of the credits that are submitted are EU credits. The enterprises also have the opportunity to purchase carbon credits from UN-approved projects under the Kyoto Protocol and use these in the allowance settlement. The option of settling with project-based UN credits (JI or CDM) is limited. Nine per cent of the credits that companies submitted for these years, are UN-approved carbon credits, mainly from projects in developing countries.

Government purchase of allowances is another measure on which Norway depends to exceed its Kyoto Protocol by 10 percentage points, and to contribute to the national targets for 2020. The state has only purchased credits approved by the UN. The state has as at October 2013 entered into contracts for the delivery of about 30 million credits generated during the Kyoto period 2008–2012. NOK 360 million worth of agreements have also been signed for deliveries of credits after 2012 (based on authorisation).

Fact box 14 Flexible mechanisms

The Kyoto Protocol allows countries, as a supplement to national efforts, to meet their obligations by using three flexible mechanisms:

International emissions trading covers various forms of emissions trading. Emissions trading means that countries or companies can buy carbon credits from other countries or companies that have excess credits. They can, for example, do this through the EU emissions trading scheme.

The Clean Development Mechanism (CDM) provides carbon allowances (credits) for investment in emission reduction projects in countries without emission obligations. Such projects will help reduce greenhouse gas emissions and sustainable development in developing countries. Investors may be countries, private companies and organisations. Using carbon credits, projects that otherwise would not have been completed, will be realised.

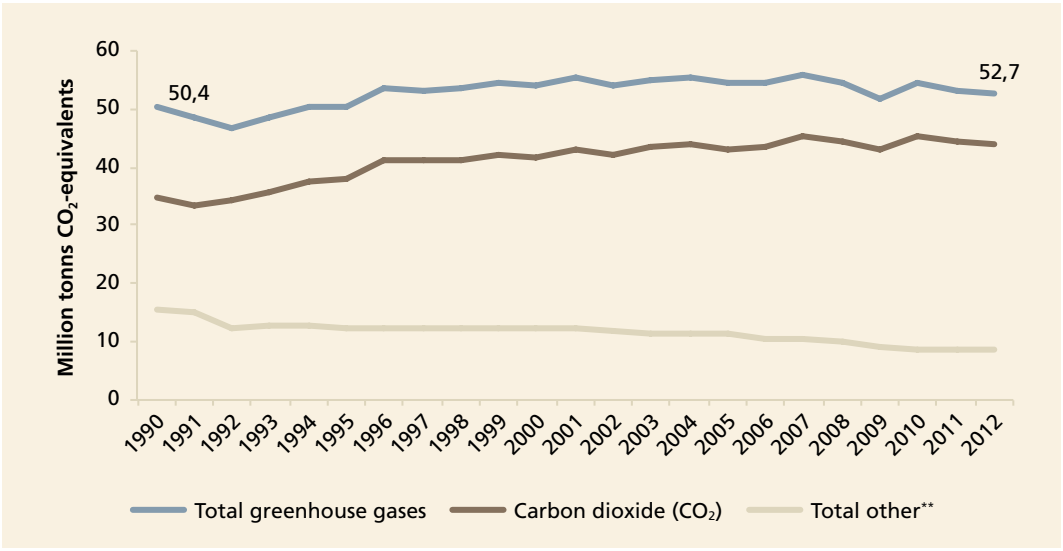
Joint Implementation (JI) provides opportunities to obtain allowances (credits) for investment in emission-reduction projects in countries with emission reduction commitments. This can be done by authorities in two or more countries cooperating on funding and supporting investment projects that can reduce total emissions in the countries. Individual companies in the countries can also cooperate and report actions and emission reductions to the authorities.

313) *The Office of the Auditor General's Investigation into the Norwegian Authorities' Control of the Norwegian Emissions Trading System*. Administrative report 1/2012.
314) Norwegian Environment Agency (2013) *Billige FN-kvoter lite brukt*. (Cheap UN credits see little use.) News. Published 16 May. 2013.

National emissions of long-lived greenhouse gases and some short-lived greenhouse gases

Figure 15 shows the emissions of long-lived greenhouse gases covered by the Kyoto Protocol in the period 1990–2012. A distinction is made between CO_2 and the other greenhouse gases (mixture of long-lived and short-lived greenhouse gases).

Figure 15 Emissions of long-lived greenhouse gases and some of the short-lived in the period 1990–2012, in million tonnes of CO_2 equivalents*



* Different greenhouse gases have different atmospheric lifetimes and various effects on the climate. Using the so-called Global Warming Potential Scale (GWP scale), the release of various greenhouse gases are converted into CO_2 equivalents. This is done by calculating the warming effect each gas has in the atmosphere over one hundred years, so that it corresponds to the effect of CO_2. For example, fluorinated gases have very long atmospheric lifetimes, and they will then have a high conversion factor or high global warming potential.

** Methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF_6). This is a mix of long-lived and short-lived greenhouse gases.

Source: Statistics Norway

The figure shows that greenhouse gas emissions have increased by approximately 4.5 per cent from 1990 to 2012. The largest sources are oil and gas, manufacturing and mining and road traffic, cf. Table 10.

Table 10 Greenhouse gas emissions by source in 2012, in million tonnes of CO_2 equivalents Percentage change from 1990 to 2012 and from 2011 to 2012

Source	2012	Change 1990–2012	Change 2011–2012
All sources	52.7	4.6	–1.1
Oil and gas production	13.7	77.3	0.8
Manufacturing and mining	11.7	–39.0	–1.6
Energy supply	1.5	373.2	–27.2
Heating in other industries and households	1.5	–44.8	–6.7
Road traffic	10.1	30.0	0.4
Aviation, shipping, fishing, motorised equipment etc.	7.3	29.6	2.6
Agriculture	4.5	–10.6	–0.4
Other sources	2.4	12.9	–0.3

Source: Statistics Norway

Emissions from oil and gas production amounted in 2012 to over a quarter of total emissions of greenhouse gases and is the largest source of greenhouse gas emissions in Norway. Emissions have increased by 77 per cent since 1990. The increase is due to increased production on the shelf and several fields in a mature phase and the change in the production profile towards more gas production, cf. Document no. 3:5 (2009–2010) *The Office of the Auditor General's investigation into target achievement in climate policy.* As a result of the CO_2 tax, emissions are 2–3 million tonnes lower than they otherwise would have been. Among other things, increased energy efficiency and reduced use of flares have contributed to lower emissions.

Emissions from industry have declined by 39 per cent since 1990, and amounted in 2012 to 22 per cent of total emissions of greenhouse gases. According to Statistics Norway, the reduction is attributed to technological improvements, less use of oil products and business closures.

Emissions from road traffic account for about 20 per cent of the total greenhouse gas emissions. Emissions have increased by 30 per cent since 1990. According to Statistics Norway, the increase is due to more vehicles on the road and longer distances being driven. However, more energy-efficient vehicles, the transition from petrol to diesel – which means lower emissions per kilometre – and biofuel blends have helped curb growth.

According to the Norwegian Environment Agency, these estimates of emission-reducing effects of climate measures were presented for the first time in Norway's sixth national communication under the framework of the UN climate convention (NC6)[315]. Here it was stated that the measures reduced greenhouse gas emissions by 12.6 to 15.2 million tonnes of CO_2 equivalents in 2010 and by 17.1 to 20.1 million tonnes of CO_2 equivalents in 2020 compared with developments without these measures. The Norwegian Environment Agency pointed out that no uncertainty calculations were performed to estimate the effects of these measures, but considers the estimates of the total emissions impact of the measures and instruments to be reasonably accurate. The Norwegian Environment Agency referred in this context to all climate measures, with the exception of the CO_2 tax on the shelf and on land under the Ministry of Finance's area of responsibility.[316]

Target achievement for the long-lived greenhouse gases

Norway met its Kyoto commitments for the period 2008–2012 without resorting to government purchases of credits, cf. the white paper *Long-term Perspectives on the Norwegian Economy 2013 – a summary* (Meld. St. 12 (2012–2013)). Norway's emissions allowance under the Kyoto Protocol for the period 2008–2012 is 250.5 million tonnes of CO_2 equivalents. National greenhouse gas emissions in the same period amounted to 266.7 million tonnes, or 16.2 million tonnes above the Kyoto Protocol target. The credits corresponding to this difference will be obtained through the EU emissions trading scheme.

However, to achieve the goal of exceeding the Kyoto Protocol by 10 percentage points there is a need for government purchase of credits (cf. CDM and JI above). The government purchase need, in order to exceed the Kyoto Protocol, is about 21 million tonnes, cf. draft resolution Prop. 1 S (2013–2014) Ministry of Finance. Contracts have been entered into for a larger amount than this, but there is uncertainty as to how many credits will actually be delivered. Deliveries of credits generally take

315) *Norway's Sixth National Communication under the UN Framework Convention on Climate Change*. Status report at January 2014, March 2014.

316) Response from the Norwegian Environment Agency to additional questions at the meeting on 13 June 2013.

longer than planned.[317] The degree of target achievement is therefore dependent on the extent to which the projects that are invested in, deliver credits as required.

Short-lived climate forcers – emissions

Table 11 Norwegian emissions of sulphur dioxide (SO_2), nitrogen oxide (NO_x), ammonia (NH_3), volatile organic compounds (NMVOCs) and particulate matter (PM2.5) in 2012 by source, in 1000 tonnes*

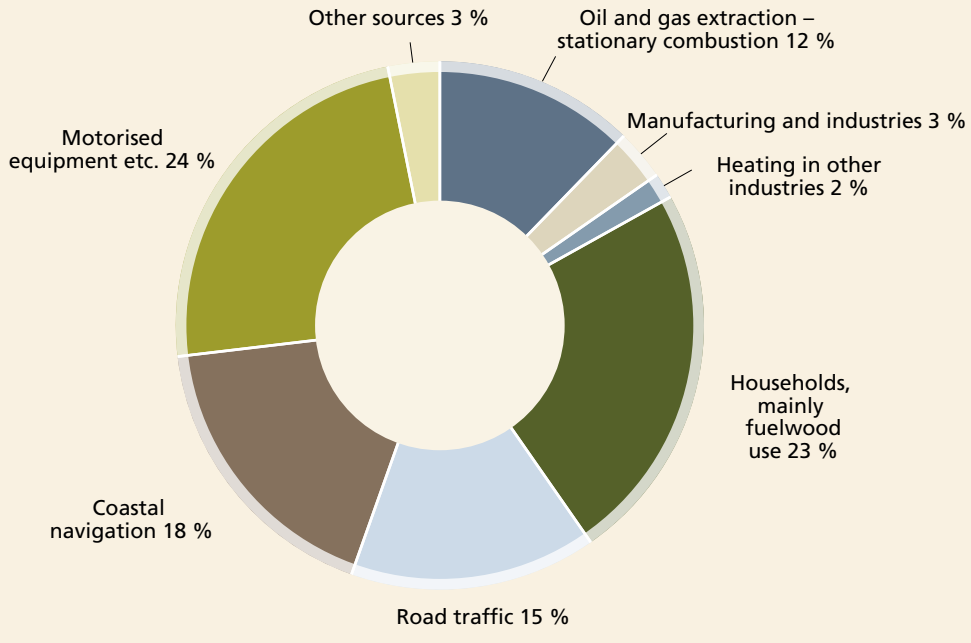
	SO_2	NO_x	NH_3	NMVOC	PM2.5
All sources	16.6	166.2	26.9	137.3	37.2
Oil and gas production	0.8	47.9	:	33.9	1.6
Manufacturing and mining	11.4	17.7	0.6	14.3	4.4
Energy supply	1.3	1.6	:	1.3	0.9
Heating in other industries and households	0.7	2.5	0.2	9.8	22.6
Road traffic	0	36.3	1.2	10.6	1.1
Aviation, shipping, fishing and motorised equipment etc.	2.3	60.1	0	18.6	5.2
Agriculture	0	0	24.5	0	0
Other sources	0	0	0	48.6	1.4

*Does not include international shipping and aviation.

Source: Statistics Norway (final figures, published 29 January 2014)

Soot (black carbon)

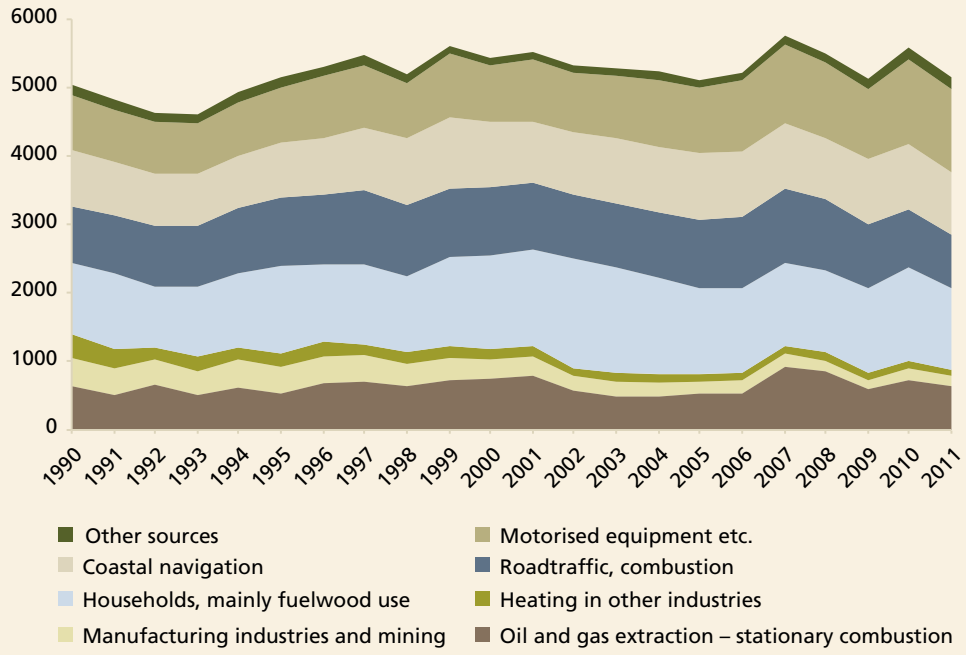
Figure 16 Norwegian emissions of soot by source



Source: Statistics Norway, at April 2014 – last updated April 2013.

317) EUROSAI WGEA (2012) *Emissions trading to limit climate change: Does it work*? A cooperative audit.

Figure 17 Development of Norwegian emissions of soot by source in the period 1990–2011, in tonnes



Source: Statistics Norway

Annex 5 Pollution

The Stockholm Convention, Århus Protocols, Minamata Convention (mercury) as well as measures to clean up radioactive sources in Northwest Russia are all based on important documentation from the Arctic Council and AMAP relating to emissions and the presence of contaminants in humans, species and the environment in the Arctic. The Ministry of Climate and Environment noted that AMAP's summaries of POPs, heavy metals and radioactivity still play an important role in documenting the changes and the effectiveness of the measures initiated in international fora.[318]

National implemention of the Stockholm Convention

The Stockholm Convention on Persistent Organic Pollutants (POPs) is a global agreement that was signed in 2001 and entered into force on 17 May 2004. The agreement contains several requirements for actions to reduce and eliminate releases of POPs and requirements for best environmental management of such substances. At October 2013, 179 countries had signed the agreement.

The convention originally included demands for measures for a total of 12 substances or groups of substances that have been used as pesticides or chemicals in industry, or as by-products of processes. At October 2013 the list had increased to 23 substances. Norway submitted an updated implementation plan and status description in January 2013.[319]

Most of the twelve original POPs have been strictly regulated for many years, and according to the Ministry of the Environment, nine of the POPs on the list represent little environmental danger in Norway. The environmental authorities continue to work on reducing emissions of PCBs, dioxins and furans. Halting emissions of these substances by 2020 is a priority. PCB is one of the substances that continues to be measured in the air and in animals in the Norwegian Arctic.

Although the use of PCBs has been banned since 1980, products and buildings still contain PCBs that can spread into the environment through leaks and in connection demolition and renovation of buildings. The Norwegian Environment Agency estimates that approximately 90 per cent of PCB products that were in use in 1980 had been taken out of use by the end of 2010, but there are still approximately 125 tonnes of PCBs that must be addressed. This will be achieved through proper handling of PCB-containing products – it applies particularly in the building and construction industry and in the waste industry. Supervision is an important means of ensuring such handling. The OAG's investigation into the management of hazardous waste[320] showed that the authorities have largely succeeded in collecting PCB-containing waste.

As regards dioxins and furans, the Norwegian authorities have adopted a goal that emissions and the use of dioxins shall be continuously reduced for the purpose of eliminating them by 2020. Dioxin emissions in Norway decreased by over 80 per cent from 1990 to the end of 2011.[321] Industry has particularly accounted for this reduction. However, the decline of these emissions has levelled off since the mid-2000s.[322] The environmental authorities also added that emissions data are uncertain. The concentration is the highest at local discharge points, and the values at places such as Svalbard are low.

318) Letter dated 25 April 2014 from the Ministry of Foreign Affairs.
319) Ministry of the Environment (2006) *Norwegian Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants* and updated version in January 2013.
320) Document 3:7 (2011–2012) *The Office of the Auditor General's investigation into the management of hazardous waste.*
321) Emissions in the period decreased from 127 to 22.5 TEQ grams.
322) Annual emissions are between 21 and 25 TEQ grams.

Since 2009, eleven new chemicals have been added to the Convention. Many of the latest chemicals were already banned or their use has never been permitted in Norway. Several of the substances in use are termed brominated flame retardants. Several brominated flame retardants are on the priority list[323], and initiatives are under way to reduce their use and release for the purpose of eliminating them by 2020.

The total consumption of brominated flame retardants has increased more than five times in Norway in the period 1995–2007. Consumption was approximately 450 tonnes in 2007, but has since been reduced to 300 tonnes in 2010. About three-quarters of the total amount is found in plastic components in electrical and electronic equipment (EEE). However, the quantities found in products in Norway is highly uncertain. Estimates of emissions are also highly uncertain. The environmental authorities assume that emissions have not increased in line with consumption since the majority of EEE products where the use occurs are collected through collection schemes. Brominated flame retardants have been found in the Norwegian parts of the Arctic, but in lower numbers than in areas with point source emissions.[324] New substances of this type have, however, been detected in the Norwegian Arctic areas, as referred to in section 5.2.

Table 12 Stockholm Convention's initial 12 POPs and Norwegian regulation

Name	Chemical category			Annex in the convention	Regulation in Norway	
	Pesticide	Industry	By-product		Pesticide	Industry
Aldrin	X			A	Prohibited 1969	Total ban 2002
Chlordane	X			A	Prohibited 1968	Total ban 2002
DDT	X			B	Prohibited 1970*	Total ban 2002
Dieldrin	X			A	Never approved	Total ban 2002
Endrin	X			A	Prohibited 1966	Total ban 2002
Heptachlor	X			A	Never approved	Total ban 2002
Mirex	X			A	Never approved	Total ban 2002
Toxaphene	X			A	Never approved	Total ban 2002
Hexachlorobenzene	X	X	X	A, C	Never approved	Total ban 2002
Polychlorinated biphenyls (PCB)		X	X	A, C		New use prohibited in 1980
Polychlorinated dioxins and furans			X	C		Emission requirements and fireplace requirements

* With one exception to combat pine weevil – this was also banned as of 1989.

Source: Norway's implementation plan as of June 2006 and State of the Environment Norway (October 2013)

323) See the priority list: http://www.miljostatus.no/Tema/Kjemikalier/Kjemikalielister/Prioritetslisten/

324) Miljøstatus.no. State of the Environment Norway contains updated information on the state of the environment and developments. The database was developed by the Norwegian Environment Agency on behalf of the Ministry of the Environment.

Table 13 New chemicals under the Stockholm Convention and regulation in Norway

Name	Chemical category			Annex in the convention	Regulation in Norway	
	Pesti-cide	Industry	By-product		Pesticide	Industry
Chlordecone	X			A	Never approved	
Technical endosulfan and associated isomers*	X			B	Total ban 1999	
Pentachlorobenzene (PeCB)	X	X	X	A and C	Total ban 1974	Never approved
alpha-Hexachlorocyclohexane (α-HCH) and *beta*-Hexachlorocyclohexane (β-HCH)*	X			A	Never approved	
Lindane (*gamma*-hexachlorocyclohexane, γ-HCH)	X			A	Total ban 1992	
Tetrabromodiphenyl- and pentabromodiphenyl ether (penta-BDE), (nominated by Norway)		X		A		Is in use
Hexabromodiphenyl ether		X		A, C	Never approved	
Heptabromodiphenyl ether (octa-BDE)		X		A, C		Is in use
Perfluorooctanesulfonic acid, its salts and perfluorooctane sulfonyl fluoride (PFOS).		X		B		Is in use in accordance with section III Annex B
Hexabromocyclododecane (HBCDD) from April 2013 following proposal from Norway						

*Not found or found in a concentration in food that signifies background levels.

National implementation of POPs and Heavy Metals Protocols under the Convention on Long-range Transboundary Air Pollution

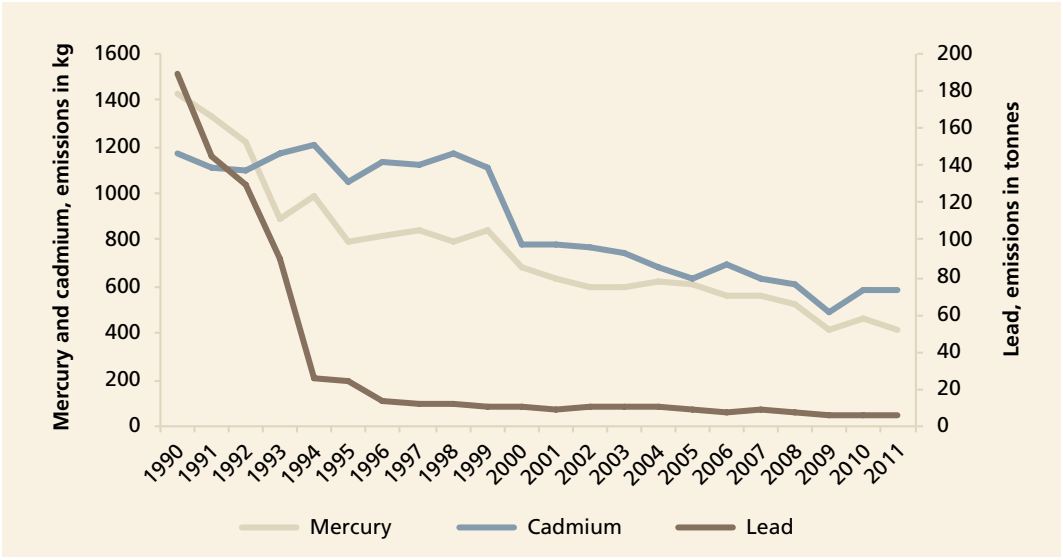
The LRTAP Convention means that 51 countries have committed themselves to protecting people and the environment against air pollution, and reducing and preventing emissions of long-range transboundary air pollution as far as possible.

While the POPs protocol overlaps with the Stockholm Convention on several points, the POPs Protocol contains a few substances that are not covered by the Stockholm Convention. In a Norwegian and Arctic context this includes polyaromatic hydrocarbons (PAH). Some of these are toxic, mutagenic and carcinogenic. They are formed during incomplete combustion of organic matter, and the aluminium industry and wood burning are the major sources of PAHs in Norway. Statistics from State of the Environment Norway show that emissions have declined in Norway, particularly as a result of emissions reductions in the aluminium industry. Wood burning measures will become important in the future. PAHs are on the priority list for Norwegian authorities and the goal is to stop emissions by 2020. As shown in Figure 7 in Section 5.2, the occurrence in Svalbard has significantly decreased since the late 1990s.

The heavy metal protocol requires the parties to reduce their total annual emissions of cadmium, lead and mercury to the atmosphere to 1990 levels. Figure 18 shows that Norway has reduced emissions to air significantly since the beginning of the 1990s.

Including all emissions of heavy metals to soil, watercourses, etc., the tendency is the same.

Figure 18 Reduction in emissions of heavy metals to air from 1990 to 2011



Source: Basic data from State of the Environment Norway (October 2013)

As the figure shows, lead emissions to air have been greatly reduced in the period in question, and also since the 1980s. The decrease is mainly due to the transition to the use of unleaded petrol. Emissions to soil and water also make up a significant amount. Total emissions have been reduced by approximately 80 per cent since 1995. The goal is to stop emissions of lead by 2020. As shown in section 5.2 in Figure 7, their prevalence has not been reduced to the same extent as Norwegian emissions.

Figure 18 shows that there has been a significant reduction in emissions of cadmium and mercury into the air in that period. The decline is largely due to reduced emissions from the oil industry and other industries. Halting emissions of both substances by 2020 is a national target. To ensure low emissions of both mercury and cadmium in the future, it is important according to the environmental authorities to ensure that applicable requirements and regulations are complied with.

The environmental authorities pointed out that the greatest threat to biodiversity in Norway is the destruction and division of habitats for animals and plants. Nature conservation has also been prominent in the Arctic Council. National parks and other protected areas protect vulnerable and endangered habitats and conserve areas of international, national and regional value. Under the Convention on Biological Diversity (CBD), countries have declared their agreement that they will ensure effective and representative protection of 17 per cent of the land and freshwater area and 10 per cent of the world's coastal and ocean areas by 2020.

The Act relating to Svalbard (Svalbard Act) (1925) called for the protection of "animals, plants, natural formations, land routes and relics of the past." Reindeer were protected in 1925, and hunting of grouse, geese and Arctic foxes was regulated in 1928. The walrus has been protected since 1952. In 1932, two major areas were protected for their botanical value. Polar Bears in King Karl's Land were protected in 1939. In 1973, Norwegian authorities made extensive protection decisions: the polar bear was completely protected, three national parks, two nature reserves and 15 bird sanctuaries totalling approximately 25,000 km^2 were created. The Moffen and Bear Island nature reserves were created in 1983 and 2002, respectively.[325] The Hopen and Ossian Sars nature reserves were both established in 2003. The Nordenskjöld Land, Northern Isfjorden and Sassen-Bünsow Land national parks were created in 2003 together with the Festningen Geotope Protected Area. Indre Wijdefjorden National Park was established in 2005.

Figure 19 shows national parks and nature reserves on Svalbard, where protected areas make up about 65 per cent of the land area. The protected areas are rooted in the *Act relating to environmental protection in Svalbard* (Svalbard Environmental Protection Act), whose purpose is to maintain a near pristine environment of continuous wilderness, landscape elements, flora, fauna and cultural heritage.[326]

325) Governor of Svalbard (2009) *Verneområdene på Svalbard. Sikrer internasjonale kultur- og naturverdier.* (Protected areas on Svalbard. Ensures international cultural and natural values.) Brochure.
326) *Act No. 79 of 15 June 2001 relating to environmental protection in Svalbard* (Svalbard Environmental Protection Act).

Figure 19 National parks (green) and nature reserves (red) in Svalbard

Source: Norwegian Polar Institute

According to the Ministry of the Environment, the consequences of past overexploitation of individual species continue to be seen, but the problem is smaller than before. Management of harvesting is better than before, and halting the harvesting of some species is producing positive results – this applies to e.g. polar bears and walruses in Svalbard.[327]

327) Interview with the Ministry of the Environment on 7 May 2012.

The statutory framework relating to Svalbard is the most important means of protecting the landscape, flora and fauna against encroachment. Much of the archipelago is protected, and hunting is prohibited in most of these areas. Picking flowers or other plants in Svalbard is also prohibited.[328]

Management plans for protected areas is an important measure for achieving the national goals.[329] The purpose of the management plans is to ensure uniform conservation of the protected area by providing specific guidelines for use of the site, information, maintenance and administrative procedure. Management plans have been prepared for Hopen and Bear Island nature reserves, and are also being worked on for the Northeast Svalbard and Southeast Svalbard nature reserves, Northwest Spitsbergen, Forlandet and South Spitsbergen national parks and bird sanctuaries in Svalbard.[330]

The extensive protection and strict environmental provisions contained in the Svalbard Environmental Protection Act and its regulations, provide a good starting point because intact ecosystems per se help make nature more resistant to the effects of climate change. Consequently, it is important to continue the current protection.[331] There is also a special Red List for Svalbard. In addition, some monitoring of the Barents Sea takes place through Institute of Marine Research surveys. The management plans for the Barents Sea also generate a lot of information on the environmental status of the Barents Sea.[332]

According to the Norwegian Environment Agency, various measures are carried out in Norway to protect endangered species and habitats and biotopes. These measures include mapping and monitoring, establishment of conservation, preparation of action plans for individual species, groups of species and habitats and biotopes, as well as strategic plans. Systematic monitoring of animal populations has been taking place for decades and includes numerous species. The monitoring also applies to Arctic plants and species, such as ivory gulls and kittiwakes, both of which are in sharp decline. The Norwegian Environment Agency recently finalised an action plan for polar bears. Knowledge about the individual species is used not only in conjunction with species management, but also in dealing with land management, including our northern areas.[333]

An action plan has been prepared for four endangered vascular plants in Cole's Valley (Svalbard). The plan has not been followed up due to lack of resources.
The Norwegian Environment Agency has not had sufficient resources to prioritise work on endangered habitats in Svalbard. The Red List categorises two habitats as vulnerable based on very few localities, so the retrospective criterion is not applied here.[334]

In March 2013 the Norwegian Polar Institute organised a seminar on monitoring species on Svalbard's Red List. Norway's efforts to maintain and manage these species were systematically reviewed at the seminar.[335]

328) Environmental status of Svalbard, http://fylker.miljostatus.no/Svalbard/Tema-A-A/Dyr-og-planter/.
329) Prop. 1 S (2013–2014) Proposition to the Storting (draft resolution) – Ministry of the Environment.
330) Governor of Svalbard, *Forvaltning av verneområder*. (Management of protected areas.) www.sysselmannen.no.
331) Meld. St. 33 (2012–2013) *Klimatilpasning i Norge*, white paper on climate adaptation in Norway.
332) Interview with the Ministry of the Environment on 7 May 2012.
333) Additional questions to the Norwegian Environment Agency in connection with the interview on 13 June 2013.
334) Ibid.
335) Ibid.

Annex 7 Economic activity – shipping, maritime infrastructure and maritime services and oil spill preparedness

Norwegian authorities' efforts to implement IMO regulations on maritime safety

A key element in Norway's work on ship safety and security is the extent to which the authorities implement existing international regulations. As part of this work, IMO has introduced a voluntary scheme for auditing member states' actual implementation of the IMO instruments to which each member country is subject. The scheme was launched in 2006. According to IMO the audit will provide an objective and comprehensive assessment of how effectively the member states administer and implement the IMO instruments each country has ratified.[336] Norway was the subject of such an audit in the autumn of 2007.[337]

Fact box 15 The contents of the IMO audit of Norwegian maritime authorities

The areas covered by the audit included the organisation of work, development of laws and other regulations, measures to implement laws and regulations, flag state control of own ships, international port state control, coastal state functions such as search and rescue, as well as measures to combat pollution and navigation information.

The IMO audit concluded that the Norwegian maritime authorities largely meet the commitments Norway has undertaken through ratification. The audit identified a large number of areas of good practice and some areas where there was room for improvement.[338] For the work on maritime safety, this applied in some areas to a lack of reporting to IMO and that the regulations could be designed to be more transparent and user-friendly.[339]

According to the Ministry of Trade and Industry , improvements have been implemented in the areas where opportunities for improvement were identified through the IMO audit. Restructuring of the regulations is in progress. The Ministry also pointed out that Norway has fully implemented the overall IMO regulations that Norway has ratified or to which Norway is bound.[340]

The Norwegian Maritime Directorate's work on safety at sea

Subject to both the Ministry of Trade and Industry and the Ministry of the Environment, the Norwegian Maritime Directorate is responsible for Norwegian-registered ships and foreign ships calling at Norwegian ports. The Norwegian Maritime Directorate's overall goal is to ensure that Norway is an attractive flag state with high safety standards for life, health, property and the environment.

The *Act relating to ship safety and security* (Ship Safety and Security Act)[341] that, based on the relevant IMO conventions, governs the requirements for safety on board Norwegian vessels and foreign vessels operating in Norwegian waters (including the continental shelf).[342] The act assumes that shipping companies have primary responsibility for meeting the legal requirements.[343]

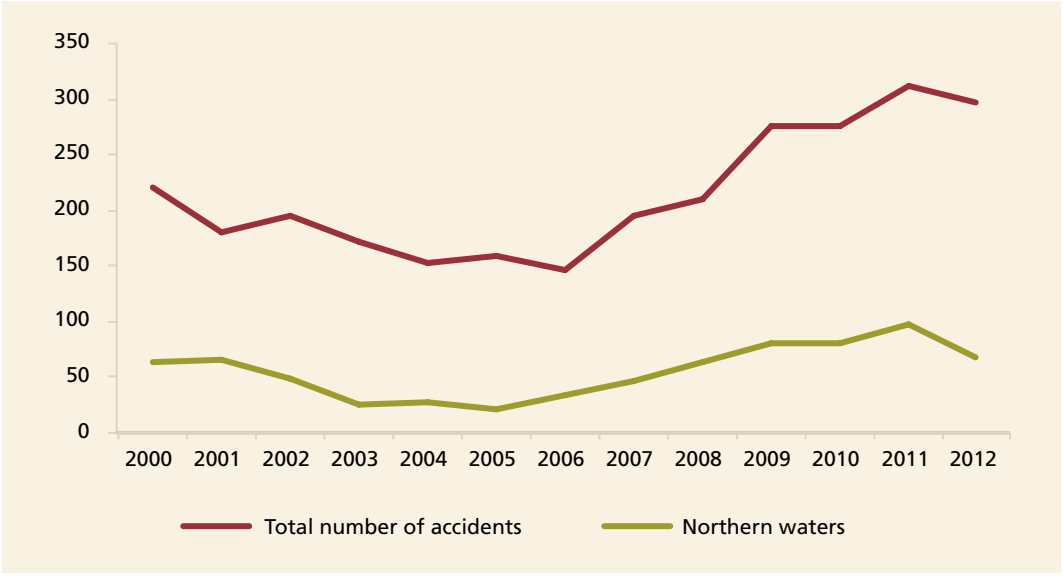
336) http://www.imo.org/OurWork/Safety/implementation/pages/auditscheme.aspx.
337) Letter from the Ministry of Trade and Industry of 2 April 2013 and http://www.sjofartsdir.no/om-direktoratet/imo-rapporter-og-internasjonalt-arbeid/flaggstatsdirektivet/imos-revisjon-av-norge-som-flaggstat-forelopig-rapport/.
338) Ibid.
339) Letter from the Ministry of Trade and Industry of 27 August 2013.
340) Ibid.
341) *The Act relating to ship safety and security*, Act No. 9 of 16 February 2007.
342) See Sections 1 and 3 of the Ship Safety and Security Act.
343) See, for example, Chapters 2 and 3 of the Ship Safety and Security Act and the Ministry of Trade and Industry's letter to the OAG dated 25 February 2010.

The Norwegian Maritime Directorate has a broad set of measures for ensuring safety on board Norwegian and foreign vessels operating in Norwegian waters and to safeguard the environment. According to the Ministry of Trade and Industry, work on regulations, supervision and control as well as motivation and awareness campaigns are pivotal Norwegian Maritime Directorate instruments.[344] More specifically, this includes the follow-up of educational institutions to ensure good qualifications among seafarers, and certification and supervision of vessels, including working conditions (cf. among other things the letter of allocation from the Ministry of Trade and Industry to the Norwegian Maritime Directorate for 2013). According to the Norwegian Maritime Directorate, supervision is transitioning to risk-based supervision, in line with the intentions of the Ship Safety and Security Act and in line with the strategic plan for the period 2012–2015.[345]

Accidents and incidents in Norwegian shipping

Compliance with international conventions and the development of a national regulatory framework form the basis for ship safety. The number of accidents with ships can provide an indication of the actual status of safety at sea and how well the shipping companies comply with safety requirements on board vessels. Figure 20 shows the number of accidents among Norwegian vessels in the period 2000–2012, total (red line) and in the north (green line).[346]

Figure 20 Number of accidents among Norwegian vessels in the period 2000–2012, total and in the north



Source: The Norwegian Maritime Directorate's accident database (data as of April, updated 30 June 2013).

The Norwegian Maritime Directorate's database shows that there has been an increase in the total number of accidents in that period, while the number of accidents in northern waters is at about the same level in 2012 as in 2000.[347] As of April 2013,

344) Document 3:8 (2008–2009) *The Office of the Auditor General's investigation into the Norwegian Maritime Directorate's case processing in connection with document control of vessels and seafarers.*
345) The Norwegian Maritime Directorate's annual report for 2012.
346) Northern waters are defined here as north of the 66th parallel – the Arctic Circle. When Norwegian authorities submitted data on vessel traffic in the Norwegian Arctic waters to AMSA, the southern boundary of the Arctic waters was set at 67 degrees (cf. PAME and CAFF's *Arctic Data* –http://www.arcticdata.is/index.php?option=com_phocadownload&view=category&id=19&Itemid=166 *Arctic Marine Activity Database for Norway*.
347) The figures apply to Norwegian vessels regardless of waters, while for foreign vessels they apply only to the Norwegian economic zone and the territorial waters around Jan Mayen and Svalbard. Letters from the Ministry of Trade and Industry dated 2 April and 27 August 2013, respectively.

a total of 83 accidents were registered. The figures, however, do not take any traffic changes into account.

On a national basis, cargo and passenger ships were the ships that were involved in the most accidents, while north of the 66th parallel, fishing vessels accounted for about half of the accidents in the specified period. The main cause of the incidents are groundings (over 50 per cent in the northern waters) and contact and collisions (about 20 per cent).[348]

In northern waters, vessels in over half of cases where the extent of the damage was reported, had little or no damage. Over 30 per cent of the cases resulted in serious damage, total damage or shipwreck. Fishing vessels are often involved in more serious accidents. Of the approximately 200 shipwrecks, fishing vessels accounted for approximately 80 per cent of cases, and in the northern waters, fishing vessels were represented in serious incidents in more than 75 per cent of cases.

Thirty-two incidents involving ships were recorded in the waters around Jan Mayen and Svalbard in the period 2000–2012. Half of the accidents concern grounding, while the others involve various forms of incidents such as collision and fire. Mainly cargo and passenger ships run aground. Severe damage to the vessels involved in these accidents occurred in only a few cases.

Although the number of accidents at sea has increased, the number of working and personal accidents decreased in the same period from more than 1,200 in 2000 to 267 in 2012 nationwide.[349] According to the Ministry of Trade and Industry, the causes of accidents are complex, and the authorities work continuously on measures to ensure safety at sea and prevent accidents. According to the Norwegian Maritime Directorate, while the spotlight has been on the major accident areas (groundings and contact damage), this has not resulted in a reduction in the number of incidents. Because of the large number of undesirable incidents at sea and along the coast among fishing vessels, emphasis has also been placed on preventive work in the fishing fleet.[350] The Ministry stated that the transition to risk-based supervision and measures targeted at selected groups of vessels are key to the development of policy instruments.[351]

The Ministry also notes that the general standard among Norwegian vessels is good. The Port State Control Regime, under which Norwegian vessels arriving at foreign ports can be subjected to inspection, shows that Norwegian vessels are rarely detained due to defects and deficiencies – at July 2013 Norwegian vessels ranked No. 7 on the list of nearly 80 flag states and Norway is deemed a *low-risk quality flag.*[352]

Maritime infrastructure

The maritime infrastructure consists of navigation installations such as lighthouses, marks and signs. The installations serve as visual navigation aids and complement the electronic navigation aids. The maritime infrastructure also consists of fairways, charts and messaging and information services.

Navigation installations

Around 1,770 of Norway's 21,500 navigation facilities are located along the coast of Troms and Finnmark counties. More than 600 of the installations in Troms and

348) About the same picture applies nationally, but on a national basis groundings accounted for approximately 40 per cent of the incidents and collisions and contact damage account for approximately 30 per cent.
349) Norwegian Maritime Directorate (2011) *Ulykkesutvikling 2000–2010* (Accident development 2000–2010) and press release of 17 January 2013.
350) See, for example, the Norwegian Maritime Directorate's annual report for 2011 to the Ministry of Trade and Industry.
351) Letter from the Ministry of Trade and Industry of 27 August 2013.
352) Norwegian Maritime Directorate, press release of 17 July 2013 and Paris MoU's annual report for 2012.

Finnmark counties emit light signals. The operating time in 2012 for the light-emitting installations nationwide and in Troms and Finnmark counties has remained roughly at the level specified by the recommendations of the international standards in 2012, while for previous years, Troms and Finnmark counties were slightly below this level.[353] Svalbard has a total of 16 navigation systems, all of which emit light.

The Norwegian Coastal Administration does not, however, have a complete overview of the operating time of the installations that emit light signals, and relies on reports from mariners to obtain a list of lights that do not work. The same applies to Svalbard. The Norwegian Coastal Administration has, however, established a management, operation and maintenance (MOM) system, in order to monitor the maintenance backlog. Since not all objects undergo audits each year, it will take some years before the agency has updated the status of all of them.[354] However, the installations in Svalbard have not been entered in the database for condition status registrations in MOM.[355]

For Svalbard, an annual report on tasks carried out at navigation facilities is issued by the Norwegian Polar Institute.[356] According to the Norwegian Coastal Administration, the Norwegian Polar Institute reported a slightly increasing maintenance backlog for facilities in Svalbard. For fiscal years 2012 and 2013, the Norwegian Coastal Administration has requested, but has not been granted, funds to renew aero lights in Svalbard.

The Ministry of Fisheries and Coastal Affairs and the Norwegian Coastal Administration said that there is a general maintenance backlog for navigation facilities. The authorities are currently trying to obtain an overview of the status and assign actions to reduce the maintenance backlog. These measures will then be incorporated into the Norwegian Coastal Administration's action plan for the period 2014–2017. The fairway review covers Mainland Norway, not Svalbard.

Electronic navigation aids[357]

In addition to conventional navigation facilities on shore, larger vessels have radar. There is also a requirement for the use of various electronic navigation facilities that also provide the Norwegian Coastal Administration with an opportunity to monitor ship traffic.

When asked how the electronic infrastructure works, the Norwegian Coastal Administration replied that overall monitoring of vessel traffic using the various technical aids (AIS, satellites AISSat-1, DGPS[358], LRIT, etc.) largely functions as intended. The Norwegian Coastal Administration nevertheless believes that there is still room for further development with a consolidated maritime situation picture where data from the various aforementioned systems (sensors) is matched to a uniform database that can be used in the various agencies' technical systems. Work on the consolidation process is under way.[359]

The Norwegian Coastal Administration also noted that some smaller areas along the coast and much of the coast of Svalbard lack sufficient sensor coverage. Measures are currently (2013) being implemented along the Norwegian coast, and the framework of

353) Cf. IALA – recommended uptime is 99.8 per cent, while nationwide in 2012 it was at 99.69 per cent and at 99.87 per cent in Troms and Finnmark counties, cf. the Norwegian Coastal Administration's annual report for 2012.
354) The Norwegian Coastal Administration's annual report for 2012 to the Ministry of Trade, Industry and Fisheries.
355) E-mail with attachments dated 31 May 2013 from the Norwegian Coastal Administration.
356) Interview with the Ministry of Fisheries and Coastal Affairs on 1 February 2013 and e-mail with attachments dated 31 May 2013 from the Norwegian Coastal Administration.
357) While electronic navigation is defined as a maritime service, it is discussed here under maritime infrastructure.
358) DGPS: *differential global position system*. The system is used to improve the positioning accuracy specified in GPS.
359) E-mail with attachments dated 31 May 2013 from the Norwegian Coastal Administration.

the National Transport Plan provides an opportunity to better cover the most important parts of the coast of Svalbard in the last sub-period.

Fairways/shipping lanes in northern waters
The Norwegian Coastal Administration emphasises that the creation and development of fairways and shipping lanes is a crucial element in the work of ensuring safe and navigable waterways for ship traffic. Fairways are maritime transport arteries along the coast, at the entrance to and exit from ports, and to and from the open sea.

For northern waters, the creation of a shipping lane outside territorial waters from Vardø to Røst in 2007 was paramount.[360] The Norwegian Coastal Administration pointed out that with this fairway some of the traffic is moved farther out from the coast, and all passing risk traffic, such as oil tankers,[361] must sail around 30 nautical miles from the coast. This reduces the risk of an oil spill or a wrecked ship reaching shore in the event of an accident. Over 80 per cent of the largest ships and almost all tankers follow these sailing routes, and this increases safety and reduces the likelihood of accidents.

In order to have the best possible overview of ship traffic coming from Russian waters into Norwegian waters, such as ships sailing the Northern Sea Route, the Norwegian Coastal Administration's VTS in Vardø receives information from the traffic control centre in Murmansk. With the Vessel Traffic Management and Information System, vessels coming from the east towards Norwegian waters will automatically transmit a signal to the vessel traffic monitoring service in Murmansk when they are one hour from a specified boundary in the sea between Norway and Russia. The traffic service in Murmansk will then send information about the vessel to the Norwegian VTS in Vardø. The same system applies to vessels coming from the west and moving in the direction of Russian waters.[362]

Nautical charts
Access to updated charts is essential for safe navigation. The Norwegian Mapping Authority has updated maps for the relevant national marine and coastal areas, but according to the Ministry of Fisheries and Coastal Affairs, hydrographic coverage in the Svalbard area is still not satisfactory – this applies particularly to the east. Charting, however, is done under the auspices of the Norwegian Mapping Authority's Hydrographic Service (under the Ministry of Climate and Environment). Deglaciation is making new sites accessible, entailing the need for new maps. The same may apply internationally. There have been incidents in the waters around Svalbard due to inadequate maps.[363]

The Norwegian Coastal Administration pointed out that it has communicated to the Authority the desire for new map surveying in Svalbard and maintains that such surveying is important because of the introduction of compulsory pilotage in Svalbard. Analyses of navigation infrastructure must be considered together with the availability of good charts for Svalbard.[364]

360) Presented to the Storting in Report No. 14 (2004–2005) to the Storting.
361) Risk traffic is defined as all vessels over 5,000 gross tonnes, all tank vessels and all vessels sailing with hazardous and polluting cargo, and ocean-going tugs. Norwegian Coastal Administration, Vardø Vessel Traffic Service Centre (NOR VTS), *Årsrapport hendelser 2012* (Annual report of incidents 2012).
362) Interview with the Ministry of Fisheries and Coastal Affairs and Norwegian Coastal Administration on 2 May 2012 and interview with the Ministry of Fisheries and Coastal Affairs on 1 February 2013.
363) Interview with the Ministry of Fisheries and Coastal Affairs on 2 May 2012.
364) E-mail with attachments dated 31 May 2013 from the Norwegian Coastal Administration.

Message services
The Norwegian Coastal Administration offers wind, current and wave alerts along the parts of the coast where it is considered that there is a need for this type of service. The alerts also apply to the North Atlantic and Barents Sea and include forecasts and actual measurements. The navigational warning service for Arctic waters has also been strengthened. In 2010, the International Maritime Organization (IMO) and the International Hydrographic Organization (IHO) extended the global maritime navigational warning service NAVAREA to Arctic waters. The Norwegian Coastal Administration has taken on the responsibility of being the coordinator of NAVAREA XIX. The area that the Norwegian Coastal Administration is responsible for, covers the waters between Greenland and the border with Russia and stretches from the middle of the Norwegian coast to the North Pole. The service was put into full operation on 1 June 2011, and Vardø VTS now sends out NAVAREA alerts twice a day.
The Norwegian Coastal Administration related that the service was working as intended in 2013.

Maritime services
The second main part of prevention is the maritime services. These include pilotage services, pilot exemption certificates, traffic monitoring and traffic control. Towing preparedness and ports of refuge will in this context be described as maritime services.

Pilotage services
The *Act relating to pilotage services etc.* (Pilotage Act)[365] with regulations defines the geographical areas and types of vessels where a pilot is required. Vessels with a valid pilot exemption certificate may be exempt from using a pilot in compulsory pilotage waters. Vessels on voyages subject to compulsory pilotage may also be granted exemption by the Norwegian Coastal Administration to sail without a pilot.

The Norwegian Coastal Administration pointed out that the introduction of compulsory pilotage in Svalbard through the Pilotage Act and its regulations is an important maritime safety measure for the northern waters. The scheme will be introduced in stages so that from 2015, full compulsory pilotage will also apply in Svalbard.[366] Statistics from the Norwegian Coastal Administration show that accidents rarely occur in the compulsory pilotage shipping lanes, and there has also been a decline in the number of accidents since mid-2000.[367] There is no record that any of the accidents in Svalbard took place on compulsory pilotage shipping routes.

Vessel traffic service (VTS) centres
The Norwegian Coastal Administration has established five VTSs along the coast – in Vardø, Horten, Brevik, Kvitsøy and Fedje – which monitor and control ship traffic and have primary responsibility for handling traffic situations that may result in undesirable incidents. These vessel traffic services were established in accordance with international guidelines in areas where traffic represents a particularly serious threat to maritime safety and the environment.

Vardø VTS was established on 1 January 2007 and oversees voyages that represent a particularly high risk beyond the baseline along the Norwegian coast, in the waters around Jan Mayen and in the waters around Svalbard. The VTS also provides VTS functions for traffic to Melkøya, Hammerfest and Svea in Svalbard and manages the state tugboat emergency preparedness. Statistics show that the traffic control centre serves

365) *Act relating to pilotage services etc.* Act No. 59 of 16 June 1989.
366) E-mail with attachments dated 31 May 2013 from the Norwegian Coastal Administration and the Pilotage Act.
367) Five accidents were recorded with a pilot on board in 2011 and three in 2012. In 2006 and 2007 the number was respectively 26 and 27, while in 2008 it was 19.

growing traffic. In 2012, nearly 250,000 voyages were recorded in this area of responsibility, and 63,000 of these were defined as risk voyages. More than 1,400 minor and more serious incidents requiring the involvement of the VTS were recorded.[368]

Tugs and ports of refuge
Tugs are also essential in prevention work. When the VTS, pilot or crew of a vessel becomes aware that a ship is, for instance, losing engine power or manoeuvrability, a tug can keep the ship steady or pull it to shore and prevent grounding.

Regular analyses are done of preparedness and infrastructure along the Norwegian coast and the Svalbard area. Work on a new environmental risk and contingency analysis for Svalbard and Jan Mayen started in 2013. The Norwegian Coastal Administration recently worked on a review of towing preparedness and presented a concept analysis in 2012. Quality Assurance 1 has been completed and is under review by the Ministry of Transport.

The state tugboat response must be tailored to risk, including the scope of risk traffic along the Norwegian coast, and be assessed against other risk-reduction measures. Based on the analyses, the Norwegian Coastal Administration believes it would be sufficient to have two tugs in northern Norway on a year-round basis. One of the reasons why the Norwegian Coastal Administration believes this would be sufficient, is the presence of commercial emergency towing vessels that can make resources available when needed.

Another instrument is the use of ports of refuge. To prevent or minimise undesirable incidents, vessels in distress can be directed to a port of refuge. Steps can be taken in the port of refuge to stabilise the ship's condition to safeguard maritime safety and protect life, health and the environment. Emergency ports have also been designated in Svalbard.

Emergency preparedness work to combat acute pollution in Norway
As of winter 2014, there were no incidents involving major acute discharges from either ships or petroleum activities in the Norwegian part of the Arctic.
The Norwegian Coastal Administration, which has the state operational responsibility for oil spill preparedness, annually receives about 1,400 alerts of possible discharges to sea, waterways and soil, and just under 400 of these cases lead to acute pollution.[369] Regarding the Barents Sea, acute discharges from shipping and the oil industry accounted for approximately 0.5 per cent of total discharges both in terms of numbers and volume in the period 1987–2011.

Norwegian preparedness against acute pollution is handled by three parties: private, municipal and state emergency preparedness. The Ministry of Fisheries and Coastal Affairs is responsible for national preparedness against acute pollution, while the Norwegian Coastal Administration is assigned overall operating responsibility for the state response.

Under the Pollution Control Act, the private sector has the primary responsibility for emergency preparedness. Preparedness shall be dimensioned according to environmental risk, and it should handle acute incidents arising from a company's own activities. The Norwegian Environment Agency makes special contingency requirements of

368) NOU (2013: 8) *Med los på sjøsikkerhet* (With pilot on maritime safety) and the Norwegian Coastal Administration, Vardø Vessel Traffic Service Centre, *Årsrapport hendelser 2012* (Annual report of incidents 2012).
369) Statistics concerning acute pollution from oil and chemicals from land-based sources, ships and offshore petroleum activities are prepared by the Norwegian Coastal Administration's emergency response department. All reported releases of 50 or more litres of oil and oil products and all releases of chemicals are entered into the database, cf. the Norwegian Coastal Administration's website http://www.kystverket.no/?did=9142395 [retrieval date 7 July 2009].

enterprises with potential risk of acute pollution, including petroleum activities, tank farms, refineries and land-based industries that handle hazardous chemicals.[370] The Norwegian Environment Agency also makes emergency preparedness requirements of municipalities and the Inter-municipal Oil Spill Combat Groups (IUAs) – UIA are discussed in more detail below. In a normal situation, the Norwegian Environment Agency and the County Governor ensure compliance with the requirements through supervision.

Shipping is not required to have its own emergency preparedness. State emergency preparedness is therefore primarily designed to combat acute pollution from ships. The state can take over responsibility in the event of major incidents that exceed the private and/or municipal emergency preparedness capacity.

Efforts to strengthen preparedness efforts in the north

Within petroleum activities, the Norwegian Clean Seas Association for Operating Companies (NOFO) discharges the oil companies' obligation to have oil spill preparedness and to handle any discharges from their own operations on the Norwegian continental shelf. If an accident were to occur, the Norwegian Coastal Administration will make contractual equipment available to NOFO. NOFO and other private emergency response organisations have a statutory duty to assist the state.[371]

The Norwegian Environment Agency related that serious general shortcomings were uncovered in 2011 regarding the oil companies' compliance with the regulations to ensure preparedness against acute pollution. The Norwegian Environment Agency therefore paid additional attention to preparedness in 2012. The Norwegian Environment Agency pointed out that the industry has made efforts to improve and standardise the methodology for emergency preparedness analyses, and has developed methods to detect oil at sea early, and to ensure that all companies have implemented the necessary improvements in preparedness efforts.

However, the Norwegian Environment Agency related in March 2013 that it is concerned that the petroleum industry's preparedness will be inadequate in the event a serious incident occurs with a prolonged oil spill on the Norwegian continental shelf. The Agency pointed out that the petroleum industry is in the midst of a period of high and increasing activity with operations farther north and closer to the coast than has previously been the case. In the new areas, emergency response to oil pollution will be more demanding than in the established areas on the shelf. Although the industry has made many improvements in preparedness against acute pollution, the Agency, based on the developments in the north and coastal areas, questioned whether the overall response is sufficient to address actual needs. The Agency therefore believes that it is necessary to have a full review of the current emergency preparedness.

Following a request from the Norwegian Environment Agency, the industry presented a plan for the process of reviewing and assessing preparedness against acute pollution on the Norwegian continental shelf. The Norwegian Environment Agency states that there is not enough of a basis for an opinion on whether the industry agrees with the Agency's assessments.

NOFO said that in dialogue with the Norwegian Environment Agency, the industry is now prepared to consider the need to improve emergency preparedness. The industry presented a report with recommendations for actions at the end of 2013. NOFO noted that much has already been done to strengthen capacity. The strategy and action plan

370) Report No. 37 (2008–2009) to the Storting *Integrated Management of the Marine Environment of the Norwegian Sea* (management plan), and interview with the Norwegian Coastal Administration on 8 May 2013.
371) Report No. 37 (2008–2009) to the Storting, p. 101.

for the period 2012–2016 calls for further expansion of oil spill preparedness capacity on the Norwegian continental shelf as a result of increased activity. NOFO pointed out that a contract was awarded in July 2013 to build two new oil spill response depots in Finnmark County to meet the increasing activity in the Barents Sea, including the Goliat field.[372]

Municipal emergency preparedness

Municipal emergency preparedness is undertaken by the country's individual municipalities and 32 Inter-municipal Oil Spill Combat Groups (IUAs). Inter-municipal emergency preparedness is designed to handle less acute discharges and has a duty to take action against all discharges not handled by private or individual municipalities.[373]

In Svalbard, the undertaking in question has primary responsibility for preparedness against acute pollution related to their own activities. If the responsible polluter does not take action itself or is not able to combat the pollution, the Governor and the Norwegian Coastal Administration can take action. Since there are no municipalities in Svalbard, there is an Oil Spill Combat Group (UA), with representatives for the Governor and the major industry players.

All IUAs have prepared contingency plans based on environmental and risk assessments. The Norwegian Environment Agency (then the Norwegian Pollution Control Authority (SFT)) has issued a guide for the planning work, and all IUA plans have been approved by the Norwegian Environment Agency. The guide, however, was first published in 1992, updated in 2003, and the Norwegian Environment Agency announced in 2012 that it was working on updating the template, but a new version was not available as at November 2013.[374]

The Norwegian Environment Agency conducted its last inspection of 29 of the then 34 IUAs in 2007. The inspections revealed that several IUAs had not conducted exercises as intended and/or had not prepared any environmental risk analysis. Otherwise, there were only minor comments on the preparedness of the IUAs. The Norwegian Environment Agency also conducts regular response time controls in the IUAs to test how much time elapses from the time an IUA receives notification of an accident until it has established a minimum emergency response organisation consisting of four people. In the last inspection in 2012, the response time for 20 IUAs was good, while it was too long for two.

Although it may vary, the Norwegian Coastal Administration is basically satisfied with the IUAs' preparedness capacity based on the requirement that IUAs must establish their preparedness for minor cases of acute pollution. In many cases, the municipalities and IUAs have close cooperation with relevant undertakings to ensure a coordinated response. For example, in West Finnmark, the IUA has partnered with municipalities in the area for a possible accidental discharge from Goliat, which strengthens the IUAs in West Finnmark. The IUAs and NOFO have a cooperation agreement in East Finnmark. The oil industry buys emergency preparedness support from all coastal IUAs so that they can help with oil spill response operations.

372) Letter from NOFO to the Norwegian Climate and Pollution Agency (now the Norwegian Environment Agency) of 31 May 2013.
373) Report No. 37 (2008–2009) to the Storting, p. 101–102, and interview with the Norwegian Coastal Administration on 8 May 2013.
374) Norwegian Environment Agency, national emergency preparedness seminar on 30 October 2012. No new planning template was available as of November 2013.

State preparedness

The state preparedness organisation is an additional protection directed toward the risk of or response to major instances of acute pollution from ships and unknown sources. The Norwegian Coastal Administration is responsible for the operation and development of the state's preparedness against acute pollution and has prepared plans for this. If an acute discharge is handled by the responsible polluters or municipal preparedness, the Norwegian Coastal Administration will have supervisory responsibility. The Norwegian Coastal Administration must be capable of taking over a campaign, in whole or in part, if the private or municipal preparedness organisation is insufficient. In such cases, the private, municipal and state preparedness organisations will combat the discharge together, under the leadership of the Norwegian Coastal Administration.[375] In practice, the IUAs have been very important in the major actions in which the state has built and managed operations before they were handed over to the relevant IUA or IUAs.

The Norwegian Coastal Administration previously pointed out that it has not had sufficient means to control the IUAs since it is the environmental authorities that make the requirements and follow them up in a normal situation. This division of roles has previously been somewhat unclear in practice, but in the Norwegian Coastal Administration's view as at 2013, there was at the time a good separation of roles between the Norwegian Environment Agency and the Norwegian Coastal Administration vis-à-vis municipalities/IUAs and companies. The Norwegian Environment Agency has previously emphasised that in their assessment, this division of roles is sound and has also been selected in other areas.

The Norwegian Coastal Administration explains that it has good cooperation and dialogue with the Norwegian Environment Agency on technical issues and contingency plans etc., which are important for cooperation. The Norwegian Coastal Administration is also involved in a collaborative forum for developing municipal emergency response together with the Directorate for Civil Protection and Emergency Planning (DSB), the Norwegian Environment Agency and IUAs. The Norwegian Coastal Administration, Klif and DSB have prepared a guide for equal organisation of actions (the ELS guide) covered by this framework. In this way, the state acts more uniformly vis-à-vis municipalities, and this work together with the guide can help to ensure more unified organisation.

Oil spill response equipment

The Norwegian Coastal Administration said that emergency preparedness and infrastructure along the Norwegian coast and in the Svalbard area are regularly analysed. Based on analyses and recommendations to the Ministry of Fisheries and Coastal Affairs until 2005, the Norwegian Coastal Administration carried out a renovation programme for the state's oil spill response. In line with the programme, a lot of oil recovery equipment at the state oil spill response depots in the period 2006–2010 has been upgraded and renewed, so that the status of equipment renewals in 2010 was in line with the recommended level.

In June 2011, the Norwegian Coastal Administration presented an environmental risk and emergency preparedness analysis with additional advice and recommendations, and in March 2012 they presented a corresponding action plan. The Norwegian Coastal Administration is generally satisfied with the follow-up of the action plan, and believes they have gained support for their proposals, including the need to increase the financial resources to implement the necessary measures. The budget increase was used to enhance oil spill preparedness along the coast and strengthen municipalities'

375) Report No. 37 (2008–2009) to the Storting, p. 102.

and inter-municipal groups' ability to respond quickly and effectively in the event of acute pollution. The increase was maintained for 2013 and for 2014 and further follow-up of the Norwegian Coastal Administration's environmental and emergency preparedness analysis from 2011 is proposed.[376]

According to the report *Økt skipsfart i Polhavet – muligheter og utfordringer for Norge* (Increased shipping in the Arctic Ocean – opportunities and challenges for Norway) (April 2013), there is a need to update analyses of environmental risk and emergency needs related to the risk of acute pollution of the northern Norwegian waters, especially by Svalbard and Jan Mayen. The Norwegian Coastal Administration agrees with this and that work on updates must be given high priority. The plan was that the report from 2011 should also include an analysis of Svalbard and Jan Mayen, but due to lack of time, these areas were not included in the analysis. The Norwegian Coastal Administration notes that the emergency preparedness analysis from 2011 reveals that there are insufficient time series of ship traffic in these areas, but this is something that will be enhanced by the forthcoming analysis. At the request of the Ministry of Fisheries and Coastal Affairs, a project was initiated in June 2013 to analyse environmental and emergency preparedness needs for Svalbard and Jan Mayen according to the same method used in the analysis presented in 2011.

The need for new measures to ensure the protection of these coastal areas will also be considered in connection with the environmental risk and emergency preparedness analysis to be done for Svalbard and Jan Mayen. Today, specific contingency requirements are made of operations in Svalbard involving an activity that may cause acute pollution. Together with the Governor, these undertakings contribute at the same time to ensuring that there is a reaction force in Svalbard that all parties can benefit from (and which constitutes Svalbard UA). There are oil spill depots in Longyearbyen and Ny-Ålesund, and several exercises are conducted each year.

In addition, several Coast Guard vessels have permanent oil spill response equipment on board. Some of the Coast Guard vessels also have towing capacity. Agreements have been signed with several vessels in the coastal fishing fleet so they can be included as a contingency resource in oil spill response operations – they are trained, certified and can be equipped with the necessary oil-spill equipment.

376) Prop. 1 S Addendum 1 (2013–2014) Proposition to the Storting (draft resolution) – Ministry of Finance. Proposals.

Annex 8 Indigenous peoples' issues emphasised by the Arctic Council – and their status in Norway

Preserving the Sami population's rights

With the Ottawa Declaration the member states of the Arctic Council confirmed their obligations to the people of the Arctic and recognised the special conditions and unique contributions of indigenous peoples and their communities. Through the ministerial declarations for the period 2009–2013, the ministers have stated that they recognise the rights of indigenous peoples in the Arctic.

According to the Ministry of Government Administration, Reform and Church Affairs, Norway's Sami policy is based on the premise that the state of Norway was established on the territory of two peoples, namely the Sami and Norwegians, and that both peoples have the same right and the same requirement to be able to develop their culture and language. The development of the Sami's legal status in Norway is based on the reports of the Sami Rights Committee and Sami Culture Council in the 1980s. Furthermore, developments are impacted by international developments in indigenous rights. The Sami Rights Council and Sami Culture Council found that the Norwegian authorities have a responsibility to protect Sami society and culture through legislation and other measures.

According to the Ministry of Government Administration, Reform and Church Affairs the basic principle in Norway is that the interests of the whole population, including the Sami, are primarily addressed through general legislation. However, there are acts that directly regulate Sami interests, such as Article 110 a of the Constitution and the *Act concerning the Sami Parliament and other Sami legal matters* (Sami Act). The Sami Act governs the Sami Parliament's legal status and issues relating to the right to use the Sami language. Furthermore, the *Act relating to strengthening the status of human rights in Norwegian law* (Human Rights Act) is an important legal framework, including for safeguarding Sami rights. Through the Human Rights Act, Article 27 of the International Covenant on Civil and Political Rights has been recognised as Norwegian law, with precedence in case of conflict with other Norwegian acts. The article is a key provision for the protection of minorities, and therefore also the Sami people. ILO Convention No. 169 concerning Indigenous and Tribal Peoples in Independent Countries is the only convention that deals with indigenous rights directly. Norway ratified the Convention in 1990. The Convention establishes minimum standards for the legal protection of indigenous peoples. The main principle of ILO Convention No. 169 is the right of indigenous peoples to continue to preserve and develop their culture, and the government's duty to take steps to support this work.

Norway is highlighted as a leader by the UN Special Rapporteur on the Rights of Indigenous Peoples as regards the ratification of international conventions and the incorporation of such agreements in Norwegian laws. In addition to being the first country to ratify ILO Convention No. 169 and voting to adopt the UN Declaration on the Rights of Indigenous Peoples in 2007, Norway has incorporated the UN Convention on Civil and Political Rights and the International Covenant on Economic, Social and Cultural rights in Norwegian law.[377]

According to the Ministry of Government Administration, Reform and Church Affairs, the Sami Parliament, as the representative elected body of the Sami, is an important agenda setter for Sami policy.

377) UN report from the Special Rapporteur on the rights of indigenous peoples, 2011.

Special acts contain several provisions dealing with Sami interests. See an overview of them in Fact box 16.

Fact box 16 The most important laws and regulations on Sami rights

Key acts:

- Article 110 a of the Norwegian Constitution
- Act concerning the Sami Parliament and other Sami legal matters (Sami Act)
  - the Ministry of Justice's interpretation statements
  - regulations on election to the Sami Parliament
- Act relating to legal matters and management of land and natural resources in Finnmark County (Finnmark Act)
- The Lapp Codicil

Other relevant acts:

- Act relating to reindeer husbandry (Reindeer Husbandry Act)
- Act relating to primary and secondary education (Education Act) – on Sami Education
- Act concerning cultural heritage (Cultural Heritage Act) (particularly Sections 4, 12 and 23)
  - regulations on division of responsibilities under the Cultural Heritage Act
  - regulations on the export and import of cultural objects
  - regulations on the spelling of place names
- Act relating to reindeer fences between Norway and Finland
- Act relating to reindeer grazing between Norway and Sweden (Border Reindeer Grazing Land Act)
- Act relating to the right to fish in the Tana river in Finnmark County
- Act relating to salmonids and freshwater fish (Salmon and Freshwater Fish Act)
- Act relating to the right to participate in fishing and hunting (Participation Act)
- Act relating to the management of wild living marine resources (Marine Resources Act)
- Act relating to the exploitation of rights and entitlements in the state commons (Mountain Act)
- Act relating to hunting and trapping of wildlife (Wildlife Act)
- Act relating to motor traffic on uncultivated land and in watercourses
- Act relating to outdoor recreation (Outdoor Recreation Act)
- Act relating to planning and processing of building applications (Planning and Building Act)

The Finnmark Act and other statutory rights

The Act relating to legal matters and management of land and natural resources in Finnmark County (Finnmark Act) was enacted in 2005. The purpose of the act is to facilitate the management of land and natural resources in Finnmark in a balanced and ecologically sustainable manner for the benefit of the citizens of the county and particularly as a basis for Sami culture, reindeer husbandry, use of uncultivated land, commercial activities and community life. Through the act, an area of over 45,000 km^2 was transferred from Statskog SF to Finnmarkseiendommen (*Finnmárkkuopmodat*), and the area will be managed in accordance with legislative intent.

Responsibility for following up the Finnmark Act is mainly divided between the Ministry of Justice and Public Security and the Ministry of Government Administration, Reform and Church Affairs. The Ministry of Government Administration, Reform and Church Affairs is responsible for Chapters 1–3, which includes the handling of complaints. The Ministry of Justice and Public Security otherwise has the main responsibility for the act.

The Finnmark Commission was appointed by the King in Council on 14 March 2008 on the basis of the Finnmark Act regarding the identification and recognition of

existing rights to land. The Commission's task is to map existing use and ownership rights that people in Finnmark have acquired on the basis of long-term use. At October 2013 the Commission studied and issued reports on three areas: Stjernøya/ Seiland, Nesseby and Sørøya. The Commission's conclusions are not legally binding. They can be brought before the Uncultivated Land Tribunal for Finnmark County within given deadlines.

According to the UN Special Rapporteur, the Finnmark Act is an important tool for Sami rights to self-determination and control over natural resources at the local level. Just how good the act is as a policy instrument, will be demonstrated once it has been in force for some years (cf. page 13 of the report). But even if the Finnmark Act is a good tool in Sami policy, it does not ensure the same rights to the Sami people who traditionally reside elsewhere than in Finnmark.

The Ministry of Local Government and Modernisation said that the Government is currently (April 2014) considering the follow-up of the report from the Sami Rights Council in NOU (2007:13) *Den nye sameretten*. (The New Sami Legal Regime.) The Sami Rights Council has examined the question of rights to, and the allocation and use of land and water in traditional Sami areas southward from Troms County. The report contains proposals for three new acts:

- Act relating to administrative procedures and consultations for measures that might affect natural resources in traditional Sami areas (Case Management and Consultation Act)
- Act relating to identification and recognition of existing rights to land and natural resources in the traditional Sami areas southward from Troms County (Mapping and Recognition Act)
- Act relating to legal matters and allocation of land and natural resources on Hålogaland Common Land in Nordland and Troms counties (Hålogaland Act)

The committee has also proposed amendments to existing acts, including the Mineral Act. The Ministry of Justice and Public Security and the Ministry of Government Administration, Reform and Church Affairs have primary responsibility for following up the proposals of the Sami Rights Council and implementation will be in cooperation with relevant ministries.

Consultation procedures

According to ILO Convention No. 169, Article 6, the Sami as an indigenous people have a right to be consulted on matters that affect them. Norway has implemented the Sami's right to be consulted with an agreement on procedures for consultation between central authorities and the Sami Parliament. By Royal Decree of 1 July 2005, it was confirmed that the consultation procedures shall apply to the entire central government administration. State authorities also have a duty to consult with other Sami interests in addition to the Sami Parliament, one example is reindeer husbandry. It is an important principle in consultation procedures that consultations shall be conducted in good faith and with a view to reaching agreement. In cases where there still is no agreement with the Sami Parliament, it is essential that the Sami Parliament's opinions and assessments are clearly stated in the documents submitted to final decision-makers. This especially applies to relevant matters considered by the Government, and cases submitted to the Storting. Consultations will not replace conventional processing procedures, including the right to appeal, or the opportunity to have legal issues resolved by the courts.

Consultation procedures and their follow-up are the responsibility of the Ministry of Government Administration, Reform and Church Affairs, but the sectoral ministries

are responsible for ensuring that procedures are observed in specific cases and conducting consultations in their respective fields. The Ministry of Government Administration, Reform and Church Affairs pointed out that it had conducted seminars on the consulting agreement (including frameworks and scope) for all ministries. New seminars will be held as needed, and the Ministry assists sector ministries by telephone when needed. The Ministry also assists in consultations on procedural issues relating to the implementation of consultation meetings (as process supervisor).[378]

The Ministry of Government Administration, Reform and Church Affairs stated in an interview that it annually carried out between 30 and 40 consultation processes with the Sami Parliament. The consultations shall be conducted in accordance with the principles of consultation procedures, where the aim is to reach agreement, and that the Sami Parliament shall receive early information on planned measures.
The Ministry also states that it follows from Section 5 of the consultation procedures that fixed semi-annual political meetings are held between the minister responsible for Sami affairs and the president of the Sami Parliament. Political leadership from other ministries participates in these meetings as needed, and some ministries have similar arrangements regarding regular meetings. Circumstances and development needs of Sami society, matters of a fundamental nature and ongoing processes shall be discussed at the regular semi-annual political meetings. Beyond this, the Sami Parliament is the consultative body in many cases, the Sami Parliament is represented in some delegations etc., and a series of meetings are also held on matters that do not fall under the consultation procedure.

In interviews, the Ministry of Government Administration, Reform and Church Affairs stated that it received feedback that consultation as a tool greatly helps to enlighten matters, and that consultations often contribute to consensual decisions and little unnecessary noise around processes. Although the consultation agreement does not give the Sami Parliament veto powers and the formal decisions are made by central authorities and the Storting, more consultation meetings shall be facilitated, and matters must not be concluded as long as the Sami Parliament and the central government believe it is possible to reach agreement.

When asked, the Sami Parliament emphasised that they consider the development of the Sami Parliament and establishment of procedures for consultations between the central government and the Sami Parliament as a significant step forward in terms of rights and institutional development that will give the Sami Parliament the potential to influence decisions. The same is stated in the UN report from the Special Rapporteur on the rights of indigenous peoples.

The UN report from the Special Rapporteur on the rights of indigenous peoples determined that the Sami Parliament has stated that while "the procedures for consultations gave the Sami Parliament in Norway more influence on government policy in Sami matters, experience with the consultation agreement [has been] mixed. Challenges relating to the traditional Sami way of life and industrial development remain in place."

It was also stated that representatives of the Norwegian Sami Parliament have expressed concern that the Government has at times entered into consultations in cases where the outcome was already decided.

378) Interview with the Ministry of Government Administration, Reform and Church Affairs on 14 June 2013.

In response to a list of questions, the Sami Parliament highlighted some of the challenges with the consultation system. First, the Sami Parliament views the lack of consultation arrangements for budgetary measures affecting the Sami as a challenge. They point out that the economy, along with legislation, organisation and communication, are the main instruments for achieving political goals. In interviews with the Ministry of Government Administration, Reform and Church Affairs and the Sami Parliament it emerged that the Government and the Sami Parliament have differing views on how the determination of funding for Sami purposes via the fiscal budget is to be carried out in practice. The Ministry noted that the budget is not subject to mandatory consultation under the consultation procedures. The parties have reached a temporary, practical solution with an annual budget dialogue meeting between the Minister of Finance and the president of the Sami Parliament.

With respect to decision-making powers and participation in government in general, the Sami Parliament maintained in its response to questions that in recent years it had not been empowered to any great extent to make decisions or been given the opportunity to participate in public administration on matters affecting internal and local affairs. The Sami Parliament cited the following areas: Sami cultural heritage management, fisheries management and reindeer husbandry management.

Indigenous peoples' living conditions and the Arctic Council

The Ottawa Declaration cites the Arctic states' obligations regarding the living conditions of the population in the Arctic. In the ministerial declaration of 2006 the ministers stressed the importance of improving the living conditions of indigenous peoples living in the Arctic. Health is an important component of living conditions, and SDWG states that it will develop specific initiatives to improve health and well-being.[379] According to its website, SDWG has prepared over ten reports on the living conditions and health of the population in the Arctic with emphasis on the situation of indigenous peoples. Some of the reports may be updates of earlier reports. Norwegian representatives have contributed to most of the reports.[380]

In addition to the SDWG, the AMAP Working Group has produced several reports on the health of indigenous peoples in the Arctic. In this context, the Ministry of the Environment cited AMAP's health group and the mapping that has been done to study the relationship between a fatty diet derived from marine mammals and the concentration of mercury in the human body (cf. also Section 5.2.5 on the Minamata Convention on Mercury).

A review of all ministerial declarations since the Arctic Council was established in 1996 shows that few of the reports on the living conditions and health of indigenous peoples and residents of the Arctic have been referenced in the ministerial declarations. Nor have the ministers requested member states to follow up on the recommendations presented in these reports. The ministers nevertheless generally acknowledge that there are persistent health challenges among indigenous peoples, and note the need to improve both physical and mental health and well-being among indigenous peoples and the population in the Arctic.[381]

Health of the Sami in Norway

The white paper *Public Health Report. Good health – a common responsibility* (Meld. St. 34 (2012–2013)) points out that the Sami people in Norway enjoy very good health and good living conditions compared to most indigenous peoples in the

379) SDWG's website.

380) Over 80 per cent of the publications contained contributions from Norwegian representatives, such as the Norwegian Institute of Public Health and the University of Tromsø.

381) Ministerial declarations in the period 2002–2011.

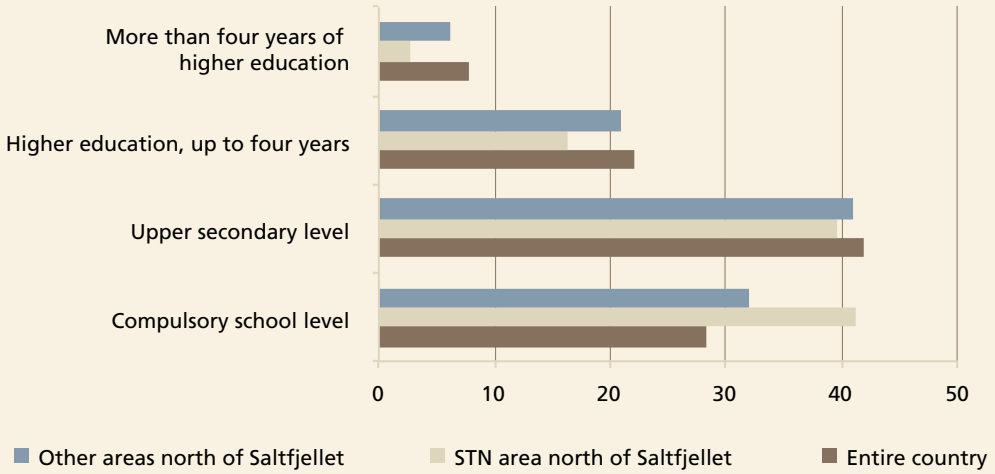
world. There are no systematic health differences between the Sami population and the general population in the same geographic area. In some areas, however, the Sami population, like the population of Northern Norway, is in poorer health than the average in the Norwegian population. Furthermore, according to figures from Statistics Norway, the education level in Sami areas is somewhat lower than in the rest of the country. The employment rate is also slightly lower.

Employment and education[382]

According to Statistics Norway's Sami statistics for the period 2009–2013, 65 per cent of people aged 15–74 years in the STN area (STN explained below) are employed. This figure is somewhat lower than for the rest of the area north of Saltfjellet.

With respect to education, Statistics Norway's Sami statistics show that the education level is lower in STN areas than in other areas north of Salten and in the rest of the country, see Figure 21.

Figure 21 Highest completed education for people aged 16 and up (percentage), 2012



Source: Statistics Norway – StatBank Norway, retrieval date 24 April 2014.

A summary of *Samiske tall forteller* (Sami by the numbers) in the white paper *Public Health Report* (Meld. St. 34 (2012–2013)) for the educational level of the population aged between 24 and 65 years in STN areas, shows that the average for people who do not complete upper secondary education in the prescribed time or do not complete upper secondary education at all, is higher than the national average. This is especially true of boys and is most clearly reflected in vocational studies.

382) Statistics Norway figures: http://www.ssb.no/samisk/. Published 6 February 2014, retrieval date 24 April 2014.

Fact box 17 Samiske tall forteller (Sami by the numbers)

Samiske tall forteller (Sami by the numbers), a report with annotated Sami statistics prepared by an expert group of analysts*, is published each year.

The sixth of these reports was published in 2013. The reports will contribute to increased knowledge that the Government and the Sami Parliament can benefit from in regard to Sami policy, in consultations, budget preparations and development initiatives. Reports are mandated to investigate the following topics:

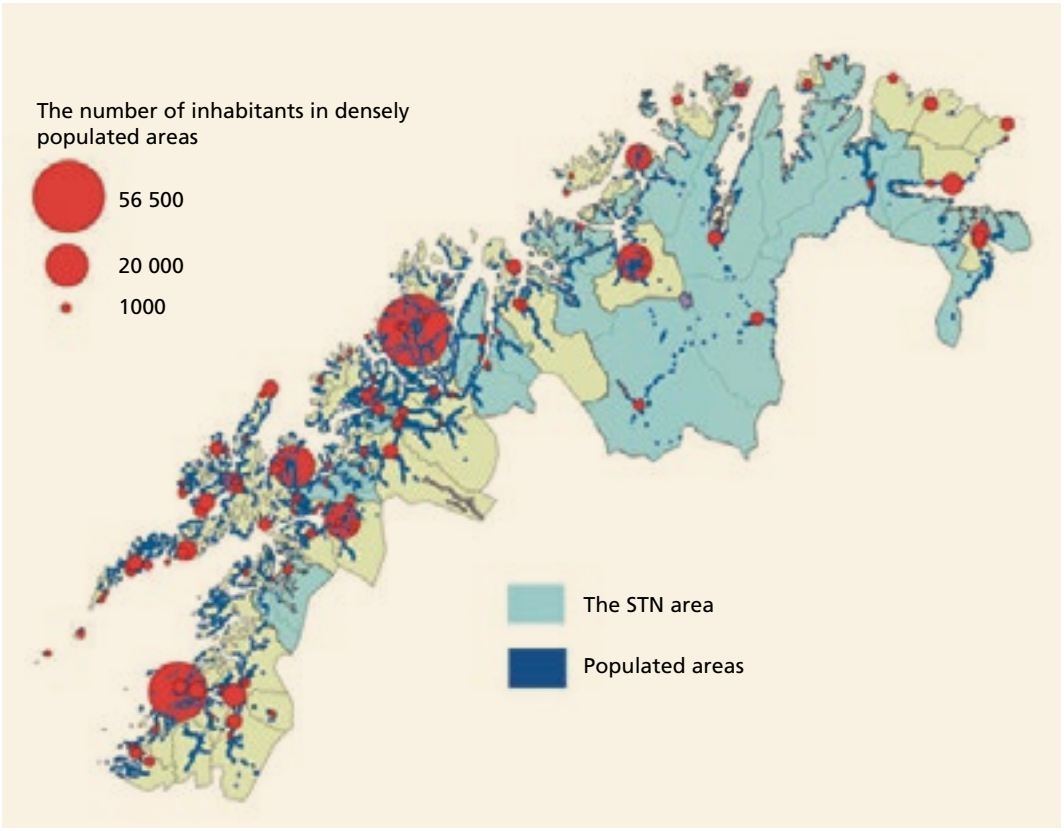
- language
- childhood and adolescence, education and research
- gender equality
- health care and social development, including population trends, demographics, income
- industries, including employment, industrial structure and traditional industries
- environmental and resource management, changes in the material cultural basis and participation and influence
- culture work and general culture, including art forms and media
- Sami civil society, including organisational and institutional development

* The Sami Parliament and the Ministry of Labour and Social Inclusion jointly established this analysis group in October 2007. The group consists of five people who serve four-year terms, and a new group was appointed in 2011.

Sami living conditions and statistics – the STN area

Because no official census has been taken of people of Sami ethnicity or who identify as Sami, it is, according to Statistics Norway, difficult to compile statistics about the Sami as a group. The starting point for Statistics Norway's Sami statistics is therefore geographically based, and the sample is the area of the Sami Parliament's grant schemes for economic development (STN). The STN area lies north of Saltfjellet (cf. Figure 22).

Figure 22 Areas for the Sami Parliament's grant schemes for economic development (STN)



Source: Meld. St. 13 (2012–2013) Report to the Storting (white paper) *Rural and Regional Policy*

The STN area accounts for nearly 60 per cent of the area north of Saltfjellet. Fourteen per cent of those who reside north of Saltfjellet, live in the STN area. Of those living in settled areas north of Saltfjellet, just 7 per cent live in the STN area. There are no cities or large towns inside the STN area. The geographical division of the statistical material has the consequence that the statistics include people within the STN area who do not consider themselves to be Sami, while Sami outside the STN area are not included.[383]

The main argument for choosing the STN area as a basis for Sami statistics is that it includes communities that are considered important in terms of preservation and developing Sami culture and business. Furthermore, the Sami Parliament has specific measures at its disposal in this area. In order to plan the use of and evaluate the effectiveness of these measures, the Sami Parliament needs data to illustrate both the current situation and changes over time within the area.[384]

Using the Sami Parliament's electoral roll for health research is not permitted in Norway, and the population is not registered on the basis of ethnicity. Categorisation of the population in mutually exclusive ethnic categories can be problematic (*Samiske tall forteller 2*) (Sami by the numbers 2). The Ministry of Government Administration, Reform and Church Affairs emphasises that it is a political choice that populations or individuals are not registered on the basis of ethnicity. Furthermore, the Ministry of Government Administration, Reform and Church Affairs pointed out the

383) Statistics Norway (2012) *Samer 2009–2011* (Sami 2009–2011). Statistics. Published 6 February 2012 and *Samer 2011–2013* (Sami 2011–2013), published 6 February 2014.
384) *Samer 2011–2013* (Sami 2011–2013), published 6 February 2014.

importance of having close and good contact with the Sami Parliament. It is the Sami Parliament that possesses special expertise with respect to Sami issues in general.

Need for more information

The report *Flytting til byer fra distriktsområder med samisk befolkning* (Migration to cities from rural areas with Sami population) (2011) emphasised that there has been insufficient research-based quantitative knowledge of health and social-related issues in the Sami population in Norway.

The *Public Health Report* also points out that there are a number of issues that should be looked at to get better knowledge about health and living conditions in the Sami population. The topics discussed in the report include general mental health, suicide and sudden death, including accidents, particularly among young Sami men, and increasing overweight and obesity and lifestyle diseases such as type 2 diabetes.

A major challenge in researching Sami health is defining the Sami population in Norway. Page 18 of *Samiske tall forteller 2* (Sami by the numbers 2) highlighted the following factors complicating the definition of being Sami:

> "First, the degree of 'mixed' ethnic population is high in a number of places. Moreover, the Norwegianisation policy practised for many years, combined with the fact that Sami languages have survived to varying degrees in the different geographical areas, are also examples of factors that have contributed to a situation in which language affiliation is not necessarily a good indicator of affiliation with the Sami population."

In response to the list of questions, the Sami Parliament pointed out that knowledge of Sami culture and society is essential in identifying health challenges and initiating good public health measures. Developing more knowledge is necessary in most fields that deal with health and social services provided to Sami patients. There are generally few published studies based on health studies in Norway where Sami ethnicity is included. Among other things, the Sami Parliament cited the following areas where more research is needed:

- public health
- quality and patient safety
- Sami children and young people
- care research

Furthermore, the Sami Parliament maintains that this kind of information and other research results from studies of Sami health are unfortunately little known among decision-makers and experts. It is therefore necessary to find solutions that can make this documented knowledge more accessible.

Established in 2001, the Centre for Sami Health Research is working to increase awareness about the health conditions of the Sami.

Fact box 18 SAMINOR

The SAMINOR study examined, among other things, satisfaction with municipal health services, risk of disease, prevalence of various diseases, use of medications and nutrition. The data from this study has made it possible to study the incidence of some diseases and selected risk factors for disease in Sami people compared with the general population in the geographic areas covered by the study.
The findings in the SAMINOR study show that the Sami population is facing some specific health challenges where further research is necessary.

SAMINOR 2 was carried out in 2012/2013. The survey collected data through questionnaires, blood tests and clinical measurements. Data on gender, age and place of residence were obtained from Statistics Norway. An application will be submitted for permission to link the collected data (from questionnaires, blood tests and clinical measurements and also Statistics Norway data on gender, age and place of residence) to the national registers.

Source: Ketil Lenert Hansen: *The Saminor study* (presentation) and Centre for Sami Health Research, Department of Public Health and General Practice and the University of Tromsø: *Project description SAMINOR 2*.

Indigenous languages

In the language area, the Arctic Council pointed out in the ministerial declaration in 2006 the need to preserve and revitalise the indigenous languages of the Arctic. On the basis of what was pointed out in the declaration, a language symposium was held in 2008 in Tromsø where advice and recommendations were presented to Member States and indigenous peoples, along with further work in the Arctic Council and international organisations within the UN system.[385] On the basis of the report from the symposium, the ministers of the Arctic Council pointed out in 2009 the importance of reducing the loss of Arctic indigenous languages and considering the recommendations presented in the report.[386]

The Sami languages in Norway

The Sami's right to preserve and develop their languages is recognised in Article 110 a of the Constitution, and Section 1–5 of the Sami Act stipulates that Sami and Norwegian languages are equal, and that they shall be equal under the provisions of Chapter 3 of the Sami Act. Certain provisions of the Sami Act are limited to the administrative area for Sami languages, while others have no such geographical limitation. Certain provisions are aimed particularly at local authorities, while others apply in addition to state and regional authorities. Statutes and regulations of particular interest to all or parts of the Sami population are translated into Sami. Language rules in the Sami Act were adopted in 1990 and implemented in 1992. The purpose of the language rules is to preserve and develop Sami languages, in particular by strengthening their use in public contexts.

The Ministry of Government Administration, Reform and Church Affairs has the main responsibility for the administration of language rules in the Sami Act, and for coordinating the Government's work on the European Charter for Regional or Minority Languages (ECRML). The Ministry also administers a separate grant item for Sami language programmes. The Ministry of Education is responsible for language education in schools. The Ministry of Culture is responsible for the Government's overall language policy and for Sami languages in culture-related issues. All ministries must also take language policy considerations into account in designing and implementing their sector policies.

385) *Proceedings of the Arctic Indigenous Language Symposium*, SDWG, October 2008, Tromsø, pp. 42–45.
386) The 2009 ministerial declaration, Tromsø.

Fact box 19 Sami languages

The Sami language area traditionally extends across parts of Norway, Sweden, Finland and Russia. Language boundaries do not follow national borders. Lule Sami and Southern Sami are spoken in Norway and Sweden, Pite Sami and Ume Sami are spoken only in Sweden and are extinct in Norway. Northern Sami is spoken in Norway, Sweden and Finland. Enare Sami is spoken only in Finland. Akkala Sami, Kildin Sami and Ter Sami are spoken only in Russia and Skolt Sami is spoken in both Finland and Russia (and previously in Norway).

These ten languages form two main groups: Western Sami and Eastern Sami. The Western and Eastern Sami main groups form a total of four subgroups: Southern, Northern, Mainland and Kola.

Source: www.sametinget.no [retrieval date: 14 October 2013]

Action Plan for Sami Languages

In Report No. 28 (2007–2008) to the Storting *On Sami Policy,* the Government announced that it would initiate work on an action plan for Sami languages. In Recommendation No. 191 (2008–2009) to the Storting, the majority of the Standing Committee on Local Government expressed that they "refer to that the Government, in cooperation with the Sami Parliament, shall draw up an action plan for Sami languages. The majority finds that in that connection targeted measures shall be initiated to strengthen Sami languages throughout the Sami area. The majority has specifically noted that the action plan will focus on strengthening the Southern and Lule Sami languages."

To ensure that the action plan would meet the needs of the three Sami languages to the greatest extent possible, the Ministry was in contact with municipalities, county authorities, local language communities and language centres as well as Sami institutions to obtain input for the action plan.

In 2009, the Government presented an action plan for Sami languages.
The Government's main objective with the action plan is to facilitate increasing the number of active Sami language users.

The action plan will lay the foundation for a stronger effort for the Sami languages – Northern, Lule and Southern Sami – in different areas of society. The effort is aimed particularly at training, education, public services and provision of care and the use and visibility of Sami languages in public contexts.

The action plan outlines the following overall objectives for the Government's work on the Sami languages:

- The Northern, Lule and Southern Sami languages shall be developed and continue to be living languages in the future.
- The Sami languages should be promoted and made visible.
- Everyone shall have the right to learn Sami languages.
- Sami language rights are to be strengthened and made known.
- The three Sami languages, Northern, Lule and Southern Sami, shall be given equal development opportunities.
- Public institutions must be conscious of their use of all three Sami languages: Northern, Lule and Southern Sami.
- Knowledge of the Sami languages in Norway shall be developed and preserved for the future.

The measures in the action plan cover three main areas:

- Learning: Strengthening education in and about Northern, Lule and Southern Sami at all levels, increase enrolment in Sami language programmes and increase the opportunities of parents and other adults to learn Sami.
- Using: Increase the public sector's use of Sami, including by strengthening Sami language and cultural skills in public enterprises, increasing information in Sami for Sami users and developing language technology and Sami orthography tools.
- Seeing: Make the Sami language visible in the public sphere through media, culture and use of Sami place names.

According to the action plan, an important task is to ensure the status of Lule and Southern Sami as living utilitarian, socially interactive and knowledge languages for future generations. Special funds have been set aside to strengthen the revitalisation of these languages. The funds are managed by the County Governor of Nordland.

The Ministry of Government Administration, Reform and Church Affairs (FAD) is responsible for coordinating the action plan, while the specialist ministries are responsible for the specific measures. For example, the Ministry of Education is responsible for activities relating to education in and about Northern, Lule and Southern Sami.

The Action Plan has a time frame of five years (2009–2014) and, according to FAD, is to be updated annually in conjunction with status reports. The first status report on the action plan (*Handlingsplan for samiske språk – status 2010 og videre innsats 2011)* (Action plan for Sami languages – status 2010 and further efforts in 2011) was presented on 10 February 2011. FAD states that the status report was prepared in consultation with the Sami Parliament and provides an overview of the initiatives launched in 2009, and how these were implemented. According to FAD, several of the measures have been strengthened, and new measures have been added.

While status reports on the action plans for 2011 and 2012 have not been prepared, the Ministry submitted a status report in September 2013: *Action plan for Sami languages – status 2011–2013.* FAD has worked closely with the Sami Parliament in connection with this status report. The report provides an overview of all actions, who is responsible for each action, and what has been done or is planned to implement the various measures, cf. discussion below.

FAD stated in an interview that semi-annual meetings are held with the Sami Parliament. The topics that are discussed include language. In addition, ad hoc meetings are held on specific actions, such as the ongoing review of Sami Act language rules.

FAD also points out that the Sami Parliament has a personal responsibility for preserving the Sami languages. The Sami Parliament plays an active role in the follow-up of the action plan for Sami languages and is a very important actor with its invaluable knowledge of the Sami languages. The Sami Parliament receives state funds that are to be used to develop and preserve languages.

When asked about the action plan for Sami languages, the Sami Parliament responded that the plan contains a number of good initiatives and has been a useful tool in efforts to strengthen and develop Sami languages. A number of the measures in the action plan had been launched by the Sami Parliament before the action plan period. According to the Sami Parliament, the weakness of the action plan is that the measures are not adequately based on overall goals and strategies. The Sami Parliament said that there is a need for a more comprehensive language policy that encompasses the entire

community. In the Sami Parliament's 2012 report on Sami languages, the Parliament supported proposals for an overarching policy on Sami languages that will guide and clarify fundamental questions about the use and development of the Sami languages. The Sami Parliament's main objectives for the development of Sami languages is to increase the number of users and the use of Sami languages. To achieve these objectives it will be necessary to clarify the areas of authority and division of responsibilities between the Sami Parliament and the Government. Such preparation requires review and amendment of legislation and framework conditions.

The Sami Parliament said that it had worked with several ministries through its work on the action plan. Based on its experience with this work, the Sami Parliament believes that someone should have overall responsibility for coordinating the measures initiated by the government.

The Sami Parliament notes that the Sami Parliament report emphasises the situation of the language areas. The situation for Sami languages is different, not only *between* but also *within* languages. This means that various strategies must be employed to strengthen and develop the Sami languages, which is also evident from *Samisk språkundersøkelse 2012* (Sami language survey 2012). The Sami Parliament emphasises that good language planning requires knowledge and expertise about the Sami languages, which the Ministry does not seem to have. This issue was also discussed by the Sami Parliament in its report on Sami languages.

Through both the budget and the revised budget for 2013 the Sami Parliament increased the basic grant for the Sami language centres so as to strengthen language work in the various linguistic areas. The Sami Parliament related that it is engaged in a language campaign that aims to encourage more people to take Sami language courses and to get more people to use Sami languages in everyday life and in more areas of society.

Fact box 20 Sami language centres

Eleven Sami language centres currently receive a basic grant from the Sami Parliament; The language centres were established at the initiative of local communities to revitalise Sami languages. The Sami language centres play an important role and are strong contributors in terms of local teaching, visibility and strengthening of the Sami languages.

Source: *Sametingsmelding om samisk språk 2012* (Sami Parliament report on Sami languages 2012)

Status for Sami languages

In an international context, all Sami languages are characterised as endangered, seriously endangered or nearly extinct languages. Of the Sami languages that are and have been in use in Norway, UNESCO's "Red List" classifies Eastern Sami, Pite Sami and Ume Sami as extinct languages, Lule Sami and Southern Sami as seriously endangered languages, and Northern Sami as endangered (*Fakta om samisk språk* (Sami language facts), the Ministry of Government Administration, Reform and Church Affairs (2011)).

The Ministry's status report at September 2013 points out that the Northern Sami language is in a stronger position than Lule Sami and Southern Sami. But ensuring that it remains a utilitarian and socially interactive language in the future is, according to the Ministry, a major challenge. The Ministry also notes that the challenges facing Lule Sami and Southern Sami are even greater, and that both of these are also minority languages, even in a Sami context. The Ministry pointed out at September 2013

that the Sami languages continue to be characterised as endangered or seriously endangered.

Fact box 21 Definitions of the status of languages

An endangered language is defined as a language with a decrease in the number of children who can speak it, a seriously endangered language is understood to be a language that almost only adults speak, and a nearly extinct language has only a few elderly speakers.

Sources: *Handlingsplan for samiske språk – statusrapport 2011–2013* (Action Plan for Sami Languages – Status Report 2011–2013) and https://www.sametinget.no/Spraak/Fakta-om-samiske-spraak

Sami in schools

After the Education Act entered into force in 1998, all Sami pupils in primary and secondary schools in Norway are entitled to tuition in Sami. In Sami districts, primary school age pupils are entitled to tuition in Sami, and Sami pupils who live outside Sami districts are entitled to tuition in Sami if the group has at least ten pupils.

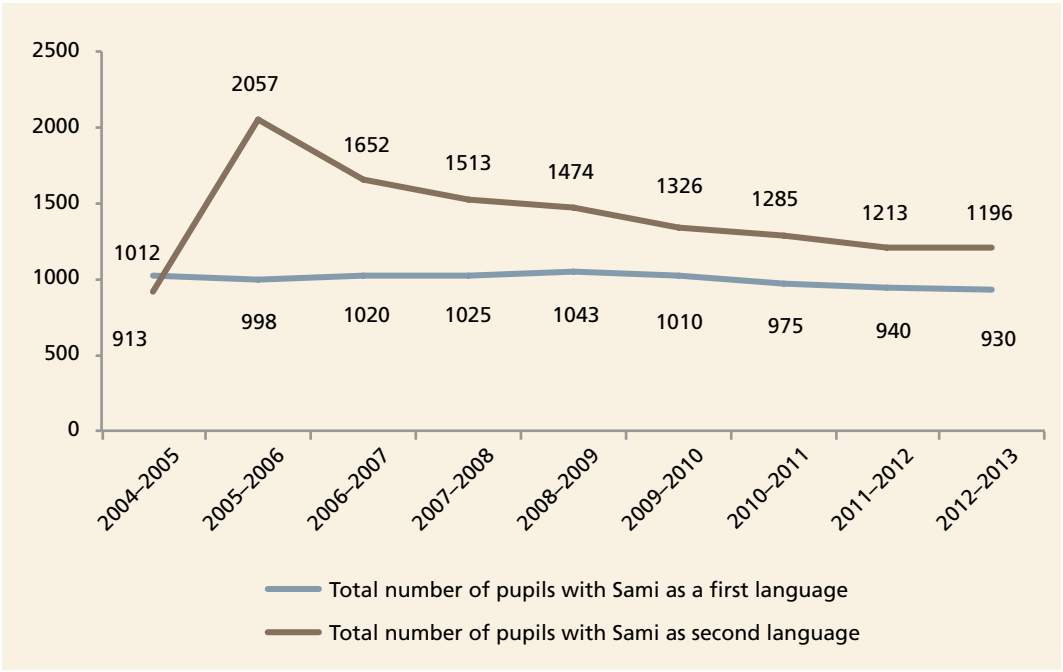
The *Act relating to Kindergartens* (Kindergarten Act) gave municipalities in Sami districts responsibility for ensuring that kindergarten programmes for Sami children are based on Sami language and Sami culture. Other municipalities are required to enable Sami children to maintain and develop their language and culture (*Handlingsplan for samiske språk – status 2011–2013*) (Action plan for Sami languages – status 2011–2013).

Figures from the Norwegian Directorate of Education and Training show that

- there were 930 pupils with Sami as a first language in primary and lower secondary school in the 2012–2013 school year, a decrease of 1.1 per cent from the 2011–2012 school year. The decline from the 2006–2007 to the 2012–2013 school year was 8.8 per cent.
- there were 1,196 pupils with Sami as a second language in primary and lower secondary school in the 2012–2013 school year, a decrease of 1.4 per cent from the previous year. The decline since the 2006–2007 school year was 27.6 per cent.
- the number of pupils with Sami as a second language in upper secondary schools has increased from 152 students in the 2008–2009 school year to 180 students in the 2012–2013 school year, an increase of 18.4 per cent (this applies to counties that have more than five students with Sami as a second language).
- the number of pupils with Sami as a first language in upper secondary schools has increased from 189 students in the 2008–2009 school year to 236 students in the 2012–2013 school year, an increase of 24.9 per cent.

The clearest and most serious trend in the statistics on Sami languages in primary education in recent years is the decline in the number of pupils who choose Sami as a second language in primary and lower secondary school. The Sami as a second language subject has lost 28 per cent of primary school pupils since 2006–2007, cf. Figure 23.

Figure 23 Total number of pupils with Sami as first and second language, 2004–2013



Samisk språkundersøkelse 2012 (Sami language survey 2012) was conducted on behalf of the Sami Parliament, which, together with the Ministry of Government Administration, Reform and Church Affairs and the Ministry of Education wanted to document the use of Sami languages in Norway.

The report shows that there are large variations in language skills between Northern, Lule and Southern Sami. Sami is used in many different interactive situations in some of the municipalities in the administrative area for Sami language in Finnmark County. Language skills are still relatively strong in Lule Sami areas, but the language is used in fewer contexts. Few people are proficient in Sami in many of the municipalities outside the administrative area for Sami language from Finnmark County to northern Nordland County. For Southern Sami languages, early assimilation to Norwegian has to some extent given way to revitalisation, but the language has become more of a written language. The use of Sami also increases in municipalities that collaborate with Sami communities on language measures. A summary of the 2012 survey, *Samisk språkundersøkelse 2012* (Sami language survey 2012) shows that availability of Sami tuition is still inadequate, and adults are also interested in Sami-language programmes). It also emerges in the language survey that one third of primary and lower secondary school pupils who are entitled to Sami tuition, do not receive such tuition. A lack of qualified teachers is highlighted as one of the main reasons why this is so (*Samisk språkundersøkelse 2012*, p. 176) (Sami language survey 2012, p. 176).

The conclusion from the report is that the large variations in language skills, applications and language attitudes, both between languages and between different parts of the country, make it difficult to develop general measures for strengthening the Sami languages. Measures must be more tailored to the local language situation.

In S*amiske tall forteller 6* (Sami by the numbers 6) (2013), Jon Todal emphasises that it is a problem that regular and comparable surveys are not carried out to show the direction in which the number of Sami speakers in Norway is changing. The Council of Europe has pointed out exactly this as a deficiency in Norwegian minority policy.

Reindeer husbandry

Reindeer husbandry is also an area on which the Arctic Council with various reports has accumulated knowledge. Since its creation in 1996, the Arctic Council has issued four reports on reindeer husbandry in the Arctic.[387] All reports provide advice and recommendations on reindeer herding. Only one of these reports, the one from 2002, is mentioned in the ministerial declarations.

However, the Ministry of Foreign Affairs and the Arctic Council Secretariat noted that the Arctic Council has initiated a major project, EALÁT, which addresses the challenges of reindeer herding in the Arctic. The project received considerable attention in the international polar year, and in March 2011 the reindeer husbandry institute the UArctic EALÁT Institute was established in Kautokeino.

In 2011–2012 the OAG conducted an extended follow-up study of Document no. 3:12 (2003–2004) on reindeer grazing resources in Finnmark: Document 3:14 (2011–2012) *The Office of the Auditor General's investigation of sustainable reindeer husbandry in Finnmark*.

387) *Sustainable Reindeer Husbandry 2000–2002*, *Family Based Reindeer Herding and Hunting Economics*, 2004, and two reports through EALÁT: *Reindeer Herding and Climate Change*, 2009, and *Reindeer herding, traditional knowledge, adaptation to climate change and loss of grazing land*, 2011.

Background and objectives for the audit.
Findings and recommendations.

241 344
Print: 07 Media 2014

Document 3:3 (2014–2015)

The Office of the Auditor General's investigation of the authorities' work with the Arctic Council

Riksrevisjonen

BACKGROUND AND OBJECTIVE OF THE AUDIT

The Arctic Council was established in 1996 to promote cooperation between the Arctic states and Arctic indigenous peoples' organizations, particularly within sustainable development and environmental protection. The Arctic represents one of the last large areas of unspoiled nature but is susceptible to environmental impact and deglaciation. Climate change is making the Arctic more accessible and fosters increased economic activity. This will amplify environmental challenges at the same time. The Arctic Council will therefore be a more important cooperation forum in the future.

The purpose of this audit has been to evaluate the Norwegian authorities' work with the Arctic Council and illustrate how the Council organises and funds its work. The audit is the Norwegian contribution to a multilateral audit of the member countries' work with the Arctic Council.

Findings and recommendations

Has strengthened cooperation and increased knowledge:

The Arctic Council has helped strengthen cooperation in the Arctic and increase knowledge – particularly about the environment and climate change.

The Council has obtained considerable knowledge that contributes to a common understanding of the challenges in the Arctic and the measures that should be implemented.

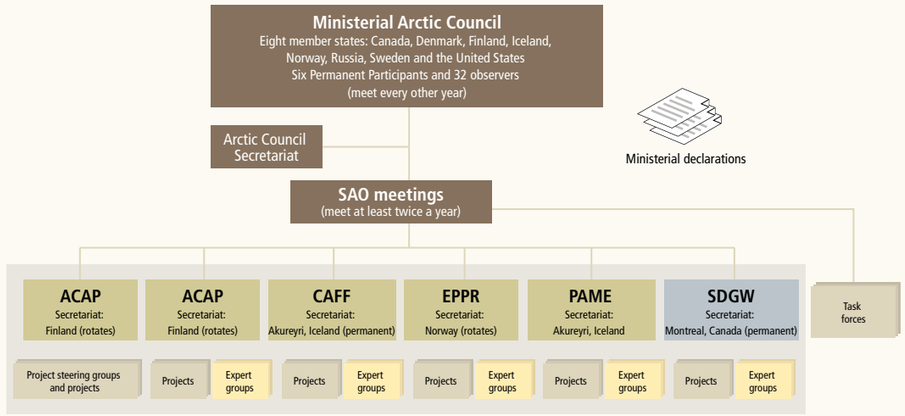
While the Council's recommendations are not binding under international law, it is, in the opinion of the OAG, important that the Arctic states can collectively show that they take responsibility for ensuring sustainable development in the Arctic.

Better management and organisation can provide greater effectiveness

The organisation of the Arctic Council is impractical and management of the work is deficient – both in terms of priorities and funding.

The Council's working groups work differently with regard to mandate, activities and achievement and have partly overlapping functions. The OAG believes that the Arctic Council needs greater prioritisation, more predictable funding and that the Council should increasingly steer technical and financial resources towards long-term and specific goals.

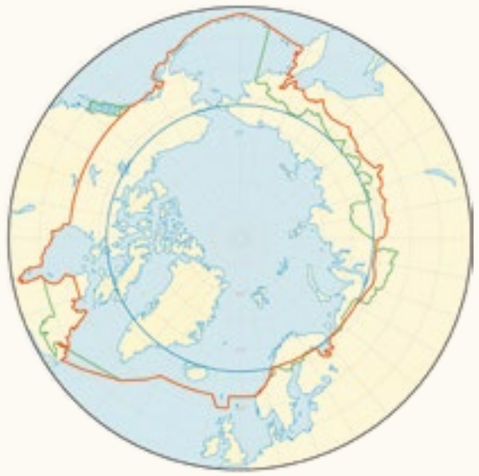
- The OAG recommends that the Ministry of Foreign Affairs step up efforts to make the Arctic Council a more efficient body with an emphasis on better management, organisation, funding and reporting.



Definitions of the Arctic

There is no one definition of the Arctic. In Norway, the political definition is the areas north of the Arctic Circle. The Arctic Council's working groups can define the geographical area that their work covers.

- The Arctic Circle
- Defined by the Arctic AMAP Working Group
- Defined in the Arctic Development Report



Source: Norwegian Polar Institute/Arctic Council

Measures for better participation of indigenous peoples:

The importance of involving indigenous peoples is clearly expressed in the Arctic Council, but participation in the Council varies due to lack of resources, both financial and in terms of available expertise and personnel.

Better coordination and follow-up of Norwegian authorities' work with the Arctic Council

In addition to the Ministry of Foreign Affairs as the responsible ministry, a large part of the work of the Council has been under the Ministry of Climate and Environment's area of responsibility. Other relevant ministries have not been as involved. Other specialist authorities have an unclear role and function, and there is no standard practice for gaining an overview of how recommendations are followed up or if they have already been incorporated into Norwegian administration.

- The OAG recommends that the Ministry of Foreign Affairs better facilitate coordination and interaction of the work in the Arctic Council with the relevant sector ministries.

- The OAG recommends that the Ministry of Foreign Affairs initiate measures so that all relevant departments increasingly find work with the Arctic Council expedient, both to make use of the Arctic Council's work and to contribute relevant expertise in relevant areas.

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