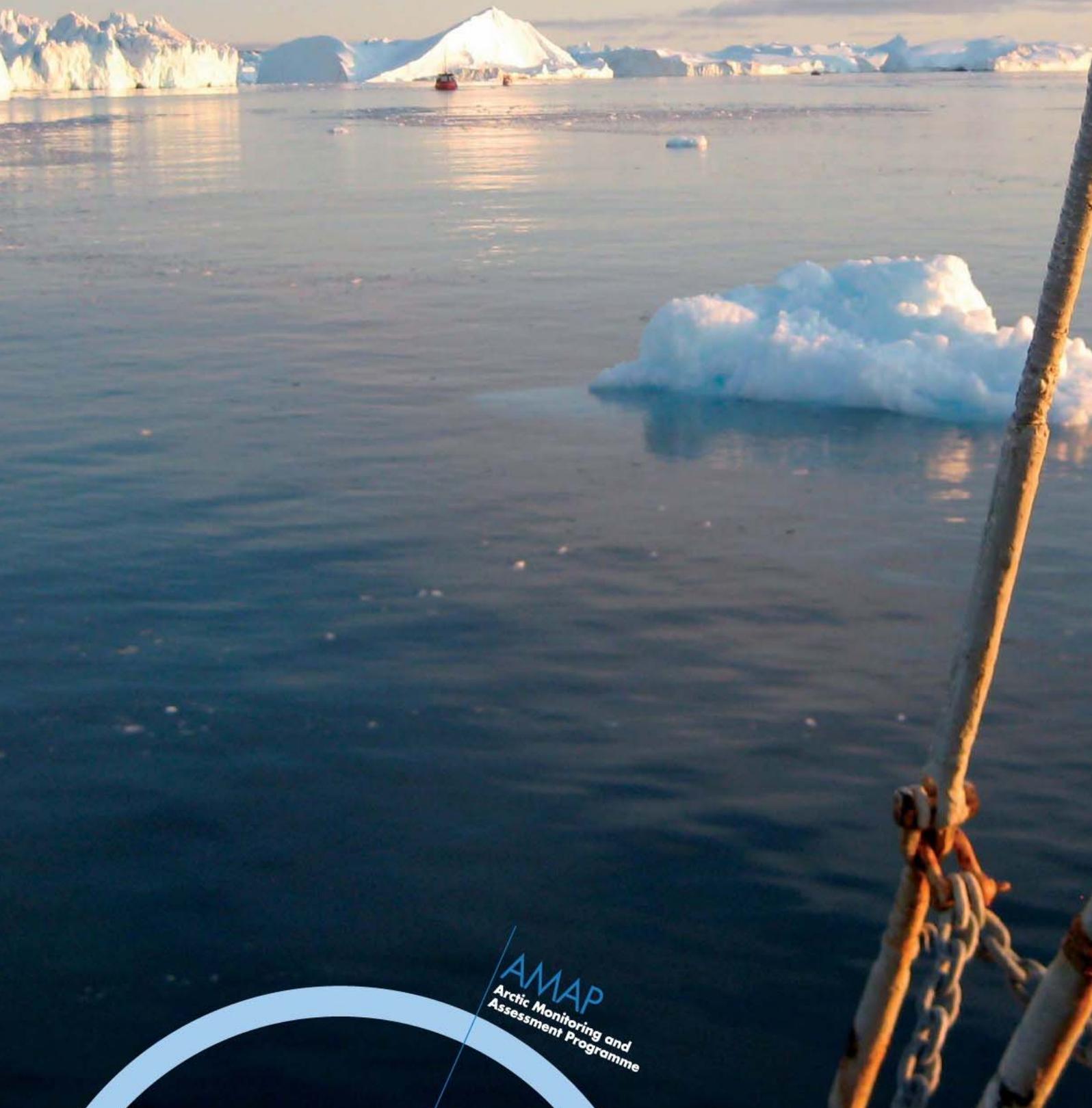


**Progress report from AMAP for the period 2007–2009
to the Arctic Council Ministerial Meeting
in Tromsø, Norway, April 28–29, 2009**



1. Administrative issues

There have been some changes in the AMAP Heads of Delegation; see Annex 1 to see the list of AMAP WG members and Observers. At the teleconference held January 22nd 2009 Russel Shearer (Canada) was elected as new Chair of AMAP and Morten S. Olsen (Denmark) and John Calder (USA) as new Vice Chairs. Thanks are expressed to Yuri Tsaturov and Per Døvlø for their work serving as AMAP Vice Chairs in the past years, in particular Yuri Tsaturov for his long period of service in this capacity.

The **AMAP WG** has met twice since the Salekhard Arctic Council Ministerial meeting: in Hanover, NH in March 2007 and in Quebec City in December 2008. In addition, Head of Delegation meetings have been held in Copenhagen in September 2007 and in Oslo in May 2008. AMAP Expert groups have held a number of meetings to prepare the Scientific Assessments: the AMAP human health assessment group met in May 2007 in Norway, May 2008 in Copenhagen and October 2008 in Atlanta, the AMAP POPs expert group met in January 2008 in Copenhagen, in March 2008 in Charleston and in December 2008 in Quebec, the AMAP mercury expert group met in October 2007 in Copenhagen and December 2008 in Quebec, the AMAP climate expert group met in September 2007 in Copenhagen, the AMAP radioactivity group met in Bergen June 2008 and Oslo September 2008. The AMAP Assessment Steering Group (**ASG**) met in Oslo in May 2008. The SWIPA Integration Team has met twice, in June 2008 in Copenhagen and in November 2008 in Oslo. SWIPA sub-component groups have also met several times during this period.

In addition to the AMAP Executive Secretary (Lars-Otto Reiersen) and Administrative Assistant (Inger Utne) working at the AMAP Secretariat office in Oslo, other members of the AMAP secretariat staff members work from their home location offices; Simon Wilson (AMAP Deputy Executive Secretary) in Rotterdam and Yuri Sychev has work part time as AMAP Deputy Executive Secretary in Moscow. Jon Øyvind Odland worked from Bodø for the time period that he was part of the Secretariat. Odd Rogne has also been working in Oslo, two days a week for AMAP Secretariat and two days a week for the IPY secretariat in Cambridge, UK. Several experts have assisted AMAP Secretariat in the preparation of the assessment reports, a special recognition is given to Janet Pawlak (Copenhagen), Carolyn Symon (London) and John Bellamy (Stockholm), David Stone (Victoria). Electronic communications make this an efficient and cost-effective arrangement for conducting the work of the Secretariat.

AMAP in cooperation with international partners has arranged several workshops during the period, related to SAON, SWIPA, non-CO₂ drivers of climate change, use of unmanned aircraft for environmental monitoring, Arctic oil and gas, Arctic Coastal Zone Risks, Arctic Carbon Flux, downscaling from global to Arctic regional climate models and oil and gas.

The Financial costs for the operation of the AMAP Secretariat are shown in Appendix 2. Norway is covering the main costs, but significant funding has been received from Canada, Finland, USA and NCM to secure additional administration costs and costs associated with project work, participation of indigenous peoples in AMAP work, and production of reports, etc.

2. Update on ongoing work

The AMAP Work plan for 2007-2009

AMAP has followed the workplan for the period 2007-2009 that was approved in October 2006 at the Arctic Council Ministerial meeting in Salekhard.

The main tasks for AMAP since the last Ministerial meeting have been the following:

Work on the production of: (1) the AMAP Assessment 2009 and its associated 2009 State of Arctic Environment Report (SOAER) on Pollution Issues, focusing on Persistent Organic Pollutants, Radionuclides and Human Health, (2) delivery of the Arctic Council Assessment of Potential Impacts of Oil and Gas Activities in the Arctic (OGA) and (3) the work to follow-up on the Arctic Climate Impact Assessment as reported in the *AMAP Update on Selected Climate Issues of Concern* report.

(1) AMAP Assessment 2009: focusing on Persistent Organic Pollutants, Radionuclides and Human Health,

The AMAP WG is pleased to present to the Ministers the *AMAP Pollution Issues 2009* report, and its background scientific documents (which are currently being finalised for publication and will be available from www.amap.no). This work was initiated following the 2004 Arctic Council Ministerial meeting. A substantial amount of new data has been compiled and assessed and the reports produced have been subject to a thorough scientific peer review and quality assurance process, including national review within the Arctic countries and independent international peer review. The reporting of data - environmental observation and emissions - remains uneven among the Arctic countries. For future assessments of climate, contaminants and human health this needs to be improved.

The 2009 AMAP assessments would not been possible to prepare and present without the substantial contribution from the Lead countries concerned: Canada and Sweden for the POPs assessment, Canada and Denmark for the human health assessment, and Norway and Russia for the radioactivity assessment. The AMAP WG would like to thank the lead countries for their excellent work in leading the assessments and providing additional in-kind resources to ensure delivery of the assessment products for the Ministerial meeting. Furthermore, the AMAP WG would like to thank all the scientists that have contributed to the assessments, and also the technical staff engaged in supporting the assessment work (scientific secretaries, technical and linguistic editor, graphical production and layout staff, and science writers) for their excellent work. Special thanks are addressed to the Nordic Council of Ministers (NCM) for their substantial financial support to this assessment work. The reports are available electronically from www.amap.no, printed reports can be obtained from the AMAP Secretariat or AMAP national HODs. The reports are distributed among the Arctic countries, Permanent participants, and observing countries and organizations, and to relevant international fora.

(2) Arctic Council (2007) Assessment Oil and Gas Activities in the Arctic – Effects and Potential Effects (OGA)

The OGA assessment was unfortunately delayed due to late contributions from some of the participating countries and additional work to agree on the reports findings and recommendations; the overview report *Arctic Oil and Gas 2007* was presented to the SAOs in November 2007 and informally released at the Arctic Frontiers Conference in January 2008 and the Executive Summary was approved in April 2008. The Scientific assessment report ('Assessment 2007: *Oil and Gas Activities in the Arctic – Effects and Potential Effects*') is being made available in electronic form from the www.amap.no and will be printed in three volumes over the course of 2009. The AMAP WG would like to thank the

Lead countries, Norway and USA, for their substantial contribution, and so also to NCM for their financial support to the production of this important assessment.

(3) Follow-up to ACIA

The Arctic Council Cryosphere project (SWIPA)

Following the SAO meeting in April 2007 planning activities for all the components and modules of the Arctic Council Cryosphere Project (Snow, Water, Ice and Permafrost in the Arctic – SWIPA) were further developed during specially arranged workshops on:

the Sea ice component in Tromsø August 2008 and Oslo January 2009;

Greenland Ice Sheet component in Copenhagen November 2007, April 2008, October 2008 and March 2009;

Snow and Permafrost modules in Potsdam February 2008, Lund September 2008 and Vienna April 2009;

Hydrology module in Reykjavik April 2008 and Calgary March 2009;

Glaciers & Ice caps module in St. Petersburg in February 2008 and Victoria February 2009;

A special workshop on social-economy was also arranged in Copenhagen March 2009.

The SWIPA Implementation plan has been updated during this process, and has been endorsed by the SAOs. It is available from www.amap.no.

The project proposal is strongly supported by several international organizations and has received positive reactions from a large number of climate experts.

An Integration Team (IT) for the SWIPA project has been established and met for the first time in Copenhagen in June 2008, and a second time in Oslo in November 2008. The chair of the SWIPA-IT is Morten Skovgaard Olsen ((Denmark).

A preliminary report on the Greenland Ice Sheet component is under preparation and an extended summary of this report will be presented to SAOs and Ministers in Tromsø.

Arctic carbon cycle assessment

A scientific paper presenting current state of knowledge and gaps in knowledge concerning the Arctic carbon cycle has been prepared and accepted for publication in the scientific journal “*Ecological Monographs*”. This paper is based on the outcome of the Arctic Carbon Flux workshop held in Seattle (2007) that was co-sponsored by AMAP, IASC and CliC. The paper is also be available as an AMAP report in electronic format on www.amap.no . The activity is linked to global work on Carbon Flux and Climate Change. Summary findings of this assessment are presented in the *Update on Selected Climate Issues of Concern* report.

Downscaling from global to regional climate models

The methodological recommendations resulting from the AMAP workshop held in Oslo in May 2007, on the subject of climate model downscaling are now being used in several scientific studies, both linked to IPY and other research projects. The workshop report and publication describing the methodology is available from www.amap.no.

Arctic climate modelling

The group of modellers within the AMAP Climate Expert Group (CEG), lead by USA and Russia, has reviewed outputs from the global climate models during spring of 2008 to evaluate those most suitable for making Arctic climate predictions. The outcome of this review will be used by the Cryosphere project (SWIPA) and related projects. A science paper will be published during 2009 and will be reported in more detail in 2011.

Arctic Report Cards

The AMAP Climate Expert Group (CEG) has been involved in the preparation and review of the Atmosphere, Ocean, Land, Sea ice, and Greenland components of the Arctic Report Cards that are published by US-NOAA (<http://www.arctic.noaa.gov/reportcard>) and that present annual updates on key Arctic climate parameters and indices. The AMAP *Update on Selected Climate Issues of Concern* report includes relevant information concerning climate development in the Arctic from the 2006 to 2008 Arctic Report Cards.

Short-Lived (non-CO₂) Drivers of Arctic Climate Change

Based on the decision made at the SAO meeting in Svolvær (April 2008), AMAP, in cooperation with the 'Oslo group' and the Climate Policy Center - Europe, arranged a scientific workshop on this subject in Oslo in September 2008. The discussion was mainly focused on three issues: Status of scientific understanding and gaps in knowledge; Sources, and potential actions on these sources; and Priority actions to be presented to the Arctic Council for their consideration.

The workshop had excellent participation and developed a number of clear recommendations that are presented in the AMAP *Update on Selected Climate Issues of Concern* report. The results of the workshop – including the draft recommendations – were also presented to the SAO meeting in November 2008 and to the meeting of Deputy Ministers arranged by Norway in Tromsø in mid-October 2008, and received supporting statements.

3. Monitoring of the Arctic

Sustaining Arctic Observing Networks (SAON)

Following-up on the decision from the 2006 Arctic Council meeting in Salekhard regarding SAON, AMAP established a SAON Initiating Group (SAON-IG), comprising 13 members including international partners that are involved in research and monitoring of the Arctic. The SAON-IG has held a number of teleconferences and arranged three workshops, in Stockholm (November 2007), Edmonton (April 2008), and Helsinki (October 2008); plus two additional meetings, one in St. Petersburg (July 2008) and one in Incheon, South Korea (September 2008) to engage Russian and Asian experts, respectively.

The SAON-IG defined its purpose as '*to develop a set of recommendations on how to achieve long-term Arctic-wide observing activities that provide free, open and timely access to high quality data that will realise pan-Arctic and global value-added services and provide societal benefits*'.

Based on the outcome of the workshops and meetings, the SAON-IG has prepared a report *Observing the Arctic* to the Arctic Council and all the other IG members. Four main recommendations are presented in the report that is available from www.amap.no.

Assuming that the Arctic Council is prepared to accept a leadership role in the continuation of the SAON process, AMAP is prepared to undertake the role assigned to it by the Ministers and SAOs regarding SAON.

Unmanned Aircraft Systems (UAS) for Environmental Monitoring

Based on the decision made at the SAO meetings in Narvik and Svolvær, AMAP have undertaken a number of follow-up activities. USA and Sweden are the co-leads for this work. A first workshop on UAS, involving mainly the scientific community, was arranged in Stockholm in March 2008. A second workshop arranged 28-29 of October in Oslo involved several experts from the Civilian Aviation Authorities from Arctic countries and the European control centre in Brussels. These experts are responsible for managing aircraft

operations in Arctic airspace. Recommendations from this work have been presented to the SAOs and are reflected in recommendations from AMAP for Ministerial decision.

Atmospheric monitoring network in Russia and Alaska

Based on funding from Canada, Denmark and Norway, mercury monitoring at Amderma has continued through 2007 and 2008, but funds are now required to prolong this monitoring activity. The Amderma site is now responsible for the third-longest time series of atmospheric mercury in the Arctic, after Alert at northern Ellesmere Island in Canada and Ny-Ålesund at Svalbard, and the only Arctic site currently monitoring atmospheric mercury in this region. In connection with a Canadian funded IPY project, POPs monitoring equipment has been installed for a 2-3 year period for operation in Far NorthEastern Russia, Fairbanks, Alaska and Little Fox Lake in the Yukon, Canada to monitoring air transport from SE Asia into the Arctic region. The upgrade of the Tiksi station has continued partly based on funding from the US. Several countries (e.g. Finland, Canada and Norway) have expressed interest in installing instruments at this station; however difficulties are being experienced in importing the equipment to Russia.

There are still no sites in Alaska and northern Russia where POPs are routinely monitored in air, and routine atmospheric mercury air monitoring in Alaska is no longer being conducted. The fact that the monitoring of atmospheric contaminants in air at Barrow has ceased is a particular concern, as this has led to a situation where there is no routine atmospheric monitoring around the Bering Sea and Chukotka to follow the possible atmospheric pathways into the Arctic from South East Asia (other than the Canadian IPY project described above which ends in 2010). AMAP together with Russian authorities are seeking funding to secure more long-term observations of climate and contaminants at Arctic stations in Russia.

AMAP Ring tests (analytical intercalibrations) on POPs in human blood and Arctic animals and sediments

The AMAP coordinated laboratory intercomparisons (ring tests) on analysis of contaminants in human blood have been a great success and improved the analytical quality of a number of participating laboratories. These ring tests, which are now an important component of several international and bilateral programmes, are continuing under the lead of the Institut National de Santé Publique du Québec.

Canada has also invited laboratories from all Arctic countries involved in the AMAP work to participate in its Northern Contaminant Programmes (NCP) laboratory quality assurance/quality control (intercalibrations) initiative for analyses of POPs, mercury and other contaminants in arctic animals and sediments. All AMAP-affiliated laboratories have been urged to participate in this Canadian sponsored activity. There are now approximately 20 laboratories participating from 6 Arctic countries.

National Implementation Plans for AMAP

Several Arctic countries have presented updated overviews of national monitoring activities conducted during the period of 2006-2008, and plans for monitoring to be performed in 2008-2009 (and beyond) that are relevant to AMAP, i.e. information regarding their AMAP National Implementation Plans (NIPs). Countries that have not yet done so are kindly requested to submit their new AMAP NIPs for 2009 to the AMAP Secretariat as soon as possible.

The AMAP Project Directory (PD) at

<http://www.amap.no/Resources/ProjectDirectory.htm> currently registers information on 643 monitoring and research projects and programmes concerned with Arctic environmental issues. This user-maintained online system is also available for use by other AC Working Groups to support their activities.

Registrations of new projects can be made through AMAP or through the ENVINET collaboration (involving European research stations/infrastructures). In addition to AMAP and ENVINET, the PD has also been adopted for use by CAFF. A request that countries complete the registration of relevant projects (in particular their NIP projects) in the PD has been repeated on several occasions during the last year, however, again not all countries have responded to this call. Once again, we kindly ask countries to ensure that their scientists and experts register (or update existing registrations) concerning all projects that are relevant to the work of AMAP, and in particular projects that might contribute to ongoing and planned assessments.

AMAP Website

New information is routinely added to the AMAP website www.amap.no. All AMAP reports, including AMAP assessments and ACIA products are available as electronic documents from the AMAP website. Maps and graphics produced for the AMAP assessments are also available from the website. Over the last two years there have been several requests for use of graphics from the AMAP and ACIA reports. It is planned to update the AMAP website in the coming year. The AMAP WG would like to thank UNEP GRID-Arendal for its continuing offer to host the AMAP website.

AMAP Data handling

AMAP continues to operate the following Thematic Data Centres (TDCs):

- Atmospheric TDC located at Norwegian Institute for Air Research (NILU), Norway;
- Marine TDC located at International Council for the Exploration of the Sea (ICES), Denmark;
- Freshwater & Terrestrial TDC located at University of Alaska-Fairbanks (UAF), USA;
- Radioactivity TDC located at Norwegian Radiation Protection Agency (NRPA), Norway.
- Human health data is handled by the AMAP Secretariat and the Human Health Assessment Group.

The Arctic countries, observing countries and organizations have all been called upon several times to report relevant data to these TDCs so that the data are available to experts engaged in production of ongoing and future AMAP assessments. However, the response to this call from some countries has not been as good as might be hoped. The Arctic countries are again kindly requested to ensure that AMAP relevant data are reported to the AMAP TDCs, and also provide financial support for the continued operation of these TDCs.

International Conferences

Results from the AMAP work over the last years have been presented at several international and national Conferences and Symposia. AMAP has been involved as part of the organizing organization or sponsor of some international events, as the following ones:

- The First International Congress on Fundamental and Applied Problems of Nutrition, June 2007 in St. Petersburg.
- The AMAP/UNEP/UNDP Symposium on Climate Change Impact on Public Health in the Russian Arctic, held in May 2008 in Moscow.
- The Arctic Frontiers Conference in January 2007, 2008 and 2009 in Tromsø, Norway.
- The Arctic Change Conference, in December 2009 in Quebec, Canada.

4. Special Projects

The proposed *Siberian hydrology project* has received considerable interest from within the GEF organizations (UNEP and UNDP), and after a period of delays while the GEF was being reorganized is now back on track. An application to GEF UNEP has been presented to the Russian Focal Point for GEF in Moscow for his consideration before it can be presented to GEF. The project is part of the follow-up to the *Lena River project* and the ACIA. RAIPON will be involved in the *Siberian hydrology project*. This project has potential to be a major contributor to the Hydrology module of the proposed AC Cryosphere project (SWIPA).

The UNEP review of the previously reported RAIPON/AMAP/GEF *Persistent and Toxic Substances project* was very favourable. Russia has set aside financial resources to follow-up this project and an application to UNEP GEF for financial support is under preparation by Russian authorities, hospitals and laboratories and AMAP. A proposal for the follow-up work is now ready to be presented to the Russian Focal Point for GEF for his consideration before it can be presented to GEF.

Remediation of Contaminated Areas of Franz Josef Land

The Russian government has initiated a project to clean up contaminated sites at Franz Josef Land (FJL), and has been open to the re-establishment a research and monitoring station on these islands. The AMAP Secretariat has assisted the Russian Polar Foundation in planning and implementation since the first survey of sites was made in 2004.

The updated inventory regarding the pollution on *Franz Josef Land* has been finalized in 2008 and AMAP presented results from the report at the ACAP meeting held in Helsinki. The report is now available from www.amap.no. Russia has allocated some 300.000 USD for this work and NEFCO has allocated 200.000 Euro.

The clean up project could be a very interesting joint project between several Russian institutions and international organizations, such as the Arctic Council and the Barents-Euro Arctic Council (BEAC). From an AMAP perspective, it is important to remove any significant local sources of contaminants at FJL, and AMAP would welcome the establishment of an upgraded monitoring and research station on Franz Josef Land that can perform monitoring and research on climate, UV/ozone, contaminants, and basic Arctic physical, chemical and biological parameters in general.

Effects of Contaminants on human health

Based on support from the Nordic Council of Ministers and some Arctic countries, AMAP has initiated a project on the Effects of Local and Long-range transported contaminants on human health in Nordic and northwest-Russian territories. The results have been used in the AMAP 2009 assessments of human health and POPs in the Arctic.

Project on combined effects of climate change and contaminants

Based on financial support from the Nordic Council of Ministers and national contributions from some of the Arctic countries, AMAP has implemented a project on combined effects between climate change, UV and contaminants on Arctic ecosystems and humans. Modelling work on potential effects on transport and precipitation of acidifying components and radionuclides has been performed during 2005-2009. An expert group to oversee the project has been established and several subprojects are under development. Part of the first results obtained has been incorporated into the *Arctic Pollution 2009* report. A special report will be made at the end of the project period. This project has been the basis for the ArcRisc project application to EU DG Research 7th Framework, see EU Cooperation, below.

5. Collaboration with other organizations

Collaboration with AC WGs

AMAP is working closely with several other Arctic Council WGs on the implementation of follow up of the Oil and Gas assessment and the Arctic Climate Impact Assessment.

Arctic Contaminant Action Plan (ACAP)

ACAP was originally established by the Arctic Council to address pollution issues documented by AMAP. In this context, AMAP has maintained a close collaboration with ACAP and its projects, however, the AMAP activity and involvement in the projects, has been reduced over the last two years.

ACAP project '*Multilateral Cooperative Project on Phase-out of PCB Use, and Management of PCB-contaminated Wastes in the Russian Federation*'

In 1998 AMAP Secretariat was asked to be the co-lead together with Russia for the PCB project to be implemented in Russia. During phase 1, 2 and 3 - until the Ministerial meeting in Salekhard, the Executive Secretary of AMAP acted as the co-chair of this project. Since then the AMAP secretariat has not been active in the PCB group due to lack of activity.

Phase 1 of the ACAP project on '*Brominated Flame Retardants*'

The AMAP Secretariat and POPs Experts have prepared a review article on BFR in the Arctic that also was used as a basis for an AMAP Fact Sheet on this issue that can be used by Arctic decision-makers as a source of background information on this issue.

Phase 1 of the ACAP project on *Mercury*

The AMAP Secretariat participated in this project as far as capacity allowed. The project is now terminated. A joint Fact Sheet on mercury in the Arctic has been produced by AMAP and ACAP under the lead of Denmark.

Phase 1 of the ACAP project on *Obsolete pesticides*

The AMAP Secretariat has participated in this project as far as capacity has allowed. Information has been gathered that is used in the AMAP assessments on POPs. The AMAP Secretariat is administering the financial accounting for this project from all sources of funding except from the USA.

Conservation of Arctic Flora and Fauna (CAFF)

AMAP and CAFF have had a close cooperation in this period, and arranged two joint meetings, in Copenhagen 2007 and Quebec 2008. Most work has been focused on the coordination of monitoring of climate, contaminants (AMAP) and biodiversity (CAFF). Several pilot projects have been suggested for coordinated monitoring (as reported to the SAOs). The implementation of CBMP by the Arctic countries is expected to be the main vehicle for implementation of a joint effort on monitoring between the two groups, especially for coordination of AMAP and CAFF activities at the national level. Due to the large degree of overlapping interest, AMAP has agreed to be an official co-sponsor of CBMP. An AMAP representative was officially designated to participate in the marine experts group of CBMP.

Emergency Prevention, Preparedness and Response (EPPR)

AMAP and EPPR have been cooperating on work to better organize and harmonize work between the different groups that are engaged in mapping and GIS activities under the Arctic Council. A joint EPPR/AMAP workshop on this subject was arranged in Oslo (February 2008) where participants from AMAP, EPPR and a number of non-AC

organizations involved in Arctic GIS activities participated. As a first step to follow-up on this workshop, EPPR/AMAP and CAFF have prepared a questionnaire for circulation to AC WGs and other interested parties to compile information on currently available data and specific needs for GIS data. Also, connected to the workshop discussions, a GIS group centred on the mapping authorities of some of the Nordic countries has issued a letter of invitation to other Arctic countries to join an initiative to compile circumpolar base map datasets; this initiative has received Arctic Council support. Work to develop an AC WG proposal for a coordinated GIS activity (to develop an Arctic spatial data infrastructure) is still under discussion.

Protection of the Arctic Marine Environment (PAME)

AMAP has contributed to the update of the Arctic Regional Plan of Action that PAME has produced. PAME is preparing an assessment strategy based on the Large Marine Ecosystem (LME) approach, including identification of indicators to be used in monitoring and assessment of the Arctic. Scientific experts engaged in AMAP assessments are concerned that the planned use of indicators and the LME approach to monitoring have flaws that make it difficult to implement in the real world. For example, for practical reasons, it will seldom be possible to monitor a full LME, only portions will be observed. In each LME, there are likely to be sub-environments that differ significantly and should not be “averaged” across the entire LME. Also, some of the LME boundaries are based on political boundaries rather than environmental ones, which artificially distort the concept. AMAP is concerned that the two AC WGs with the main responsibility for performing scientific monitoring and assessments activities for the Arctic Council (AMAP and CAFF) have not been consulted regarding this activity. There are serious practical implementation issues that remain to be resolved and to date there has been little consultation.

Coordination between the work performed under the PAME led Arctic Marine Shipping Assessment (AMSA) and the AMAP led SWIPA Sea Ice component has been established to ensure the best use of resources and information.

Sustainable Development Working Group (SDWG)

Both AMAP and SDWG are engaged in activities related to human health, oil and gas, SAON and climate issues, especially relating to assessments of socio-economic impacts and adaptation and mitigation strategies. A joint meeting between SDWG and AMAP to discuss future cooperation on several issues was held in May 2008 in Oslo. There has been followed-up since this joint meeting, especially in connection with the planned SWIPA work and SAON.

6. International cooperation

UNEP and UN ECE – Coordination of Mercury Assessment activities

In connection with the preparation of the AMAP Update Assessment on Mercury in the Arctic (due to be delivered in 2011), parallel work to prepare mercury assessments under other international bodies including UNEP and the UN ECE has been taken into account, as agreed by the AMAP WG and SAOs.

In the autumn of 2007 AMAP Secretariat was approached by UNEP-Chemicals to assist in coordinating development of a report on global anthropogenic emissions, transport and fate of mercury, as requested by the UNEP Governing Council. An agreement to coordinate this work with work being undertaken in the AMAP mercury assessment was reached and AMAP experts were engaged in the preparation of the UNEP report. This arrangement secured finances for experts engaged in both the preparation of the UNEP report and the production of certain components of the planned AMAP assessment for 2011 in a manner

that was cost efficient, and avoided duplication of effort while enhancing the quality of the products for both AMAP and UNEP. The work was jointly sponsored by UNEP-Chemicals, Nordic Council of Ministers, and some of the Arctic countries, including Canada, Denmark, Norway and Sweden.

AMAP has for several years reported to the EMEP Executive Body the status for the monitoring and assessment of POPs, heavy metals and acidification. To their last meeting in December 2008 we also reported on the latest work on Non CO₂ drivers.

AMAP arranged in April 2009 a joint workshop in St. Petersburg with the Task Force on Hemispheric Pollutants under the UN-ECE/LRTAP. The focus was monitoring of POPs and mercury in Eastern Europe, Asia and the Arctic.

Stockholm Convention – first effectiveness evaluation report

At the third meeting of the Conference of the Parties of the Stockholm Convention, the COP adopted a global monitoring plan and decided that a first evaluation of the effectiveness of the Convention should be completed by COP-04 in 2009. The global POPs monitoring plan focuses on air and human tissues (blood and milk) as core monitoring components. The monitoring and assessment work performed by AMAP has been viewed by the Stockholm Convention as a regional model and an essential contribution to the assessments for the two UNEP regions that include Arctic and northern territories. Some Arctic countries informed the Stockholm Convention Secretariat that their national Arctic information for the evaluation would be made available through AMAP (e.g. Canada) and the published AMAP assessment reports. The AMAP assessments on human health and POPs have therefore been used as background information to these two UNEP regional assessments, as well as to the global summary. Experts from the AMAP network have assisted the Stockholm Convention Secretariat in its work to prepare the first effectiveness evaluation report. AMAP and Canada are planning a effectiveness evaluation side-event at COP-04 of the Stockholm Convention to be held May 4-8, 2009 in Geneva.

EU cooperation

Based on initiatives taken by Iceland during their leadership of the Arctic Council to involve the EU more in financing Arctic-relevant research and projects, AMAP has undertaken a number of cooperative follow-up activities. For example, during the winter of 2008, the AMAP Secretariat, together with research institutes and experts from the Nordic Countries, Canada, Russia and some EU countries, prepared an application for financial support to a project concerned with combined effects of climate change on human health in the Arctic and on relevant groups in Europe – in response to an EU call for research proposals under its 7th Framework Programme. The application has been evaluated as being of very high scientific quality and the project group are now in the final stages of negotiation for financing a 4-5 year project that will involve atmosphere-ocean-sea ice modellers, ecologists and human health experts. The work will be of great relevance to AMAP and to Arctic Council member states and observers, and will contribute to future AMAP assessments.

In addition, AMAP participated at the Arctic meeting arranged in November 2008 in Monaco under the French presidency of the EU.

Barents Euro-Arctic Council (BEAC)

The AMAP Secretariat participated at some of the BEAC meetings conducted from 2007 – 2009. BEAC has expressed a strong interest in the ACIA follow-up, and in initiating projects addressing ‘Hot Spots’ identified in the report prepared by AMAP for NEFCO. BEAC has also expressed an interest in the Oil and Gas Assessment.

The International Polar Year (IPY)

There has been close contact and cooperation between AMAP and the IPY International Program Office. This is connected to the work on SAON and implementation of SWIPA, and has benefited considerably from the arrangement under which Odd Rogne is engaged to work part-time in the Secretariats of both organizations.

IASC

AMAP and IASC have worked closely and effectively together during the past two-years on several issues, including SAON and SWIPA, but also regarding special projects such as the Arctic Carbon Cycle. New cooperation on work relating to Arctic coastal dynamics and contaminant inputs due to coastal erosion is under discussion.

WHO

In connection with the implementation of the Stockholm Convention, AMAP has worked together with WHO to established Protocols and Guidelines for monitoring and reporting of POPs in humans, using blood and/or mother's milk as the substrate for the analyses.

WMO/CliC

In connection with the planning and implementation of SAON and SWIPA and special projects, there has been a close cooperation with WMO/CliC.

UNESCO

AMAP participated at the Arctic meeting arranged in March 2009 in Monaco by UNESCO.

SCAR-SSG-PS

AMAP was invited to attend a workshop arranged by SCAR-SSG-PS in June 2007 to present the AMAP strategy and results for monitoring of contaminants and climate

World Wildlife Fund (WWF)

AMAP has had a close cooperation with WWF over the years, and welcome the way AMAP information has been disseminated through the WWF-Arctic Programme's '*Arctic Bulletin*'.

7. Requests to the SAOs

Funding Situation

AMAP would like to express its continuing appreciation to Norway, Canada, Finland, USA and the Nordic Council of Ministers (NCM) for providing financial support during 2007-2009 to fund AMAP Secretariat operations and other AMAP core activities and projects. AC Member Countries are kindly requested to investigate the possibilities to provide financial support in 2009 - 2011.

The costs of producing the SWIPA project is a major undertaking and will require further financial support during 2009-2011.

Monitoring and Observation activities

SAOs are kindly requested to secure the necessary national funding to allow AMAP to fulfill its work-plan as requested by Ministers and SAOs. It is also vital to ensure that observations of levels, trends and effects of contaminants and climate in the Arctic continues, even during the periods between major assessments, in order to guarantee uninterrupted time series and ensure that future assessment reports presented by the AMAP WG are complete and reliable. Continuation of core observations and establishment of both baseline and long-term records are especially important in this connection.

Annex 1, AMAP members, Permanent participants, Observing countries and Organizations.

Arctic Council and AMAP Member countries:

Canada, Denmark/Greenland/Faroe Islands, Finland, Iceland, Norway, Russia, Sweden, United States.

Arctic Council and AMAP Permanent Participants (Indigenous peoples organizations):

Aleut International Association (AIA), Arctic Athabaskan Council (AAC), Gwitch'in Council International (GCI), Inuit Circumpolar Conference (ICC), Russian Association of Indigenous Peoples of the North (RAIPON), Saami Council.

Arctic Council and AMAP Observing countries:

France, Germany, Netherlands, Poland, Spain, United Kingdom.

Arctic Council and AMAP Observing international organizations:

Arctic Circumpolar Route (ACR), Association of World Reindeer Herders (AWRH), Circumpolar Conservation Union (CCU), International Arctic Science Committee (IASC), International Arctic Social Sciences Association (IASSA), International Federation of Red Cross and Red Crescent Societies (IFRC), International Union for Circumpolar Health (IUCH), International Union for the Conservation of Nature (IUCN), International Working Group for Indigenous Affairs (IWGIA), Nordic Council of Ministers (NCM), Nordic Environment Finance Corporation (NEFCO), North Atlantic Marine Mammal Commission (NAMCO), Northern Forum (NF), UNEP-GRID/Arendal, United Nations Development Programme (UNDP), Standing Committee of Parliamentarians of the Arctic Region (SCPAR), University of the Arctic (UArctic), World Wide Fund for Nature (WWF).

Arctic Council and AMAP cooperating international organizations:

European Environment Agency (EEA), International Atomic Energy Agency (IAEA), International Council for the Exploration of the Sea (ICES), International Union of Radioecology (IUR), Nordic Council (NC), OECD Nuclear Energy Agency (OECD/NEA), OSPAR Commission (OSPAR), United Nations Economic Commission for Europe (UN ECE), World Health Organization (WHO), World Meteorological Organization (WMO).

Appendix 2. AMAP Secretariat Operating Costs

	<u>USD</u>
Operational costs, salaries and social taxes	280.000
Office	60.000
<u>Workshops, meeting, travelling</u>	<u>40.000</u>
<u>Total</u>	<u>380.000</u>

In addition, AMAP hire professional assistance for the drafting of the SOAER reports, the graphical production, the technical and linguistic editing of all the scientific and SOAER reports. This cost varies from year to year pending on the deliverables.

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