

Arctic Council Working Groups: Report on their achievements in 2011–2013 and work plans for 2013–2015

1. ARCTIC CONTAMINANTS ACTION PROGRAM (ACAP)

Mandate

The objective of ACAP is to prevent adverse effects, reduce and ultimately eliminate Arctic environmental pollution. ACAP should complement existing arrangements, including legal arrangements, structures and mechanisms under the Arctic Council, such as the Regional plan of action for the protection of the Arctic marine environment from land-based activities; allow for actions on a wide range of pollution prevention issues and corresponding remediation measures; and include the identification of cooperative activities for implementation.

Response to Arctic Council priorities

ACAP has implemented the work plan for 2011–2013 addressing the appropriate elements in the 2011 Nuuk Declaration. Ministers endorsed the establishment of an ACAP short-lived climate forcer contaminants project steering group to undertake circumpolar demonstration projects to reduce black carbon and other emissions of short-lived climate forcers, and encouraged countries to reduce emissions and enhance the implementation of international conventions and protocols. Several practical emission reduction projects are currently under development in ACAP, in particular on the reduction of mercury emissions and short-lived climate forcers to support global actions. ACAP is also implementing projects on emission reduction measures of obsolete pesticides and dioxins and furans in the Arctic. These projects also provide capacity building to assist countries in implementing the Stockholm Convention on Persistent Organic Pollutants and the Minamata Convention on Mercury.

Main achievements in 2011–2013

The Short-Lived Climate Forcers and Contaminants Project Steering Group (SLCF PSG) officially started in March 2011 with a kick-off meeting on the margins of an ACAP meeting in Washington DC. The SLCFC PSG has two approved projects and several other project proposals in various stages of development and review. One project is on reduction of black carbon emissions from residential wood combustion led by Finland and Norway. The second project on the reduction of black carbon from diesel sources in the Russian Arctic Program, was launched by the United States Environmental

Protection Agency (EPA). Several SLCP projects are under preparation under the Nordic Environment Finance Corporation (NEFCO), subject to project criteria and owner/stakeholder engagement. The projects will be prepared for relevant financing. Sweden has established a SLCF Trust Fund with NEFCO, which is expected to fund projects that reduce SLCF emissions, including black carbon. Projects identified by ACAP projects steering group on SLCF will be prioritised.

The US EPA has held the workshop on diesel emissions, pollution mitigation, and clean and alternative technologies in the Arctic in Moscow on two consecutive days (6 and 7 October 2011). The technical steering group for the project has been established and held its first meeting in January 2013, and the emission inventory methodology is being developed. EPA has made available USD 1 million to the fund manager of the Project Support Instrument (PSI), NEFCO, for diesel black carbon-related projects in Russia.

The ACAP activities on mercury were revitalised at a meeting of mercury experts in March 2011. Senior Arctic Officials approved the Terms of Reference for ACAP mercury activities. In 2011–2013 the ACAP mercury experts have continued to share information among members about their respective activities related to mercury and ongoing work under the UNEP Global Mercury Partnership. There are currently five mercury reduction project ideas at various stages of development to become ACAP projects, including: a non-ferrous metals/zinc smelter mercury reduction project; a phase II coal-fired power plant sorbent technology project; a mercury reduction project in industrial gold mining; mercury management information gathering and review in artisanal and small scale gold mining; and coordination on mercury-containing waste issues with the ACAP Integrated Hazardous Waste Management PSG.

The ACAP project on dioxins and furans examined during the 2011–2012 phase III includes a prototype demonstration of emission reduction measures at one of the potential objects identified in phase II of the project, the Vorkutinskiy Cement Plant. The PSG prepared a Terms of Reference for a feasibility study, funded by NEFCO and completed in 2012, recommending implementation of emission reduction actions combined with already planned reconstructions of the cement plant. ACAP has published technical reports to contribute to dioxin/furan emission reduction and implementation of the Stockholm Convention in Russia.

The ACAP project on obsolete pesticides in Northern Russia has completed its activities on inventory and safe storage of obsolete pesticides waste in twelve Russian regions, directly

impacting the Arctic. ACAP has worked on this problem since 2001 and by 2012 approximately 7,000 tons of obsolete pesticides were collected and placed under reasonable storage conditions, vastly reducing the risk of contaminants spreading to the environment. The final report, including lessons learned, will be finalised by the Arctic Council in 2013. In 2011–2012 pesticides were repackaged in Krasnoyarsk Krai and Kamchatka. The project steering group also closely followed initiatives to develop environmentally sound pesticide destruction capacity in Russia, prepared an outreach fact sheet in Russian and a road map for the authorities to undertake similar activities in other regions.

Implementation and follow-up

ACAP will identify solutions to reduce sources and emissions of contaminants in the Arctic, demonstrate their effectiveness through demonstration projects and present recommendations for stakeholders to reduce contaminants in the Arctic. ACAP's experience in obsolete pesticides management has been shared through a Russian consultant in non-Arctic regions (Rostov, Moldova, Kyrgyzstan, Armenia and Kazakhstan). ACAP has also established a group to address the contamination of the indigenous communities in the Arctic. ACAP has published technical reports on its website as part of efforts to enhance transparency and knowledge-sharing.

Work plan 2013–2015

ACAP addresses Arctic pollution sources, as identified by AMAP. It acts as a support mechanism to encourage national actions to reduce emissions and other releases of pollutants in the Arctic. Cooperative actions make an important and significant contribution to the overall international effort to reduce environmental damage on a global level. ACAP will develop concrete project proposals according to this mandate for approval as Arctic Council projects, taking into account the needs of indigenous populations in the Arctic. The projects identified in this work plan are those that have already been approved by ACAP as well as projects that are under development for future ACAP review and possible approval. Additional project proposals may be developed within the scope of this work plan. Implementation of the projects is subject to the availability of funds. ACAP advances approved projects and funding, including from the PSI and other funding sources.

List of individual projects and activities

ACAP Short-Lived Climate Forcers and Contaminants: A project on reductions of SLCF and contaminants/pollutants affecting the Arctic region will be undertaken. The range of projects will include problem scoping, and source identification via emission inventories, and analysis of instruments, measures and strategies to reduce emissions. Projects may address black carbon

reduction from diesel emissions, wood stoves, wildfires, agricultural burning, industry, heating and power sectors, and build on current work by Arctic partners. A report to ministers is anticipated in 2015.

Diesel black carbon reductions in the Arctic 2011–2015: The project aims to assess primary sources of black carbon in the Russian Arctic; develop a targeted baseline emission inventory for black carbon from diesel sources in key areas; implement targeted, on-the-ground demonstration projects for reducing black carbon from diesel; and establish policy recommendations and financing options for reducing black carbon diesel sources. Co-leads are the United States, Russia and NEFCO.

Reduction of black carbon emissions from residential wood combustion in the Arctic: The objective is to contribute to reducing emissions of black carbon from residential wood combustion in the Arctic for which funds have already been allocated. The project will compile information on black carbon emissions along with abatement instruments and measures. Phase 1: Desk study on emissions and measures for reduction of black carbon from residential wood combustion and development of recommendations. Phase 2: Undertake selected pilot projects to demonstrate the effect of the recommendations. Co-leads are Norway and Finland.

SLCP projects: The projects will aim to reduce SLCP emissions in the Northern regions of Russia. Most of them are expected to cover energy efficiency and cleaner production, fuel switching, management of waste, including end-of-life equipment, and replacement or upgrading of diesel-powered stations in off-grid locations. The projects will seek cooperation with the Swedish NEFCO SLCP Trust Fund. Co-leads are Sweden, Norway, Russia and NEFCO.

ACAP Mercury: The PSG will undertake projects to reduce mercury emissions affecting the Arctic region. The projects are based on the Terms of Reference of the Mercury PSG adopted by Senior Arctic Officials in 2012.

Non-ferrous/Zinc Smelter Mercury Reduction: The project aims to appropriately identify, further develop and apply pollution reduction technologies to a selected pilot non-ferrous/zinc smelter including related monitoring. Co-leads: the United States, Russia and NEFCO.

Phase II Coal-Fired Power Plant Sorbent Technology: This project demonstrates the mercury emission removal efficiencies of standard activated carbon and brominated carbon injection when used at

power plants equipped with an electrostatic precipitator. The project also investigates the stability of the ash and sorbent residues and leaching potential of metals (mercury, selenium and arsenic) collected in the ash. The PSG will develop a proposal for a project focusing on disseminating and replicating results of this demonstration. The PSG may also develop project proposals for approval on mercury management in industrial gold mining, information gathering in artisanal and small-scale gold mining, and coordination on mercury-containing waste issues with the Integrated Hazardous Waste Management Strategy PSG. Co-leads are the United States and Russia.

Environmentally sound management of obsolete pesticides in Russia: The PSG aims to reduce releases from obsolete pesticides storages affecting the Arctic region. The PSG may also develop a demonstration project on remediation of Persistent Organic Pollutants (POPs) and mercury contaminated soil in a region directly impacting the Arctic. Project proposals will be developed and presented to ACAP for approval.

Phase III: Demonstration of environmentally sound destruction of obsolete pesticides: The PSG will work with Russian experts and the Ministry of Natural Resources and Ecology to assess technologies for environmentally sound destruction of obsolete pesticides in Russia, when such capacity becomes available. Pending the approval of technologies, the project will demonstrate destruction of 100 tons of obsolete pesticides in the Arctic in an environmentally sound manner. The project will seek synergies with the Polychlorinated Biphenyl (PCB) destruction project for management of PCBs in transformers in Russia. A report on the progress and possible results from the assessment and demonstration project is anticipated at the Arctic Council meeting in 2015. Co-leads are Finland and Russia.

ACAP dioxin/furan: The PSG will undertake projects to reduce dioxin and furan emissions affecting the Arctic region. The PSG will continue to cooperate with Russian industries and promote implementation of control technologies for reduction and elimination of dioxin and furan releases at point sources including pulp and paper mills, metal industries, cement kilns and waste incineration plants in the Russian Arctic. Coordination with the work on the Barents environmental hot spots is important as well as with Russia's activities aiming at adaptation to the requirements under relevant international conventions. A report summarising the results from the work in 2013–2015 is anticipated for the Arctic Council Ministerial meeting in 2015.

Reduction/Elimination of Emissions of Dioxins and Furans in Russia with focus on the Arctic and Northern regions – phase III: Vorkutinskiy cement plant reduction of dioxins and dust emissions and a Cleaner Production training program. PSG will also consider broadening the inventory for further dioxin/furan sources in the Russian Arctic and continue to identify other pilots for phase III and also consider additional phase II activities. Phase III demonstration projects can be considered and implemented as part of the Integrated Hazardous Waste Management Strategy. Sweden leads the project.

Integrated Hazardous Waste Management Strategy (IHWMS): The PSG aims to facilitate the development of Regional Integrated Hazardous Waste Management Strategies for Northern Regions in Russia to reduce the negative impact of hazardous wastes on the environment. The work will be based on the Terms of Reference of IHWMS PSG adopted by Senior Arctic Officials in 2010. A report to the Arctic Council Ministerial meeting is anticipated in 2015.

Regional integrated hazardous waste management strategy pilot: Develop an IHWMS focusing on the 1–2 Northern pilot regions of Russia that will address disposition and destruction of collected contaminants, mercury-containing wastes, brominated flame retardants containing waste, POPs including PCBs, dioxins and furans, perfluorinated chemicals, obsolete pesticides, etc. Russia leads the project.

Indigenous Peoples Contaminants Action Program (IPCAP): The PSG aims to identify important local sources of contamination in indigenous communities and propose projects to reduce indigenous communities' exposure to contaminants in remote areas of the Arctic. The work is based on the Terms of Reference of IPCAP PSG adopted by Senior Arctic Officials in 2010.

Baseline study on contaminant issues in indigenous communities to identify priorities: In the first phase, the project will conduct a baseline study to identify the most important sources of contamination in selected indigenous communities and facilitate projects to reduce exposure to contaminants. Based on the results, further pilot project proposals will be developed. Co-leads are Russia, Sweden and Aleut International Association (AIA).

PCB: The PSG will undertake projects to reduce emissions of PCB affecting the Arctic region.

Phase III: Demonstration of management and destruction of 250 tons of PCB in transformers: This project is currently awaiting permits. The PCB project work plan and associated tasks will be updated once the PSI is operational. It is anticipated that the PCB project will strive to liaise with IHWMS and the demonstration project on obsolete pesticide to achieve synergies. Co-leads are Russia, the United States and NEFCO.

Potential new work areas: ACAP will consider possibilities to contribute to the follow-up of the AMAP Oil and Gas Assessment Recommendations focusing on filling information gaps regarding contamination caused by oil and gas activities on land and prevention in Arctic waters. Relevant issues for ACAP could include work on releases from oil and gas operations, data on waste disposal and contamination, as well as information on effective technologies and methods for dealing with large spills on land (remediation). The importance of preventing the contamination caused by mining activities is increasing in the Arctic regions. Pollution prevention in the use of chemicals in mining could be relevant for ACAP.

Cross-cutting projects and activities

ACAP will cooperate with other working groups, in particular PAME and AMAP, to exchange information on contamination in the Arctic and progress in making reductions. ACAP will also contribute to Adaptation Actions for a Changing Arctic (AACAA) where feasible under its mandate. ACAP will continue cooperation with NEFCO to finance and facilitate implementation of ACAP projects and mobilise the PSI.

Support for international activities

The work of ACAP has connections to several multilateral environmental agreements, and other international processes and activities:

- SLCF: the Arctic Black Carbon Initiative, Global Methane Initiative, Climate and Clean Air Coalition and the Montreal Protocol.
- Mercury: Contribute to the objectives of the Minamata Convention and coordinate with related work underway in the UNEP Global Mercury Partnership.
- POPs: Contribute to the implementation of international Conventions (Stockholm, Basel, UNECE/CLRTAP) by continuing demonstrating practical solutions to reduce releases of POPs in the environment.
- Continue cooperation with Permanent Participants.
- Continue cooperation with other working groups and observers, notably the Barents Euro-Arctic

Council and NEFCO to address hot spots in the Arctic.

Communication and outreach

ACAP will enhance outreach and promote solutions to reduce the contamination of the Arctic environment demonstrated in ACAP projects, among Arctic States, and relevant international organisations and financial institutions. ACAP will implement the Arctic Council Communications and Outreach Strategy adopted in 2012 and regularly update its website.

Administration

ACAP is chaired by Finland and Sweden is vice-chair (2012–2014). Currently the chairmanship country also provides the secretariat services. ACAP has requested secretariat support from the Arctic Council Secretariat and provided a list of functions that could be provided. The meetings hosted on a rotating basis between the active states. The administration costs of ACAP consist of salary and travel costs of the chair and Secretariat. The PSGs hold their own meetings as necessary.

2. ARCTIC MONITORING AND ASSESSMENT PROGRAM (AMAP)

Mandate

To monitor and assess the status of the Arctic region with respect to pollution and climate change by documenting the levels and trends, pathways and processes, and effects on ecosystems and humans, and to propose actions to reduce associated threats for consideration by governments. AMAP produces sound science-based, policy-relevant assessments and public outreach products to inform policy and decision-making processes.

Response to Arctic Council priorities

Human Dimension and Priority on Arctic Health and Human Well-being: The AMAP human health assessment group has continued its work on issues related to climate change impacts and the dietary exposure of Arctic populations to environmental contaminants and their health effects and the best means to provide communication of such risks to exposed groups. AMAP's human health group worked with SDWG's human health expert group on food security issues in the Arctic.

Short-Lived Climate Forcers (SLCFs): AMAP has added tropospheric ozone and methane to the issues being addressed by two AMAP expert groups on SLCFs, one on black carbon and ozone and the other on methane. The work under the AMAP SLCF expert groups has been coordinated with and provided technical input to the Arctic Council SLCF Task Force.

Mercury: The Arctic Council has continued to support UNEP mercury activities through joint UNEP/AMAP expert group contributions to update the UNEP Global Mercury Assessment which was delivered to UNEP's Governing Council meeting in February 2013. The Arctic Council has previously called for urgent global action to reduce mercury emissions and impacts on the Arctic. Arctic States have shown leadership in these international efforts in the UNEP mercury negotiation process through release of the AMAP Mercury Assessment report and film and through Swedish interventions on behalf of the Arctic Council. These actions led to the adoption on 19 January 2013 of a global agreement, the Minamata Convention, to reduce mercury emissions and releases.

Science and Monitoring: Sustaining Arctic Observing Networks (SAON) is co-sponsored by the Arctic Council (coordinated through AMAP) and the International Arctic Science Committee (IASC). The SAON vision is that users should have access to free, open and high quality data that will realise pan-Arctic and global value-added services and provide societal benefits. To achieve that vision, SAON's

goal is to enhance Arctic-wide observing activities by facilitating partnerships and synergies among existing building blocks, and to promote sharing and synthesis of data and information. AMAP has continued to represent the Arctic Council and provide Secretariat support to the SAON initiative. Senior Arctic Officials shall provide the Chair of the SAON Board.

Main achievements in 2011–2013

Arctic Ocean Acidification Assessment (AOA): The AOA is the result of three years of work by an AMAP expert group assessing the most recent information on ocean acidification in the Arctic region and its possible consequences. A short executive summary for policy-makers containing the main findings of the assessment and policy-relevant recommendations was presented to the Arctic Council Ministerial meeting in May 2013, together with an electronic version of the full science report and films presenting the results. A scientific conference on AOA was held in Bergen, Norway, on 6–8 May 2013 and a layman’s overview report will be released.

Unmanned Aircraft Systems (UAS): Over the last 4–5 years an AMAP expert group has evaluated the scientific use and operation of UAS within the Arctic region. All Arctic States have recognised the potential use of UAS for scientific purposes and the need to establish regulations that ensure safe operations and allow cross-border flights of UAS. A report has been prepared by the expert group, which also includes representatives of national civilian aviation authorities.

Adaptation Actions for a Changing Arctic – part c (AACAc): The purpose of the AACAc project is to develop integrated regional reports on the combined effects of change, with emphasis on improved predictive capability. The AACAc will deliver three integrated regional reports produced in close consultation with stakeholders (Northern communities, local governments, indigenous peoples’ organisations, industry, etc). The focus will be on producing information to assist local decision-makers and stakeholders in three pilot regions in developing adaptation tools and strategies to better deal with climate change and other pertinent environmental stressors. Other key products include improved regional climate modelling, future socio-economic scenarios and the identification of key regional stressors and drivers that contribute to cumulative impacts. An implementation plan has been developed and initial activities have been undertaken.

Climate scenarios are the backbone of the AACAc project. In October 2012 a climate scenario workshop was held in Seattle, United States, to discuss short-term and long-term projections and scenarios for climate change in the Arctic. A second workshop, held on 22–24 April 2013 in St

Petersburg broadened the work done at the Seattle workshop on projections on increased temperature and ice-melting to include consequences for terrestrial and marine ecosystems, biodiversity, human health, transport, socio-economic adaptations, etc. The outcome of the workshop will set the framework for future action.

Three geographical areas have been proposed for regional implementation activities: 1) Barents and adjacent coastal and land areas; 2) Bering Sea/Chukchi Sea/Beaufort Sea and adjacent coastal and land areas; and 3) David Strait/Baffin Bay and adjacent coastal and land areas. Finally, based on inputs received from Arctic States, the following have been identified as priority sectors in the implementation work:

- industrialisation/mining/energy;
- transportation and shipping;
- tourism;
- fisheries;
- integrity of ecosystem services; and
- water and food availability and quality.

AMAP will coordinate with other Arctic Council working groups and international science organisations in carrying out this work.

Implementation and follow-up

Snow Water Ice and Permafrost in the Arctic (SWIPA): SWIPA is AMAP's coordinated assessment of climate change and its effects on snow, water, ice and permafrost that underlines the speed of change in the Arctic cryosphere and its cascading effects on Arctic ecosystems and living conditions. The speed and extent of change and effects of climate change are exacerbated by other changes within the Arctic, reinforcing calls for improved predictive capability at all levels in the Arctic systems as a basis for adaptation and sustainable development (see AACA-c above). AMAP has conducted additional SWIPA-communications and outreach activities including the production of a short summary for use in education (in English and translated into Danish, Greenlandic and Japanese) and the SWIPA Overview report. SWIPA results have been communicated to the United Nations Framework Convention on Climate Change (UNFCCC) and are being used in the preparation of the next Intergovernmental Panel on Climate Change (IPCC) assessment.

Contributions to the work of other Arctic Council working groups: AMAP has contributed to the work of the Ecosystem Based Management (EBM) Task Force and the PAME EBM-group; led the production of the Arctic Marine Pollution chapter of the PAME-led Arctic Ocean Review; prepared parts of the AMSA IIc report; and contributed to the development of the CAFF-led CBMP.

Contributions to work under other international fora: Results provided under AMAP have been presented at several international meetings and conferences.

AMAP assessment follow-up: AMAP has conducted a review of the follow-up work resulting from past assessments, including a detailed review of the follow-up of the 2007 Oil and Gas Assessment (OGA) recommendations at the national level and by Arctic Council working groups and other bodies. This work has contributed to the implementation of part a) and b) of the AACA project.

Work plan 2013–2015

List of individual projects and activities

Trends and Effects Monitoring Program: AMAP will carry out its monitoring and assessment implementation plan in accordance with the approved AMAP Strategic Framework for 2010+.

Arctic monitoring and research activities: As part of its ongoing work, AMAP will continue to coordinate, based largely on national programs, to provide the information necessary for assessment of relevant issues such as:

- spatial and temporal trends in levels of contaminants in Arctic ecosystems including humans;
- biological/ecological effects of contaminants and associated trends, including human health effects;
- climate change, including ocean acidification, SLCFs and cryosphere;
- effects of climate variability and change;
- improved predictive capacity through increased observations, research and understanding of processes governing changes in the Arctic;
- human and ecosystem health effects; and
- combined effects of contaminants, climate change and other stressors, including effects on humans.

AMAP will continue to coordinate and deal with new activities to ensure appropriate data reporting and archiving, including reporting of data to AMAP Thematic Data Centres. AMAP will cooperate

with international partners and arrange workshops to improve monitoring capability, including the use of remote sensing.

Ongoing and planned assessments

Adaptation Actions for a Changing Arctic – part C: Work will continue on Arctic-focused climate and integrated environmental frameworks/models that can improve predictions of climate change and other relevant drivers of Arctic change in order to improve predictions and inform the development and implementation of adaptation actions by Arctic States and Permanent Participants. An interim report will be presented in 2015, other products are anticipated during 2015–2017, and final integrated reports will be produced in 2017. The main work in phases 2 and 3 will be organised around workshops starting in mid-2013, with follow-up in 2014, with experts, indigenous and local peoples, governments and stakeholders, focusing on the selected regions and prioritised sectors. These will clarify the basis for adaptation strategies to meet user needs and analyse consequences that may occur in relation to combined effects on ecosystems and socio-economic development. Information for relevant sectors will be compiled and evaluated, and integrated regional reports and other products will be prepared to improve predictive capability of the consequences of climate change and other relevant drivers of change.

SLCF Expert Group: AMAP will update its assessment to include scientific data and information on black carbon, methane and tropospheric ozone from sources inside and outside the Arctic. Updated scientific assessment reports will be presented at the Ministerial meeting in 2015 and the work will be well coordinated with the new Task Force for Action on Black Carbon and Methane.

Human Dimension and Priority on Arctic Health and Human Well-being: The human health assessment group will continue to work with SDWG's human health expert group on issues of joint concern and plans to produce an update to the 2009 AMAP Human Health Report in time for release at the Ministerial meeting in 2015.

Unmanned Aircraft Systems (UAS) Expert Group: AMAP will continue its work on safety guidelines and demonstrate the use of UAS in cross-jurisdictional environmental monitoring.

Other: As part of its ongoing work, AMAP will determine the need for follow-up activities and products in relation to its previous work and develop plans for such activities as needed. Follow-up activities and products may be undertaken for the Oil and Gas Assessment (OGA), SWIPA, AOA, and mercury assessments. Other AMAP-relevant issues, such as POPs, radioactivity, human health,

contaminant transport and fate, will be updated. AMAP will continue to evaluate emerging issues of concern related to pollution and climate change and their effects on Arctic ecosystems and human populations.

Cross-cutting projects and activities

Food and Water Security project: The AMAP Human Health Assessment Group and the SDWG Arctic Human Health Expert Group are jointly developing this project for review and consideration by Senior Arctic Officials.

Arctic Marine Strategic Plan: AMAP will contribute to an update of the 2004 plan with PAME.

Arctic Ocean Review: AMAP will contribute to any potential follow-up related to pollution and climate change issues with PAME.

AACA part c: AMAP is leading the work on this part, which will be developed in collaboration with other relevant Arctic Council working groups and international science organisations.

Ecosystem-Based Management Initiative: AMAP will continue to implement this initiative, as appropriate with other relevant Arctic Council working groups.

Circumpolar Biodiversity Monitoring Plan: AMAP will continue to cooperate with CAFF in the further development of this plan to ensure consistency with the AMAP monitoring guidelines and plans, and on follow-up on the Arctic Biodiversity Assessment.

SAON: AMAP will contribute to the implementation of the SAON and continue to co-lead its development on behalf of the Arctic Council, together with the IASC. The AMAP Secretariat, together with the IASC Secretariat, will continue to provide secretariat support.

Support for international activities

AMAP's science results and information: As part of its continuing work AMAP will participate in relevant international meetings and symposia to communicate its ongoing activities as needed.

United Nations Environment Programme (UNEP) Chemicals: AMAP will continue to cooperate with UNEP on its activities related to UNEP's global mercury agreement, the Minamata Convention.

Stockholm Convention Conference of Parties 7 (COP 7): AMAP will present data products and intends to collaborate with the Stockholm Convention Secretariat in preparation for the Stockholm Convention's Second Global Monitoring Plan report due in 2015. Activities connected with the Stockholm Convention will be undertaken, including follow-up of the joint UNEP/AMAP technical report on climate change and POPs: predicting the impacts. AMAP will also take into account the possible need to provide Arctic information products in connection with, e.g. effectiveness and efficiency reviews of the international agreements under UNEP and the United Nations Economic Convention for Europe (UNECE), as well as information for the inclusion of new chemicals in existing conventions.

UNFCCC IPCC and the SWIPA assessment results: The results of the SWIPA 2011 assessment will continue to be delivered to the IPCC for use in its Fifth Assessment Report on Climate Change to be prepared in 2013/2014.

Combined Effects of Contaminants and Climate Change: The AMAP Secretariat will continue its leading role in this project, in cooperation with AMAP experts, and funded by the Nordic Council of Ministers and the Nordic countries. Phase 2 of the project is due to be completed by 2013. AMAP will also continue its work on ArcRisk, funded by the EU's Seventh Framework Programme and Arctic States. ArcRisk will be completed at the Arctic Frontiers Conference to be held in January 2014. Also, AMAP's climate expert group and the human health assessment group will participate in the further development and implementation of special projects in Russia, including the project on the Lena and other Russian Arctic rivers under the GEF-Russian Federation Partnership, and follow-up on the Persistent Toxic Substances project.

Communication and outreach

AMAP will further develop and implement its Communications and Outreach Plan in compliance with the Arctic Council's Communications and Outreach Strategy. AMAP will implement follow-up communication and outreach activities in accordance with the Arctic Council's Communications and Outreach Guidelines, associated with its assessments and activities: AOA, SWIPA, OGA, mercury, radioactivity, SLCFs, POPs, human health and SAON, through the production and dissemination of films, translated reports, fact sheets, website information, educational materials and other outreach products. AMAP will continue to contribute relevant programme-related scientific input to the Arctic Report Card, and co-lead, together with the United States National Oceanic and Atmospheric Administration and CAFF, its production.

Administration

The AMAP Secretariat was established in 1991 and is located in Oslo, Norway. The Secretariat is funded by the Norwegian government with support from the other Arctic States and has employees in the Netherlands, Denmark and Russia. There are seven annual full-time positions in the Secretariat: four in Oslo, one in Rotterdam, two in Copenhagen and 1/4th in Moscow. One position is allocated to assist SAON. AMAP has been chaired by Canada for the last four years (2009-2013). Denmark will take over the chairmanship in May 2013. AMAP works in close relationship with internationally recognised scientists to produce high-level science reports. In 2012, the AMAP Executive Secretary Lars-Otto Reiersen, was awarded the prestigious SETAC Rachel Carson Award for his more than 20 years of contribution to understanding the Arctic environment.

3. CONSERVATION OF THE ARCTIC FLORA AND FAUNA (CAFF)

Mandate

CAFF's mandate is to address the conservation of Arctic biodiversity, and to communicate its findings to the governments and residents of the Arctic, helping to promote practices which ensure the sustainability of the Arctic's living resources. It does so through various monitoring, assessments and expert group activities. The results of CAFF projects are intended to bridge the science/policy gap to suggest options for actions appropriate at the circumpolar level based on sound evidence from both scientific and traditional knowledge.

Response to Arctic Council priorities

The common priorities agreed under the Norwegian, Danish and Swedish chairmanship period (2007–2013) concern climate change, integrated resource management, the International Polar Year, indigenous peoples, local living conditions, management issues and biodiversity. These priorities are integral to CAFF's objectives and mandate.

Main achievements in 2011-2013

A total of 68 projects and activities were ongoing within CAFF. CAFF's Arctic Biodiversity Assessment (ABA) and Circumpolar Biodiversity Monitoring Program (CBMP) were two key contributions towards understanding the impacts of climate change and other stressors on biodiversity and the sustainable use of the Arctic's living resources. The ABA provides the first description of the current state of Arctic ecosystems and biodiversity; creates a baseline for use in global and regional assessments of biodiversity; provides a basis to inform and guide future Arctic Council work, provides up-to-date scientific knowledge; identifies gaps in the data record, identifies key mechanisms driving change; and produces scientific and policy recommendations. The CBMP will coordinate and feed harmonised and integrated biodiversity monitoring information into Arctic Council processes. These activities will create a dynamic process in which information remains up-to-date, relevant and easily accessible to scientists, decision-makers and Arctic residents.

Between 2011 and 2013 CAFF has continued to develop the suite of products from the ABA project, including: 1) a full scientific report; 2) a synthesis report; 3) a summary report for policy-makers; and 4) a TEK compendium, for release in 2013. In addition, communications materials and plans for an Arctic Biodiversity Symposium have been put in place. The CBMP has also convened three expert monitoring groups to develop and integrate long-term monitoring plans for marine, freshwater and

terrestrial Arctic ecosystems. The freshwater and marine plans have already been approved and released during 2011–2013 with the terrestrial plan also scheduled for release in 2013. CAFF has been active in developing the Arctic Biodiversity Data Service (ABDS), a coordinated web-based data management system that accesses, integrates, displays and analyses biodiversity data gathered from all CAFF projects and activities.

CAFF's Arctic Species Trend Index released a key findings report and two reports that provide a detailed analysis of marine ecosystems and spatial and temporal analysis at an International Polar Year (IPY) media event. CAFF, through its CBMP, is an active contributor and reviewer of major international biodiversity efforts, including those across Europe and North America. CAFF expert groups continued to develop their projects, which will be integrated into the ABDS system, including the Circumboreal Vegetation Map, the International Arctic Vegetation Database, the Arctic Plant Portal, the Red List for Arctic Vascular Plants, the Seabird Information Network, the Circumpolar Seabird Monitoring Plan, and the Circumpolar Murre Conservation Strategy. CAFF has also updated its entire website and made progress on various activities geared towards the targeted audiences identified in the new CAFF Communications Strategy.

Implementation and follow-up

During the in-coming chairmanship period, CAFF will continue to prepare an implementation plan for the ABA policy recommendations and actions. CAFF has already begun to develop the implementation and follow-up for the first deliverable of the ABA, the Arctic Biodiversity Trends 2010: Selected Indicators of Change report, released in May 2010. At the Conference of the Parties to the Convention on Biological Diversity in 2010 (COP10), CAFF hosted a well-attended side event focusing on the key findings of the report. CAFF received significant recognition of the importance of its activities and the COP10 invited CAFF to provide relevant information and assessments of Arctic biodiversity, in particular information generated through the CBMP. Based on the COP10 decision, CAFF provided a report for the United Nations Convention on Biological Diversity (CBD) Subsidiary Body on Scientific Technical and Technological Advice for consideration at its meeting in 2011. CAFF's report was welcomed with continued collaboration and utilisation of CAFF's monitoring and assessment information in the CBD processes. CAFF contributed to the Global Biodiversity Outlook, which featured for the first time special text pertaining to Arctic biodiversity. The CBMP's Marine, Freshwater and Terrestrial Steering Groups are underway, implementing long-term monitoring, data management and reporting activities, including gathering and rescuing existing data. The ABDS will

serve as the main tool to house the information arising from these activities and is being populated as information arises.

Work plan for 2013–2015

List of projects and activities

Monitoring: The CBMP is an international network of scientists, government agencies, indigenous organisations and conservation groups working together to harmonise efforts to monitor the living resources of the Arctic. It is an ongoing CAFF program that will continue into the 2013–2015 period. CBMP is the biodiversity component of the SAON and the official Arctic Biodiversity Observation Network of the Global Earth Observations Biodiversity Observation Network. The CBMP activities are structured around the major Arctic ecosystems: [marine](#), [freshwater](#), [terrestrial](#) and [coastal](#). In the 2013–2015 period, CBMP will continue implementation of completed monitoring plans and finish plans that are in progress. Emphasis will continue to be placed on [data management](#), [capacity building](#), [reporting](#), [coordination and integration of Arctic monitoring](#), communication, education and outreach. Canada has provided the overall leadership for CBMP over the past eight years. In 2013 that leadership will pass to Greenland/Denmark and the United States, with Canada playing an advisory role during the transition. As in the past, sub-components of CBMP, such as development and implementation of ecosystem-based monitoring plans will continue to be led by different countries, including Canada, Greenland/Denmark, Norway, the United States and Sweden.

Assessments: CAFF has completed a major assessment of Arctic biodiversity (ABA). The ABA consists of five components: 1) Arctic Biodiversity Trends 2010 – selected indicators of change, completed in 2010 as an Arctic Council contribution to the 2010 global target to reduce the rate of biodiversity loss; 2) Technical Report, which details the status and trends of Arctic ecosystems and species; 3) Synthesis report; 4) Compendium of traditional ecological knowledge, which considers biodiversity from an indigenous perspective; and 5) Summary for policy-makers which summarises the main findings and provides recommendations for action. In 2013–2015 CAFF will include preparation of an implementation plan for the ABA recommendations and early actions to address priority recommendations. CAFF has also completed the report *Life Linked to Ice: A guide to sea-ice-associated biodiversity in this time of rapid change*. This report is a response to recommendations from Arctic Council projects (especially the ABA and SWIPA) and focuses on the consequences for biodiversity in view of the dramatic changes occurring to sea ice. It is intended as a briefing and reference document for policy-makers concerned with adaptive management and setting priorities for research, monitoring, and conservation actions in the context of changing sea ice.

Conservation strategies: CAFF has a broad range of expert groups who conduct a wide range of monitoring and analysis of flora and fauna that contribute to the effectiveness of CAFF's monitoring, assessment and strategy activities. CAFF produces circumpolar strategies to conserve particular threatened species and ecosystems. In 2013–2015 CAFF expects to continue working on and further developing a number of these strategies, including; Biodiversity, traditional nature use and climate change in the Russian Arctic: assessment and adaptation strategy development; Circumpolar Eider Conservation Strategy and Action plan; International Murre Conservation Strategy and Action Plan; International Ivory Gull Conservation Strategy; and the Nomadic Reindeer herding project.

Data management: Most CAFF projects produce data in various forms, scales and formats. Consolidating this large and diverse amount of disaggregated data across all Arctic sub-regions and biomes is being accomplished through development of the Arctic Biodiversity Data Service (www.abds.is). The ABDS is an online, interoperable and circumpolar data management system that will access, integrate, analyse and display biodiversity information for scientists, practitioners, managers, policy-makers and others working to understand, conserve and manage the Arctic's wildlife and ecosystems. It will provide a dynamic source for up-to-date Arctic biodiversity information and emerging trends, and serve as a focal point and common platform for all CAFF programs and projects. This system will allow for the combination of geo-referenced data at various spatial, temporal, and taxonomic scales (e.g., populations, regions, nations, circumpolar, biomes, and habitats) allowing users to explore relationships and factors driving change. All information within the ABDS will be in the public domain.

Polar Year data policies: CAFF expects to continue developing the AABDS in partnership with all Arctic States. Additional data management projects for 2013–2015 are expected to include the International Arctic Vegetation Database, Arctic Spatial Data Infrastructure, Circumpolar Boreal Vegetation Map and an Inventory for Traditional Ecological Knowledge.

Cross-cutting projects and activities

Cross-cutting issues that require the involvement of more Arctic Council bodies have been increasing in scope and number. Over the past two years, CAFF has been engaged in several projects either in partnership with or led by other working groups or task forces. CAFF expects to continue this cross-cutting work over the next two years, contributing where appropriate to action items from the AMSA, Arctic Marine Strategic Plan (AMSP), AOR, EBM, AACA and the Arctic Resilience Report (ARR).

Support for international activities

To create synergies, avoid duplication of efforts and promote Arctic biodiversity conservation outside the Arctic, CAFF cooperates with a broad range of international conventions, agreements and organisations. CAFF expects to continue existing collaborations and develop new ones where working together is mutually beneficial. Current cooperative arrangements have been established or are under development with the CBD, Convention on Migratory Species, Convention on Wetlands (Ramsar), the Agreement on the Conservation of African-Eurasian Migratory Waterbirds and the Partnership for the East Asian-Australasian Flyway.

Other partners include the Nordic Council of Ministers, the Conference of the Parliamentarians of the Arctic Region, SAON, the Association of Polar Early Career Scientists, the European Union, the European Environmental Agency (EEA), the Global Earth Observation Biodiversity Observation Network and System of Systems, the International Association for Vegetation Science, the IASC, the National Oceanic and Atmospheric Administration, the Polar Bear Specialist Group, the International Union for the Conservation of Nature, the United Nations Educational, the Scientific and Cultural Organisation (UNESCO), the United Nations Environment Programme Global Resource Information Database, the United Nations Environment Programme World Conservation Monitoring Centre, the United Nations Environment Programme Biodiversity Indicators Partnership, the World Wildlife Fund, the Wetlands International and the Zoological Society of London.

Communication and outreach

CAFF is delivering consistent CAFF-wide organisational communication activities and platforms according to the CAFF Communications Strategy, including the CAFF website and publication series. CAFF further develops necessary project-related communications that support priority monitoring, assessment, expert group and Arctic Council activities. Such activities include the development of brochures, posters, promotional material, films, websites and presentations. CAFF participates in relevant international symposia, meetings and other appropriate fora to communicate CAFF's results

and ongoing activities. CAFF continues to develop priority activities of partners, such as Arctic Council communication activities and the Arctic Report Cards.

Administration

The CAFF International Secretariat is located in Akureyri, Iceland. The Secretariat has five staff: one executive secretary, one executive assistant; one data manager; one project officer and one communications officer. Russia has held the chair in 2011–2013. At the Kiruna Ministerial meeting, Canada will take over the chair and Norway will become vice-chair. CAFF has held four management board meetings under the Russian chairmanship. CAFF was founded in 1992 via the Arctic Environmental Protection Strategy (AEPS). A ministerial agreement (1997) provides the framework for country contributions to the operation of the CAFF Secretariat.

4. EMERGENCY PREVENTION, PREPAREDNESS AND RESPONSE (EPPR)

Mandate

The mandate of EPPR is to deal with prevention, preparedness and response to environmental emergencies in the Arctic. EPPR is not an operational response organisation. Members of the working group exchange information on best practices and conduct projects to include development of guidance and risk assessment methodologies, response exercises and training. The EPPR work plan, updated at each meeting, is refined biennially through ministerial declarations and is further shaped by guidance from Senior Arctic Officials. The goal of the EPPR is to contribute to the protection of the Arctic environment from the threat or impact that may result from an accidental release of pollutants (i.e. oil, chemicals and radiation).

Response to Arctic Council priorities

EPPR has focused on two projects for the 2013 Arctic Council Ministerial meeting. The first project is Recommended Practices for the Prevention of Oil Pollution in the Arctic (RP3) which addresses the Nuuk Declaration mandate given to EPPR regarding oil spill prevention. The second, in response to a request from Senior Arctic Officials in March 2012, supports the Task Force on Marine Oil Pollution Preparedness and Response by developing operational guidelines to be appended to the Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic. In addition, EPPR has undertaken activities and developed projects aimed at improving Arctic States' capabilities to prevent, prepare for and respond to emergencies involving petroleum, radiological materials and hazardous noxious substances.

Main achievements in 2011–2013

RP3: EPPR conducted two workshops to develop the RP3: in Oslo, Norway, in October 2011 and in Keflavik, Iceland, in June 2012. The first workshop successfully brought together experts to develop the key elements of focus for the RP3 report and to chart a path forward. The workshop benefitted from broad participation from all Arctic States and included representatives from different authorities, industries and observers. The second workshop was convened to further develop the report and shape the conclusions. This workshop was held in cooperation with PAME and breakout sessions included PAME's Health, Safety and Environment project participants. The RP3 report was revised based on workshop results and circulated for further comment. The third draft report was submitted to the Arctic Council for review in September 2012 and EPPR discussed the final draft report at their October 2012 meeting. The RP3 report was revised based on the feedback from the Arctic Council review and EPPR comments. The draft report was presented to Senior Arctic Officials

at the Haparanda meeting in November 2012. EPPR issued two products under the RP3 project: a full technical report and a high-level overview document containing recommendations to ministers.

Arctic Marine Oil Pollution Preparedness and Response Agreement: In March 2012, the Senior Arctic Officials requested EPPR to develop operational guidelines for the Agreement, addressing coordination and cooperation in response operations and notification as a priority. EPPR drafted guidelines and discussed them in depth at the October 2012 EPPR meeting. Best practices from other international bilateral and multilateral agreements have been an important input to the draft text. The second draft was submitted to the Task Force for consideration during their meeting in Reykjavik in October 2012. Based on discussions at the Task Force meeting, it was decided that EPPR would develop a complete set of operational guidelines rather than just priority chapters. A workshop was held in Canada in January 2013 where the guidelines were discussed, completed and prepared for submission to the Task Force. Canada and Norway have been the co-leads of the project.

Consequence Management Training: EPPR conducted an international consequence management training course in October 2012 to address the complex issues related to responding to a release of radiological material. This new course, hosted by Denmark, was well received and EPPR plans to conduct additional training courses during the next chairmanship period.

Implementation and follow-up

Based on the information and findings in the RP3 technical report, EPPR has identified potential draft prevention initiatives that will contribute to safer operations and increase knowledge of Arctic risks and possible mitigation measures. EPPR conducted a radiological emergency response exercise at a radioactive waste management site in Saida Bay, Russia, in July 2012. EPPR's experience in conducting radiological emergency exercises has been valuable in verifying emergency response capabilities and identifying issues and gaps to be addressed for further action. EPPR's next radiological exercise will be a full-scale exercise in Russia, scheduled to take place in mid-2014.

Work plan for 2013–2015

List of projects and activities

Arctic Rescue: The focus of the project is to elaborate best practices, recommendations and key elements of the emergency risks assessment system and the system for improving safety of potentially hazardous facilities. One of the elements is the establishment of complex Search and Rescue Centres in Russian Arctic regions along the Northern Sea Route. The overall goal is international promotion of advanced national experience and improvement of emergency

preparedness through exchange of information. A series of conferences has been held under this project. The next conference, Emergencies, Preparedness and Response in the Arctic Including Oil Pollution Issues, will be held in the Naryan-Mar, Nenets Autonomous Okrug, Russia, on 20–23 August 2013. The conference will focus on implementation of the Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic. Russia leads this project.

Development of Safety Systems in Implementation of Economic and Infrastructural Projects: The overall goal is the improvement of industrial and environmental safety related to economic and infrastructural projects (primarily development of hydrocarbons on the Arctic continental shelf and hydrocarbons transportation). In 2012, demonstration drills were conducted to practise emergency delivery of rescue forces and equipment to the emergency situation zone in the Arctic. As part of the drill, the Agency for Support and Coordination of Russian Participation in International Humanitarian Operations (EMERCOM) aviation based in Norilsk deployed to the exercise venue on 23–24 August 2012. The project is co-led by Russia and Norway.

IMO Arctic region chapter: In Situ Burn (ISB): The background is to contribute to the IMO Arctic region Chapter on ISB of Oil Spills on Water and Broken and Solid Ice Conditions. The overall goal is to improve emergency preparedness and response capacities. The main activity is to develop text to include in the IMO Guidelines. The timeline is to have the final text by July 2013. Canada leads the project with the United States and Norway as co-leads.

Arctic Region Oil Spill Response Resource and Logistics Guide: The background for the project is to develop a guide and a GIS tool for oil spill response resource and logistics. The overall goal is to improve emergency preparedness. The project is ongoing and a workshop was held in February 2013 in Canada. The United States leads the project and Canada co-leads.

Arctic Guide for Emergency Prevention Preparedness and Response: The background and rationale is to develop a guide which includes revised environmental risk matrices. The overall goal is information sharing and improvement of prevention and emergency preparedness measures. The main activity is to update the Arctic Guide. The report is to be finalised in June 2013. The United States leads the project.

RP3: develop recommendations: The overall goal is to improve prevention measures. A technical and summary report including recommendations will be submitted to the 2013 Arctic Council Ministerial

meeting. Recommendations contained in the report will be carefully considered and projects within EPPR's mandate will be developed through 2013–2015 for consideration by Senior Arctic Officials. The number of participants is seventy. Canada and Norway co-lead the project.

Radiation Emergency Training and Exercises: The overall goal is to improve emergency preparedness and response capabilities. In October 2012, EPPR conducted an International Consequence Management Training Course, hosted by Denmark. To validate preparedness and identify potential gaps in capabilities, EPPR conducts radiological emergency exercises. In June 2012, EPPR conducted an emergency response exercise in Russia and the Sayda-Bay branch of the Northwest Centre on Radioactive Waste Management. EPPR's next radiological exercise will be a full-scale exercise in Russia scheduled for mid-2014. The project is co-led by the United States and Russia.

Emergency Rescue Team Technical Support: The overall goal is to improve emergency preparedness and improve technical capabilities. The project will be completed in 2013. The project is co-led by the United States and Russia.

Community Radiation Information: The aim is to improve public communications (e.g. information sharing) and prevention measures, emergency preparedness and response capabilities. The project will be completed in 2013 and is co-led by the United States and Russia.

Technical Analysis Capabilities for Radiological Emergency Response: The aim is to improve technical analysis and to improve emergency preparedness and response capabilities. The project is co-led by the United States and Russia.

Technical Crisis Centre Support to the EMERCOM: The aim is to develop Technical Crisis Centre support to the EMERCOM crisis situation management centre phase II. The project will be completed in 2013. The project is co-led by the United States and Russia.

Arctic Automated Mutual Assistance Vessel Rescue Network (AAmverNet): The aim is to follow up the AAmverNet 2011 fact sheet and the 2012 Notice to Mariners. The overall goal is to improve emergency preparedness. The main activity will be to test and evaluate AAmverNet in 2013. The project is co-led by the United States and Canada.

Operational Safety and Health of Arctic Oil Spill Response Workers: The main activity is to develop a guide for occupational safety and health of Arctic oil spill response workers and produce a report. The overall goal is to improve information sharing, prevention measures, emergency preparedness and response capabilities. A draft report will be presented in 2013 and the project will be finalised in 2014. The project is led by the United States.

Agreement on Cooperation on Marine Oil Pollution Preparedness and Response

Operational Guidelines: EPPR is responsible for maintaining and updating the operational guidelines for the Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic.

Cross-cutting projects and activities

The EPPR chairmanship is responsible for projects, cooperation and information sharing with the other working groups. EPPR is contributing to several projects conducted by other Arctic Council working groups. Projects developed to address the RP3 recommendations will likely be cross-cutting where input and/or leadership from AMAP, CAFF and PAME will be of importance.

Support for international activities

EPPR supports the ongoing IMO work by developing text for the chapter entitled In Situ Burn of Oil Spills on Water and Broken and Solid Ice Conditions. The IMO Protocol on Preparedness, Response and Cooperation to Pollution Incidents by Hazardous and Noxious Substances Technical group has drafted a guide entitled Oil-Spill Response in Ice and Snow. EPPR has been asked to finalise this guide. Further clarification is needed before EPPR can accept this work in addition to its work plan.

Communication and outreach

EPPR has recently launched a new website. All outcomes from projects, reports, guidelines and presentations are posted on the website. EPPR is working on a communication plan that will be discussed at its June 2013 meeting.

Administration

EPPR held meetings in both 2011 and 2012. In addition, EPPR took part in workshops and exercises and contributed to meetings of other Arctic Council working groups and initiatives. EPPR has neither a budget nor a permanent secretariat. Norway has been responsible for the chairmanship and its secretariat duties and associated costs since the last Arctic Council Ministerial meeting in 2011.

5. PROTECTION OF THE ARCTIC MARINE ENVIRONMENT (PAME)

Mandate

PAME's mandate is to address policy and other measures related to the protection of the Arctic marine and coastal environment from both land and sea-based activities. These measures include coordinated strategic actions, programs, assessments and guidelines, complementing existing international arrangements.

Response to Arctic Council priorities

PAME works in accordance with specific references from the 2011 Nuuk Declaration and based on priorities identified by the Arctic Council. Its work over the last two years has proceeded in accordance with relevant actions identified in the Arctic Marine Strategic Plan (AMSP 2004) and as identified in PAME's biennial work plans as approved by the Arctic Council, including implementation of follow-up on actions of the Arctic Marine Shipping Assessment (AMSA) and other assessments of the Arctic Council.

Main achievements in 2011–2013

Follow-up of the Arctic Marine Shipping Assessment Report of 2009 (AMSA): PAME has a designated shipping expert group composed of national representatives, Permanent Participants, IMO experts and other shipping experts in an effort to address in more detail the AMSA follow-up recommendations. PAME has provided work related to recommendations I(A) – Linking to Other International Organisations; I(B) – IMO Measures for Arctic Shipping, and; I(D) – Strengthening Passenger Ship Safety in Arctic Waters. Progress has been achieved by monitoring and, as necessary or appropriate, reporting on developments with respect to Arctic initiatives, including best practices, actions or activities of other international organisations including support for the work at IMO on developing a Polar Code.

Use and Carriage of Heavy Fuel Oil in the Arctic (HFO) Phase II Project, II(D) – Specially Designated Marine Area project: This work focuses on protection of areas in the high seas portion of the Arctic. Efforts have also been made in relation to III(A) – Addressing the Infrastructure Deficit; and III(B) – Arctic Marine Traffic Systems to enhance maritime domain awareness for safety and environmental protection purposes through fostering the sharing of vessel traffic and monitoring data.

Arctic Ocean Review (AOR): The overall objective of the AOR is to provide guidance to the Arctic Council on strengthening governance in the Arctic through a cooperative, coordinated and integrated

approach to the management of the Arctic marine environment. The AOR was developed through extensive consultations with other Arctic Council working groups, Permanent Participants, observers and other experts through sharing of work in progress and the convening of three expert workshops to support the development of the report. Workshop summary reports have been prepared to record the range of views discussed, including those that may be outside the AOR Terms of Reference, but could be further considered for future work by the Arctic Council. The AOR went through intergovernmental review process among the Arctic States and Permanent Participants through weekly teleconferences in November 2012 and April 2013.

Ecosystem Approach to Management project (EA): PAME continued to advance work towards implementation of the ecosystem approach to assessment and management by taking into account the previous work on Large Marine Ecosystems (LMEs) and the summary of Observed Best Practices for Ecosystem-Based Ocean Management and work of the EBM Expert Group. One workshop was held in 2012 and focused on integrated assessment of the conditions of LMEs in the Arctic. PAME representatives have also participated in the work of the EBM Expert Group to ensure synergies with EA. PAME approved the revisions to the map of 18 Arctic LMEs and supporting text on the boundary issues.

Health, Safety and Environmental Management Systems for Offshore Oil and Gas Operations (HSE): The failure of HSE Management System elements was a contributing factor in the Deepwater Horizon disaster and other major accidents. The project started in March 2012 with a compilation of HSE Management Systems used by Arctic States and included in the Arctic Offshore Oil and Gas Guidelines of 2009. Selected common elements were examined in an Arctic context. Two expert workshops were held to gather information on its project development. The HSE Management Systems Workshop in June 2012 was coordinated with the EPPR/RP3 workshop. A Safety Culture workshop was held in September 2012 to explore common root causes of major industrial systems failure accidents.

Arctic Oil and Gas Management, Regulation and Enforcement Web-Based Information Resource project (MRE): The website will provide indexed access to specific information on national websites related to management, regulation and enforcement of Arctic offshore oil and gas activities. The website will include background documents from the HSE project and workshop reports. It will be launched in May 2013 and periodically updated.

Implementation and follow-up

Revise the Arctic Marine Strategic Plan of 2004 (AMSP): Several specific PAME activities have aimed to implement the AMSP 2004 and the Arctic Climate Impact Assessment (ACIA). AMAP, CAFF, EPPR and SDWG have responded to the status of the AMSP strategic actions which show that all strategic actions have been completed or are progressing according to plan and are expected to conclude within the next work plan period. Based on this, PAME, in cooperation with other Arctic Council working groups, will initiate a consultative process to revise the AMSP 2004. According to plan, a new AMSP will be produced for adoption by the Arctic Council in 2015.

Arctic Ocean Review (AOR): The AOR is a direct follow-up to the AMSP, which recommends “periodically review of the status and adequacy of international/regional agreements and standards that apply in the Arctic marine environment, and new scientific knowledge of emerging substances of concern...”. In addition, the AMSP suggests that states regularly consider commitments by the global community to sustainable development and protection of marine biodiversity and the marine environment through application of the ecosystem approach and integrated coastal and ocean management. PAME will initiate a process to follow-up on the AOR during 2013–2015 and implement the relevant recommendations, as directed by the Senior Arctic Officials.

Follow-up of the Arctic Marine Shipping Assessment of 2009 (AMSA): PAME continues to follow up on the recommendations from the AMSA 2009 report and has prepared an AMSA 2011–2013 progress report reflecting the status and progress on all 17 recommendations promoting safety and environmental awareness of current and future Arctic shipping activity at national, Arctic, regional, and international levels, as relevant. The report highlights the significant progress being made in implementing these recommendations.

Ecosystem Approach to Management (EA): PAME continues to advance the work towards implementation of the ecosystem approach to assessment and management (see above).

Follow up on the Arctic Council Oil and Gas Overview Report and the Arctic Offshore Oil and Gas Guidelines of 2009 (AOOGG):

- *Health, Safety and Environmental Management Systems for Arctic Offshore Oil and Gas Operations (HSE):* The project team is summarising findings from the HSE and Safety Culture workshops, Deepwater Horizon investigations, regulatory systems reviews and assessment of management systems in the Arctic. Recommendations will be developed based on these

findings and a draft report is anticipated late 2013 or early 2014.

- *Arctic Oil and Gas Management, Regulation and Enforcement Web-Based Information Resource (MRE Project)*: The web resources will be periodically updated.

Work plan for 2013–2015

List of individual projects

AMSA I(A) – Linking with International Organisations: PAME will continue to monitor and, as appropriate, identify opportunities to engage with international organisations such as the IMO, International Standard Organisation (ISO), International Association of Lighthouse Authorities (IALA), World Meteorological Association (WMO) and Arctic Regional Hydrographic Commission to advance implementation of the AMSA recommendations. The United States leads the project.

AMSA I(B) – IMO Measures for Arctic Shipping: The IMO works on developing a mandatory Polar Code for 2014. PAME, at the direction of Senior Arctic Officials, will support the work by promoting intensified collaboration among Arctic States within the IMO. Phase II of the project on Heavy Fuel Oil (HFO) in the Arctic is led by Norway, Russia and the United States and includes the following parts:

- *Part 1: Vessel traffic in the Arctic* – PAME will obtain and analyse a dataset for the most recently available 12 months of vessel activity in the Arctic and prepare a characterisation of the vessel traffic activity levels and HFO use carriage patterns.
- *Part 2: Gap analysis of existing regulatory requirements*: The working group will prepare a gap analysis to highlight opportunities and gaps in the existing regulatory requirements for use and carriage of HFO by ships in the Arctic, based on the overview of existing regulatory requirements contained in the HFO Phase I Report.
- *Part 3: Risk analysis on present and projected use of HFO in the Arctic*: PAME will finalise the HFO Phase II report, including its recommendations, by 1 November 2013.

AMSA I(D) – Strengthen Passenger Ship Safety in Arctic Waters: PAME will continue to monitor and support IMO initiatives to strengthen passenger ship safety and work with the passenger ship industry and other stakeholders in the identification and improvement of best practices. Co-leads are Canada, Denmark and the United States.

AMSA II(A) Survey of Arctic Indigenous Marine Use: PAME will solicit regular progress reports from Arctic States, Permanent Participants and others as relevant, including the AIA project on building

marine based subsistence mapping capacity in Arctic coastal communities. PAME also encourages Arctic States to share relevant information or methodologies with AIA and others as appropriate. The project is led by the PAME Chair and the PAME Secretariat.

AMSA II (D) – Specially Designated Arctic Marine Areas: PAME has retained a consultant to assist in developing recommendations on areas within the high seas of the Arctic Ocean that may merit consideration by Arctic States as possible proposals for protective measures in IMO. The consultant's final report is to be presented in November 2013. PAME will also convene a workshop in June 2013 to coordinate and advance this project, based on the final AMSA II(C) report and the work plan for AMSA II(D). Co-leads are Canada, Finland, Norway, the United States and Russia.

AMSA II (G) – Address Impacts on Marine Mammals: PAME will collaborate with other Arctic Council working groups to monitor and provide support to work undertaken by other international and bodies such as IMO and the International Whaling Commission (IWC) regarding the impact of shipping on marine mammals. Co-leads are PAME and the United States.

AMSA II(H) – Reduce Air Emissions: PAME will monitor and support IMO's work related to black carbon, in particular as it relates to the Arctic and explore synergies for supporting other Arctic Council efforts on black carbon. PAME also encourages continued scientific research related to black carbon emissions including a technical definition of black carbon and appropriate measurement methods and control measures. Co-leads are Finland, Norway, Russia and the United States.

AMSA III(A) - Address the Infrastructure Deficit: PAME will continue to monitor and support initiatives for strengthening Arctic marine infrastructure, including with respect to the AMATII project. Co-leads are Russia and the United States.

AMSA III(B) - Arctic Marine Traffic Systems: Build on its work related to vessel traffic monitoring and tracking: PAME will explore how Arctic States can enhance the ability to collect and share such information, including in cooperation with other regional bodies, and how such information could be used to support PAME's work related to conservation and sustainable development. Enhanced and ongoing understanding of vessel traffic could be shared with others and/or used to develop recommendations for consideration by Arctic States for new vessel traffic measures, location and pre-positioning of SAR resources, and approaches for addressing impacts of shipping on marine and coastal resources and communities. Co-leads are Russia and the United States.

Develop a sustainable tourism initiative: PAME will reach out to SDWG, AMAP and CAFF to explore the development of a sustainable tourism initiative. Potential elements could include: collecting and assessing existing information regarding trends in Arctic tourism; collecting and assessing existing information on adverse and beneficial environmental, social, and cultural impacts of Arctic tourism; an inventory of existing laws, codes, policies, guidelines and best practices pertaining to sustainable Arctic tourism and based on an evaluation of the inventory, identifying fundamental principles of sustainable Arctic tourism, publicising principles and encouraging their adoption and/or implementation by key Arctic actors; and if/as appropriate, developing or encouraging the development of more specific code or best practices of sustainable Arctic tourism, tailored to specific regions, communities, destinations, ecosystems or industries. Co-leads are Canada and the United States.

Update the Arctic ship traffic data: PAME will explore opportunities for updating the Arctic ship traffic data contained in the AMSA report for use in studies, assessments, trend analyses and the development of recommendations that enhance Arctic marine safety and support protection of Arctic peoples and their environment. Co-leads are all Arctic States.

AMSA implementation progress report: PAME will continue to provide biennial AMSA implementation progress reports for submission to the Arctic Council meetings (e.g. 2013 and 2015). Co-leads are Canada, Finland and the United States.

Health, Safety and Environmental Management Systems for Arctic Offshore and Gas Operations (HSE): Ongoing project as per the agreed timeline. To be finalised for submission and approval in late 2013 or early 2014. The United States leads the project.

Arctic Oil and Gas Management, Regulation and Enforcement Web-Based Information Resource (MRE): The project updates the MRE web-based information annually two weeks prior to the PAME winter/spring meetings. It includes information regarding existing national liability and compensation regimes. The project is led by PAME.

AOR follow-up on relevant recommendations: Activities to be added based on the findings of the AOR and as agreed by Senior Arctic Officials in 2013. This will be done by creating a matrix of activities intended to address the recommendations. Co-leads are Canada, Norway and the United States.

Revision of the Arctic Council Arctic Marine Strategic Plan (AMSP) of 2004: PAME will take into account relevant deliverables agreed at the 2013 Arctic Council Ministerial meeting for inclusion into a new AMSP. PAME will host a scoping workshop in June 2013. The revised AMSP will be presented for the Arctic Council Ministerial meeting in 2015. Co-leads are Canada, Iceland, Norway and the United States.

Ecosystem Approach to Management: PAME will continue work on integrated assessment and comparing cases and reviewing existing methodologies. To resolve data issues, PAME will continue to work from the third EA workshop in June 2013 at two levels: LMEs and pan-Arctic. PAME will compile information on higher level objectives and species management objectives and review methodology for setting ecological quality objectives. PAME will consider the use of identified areas of heightened ecological significance in relation to EA for the Arctic LMEs. PAME planning tools include mapping of human uses and habitats in LMEs in relation to integrated assessments and other tools for EA and exploring the feasibility of developing pilot projects to demonstrate outcomes from other EA activities. Co-leads are Norway, the United States and Canada (TBC).

Framework for an Arctic Marine Protected Areas (MPA) network: PAME will form an MPA expert group to explore the development of a framework for an Arctic marine protected areas network, for consideration by PAME. Co-leads are Norway, the United States and Canada (TBC).

Follow-up of the Arctic Biodiversity Assessment (ABA): PAME will consider the ABA recommendations of relevance to PAMEs mandate. PAME leads the project.

Adaptation Actions for a Changing Arctic (AACA) part C: PAME plans to provide input to the AACA-c in line with the project plan. AMAP leads this work.

Information outreach and efforts to increase cooperation and collaboration with international/regional organisations: PAME will liaise and exchange information with relevant organisations and programs (e.g. UNEP Regional Seas Programme), regions and other regional programs.

Build capacity and engagement of indigenous communities and other Arctic inhabitants: PAME will develop a communication plan in line with the Arctic Council's communication strategy approved in

May 2012. The chair and secretariat of PAME leads the project.

Cross-cutting projects and activities

PAME continues to actively communicate with other Arctic Council working groups on the need to collaborate on related projects to ensure synergies. AMAP, CAFF, EPPR and SDWG have participated at PAME's meetings.

EPPR has provided an update on relevant AMSA follow-up including AMSA II(F) – Oil Spill Prevention as it relates to updates on the recommended practices for Arctic oil spill prevention project (RP3) and on AMSA III (C) – Circumpolar Environmental Response Capacity Safety Systems in Implementation of Economic and Infrastructural Projects. Furthermore, the PAME Oil and Gas contact group has collaborated with the EPPR on the RP3 project and the HSE project to ensure synergies with both efforts.

AMAP, CAFF and SDWG have worked on the AMSA follow-up for recommendations II(C) on Areas of Heightened Ecological and Cultural Significance. Representatives from all working groups were invited to participate in the two AOR workshops during the Phase II process (September 2011–September 2012) in an effort to enable all working groups to provide input.

AMAP, CAFF and SDWG engaged in marine-related issues have been invited to participate in the PAME-led Ecosystem Approach (EA) expert group and will jointly work on the planning of its spring 2013 workshop. PAME has been actively involved in the work of the EBM Expert Group to ensure synergies with PAME's work on this issue.

PAME seeks contributions from other Arctic Council working groups engaged in marine-related issues on a new AMSP as per PAME's work plan for 2013–2015. Such a consultative process will start with a scoping workshop with relevant experts.

Support for international activities

Since the approval of the AMSA 2009 Report, PAME has invited expert organisations to meetings as a means of outreach and information sharing of relevance to the AMSA follow-up activities. These include:

- *AMSA I(D) - Strengthening Passenger Ship Safety in Arctic Waters*: presentation on Best Practices for Arctic Cruise Tourism by Cruise Lines International Associations.

- *AMSA I(D) - Strengthening Passenger Ship Safety in Arctic Waters.*
- *Presentation on Environmentally friendly, safe and responsible expedition cruise tourism in the Arctic: practices and industry standards by Association of Arctic Expedition Cruise Operators (AECO).*
- *Presentation on how members address voyage planning (including possible contingencies) and coordinate with each other and with shore-based administrations: by Arctic Expedition Cruise Operations (AECO).*
- *AMSA I(B) and I(D) - IMO Polar Code and initiatives to improve Arctic passenger ship safety: presentation by the shipping insurance industry on factors that go into setting insurance premiums for Arctic cruises by International Group of P&I Clubs.*
- *AMSA III (B) - Arctic Marine Traffic Systems: presentation on Automated Identification System (AIS), Long Range Identification and Tracking of ships (LRIT) and/or similar ones that may be deployed by Arctic States by Satellite Based Monitoring Service, European Maritime Safety Agency.*
- *AMSA II(D) - Specially Designated Arctic Marine Areas: presentation on Satellite AIS Capabilities in the Arctic by ExactEarth, Automatic Identification System.*
- *AMSA III (B): to AMSA including their initiatives and views regarding IMO's Polar Code, areas of heightened ecological and cultural significance, invasive species, oil spill prevention, ship strikes, underwater noise, air emissions and marine traffic awareness systems by Baltic and International Maritime Council's (BIMCO).*

Communication and outreach

The PAME Secretariat leads PAME's overall communications activities. PAME develops necessary project-related communications, including brochures, promotional materials, websites and presentations. PAME participates in relevant international symposia, meetings and other appropriate fora to communicate its activities. PAME's work plan includes information outreach and efforts to increase cooperation and collaboration with international and regional organisations to include the liaising and exchange of information with relevant organisations and programs (e.g. UNEP Regional Seas Program), and other regional programs. PAME will develop a communication plan in line with the Arctic Council's communication. PAME's website serves as the main outreach and communication tool (www.pame.is).

Administration

The PAME International Secretariat is located in Akureyri, Iceland. The Secretariat has three staff: one executive secretary, one executive assistant and one project officer. Both Iceland and the United States have chaired PAME in 2011–2013. At the Kiruna Ministerial Iceland will take over the chairmanship and the United States will become vice-chair. PAME has held four working group meetings, two AOR expert workshops, one ecosystem approach workshop, one health safety and environmental management systems workshop and one safety culture expert workshop during the Swedish chairmanship of the Arctic Council. PAME was founded in 1993 via the Arctic Environmental Protection Strategy (AEPS). A ministerial agreement from 1997 provides the framework for state contributions to the operation of the PAME Secretariat. PAME cooperates closely with CAFF to share fixed secretariat overhead costs.

6. SUSTAINABLE DEVELOPMENT WORKING GROUP (SDWG)

Mandate

The goal of the Sustainable Development program of the Arctic Council is to propose and adopt steps to be taken by the Arctic States to advance sustainable development in the Arctic. It includes opportunities to protect and enhance the environment and the economies, culture and health of indigenous peoples and Arctic communities. The guiding tenet running throughout the work of the SDWG is to pursue initiatives that provide practical knowledge and contribute to building the capacity of indigenous peoples and Arctic communities to respond to the challenges and benefit from the opportunities emerging in the Arctic region.

Response to Arctic Council priorities

Since the Nuuk declaration, the SDWG has made strides in fulfilling its human dimension mandate. Particularly worth mentioning are the completed Arctic Social Indicators II report and the work of the forthcoming Arctic Human Development Report II, which will conclude in 2014. An important development is the establishment of an expert group on Social, Economic and Cultural (SEC) issues, which will be an asset for the entire Arctic Council. The aim is to respond to the demand related to these issues, increase SDWG's capacity and deliver appropriate and relevant information on human dimension priorities.

Main achievements in 2011–2013

The SDWG has worked on a total of 17 projects. Moreover, there are a large number of cross-cutting projects, i.e. projects that are led by other Arctic Council working groups, but where important human dimension input is required. The main achievements during the Swedish chairmanship include:

Arctic Social Indicators II: The project tests, validates and refines the indicators across the Arctic. The project is led by Iceland.

Arctic Maritime Aviation Transportation Infrastructure Initiative (AMATII): Provides an inventory of marine and aviation transportation infrastructure. The project is co-led by Iceland and the United States.

Social Economic and Cultural Expert Group: The expert group will enhance the SDWG's institutional capacity and is led by Canada.

Arctic Marine Shipping Assessment Recommendation IIc: Identifies areas of heightened cultural significance that would be affected by increased shipping traffic in the Arctic. The project is led by Norway.

Adaptation Actions for a Changing Arctic part a): Examines the Arctic Council working groups' assessments and recommendations over the last ten years that inform adaptation options and actions for Arctic States. In addition, the Arctic Council requested the working groups to review assessments and recommendations over the past ten years and for SDWG to prepare the Adaptation Actions to a Changing Arctic (a) synthesis report to inform adaptation options and actions for the Arctic States. The project is led by SDWG.

Corporate Social Responsibility and Sustainable Business in the Arctic: Information tool that will be included on the SDWG website. Initiated and led by Sweden.

Arctic Human Health Expert Group (AHHEG): Led Circumpolar Health Systems Review, Arctic Human Health Initiative (AHHI) comprehensive summary report of activities 2007–2013, and the ongoing efforts of AHHEG to increase awareness and visibility of the health concerns of Arctic people in the fields of health research, expansion of health and outreach education networks.

Cross-cutting projects: The SDWG has engaged in and provided input to the Arctic Ocean Review Phase II (AOR-II), the Arctic Resilience Report (ARR) and the Arctic Council's Ecosystem-Based Management (EBM) approach.

Implementation and follow-up

Unlike other Arctic Council working groups, initially the SDWG carried out its mandate based on specific projects approved by Arctic Council Ministers, rather than in accordance with a broad program mandate. At the Salekhard Ministerial meeting in 2006, the Council amended this approach, giving Senior Arctic Officials an open-ended mandate to approve SDWG projects intersessionally, as consistent with the overall work and priorities of the Arctic Council. The SDWG planning and project development will benefit from the SDWG project proposal template and its evaluation criteria, as well as the implementation of the Social, Economic and Cultural Expert

Group (SEC). These instruments support the institutional capacity to identify and implement a strategic planning approach to the human dimension activities of the Arctic Council and respond by providing human dimension input into cross-cutting activities.

Work plan for 2013–2015

Consistent with the overall work and priorities of the Arctic Council, the SDWG will undertake projects and activities endorsed by delegations and approved by Senior Arctic Officials. There has been a recent shift from single, narrowly focused projects to larger, cross-cutting activities involving a number of working groups.

List of individual projects (continuing into the 2013–2015 period)

Arctic Human Development Report II (AHDR-II): This project will provide a second assessment and synthesis report on the state of human development in the Arctic. The AHDR-II will contribute to increased knowledge and understanding of the consequences and interplay of physical and social global change processes for human living conditions and adaptability in the Arctic. The work is scheduled for completion in 2014, ten years after the first report. Co-leads are Iceland, Canada and Denmark/Greenland.

Assessing, Monitoring and Promoting Arctic Indigenous Languages: This initiative is a comprehensive program of research, communications, networking, advocacy and action. Its stated objectives are to: reinforce the importance of indigenous languages; assess the state of Arctic indigenous languages; lead and facilitate inter-regional, international, and intergovernmental activities in support of languages; and enhance language exchange and youth engagement. This project will be a deliverable for the Arctic Council Ministerial meeting in 2015. Co-leads are Canada, the United States and Denmark/Greenland.

A Circumpolar-Wide Inuit Response to the AMSA: ICC's objectives for this project are twofold: 1) to communicate AMSA findings to Inuit and seek their guidance on moving AMSA forward, and 2) to expand its earlier survey on Inuit use of sea and sea ice. The expanded survey will assess how current use of sea and sea-ice is impacted by Arctic shipping and compares with earlier land use studies. This will be a deliverable for the 2015 Ministerial. Co-leads are the Inuit Circumpolar Council (ICC), Canada and the United States.

Electronic Memory of the Arctic (EMA): The EMA project is designed to accumulate and represent to the full extent various virtual resources they relate to investigation, operation and development of

the Arctic. EMA electronic information resources from libraries, museums and archives of the Arctic Council as well as an expert blog on the EMA portal will allow the expert community to discuss issues on the history of geographical discoveries and exploration of the North, industry, geology, nature, indigenous cultures and literature of the circumpolar world, artistic heritage and ethnography. Progress can be seen on the EMA website: www.emaproject.com. Co-lead by Russia and Norway.

Reindeer Herding and Youth (EALLIN): The main goal of the EALLIN project is to maintain and further develop sustainable reindeer husbandry in the Arctic, while working towards a vision of creating a better life for circumpolar reindeer herders. The project will continue to promote knowledge building and experience exchange in and between local reindeer herding societies in the Arctic, with the emphasis on youth. The project activities have been very successful and will continue into the 2013–2014 period. This project will be a deliverable for the Arctic Council Ministerial meeting in 2015. Russia leads the project and is supported by Norway.

List of individual projects (under development for the 2013–2015 period)

Gender and Equity in the Arctic – conference and network: This project will build on the 2002 conference (Taking Wing) on gender equality and women in the Arctic. Specific outcomes will include a conference on gender equality and the creation of a cooperation network of stakeholders. Iceland leads the project.

Food and Water Security: This initiative, under the auspices of the SDWG and AMAP health experts, has produced the report entitled Food and Water Security Indicators in an Arctic Health Context. Additional work to assess the food and water security situation in the Arctic is being considered as a combined SDWG and AMAP project proposal.

Traditional and Local Knowledge: Canada has requested the SDWG, in collaboration with all working groups, to develop recommendations to integrate traditional and local knowledge into the work of the Council.

Promoting Mental Wellness in Northern Circumpolar Communities: The project builds on previous efforts of the Arctic Council to promote mental health in Arctic communities, including the recommendations from the SDWG Hope and Resilience Seminar (2009). The objective of this initiative is to promote further research to improve and develop mental wellness promotion strategies and suicide prevention interventions. This will be a deliverable for the Arctic Council

Ministerial meeting in 2015. The project is co-led by Canada and the United States.

Facilitating Adaptation to Climate Change: This project will build on the results of parts a) and b) of the AACA initiative by facilitating the ongoing exchange and dissemination of information.

Cross-cutting projects and activities

Arctic Resilience Report (ARR): There is a human dimension chapter in the ARR. The SDWG is closely following the development of this chapter and the lead author reports to the SDWG on a regular basis.

Ecosystem-Based Management (EBM): The integrated work, including sharing of information on approaches and experiences with integrated analyses and efforts to consider both traditional and scientific knowledge, will be complex. SDWG must evaluate the capacity and feasibility of potential projects. The SDWG participation will be an increasingly essential element in EBM-led Arctic Council activities.

Arctic Ocean Review (AOR): The AOR follow-up and implementation will necessitate ongoing SDWG participation.

Other cross-cutting projects: Over the coming two years, there remains the possibility of additional cross-cutting activities identified by another working group which will need to be considered by the SDWG for possible undertaking.

CSR and Sustainable Business in the Arctic: Sustainable economic development is essential for the Arctic. Sweden, through the SDWG, intends to initiate a discussion with the private sector on how business, as a primary driver of globalisation, can help ensure that markets, commerce, technology and finance advance in ways that benefit economies and societies in the Arctic. The project will draw on existing CSR frameworks such as the UN Global Compact, the Extractive Industries Transparency Initiative and the OECD Guidelines for Multinational Enterprises.

Communication and outreach

The SDWG has adopted a communication strategy and will work to implement it. There will be a new SDWG website but other print and outreach material will need to be developed. During the Swedish chairmanship, the SDWG Chair established a SDWG profile on social media (Twitter) for SDWG activities.

Administration

The SDWG has arranged a number of meetings during the Swedish chairmanship, which has also conducted informal dialogues, one with indigenous peoples and the other with Arctic businesses. The SDWG Secretariat is funded and hosted by Canada with support from Finland. The budget covers Secretariat services for the SDWG. During the Swedish chairmanship, considerable effort was focused on the Secretariat structure and operational procedures, including document archiving, a reference numbering system, and a new website.