

These collaborations have been favorably received within the international organizations concerned, have enhanced the Arctic Council's profile in these activities, and have ensured that Arctic perspectives, information, and data are recognized in these international fora.

AMAP has supported the following work in projects led by other Arctic Council WGs and TFs: Integrated ecosystem assessment (PAME); marine biodiversity trends updates (CAFF); Arctic marine strategic plan and AMSA follow-up (PAME); and One Health (SDWG).

2.B.ii. Work plan 2017-2019

Introduction

Significant parts of AMAP's work to meet its mandate to inform policymakers with up-to-date information on pollution and climate issues are of a continuing nature. This includes the implementation of the AMAP coordinated (trends and effects) monitoring program. The 2017-2019 AMAP WP described below is developed within the context of a multi-year schedule for updating assessment of issues under AMAP's mandate. The 2017-2019 WP reflects near-term priorities identified by the AMAP WG, and it takes into account timing and allocations of resources. Priorities not included here are still important and may be ongoing or have longer time horizons. The WP also takes note of Finnish Chairmanship priorities, in particular concerning environmental protection and education and improved links to the SDGs. Detailed information on specific activities, the EGs that would be responsible, intended products, relationship to the Arctic Council and external processes, and envisaged workload is maintained by the AMAP secretariat. All AMAP work endeavors to engage PPs and use TLK where applicable. The WP also recognizes the potential contributions of Observers.

List of individual projects and activities

Project/activity: Addressing climate issues

Lead/co-leads: Arctic States and PPs - Cryosphere Change (SWIPA) – Canada, Kingdom of Denmark, Norway, Russian Federation, Sweden, U.S.; AOA – Norway, U.S.

WG partners: Joint outreach of Arctic Council information on Arctic climate change and its impacts, is proposed together with CAFF, PAME, and ACS

Other partners: Observers - WMO, IPCC, IASC (on SWIPA); International Council for the Exploration of the Sea (ICES) (on AOA)

Rationale and overall objective: AMAP's continuing work to update information on the implications of climate change for Arctic physical environments and ecosystems is essential



for providing policymakers with the most recent and relevant information to inform decision-making on these far-reaching issues. Arctic climate change impacts are already altering the region's nature and human activities, and this change is projected to continue with implications both for the Arctic and for the world as a whole.

AOA is a consequence of increasing emissions of carbon dioxide that has potential for major effects on Arctic ecosystems, including important subsistence and commercial fisheries.

AMAP has been asked to support the IPCC process to prepare special reports on "impact of global warming of 1.5°C above pre-industrial levels (due in 2018), and "climate change and the oceans and the cryosphere" (due in 2019). The SWIPA and AOA follow-up work also feeds into a range of other Arctic Council activities.

Main activities and interim milestones: A major focus of AMAP work on climate issues under the 2017-2019 work-plan is to contribute to the planned IPCC special reports and to disseminate the results of the SWIPA 2017 update widely and effectively to multiple target groups.

Timeline/completion date: Work to contribute to IPCC special reports is scheduled for 2017 and 2018. Planned work on AOA involves completion in 2017 of the ongoing assessment that was initiated under the AMAP WP 2015-2017. Proposed work on SWIPA outreach requires coordination with other Arctic Council subsidiary bodies and this is part of the work planned in the 2017-2019 period.

Project/activity: Addressing contaminants and human health issues

Lead/co-leads: Arctic States and PPs - POPs and contaminants of emerging concern - Canada, Kingdom of Denmark, Finland, Sweden; Mercury — Canada, Kingdom of Denmark; Radioactivity — Norway, Russian Federation; Human health — Canada, Kingdom of Denmark; Air pollution/SLCPs — Finland, Norway, U.S.

WG partners: Parts of the work connect to work under other Arctic Council WGs, specifically ACAP (chemicals and SLCPs), CAFF (pollution effects on biota), EPPR (radioactivity), SDWG (human health), and EGBCM (SLCPs)

Other partners: Observers – United Nations Economic Commission for Europe (UNECE), UNEP/UN-Environment; Others – industry

Rationale and overall objective: These ongoing activities fulfill AMAP's ongoing mandate. Work elements support the further development and implementation of the UNEP Stockholm (POPs) and Minamata (mercury) Conventions, CLRTAP, and connect to UNFCCC/IPCC priority: Food security and the SDGs #2 on food security, #3 on ensuring healthy lives, #6 on access to safe drinking water, and #13 on action to combat climate change and its impacts.



Main activities and interim milestones: Main activities on mercury under the 2017-2019 WP relate to joint work with UNEP relevant to the Minamata Convention and Global Mercury Assessment 2018; an update on the assessment of mercury in the Arctic is planned for 2021 (updating the 2011 assessment of this issue). Work on POPs is focused on completion of ongoing work on biological effects of POPs (and mercury) for delivery in 2017 and work to follow up on the assessment of chemicals of emerging concern, including provision of relevant data and information to bodies responsible for chemical regulation. Assessments of radioactivity and human health were delivered in 2015, so planned work in 2017-2019 relates mainly to routine compilation of new data and activities to enhance cooperation between groups working on contaminant and human health effects. Longer-term planning includes provision of timely input for Stockholm Convention effectiveness evaluation and further work on impacts of climate change on contaminant release and fate in the Arctic, possibly including targeted studies addressing possible radioactive and other pollution at a site in Greenland. AMAP delivered assessments of scientific knowledge regarding SLCP impacts on Arctic climate in 2015 and plans to update these in the form of an interim update in 2019 with a focus on emissions scenarios and modeling and a comprehensive update in 2021 considering air pollution issues in an integrated context (working in collaboration with CLRTAP bodies and other relevant groups, including coordination activities in relation to the European Union initiative on black carbon).

Timeline/completion date: These activities are part of a coordinated plan for activities with deliverables in 2017 (POPs), 2019 (POPs and human health targeting Stockholm Convention information needs; SLCF interim update) and 2021 (mercury; integrated air pollution assessment).

Project/activity: Supporting adaptation actions

Lead/co-leads: Arctic States and PPs - Norway, Finland, Russian Federation, Sweden (Barents region); Canada, Russian Federation, U.S. (Bering-Chukchi-Beaufort region); Canada, Kingdom of Denmark (Baffin Bay/Davis Strait region)

WG partners: SDWG, CAFF, PAME

Other partners: Observers – none; Others - stakeholders (e.g. Arctic Economic Council, industry, local/regional governments, etc.)

Rationale and overall objective: The AACA project is implemented through three regional pilot studies addressing the Bering-Chuckchi-Beaufort region, the Baffin Bay-Davis Strait region, and the Barents area.

Main activities and interim milestones: Under the WP for 2017-2019, in addition to completing planned deliverables, the AACA pilot studies will be followed up initially through



an evaluation process and the possible development of an overarching report and possible development of national follow-up activities by the AMAP WG.

Timeline/completion date: Completion of a possible overarching report and initial evaluation of the AACA results would take place during 2017-2019 with the intention of developing more concrete follow-up activities in the period beyond 2019.

Project/activity: AMAP strategy and implementation

Lead/co-leads: Arctic States and PPs - AMAP future strategy development - All Arctic States;

Support for SAON – Canada, Norway, U.S.

WG partners: CAFF (for SAON)

Other partners: Observers - IASC (for SAON), WMO; Others - none

Rationale and overall objective: AMAP's existing strategic framework document was developed in 2010. The AMAP WG is planning an activity under the WP 2017-2019 to update its strategic direction for the coming years. AMAP, together with IASC, provide secretariat support to the SAON initiative.

Main activities and interim milestones: Preparation of an updated AMAP strategic framework document, including consideration of how to better incorporate TLK in AMAP work. Ensure continued support of the SAON secretariat.

Timeline/completion date: Strategic Framework development during 2017 for approval by AMAP HoDs in 2018; SAON support - ongoing

Communication and Outreach

Policy-relevant overviews

In addition to the deliverables for the Fairbanks Ministerial that target policy-makers and public outreach, AMAP co-produced the "Arctic Freshwater System in a Changing Climate Overview Report". This report summarizes the results of a collaborative project between AMAP, IASC, and Climate and Cryosphere (CliC). The work was delivered at the Arctic Science Summit Week Conference in Fairbanks 2016 and is reflected in the SWIPA 2017 update assessment.

Additional foreign language translations of AMAP outreach products completed since 2015 include Russian and Saami translations of the "Arctic Climate Issues 2011" (SWIPA 2011 overview report) and AOA 2013 overview reports. The Saami translations have been recognized by the Saami Council as also being of cultural value with respect to adding new words relevant to description of pollution and climate concepts to the Saami language.



During the 2015-2017 period, AMAP provided input to the CLRTAP report "Trends in Ecosystem and Health Responses to Long-Range Transported Atmospheric Pollutants" and, following a request from CLRTAP, provided technical support for the production of both the technical background and policy-makers' summary reports associated with their assessment "Towards Cleaner Air" (also translated into Russian), which were released at the UNECE Ministerial Conference at Batumi. AMAP also provides assistance to the U.S. National Oceanic and Atmospheric Administration (NOAA) in arranging the peer review of the "Arctic Report Card."

AMAP also facilitated the delivery of the "ARR Synthesis for Arctic Leaders" at the Arctic Council Ministerial meeting in 2017.

Scientific/technical background reports

AMAP has prepared a series of peer-reviewed technical reports that target the scientific and educational communities and provide the validated documentation for statements and conclusions communicated in AMAP deliverables to the Fairbanks Ministerial, including:

- "SWIPA 2017: Snow, Water, Ice and Permafrost in the Arctic"
- "AACA Barents area; Overview Report"
- "AACA Bering-Chukchi-Beaufort region; Overview Report"
- "AACA Baffin Bay-Davis Strait region; Overview Report"
- "AMAP Assessment 2016: Chemicals of Emerging Arctic Concern"
- "AMAP Assessment 2017: Biological Effects of POPs and Mercury"

AMAP published the following scientific/technical background reports during 2016:

- "AMAP Assessment 2015: Human Health in the Arctic"
- "AMAP Assessment 2015: Trends in Persistent Organic Pollutants in the Arctic"
- "AMAP Assessment 2015: Radioactivity in the Arctic"

As well as these AMAP publications, AMAP work has been featured in a number of scientific journal publications including the "Arctic Freshwater Summary Special Issue of the Journal of Geophysical Research: Biosciences"; and a special issue of the "International Journal of Circumpolar Health."

Conferences

AMAP work has been presented at several international conferences and other events:

 A scientist involved in AMAP climate-related work participated in Arctic side events at the UNFCCC COP 21 (Paris) and COP 22 (Marrakech); cooperation has been established with the IPCC-secretariat under the SWIPA 2017 work.



- An AACA side event was arranged as part of the 2016 Arctic Frontiers conference.
- Results of the CEAC assessment were delivered at a dedicated session of the Society of Environmental Toxicology and Chemistry (SETAC) Europe international scientific conference.
- Results of the AMAP 2015 human health assessment were presented at the 16th International Congress on Circumpolar Health, Oulu, Finland.
- AMAP's achievements in different areas of work were highlighted at the AMAP 25year anniversary seminar arranged in conjunction with the AMAP 30th WG meeting in Helsinki.
- AMAP engaged in the International Conference on Arctic Science: Bringing Knowledge to Action (April 24-27, 2017 Reston, Virginia, USA), including sessions organized together with CAFF, EPPR, and SDWG.
- AMAP continues to upgrade and further develop AMAP website services and has implemented AMAP social media feeds (Facebook and Twitter).

Scientists involved in AMAP work regularly publish their work in high-ranking scientific publications and present at international scientific conferences.

Administration

The AMAP Secretariat is located in Oslo, Norway. Staff includes the executive secretary and five deputy secretary positions. In addition, the AMAP Secretariat has one full-time administrative assistant, a half-time accounting assistant and other occasional part-time assistance to help with maintaining archives and other administrative tasks as necessary. AMAP secretariat core funding is provided by Norway, with additional contributions from some other Arctic States to support directed work tasks. Between May 2015 and December 2016, AMAP held two WG meetings and two face-to-face heads of delegation meetings, as well as several virtual heads of delegation meetings. The AMAP WG Chair is elected by the AMAP HoDs for a period of two years. During the years 2015-2017 the Chair has been from Finland. In 2017-2019 the AMAP Chair will be from Norway.

In 2017, the current AMAP executive secretary will retire, and the Norwegian government has announced that the secretariat will be relocated to Tromsø in 2018.