AMAP Report 2012:2
This report can be found on the AMAP website: www.amap.no

Minutes of the 26th AMAP WG Meeting

Stockholm, Sweden, 3–5 October 2012

AMAP
Arctic Monitoring and Assessment Programme

Table of Content

List of Annexes

Minutes of the 26th AMAP WG Meeting

Stockholm, Sweden, 3–5 October 2012

1 Opening of the WG meeting

Eva Thörnelöf, Director of the Research and Assessment Department, Swedish Environmental Protection Agency, opened the meeting at 9:00 hrs on 3 October 2012 and welcomed the AMAP Working Group (WG) to Stockholm. In her speech, she gave an overview of the history of AMAP and reminded the meeting of the role that AMAP had served in relation to the signing of the Stockholm Convention.

The AMAP Chair, Russel Shearer (Canada), also welcomed the WG. He stated that that the prime objective of the meeting was to prepare for the SAO meeting in Haparanda in November 2012, and to plan for the deliverables to the Kiruna Ministerial Meeting in May 2013. The meeting should also develop the AMAP work plan and strategic plan for 2013 and beyond, including potential restructuring of the Expert Groups. The meeting adopted the agenda as proposed. The agenda is attached as Annex 1 and the list of participants as Annex 2.

2 SWIPA: Follow up

The Chair opened this agenda item noting that the summer Arctic sea-ice minimum, as reported by NSIDC in 2012, was much lower than the previous record in 2007. Older model estimates are conservative, but newer models, even though they are more accurate, are still conservative compared with the observations. This puts emphasis on the need for improving modelling methods.

Morten Skovgård Olsen (Denmark), Chair of the SWIPA Integration Team, summarized the SWIPA findings and recommendations. The Arctic is warming rapidly and all components of the Arctic cryosphere are responding. Feedbacks enhancing warming have been observed and changes are fundamentally altering the characteristics of Arctic ecosystems. Observed and future changes will impact Arctic societies on many levels and will have global implications; while there is uncertainty about the speed and consequences of future change, everyone in the Arctic will need to adapt. Climate change is a key driver of change but not the only one. The condensed recommendations from SWIPA are that: 1) plans and strategies for adaptation actions appropriate to the scales and anticipated challenges should be developed; 2) Arctic societies and the global society should be informed and educated about how the changes in the Arctic are linked to climate change, and how they affect people, locally, regionally and globally; and 3) global greenhouse gas emissions should be reduced.

Morten Skovgård Olsen summarized the Arctic Council (AC) and AMAP activities that are ongoing or under development to address the recommendations, putting emphasis on, among others, the AMAP Climate Expert Group's (CEG) work to improve predictive capability. He highlighted the SWIPA report's recommendation to strengthen research, monitoring, and data

handling and listed the need for new assessments that were identified in the SWIPA report. He also summarized the outreach materials that had accompanied the report, including the films, which are now available at www.vimeo.com, and the SWIPA overview report that would be published in the coming weeks.

The delegate of the United States acknowledged the work of Morten Skovgård Olsen, and explained how the USA works in the context of the IPCC. He stated that the impacts and effects of climate change must be understood locally and not averaged. He recommended first of all to ensure that a follow-up to SWIPA is organized with emphasis on local impacts and effects. Secondly, he suggested that first CEG workshop in Seattle should have a link to scenario development. Finally, he believed that AMAP on its own should develop an Arctic climate impact/change assessment, as a follow up to SWIPA.

In the discussion, the following points were made:

- There is a need for strengthening ground-level observations. Arctic residents are in the best position to make such observations, and the ICC is working with CAFF and CBMP to integrate local observations into western science.

- There is a need for downscaling.

- There was some concern regarding the large number of SWIPA recommendations, given that AMAP cannot handle them alone. The fact that the IPCC report does not contain as much about the Arctic as there should be emphasizes the need for AMAP to cooperate with other groups, including the IPCC.

- There was some support for the idea from the U.S. to conduct an Arctic climate/change assessment prepared under the direction of AMAP as well as for a role of AMAP as a niche-filler on a regional scale; however, there was concern regarding timelines, given that assessments can take five to six years, but the world is changing more rapidly.

The delegate of Russia gave an update on the plans for the second CEG workshop to be held in St Petersburg in 2013. He also drew attention to a forthcoming WMO congress in Geneva that will consider monitoring for climate change.

In responding to these comments, the Chair stated that AMAP must be well-connected with other climate-related initiatives and organizations, including IPCC and WMO. He concluded the discussion by noting that AACA and the AMAP Work Plan would be handled under later agenda items at the meeting, and that this discussion should serve as input to them.

3 AACA: Adaptation Actions for a Changing Arctic

The Chair introduced the Adaptation Actions for a Changing Arctic (AACA) project. The project is the result of SAOs' decisions regarding the (integrated) Arctic Change Assessment (ACA) project that had been proposed by AMAP. The AACA is a more focused and partial implementation of the ACA with three components. Part A will summarize existing key findings

and recommendations from AMAP and other WG assessments concerning adaptation options. This work is based on templates that should be completed by all WGs and delivered to SDWG. Nineteen (19) AMAP templates have been prepared by a consultant and were submitted to SDWG, who is responsible for preparing a summary/synthesis of the information received for presentation at the Ministerial Meeting in May 2013.

Part B, intended to identify regional/national/local adaptation efforts with a view to determining best practices, is being led by Canada and Russia. A call has been issued for nominations to a committee to work on Part B. The relationship between Parts A and B, and the timeline leading to delivery of a Part B product for the May 2013 Ministerial Meeting, is currently unclear. At the request of the AMAP WG, Linnea Nordström (AC Secretariat) contacted the organizers of Part B (Cynthia MacRae and Matt Parry, Canada) who stated that the objective of Part B is to be able to provide advice and recommendations to Arctic Council Ministers concerning climate change adaptation. Thus, the focus will be on gathering information on climate change adaptation activities, projects, tools and strategies and not on research or assessments, as the latter is the aim of Parts A and C and other initiatives. The plan is to collect information via a template during October and November and host a workshop early in 2013 to undertake the analysis and prepare recommendations.

Part C of the AACA is concerned with improving predictive capability and scenario development; it is being led by AMAP and is linked to AMAP (Climate Expert Group) follow-up of the SWIPA assessment. The project is intended to prepare final deliverables in 2017 (under the U.S. Chairmanship of the AC). The overarching intention of the work is to move from a thematic to a more strategic/integrated approach, to feed into activities such as ecosystem-based management (EBM), etc.

The Chair referred to the AMAP gap analysis work undertaken by a consultant (WG26/2.4/2) and the priorities for future work indicated in that document, including work on mining, tourism, fisheries, food security, predictive capabilities, etc. Such information is needed if integrated assessments in support of integrated management strategies are to be delivered. It was noted that this report was delivered through the AMAP Secretariat and that, as such, the document constituted background information for the WG. This work was also being used to develop the template responses to meet the AACA Part A request from SDWG. Some delegates considered the document incomplete and inconsistent in parts (for example, in its treatment of policy-relevant vs. technical recommendations).

The subsequent discussion focused on the problems associated with such comprehensive information needs and some countries indicated the need for caution about being overly ambitious. The gap analysis identifies needs but not how to fill them and therefore further work is necessary to focus the subsequent development of this activity. It was concluded, however, that if AMAP assessments require information on multiple stressors, etc., solutions must be identified to meet these information needs – either through activities initiated by AMAP or from external sources (through cooperation with other AC WGs or other organizations). In the context of the latter, Finland referred to a conference on mining (opportunities and challenges with the goal of identifying best environmental practices) being organized by the Barents Council that will take place in Rovaniemi, Finland 23–25 April 2013. Russia also noted the Arctic 2020/GEF-

funded project on Russian river hydrology and integrated river basin management as a relevant potential contribution to the AACA Part C; after protracted efforts (supported by AMAP) to arrange this project, it has now been approved and it is hoped that the organizational structure for the project will be in place by November 2012. In connection with this, Lars-Otto Reiersen encouraged countries to identify possible national experts to be engaged in this work, which will run for three years and potentially feed into the final part of the AACA Part C. Several other activities, including the recently completed EU-funded Ice2Sea project and other ongoing EU projects, ArcticNet projects such as the Integrated Regional Impact Studies (IRIS), and an EU communication initiative on 'opportunities for marine and maritime sustainable growth (blue growth)' were mentioned as possible activities with links to the AACA Part C. It was suggested that, with input from the WG, the Secretariat should compile an overview of these and relevant national activities.

Lars-Otto Reiersen (AMAP Executive Secretary) introduced document WG26/2.4/1 (A discussion paper on Strategy and Organization for the AACA Part C). The mandate from Deputy Ministers and SAOs in their decision regarding AACA Part C is not specific but implies a need to pursue the data requirements associated with integrated assessments, and therefore AMAP needs to identify priority areas for work during 2013 to 2015, leading up to an integrated analysis by 2017. In addition, AMAP's role and the role of external partners in preparing products during these periods need to be defined.

The Observer of the United Kingdom identified time scales of change (longer term) vs. time scales of adaptation (shorter term) as a missing component in the discussion document, and noted that the time scale perspective for drivers and modelling may not be the same. Other delegates also pointed out that some parts of the document implied contributions from other groups (including AC WGs) that had not been confirmed and that might be misinterpreted.

Several delegations suggested revisiting the original ACA proposals in further developing the AACA Part C proposals, but noted the need for sensitivity when presenting these proposals in order to avoid some of the misconceptions that prevented the approval of the ACA, and to better explain that proposed work relates to identified needs and not to 'issues' that are associated by some parties with the respective work areas of the AC WGs or the (artificial) barriers that exist between them.

The delegate of Norway highlighted the need to signal now if we have expectations of other WGs for activities during 2013 to 2015 as they are also finalizing their work plans for this period, in the same way that other WGs are requesting work of AMAP. The Secretariat identified the disconnect between SAOs and WGs when it comes to development of WG work plans as an issue that needs to be addressed well in advance of the SAO/Ministerial Meeting and the need to make the WG Chairs consultations more effective in this respect. It was agreed that this was an issue for the AC Chair and Secretariat to take up with the SAO Chair.

Annika Nilsson (Sweden) presented an update on the status and plans for the delivery of the Arctic Resilience Report (ARR). The ARR addresses the 'potential for shocks, consequences and how to deal with them'. A review of the state of knowledge (covering methods, thresholds, and adaptive and transformative capacity) will be presented in an interim report to be delivered in

2013. Building on workshops, case studies and synthesis/integration, a final report will be delivered in 2015. This timeline raises the possibility for collaboration with the AACA Part C, and that the ARR could deliver input to the AACA Part C. The ARR also needs input from AMAP associated with, for example, the results of the Arctic Ocean Acidification and other past AMAP assessments. Responding to a question from the U.S., Annika Nilsson indicated that in her view, the ARR was a 'process', incorporating tools that have a longer term usefulness; however, because the ARR is an AC Chairmanship project rather than an activity founded on a continuing WG responsibility, it will most likely end in 2015. Responding to a question from Canada, she confirmed that some parts of the ARR may include a (semi)quantitative approach, whereas others, in particular the socio-economic components, will involve a more qualitative approach, and that a part of the ARR involves trying to link these two modes of thinking. She also noted that risk-based analysis could be one possible option when it comes to looking at policy; another possible approach in this respect is one based on scenarios.

The AMAP WG Chair provided a summary of the timeline for the AACA Part C development, as follows:

- The AACA Part C was endorsed by the Deputy Ministers at their meeting in May.

- An (internal) information needs analysis has been conducted. This work is now considered to be completed. The task at hand is to define the work to be undertaken during the period 2013 to 2015 that can be implemented by AMAP, working within its mandate, in collaboration with others (i.e., other WGs and international science organizations) to fill the identified gaps, leading up to an eventual final product in 2017.

- The AMAP Board/Secretariat prepared a draft proposal on the development of the AACA Part C, as an internal draft for consideration by the WG.

- This proposal will be further developed by the Secretariat for external communication, based on the ongoing consultations with the WG. This revision will:
    - incorporate the time scale elements identified by the UK;
    - omit parts that pre-assume activities on the part of other WGs or organizations;
    - be more process-orientated regarding possible involvement of other WGs and other external partners;
    - match proposals more clearly with identified priorities.

- Thereafter, AMAP will approach the other AC WGs and other potential partner organizations concerning their possible interest and support for the activities proposed for the different periods between now and 2017.

- The AMAP Chair/Board together with the SAO Chair and Chairs of the other WGs will hold discussions to integrate AACA Part C follow-up into the work plans of the other AC WGs (before 4 December).

Recognizing the need to consider all aspects associated with the AACA Part C, it was agreed that a small group (including representatives of Canada, Denmark, Norway, the USA and ICC)

should be established to work during the meeting to finalize the AACA Part C Work Plans and present them to the AMAP WG for approval and for external communication of the AACA Part C plans. The results of this work were presented and approved at the end of the meeting.

Rapporteur's note: Following the WG meeting, a further round of review was undertaken to ensure that all eight Arctic countries and the PPs had another opportunity to provide comments and give their approval. A final draft work plan was produced and forwarded to the Arctic Council Secretariat in time for review by SAOs at their meeting in Haparanda to be held 14 to 15 November. A presentation to SAOs will be given by the AMAP Chair to obtain further guidance before the work plans are implemented.

4 Arctic Ocean Acidification (AOA) assessment

Lars-Otto Reiersen informed the WG about the outcome of the AOA drafting meeting in San Francisco (21-23 September) and presented a preliminary set of scientific conclusions and key messages developed by the assessment lead authors. He reported that the national and peer reviews of the AOA had been completed and work was now proceeding to update the drafts based on review comments, with the aim of handing over the scientific assessment report for editing in early December. Drafting of the AOA summary report is also now under way.

With reference to a request from SAOs that results of the AOA be handed over to them already in December, much earlier than originally scheduled in the assessment delivery plan, some WG delegations expressed concern regarding the procedure for WG review of the findings, and the checking that would normally occur to ensure that the findings could be substantiated in the scientific assessment report.

The view of the delegate of the United States was that these were preliminary findings reflecting the conclusions of the scientists, and therefore as long as the findings were policy-relevant but not policy-prescriptive, and could be substantiated by the science, their presentation to SAOs should be acceptable. The delegates of Finland and Norway supported this view, noting that AOA was a major issue that is still not on the radar of many decision-makers. However, they also expressed the view that the findings, as presented, needed to be further qualified and also considered in terms of possible needs for actions or measures to address the issues raised. The delegate of Norway specifically requested that many of the conclusions presented needed to be clearly supported by the science and that they needed to be revised before being presented to SAOs in Haparanda in November. The WG supported the need to agree to a process that would secure the WG review of the findings, and if relevant, to draft (under the WG's responsibility) any policy-relevant recommendations warranted by the assessment findings.

The AMAP Chair confirmed that this process would be followed, with a view to delivering the results of AMAP's considerations of the AOA one month prior to the SAO meeting in March 2013, as required by the AC rules of procedure. However, he also concluded that a version of the preliminary findings, revised to include more relevant background detail, could be presented at the SAO meeting in Haparanda in order to inform and prepare SAOs. Final WG approval of the assessment, its summary report and executive summary (including any policy-relevant recommendations) would be one of the main tasks to be completed at an AMAP HoDs plus PPs

meeting, provisionally scheduled for the end of January 2013, but subsequently rescheduled for the week of 22 January 2013 in Tromsø to be held immediately before an informal SAO meeting also taking place that week in Tromsø. The final AOA reports will be ready for delivery at the Ministerial Meeting in May.

Lars-Otto Reiersen presented an update on planned outreach activities associated with the AOA delivery, including plans for an International Scientific Conference on Arctic Ocean Acidification, to be held in Bergen, Norway, 6-8 May 2013, and films presenting the results of the assessment. SAOs have been informed about the planned conference and a first announcement has been circulated (WG26/4.5/1). Several organizations had been approached as possible co-sponsors of this event and some positive responses have already been received. Practical work associated with the arrangement of this conference is now a priority for the AMAP Secretariat and assessment leads. Regarding the AOA film, he reported that Alphafilm (Denmark) has been engaged to prepare a short three-minute and longer 15-minute version of the film and that shooting was already under way. There is a need to ensure that a circumpolar perspective on AOA is included in the film.

The Chair requested that the AMAP HoDs ensure that their SAOs are aware of the plans for AOA delivery and that they advertise the conference within their respective countries. They were also requested to advise the Secretariat of any possible needs regarding, e.g., translated versions of the films, etc.

5 Short-lived Climate Forcers (SLCF): Black Carbon, Ozone and Methane

Karrle Kupiainen (Finland) reported on the plans and progress of the two AMAP Expert Groups on Short-Lived Climate Forcers (SLCF): black carbon (BC) and ozone, and methane. The Black Carbon Expert Group (SLCF BC) has continued its work on black carbon and has extended the scope to include tropospheric ozone. The group has finalized plans for the preparation of a 2015 Assessment on Impacts of BC and Tropospheric Ozone on Arctic Climate. The report will contain published values for forcing and climate response in the Arctic due to BC and tropospheric ozone. These will be summarized and compared to the values produced as part of the assessment. Additionally, model simulations will be performed to assess the impact of specific source regions and sectors on Arctic climate. Finally, comparisons of measured and modelled concentrations of key species will be conducted to evaluate model performance. A timeline for the work has been developed up to and including summer 2013.

Karrle Kupiainen stated that the Methane Expert Group has been established and has good expertise and participation. The first meeting was held in September 2012 in Washington, DC. It was well attended, covering all needed expertise (except marine emissions). The scope of the work will be finally confirmed in November 2013, and the work plan will be developed in agreement with the interests of the AC Task Force (AC TF) on SLCF, in consistency with the SLCF BC, and with the broader AMAP interest to improve understanding of Arctic climate change. A timeline for the work has been developed up to and including spring 2015.

He reported that both groups have established links with the AC TF on SLCF: Members attend each other's meetings, and climate impact assessments of the AMAP groups will be based on emission inventories discussed by the AC TF.

Several delegates expressed satisfaction with the level of cooperation between the AMAP Expert Groups and the AC TF on SLCF, although it was noted that the AC TF will report in 2013 while the AMAP Expert Groups will report in 2015.

In the discussion, a question was raised as to whether the BC group will end its work in 2013 and whether the modelling will cover new data. Karrle Kupiainen responded that the 2013 deadline was only for the technical background and modelling work; the assessment work of the group will continue after that. He explained that the models must be run early on so that they can be adjusted and interpreted, and that there may be later iterations. The planned modelling work will also include scenario modelling. In addition, there is a group that will compare observations and model output. They will investigate how and when data will be delivered. Trends for black carbon in Arctic ice cores will also be considered and questions from the WG, including how to monitor releases of methane from terrestrial and marine processes, will be brought to the Expert Groups for their consideration.

Lars-Otto Reiersen informed the WG that the AMAP Secretariat has established funding for the modelling work to be conducted by these Expert Groups.

In the discussion, it was noted that there are similar initiatives within UNEP and that mainly the same experts are working on this issue in both organizations. This indicates a potential for better ways of organizing deliverables and products and there may also be an opportunity for joint outputs. This topic should be subject to further deliberations.

The delegate of the United States informed the WG about bilateral U.S./Russian work on BC. He suggested that contact between the AC and this initiative be established. The delegate of Russia supplemented this by informing the WG about Russian/American meetings in October 2012 on climate programs and BC.

The Chair concluded the discussion by noting that the SAOs have asked AMAP to treat this issue as a high priority and have expressed a desire that there be close cooperation with the AC TF on SLCF; he noted that the plans reflect this cooperation. He asked the two Expert Groups to make the necessary preparations for a progress report for the 2013 Ministerial Meeting in Kiruna.

6 How to organize the future assessments and priority work 2013-2017

6.1 AMAP Expert Groups—reorganization?

Simon Wilson (AMAP Deputy Executive Secretary) presented a discussion paper on this topic (WG26/6.1/1), noting that AMAP assessments have been increasing in number and scope with corresponding increasing demands on Expert Groups. Previously, AMAP utilized an Assessment Steering Group (ASG) to coordinate and arrange feedback among Expert Groups and between Expert Groups and the WG, but this successful mechanism changed over time as assessments

moved from having a multi-topic to a single-topic focus. An increasing problem is also the small pool of relevant experts who are being asked to work on a growing number of assessments including many new activities that are being instituted by both the AC and external organizations. After outlining the need for resources that will match the requirements and other issues in relation to the assessment work, Simon Wilson suggested that the main future options include: 1) maintaining the status quo, by continuing to operate as now, with the establishment of new permanent and ad hoc groups as the need arises; 2) disbanding all groups and creating a master 'pool' of nominated experts to select from when needed to perform specific tasks; or 3) using paid consultants. As none of these options is optimal, he proposed that potential hybrid combinations be developed as a new, modernized structure is needed to meet the new demands.

In the discussion, this was considered to be an excellent paper, providing a good background for consideration of the topic. It was recognized that, while Expert Groups are crucial to the work of AMAP, there is a need to adapt to new requirements and conditions, including the need for more short-term products. There is also a need for more open nominations to the groups, as well as clearer terms of reference and greater direction by the AMAP WG. There is a need to recruit new, younger experts and to enhance the value of being an AMAP expert so that it becomes more attractive to younger scientists. One way of making AMAP work more attractive to younger scientists can be through its relationship to global groups, such as the IPCC and APECS. Joint work could also be conducted with OSPAR, such as annual joint AMAP/OSPAR trend data assessments. The use of consultants to drive assessments and prepare much of the work, with an expert group to review and complete it, as HELCOM does, was also suggested. The need for flexibility and prioritization of the work is also clear.

The delegate of Iceland, Helgi Jenssen, noted that there are four pillars of AMAP work: pollution, human health, climate, and socio-economics. These pillars need to be covered when conducting assessments. The climate issue is the most important, so there is a need for a strong Climate Expert Group with shorter-term sub-activities; there is also a need for pollution groups in three areas: POPs, heavy metals, and radionuclides, and also for the Human Health Assessment Group.

Delegations generally agreed with these four pillars, but stated that a flexible approach is needed and cross-cutting issues and integrated management must also be considered. A close WG connection with the scientists on the Expert Groups is also essential as well as the provision of clear direction for the groups. A more flexible, hybrid structure was generally favored.

There is a need to work within the Strategic Plan, which contains a clear statement of AMAP's mandate. However, it was not clear how socio-economic issues should be handled: whether AMAP should handle them on its own, jointly with SDWG, or depend on SDWG for this work.

It was suggested that workshops could be used more often to conduct AMAP work. Workshops allow the participation of experts from observer countries and thus attract broader scientific participation. The workshop in San Francisco, CA in February 2010 served to begin this consideration of the organization of future assessments. That workshop was very valuable for expanding ideas and obtaining cross-fertilization and integration.

Another suggestion, based on three types of expert work: 1) understanding and articulating detailed scientific information; 2) cross-fertilizing and integrating scientific information; and 3) reviewing scientific texts, was that an overarching group could be established to guide the Expert Groups in this work and to identify and recruit potential experts as well as maintain contact with the AMAP Secretariat. This would be a scientific integration group—an operational group—and would not duplicate the work of the WG, which is a strategic group. If formed, the overarching group would probably also include some members of the Secretariat and representatives of the Expert Groups.

The delegation of Denmark stated that it does not support a new structure between the WG and the Expert Groups.

The Chair summarized the discussion, stating that AMAP is under the Arctic Council and must respect and work within the structure of the AC with its six WGs and various Task Forces. The common objective is the desire for AMAP to work more effectively. The paper on this topic will now be revised in the light of the discussion, ensuring that it will be in line with the Strategic Plan. Issues to be considered include a review of the nomination process that includes experts from AC countries and observers but also beyond these as well as how to include socio-economic issues.

6.2 Assessments of contaminants to be prepared: POPs, Mercury and Radionuclides

Simon Wilson reported that the white paper contributed by the POPs Expert Group in 2009 (WG26/6.2/1) is still valid (WG26/6.2/2). The group will prepare an update on trends in POPs for the Stockholm Convention. This will include concentrations of POPs in air and their temporal trends and POPs in humans and, if possible, also biota. Material will be provided for this review in 2013 so the report will be ready in 2014 for submission to the Stockholm Convention Secretariat. In addition, the group will possibly prepare an updated assessment of trends, distribution, etc., for new chemicals. The group may also prepare an update of the AMAP/UNEP report on the influence of climate change on POPs as well as other work.

The AMAP WG expressed strong support for the work of the POPs Expert Group. Ways should be found for its coordination with SAON, particularly to ensure coordination of international monitoring in the Arctic. Consideration should also be given to local sources of pollution as well as work with ACAP representatives.

Simon Wilson then reported on work on mercury. There has been no AMAP work since the 2011 assessment was published, but joint work with UNEP has been conducted on atmospheric emissions in relation to an update of the UNEP assessment in 2012. AMAP was requested to coordinate the production of this report, while Henry Huntington is writing the lay version. This technical report is composed of four parts: Part A, global emissions of mercury to the atmosphere; Part B, global releases of mercury to aquatic environments; Part C, atmospheric pathways, transport and fate; and Part D, aquatic pathways, transport and fate.

Simon Wilson is responsible for the production of Part A, providing a new global inventory of anthropogenic mercury emissions. One problem encountered has been the difficulty of

reconciling data obtained from different sources; this has created more work and caused delays because the INC process has resulted in a more political environment for data compilation. Simon Wilson stated that, as AMAP is responsible for Part A, he will handle the data discrepancies in that part, but not in the other parts of the report because they are the responsibility of UNEP. Although preparing a table with explanations for the different values would be useful, not all countries were in favor of this approach.

In the discussion, the importance of this work was stressed as well as the great influence that AMAP has had on the negotiating process for the global agreement on mercury. Arctic Council countries should take appropriate action to work together to ensure a mercury agreement by 2013 as this is a critical issue in the Arctic.

A member of the Radioactivity Expert Group, Solveig Dysvik (Norway), described the next assessment of radioactivity in the Arctic, which follows three previous assessments in 1998, 2002, and 2009. The new assessment is scheduled for 2013-2014 and will cover new potential sources of radioactivity, including mineral extraction, wood processing, and extraction of oil and gas (termed TENORM), as well as floating nuclear power plants and other relevant sources. She noted that extreme weather conditions may impact these sources and the thawing of permafrost may alter the fluxes of natural and man-made radionuclides. There are new challenges in relation to climate change and the acidification of the oceans, resulting in changes in biological diversity and combined effects of many stressors. However, joint Russian-Norwegian cruises to dumping areas in the Barents and Kara Seas indicated that there had been no increase in radioactivity in the marine environment.

The next meeting of the Radioactivity Expert Group will take place in Roskilde, Denmark in January 2013. Countries were requested to confirm the names of their participants in this meeting to the AMAP Secretariat.

Frits Steenhuisen (The Netherlands) reported on behalf of the Radioactivity TDC that there had been a substantial decrease in the delivery of data on radioactivity after the initial AMAP assessments. This had unfortunately compromised the 2009 assessment. He stated that there is a need to have a firm agreement on the annual reporting of data, with a fixed due date for its delivery. The data submitted should be from within the geographical boundary of AMAP, but should also include other data if needed, including data relating to accidents, TENORM, etc.

The delegation of Russia stated that it will improve its submission of data on radioactivity and increase the amount sent to the TDC, and it encouraged other countries to do the same. Russia has recently completed an expedition to the area near Japan affected by the nuclear accident and will report on this to the Expert Group.

7. Human health and related work

7.1 Food and Water Security Project

The Chair reported that, although the AMAP Human Health Assessment Group (HHAG) and the SDWG Arctic Human Health Expert Group (AHHEG) have been working on a proposal for a second phase of the Food and Water Security Project, the proposal will not be ready for the next SAO meeting. A workshop has been set for 19 to 20 December in Sweden to prepare a proposal for SDWG and AMAP review to decide whether the proposal should go to the SAO meeting in March 2013. If this proposal is approved by SAOs, the project will be incorporated in the respective WG work plans. Any comments should be directed to the group responsible for preparing this proposal. Currently, work is being conducted on phase 1 of the project which is being funded by Sweden.

Lars-Otto Reiersen reported that, based on the HHAG meeting in Montreal in April, there will be a teleconference on 24 October to discuss the AMAP part of the phase 2 proposal. AMAP has also signed a contract with St Petersburg Hospital to ensure that Russian data will be available for this project.

In the discussion of this issue, it was noted that food security is a major domestic issue in several Arctic countries and regions. This project should aim to determine how circumpolar work can assist in the handling of this problem. Relevant AMAP issues include contaminants, especially mercury, in food particularly the traditional food of indigenous communities and health effects on women and children, as well as the impact of climate change on the availability of and access to traditional foods. It was also proposed that local sources of contaminants should be considered in phase 2.

Regarding phase 1, it was noted that AMAP HoDs had expressed many comments at the meeting in Victoria, but it was not clear how they had been handled. It was suggested that the group working on this project could be strengthened by bringing in scientists from the AMAP expert groups on mercury and POPs who have expertise on human health issues. There was recognition of the need to ensure that Permanent Participants will be directly involved to bring local expertise and the use of traditional knowledge into this work.

7.2 Priority work by the Human Health Assessment Group

It was agreed that this item would be considered under Agenda Item 14 on the AMAP Work Plan for 2013-2015.

The delegate of Sweden reported that a paper has been prepared describing what Sweden can contribute to the work on human health; this paper will be submitted for the next meeting of HHAG. This will include a handbook for ongoing and completed projects on human health.

This paper was considered an excellent contribution to informing the WG of the status of national activities and other countries were encouraged to prepare similar reports.

7.3 ArcRisk status and work in progress

Janet Pawlak, AMAP Deputy Executive Secretary and Coordinator of the ArcRisk project, presented a brief summary of the progress in the EU-funded FP7 project ArcRisk (WG26/7.3/1), which is now in its fourth year. The modelling of contaminant transport to the Arctic has essentially been completed, analyses of contaminants in the environmental samples are finished and data evaluation is under way, and reports are being prepared on the human health aspects of the project. A major challenge will now be to bring all the results together into synthesis products during the final phase of the project.

7.4 The Arctic Frontiers 2014 Conference

It was noted that this conference will not only be used to present the results of the ArcRisk project, but will also cover other health-related issues from AMAP. Further information will be forthcoming on the conference after detailed planning begins early next year.

8 Oil and Gas Assessment (OGA) and AMSA IIc

8.1 Status for the production of the last OGA volume

The WG were informed that work to deliver Volume 3 of the OGA is continuing and is related to the work to finalize the AMSA IIc report. There is no firm timeline for this work at present, and it will depend on other priorities assigned with respect to editing and report production.]

8.3 AMAP follow-up related to OGA

Simon Wilson introduced the compilation of information on national follow-up of the recommendations arising from the OGA and associated work to address the knowledge gaps identified in the OGA (WG26/8.3/2). This information related to a previous action agreed by the WG.

He reported that only Denmark/Greenland/Faroe Islands, Finland and Sweden had so far provided the information requested on the follow-up OGA table prepared at the HoDs meeting in Victoria, and that to be useful it was important that the major oil and gas producing countries, Canada, Norway, Russia, and the USA, provided their information.

The delegate of Canada took note of this request for information and will forward it to the appropriate people for a response. He reported that projects in the Beaufort Sea are being implemented under a Beaufort Regional Environmental Assessment. In addition, a first draft of a consultant's report on climate change and interactions with the oil and gas industry has been prepared. This report will be revised based on a workshop to be held in Inuvik on 19 to 21 November. The design of an overall Beaufort Regional Environmental Assessment program will be prepared in three to five years and will be integrated into an overall program. In addition, there are many past and current projects that are establishing baselines for a number of parameters.

The delegates of Norway, Russia and the USA also indicated that they would follow up on this matter.

Simon Wilson presented proposals for OGA follow-up (WG26/8.3/1), building on the discussions on this subject at the AMAP HoDs meeting in Victoria. This presentation included proposals for follow-up activities by AMAP under its own mandate and work plan and activities that could be implemented by AMAP in collaboration with other partners.

In the discussion, it was considered important that several of the proposed suggestions be pursued and that follow-up work should concentrate on information that will be needed for the AACA; the main focus should be on new areas and areas that have changed recently. This could include the following:

- Climate change impacts on oil and gas activities, and vice versa, combined with the development of climate scenarios and overall environmental effects;
- Chemical issues, including radioactive TENORM, in relation to the oil and gas sector under Arctic conditions;
- Updating information on current levels of oil and gas activities in the Arctic.

It was agreed that these follow-up activities would be reflected in the AMAP work plan for the coming period.

9 Communication and outreach strategy

9.1 The AMAP Communications and Outreach Strategy

Simon Wilson presented an updated version of the AMAP Communications and Outreach Strategy document, developed following the Victoria meeting by the Secretariat together with Denmark and the United States (WG26/9.3/1). He drew attention to the proposed implementation actions and timeline, including the plan to establish an AMAP communications and outreach expert group.

In the discussion, delegations thanked Simon Wilson for his work on this strategy document. There was general agreement that this was an excellent document, but that it was too long and should be shortened and focused for better use. A comment was made that the document should give greater emphasis to improved communication with Arctic residents and indigenous peoples. In the discussion, this was considered to be partly an issue of language and it was accepted that countries have a large responsibility to develop communications in their own language and in their indigenous languages; this is particularly relevant in relation to the communication of risk, especially regarding the sensitive issue of risks to human health. The importance of internal communication within AMAP was also raised.

The potential for the use of newer social media communication tools was discussed, noting that solutions such as Twitter are now considered mainstream forms of communication and that social media solutions are well-suited to maintaining sustained interest in a topic. However, it

was also noted that, to be useful, these types of communication media require a steady flow of new, interesting material and dedicated manpower to support and review content feedback, etc. Such media are therefore considered to be too resource-demanding for AMAP use at present. Nonetheless, the use of the different means of communication with the younger generation should not be ignored and efforts should be made to identify and allocate resources to support this. The APECS Observer offered to assist AMAP in this work.

It was considered that the document was very comprehensive and the communication and outreach objectives reflected in it are substantial. These would need to be matched with available resources. The WG agreed that elements of the plan would need to be implemented as and when resources become available, and that much of the initial focus is likely to be on the targeted work-streaming that is associated with the release of major AMAP assessments and related products.

In conclusion, the Chair noted that there is approval in principle from the WG on this document. He thanked Morten Olsen and Tom Armstrong for their excellent work in assisting Simon Wilson in the preparation of the document. It was agreed that comments from the meeting would be taken into account in finalizing the document, which would then become the detailed AMAP Communication and Outreach Strategy reference document. In addition, a shorter version of the document would be prepared for public dissemination, including the annex with the list of actions and a time plan for this work. A revised version of the document will be circulated by the AMAP Secretariat in January/February for review by the AMAP HoDs and PPs. It is anticipated that a final, approved AMAP Communication and Outreach Strategy would be available by the Ministerial Meeting in May.

9.2 The Arctic Report Card 2012 and beyond

It was noted that the decision to prepare an annual Arctic Report Card was made at the Climate Experts Group meeting in September 2007. This report card has been prepared by U.S. NOAA but AMAP coordinates the peer review. However, the peer review period is only about two weeks, which is too short. The AMAP Secretariat is currently finding appropriate reviewers for the 2012 report card, which will need to be reviewed over 14 days in October.

The WG then discussed future AMAP involvement in the Arctic Report Card (ARC), based on the discussion/options paper prepared by the Secretariat and given that NOAA has recently had a change in leadership as well as a change in view regarding international involvement in this activity. The ARC is now under the U.S. Global Change Research Program, of which Tom Armstrong is the Executive Director. This presents an opportunity for AMAP to join in the development of the ARC, so the question was raised as to what type of role AMAP wants in this work. It was noted that currently scientists from a number of AMAP countries contribute to the ARC but they are not designated ‘AMAP scientists’, so it is difficult to distinguish between the contribution of individuals and that of countries and organizations. AMAP would like a faster means of communicating its results to a wider audience, which was why the ARC was started in the first place, but AMAP does not have the resources to prepare such an annual report on its own.

In conclusion, the WG agreed that the ARC is a useful document and the WG wants to see it come out at this time of the year. The WG appreciates that the USA is leading on this work as AMAP does not have the capacity to do this report on its own. However, the role of AMAP could be expanded to include the scoping of new issues and possibly also finding new authors. It was indicated that CAFF should also be included in these future discussions with AMAP, given that they consider the ARC one of their outreach products as well. It was agreed that the Tom Armstrong should discuss the ARC issue with NOAA leadership in order to assess their position as to the formal role of AMAP in the ARC development and release.

10 AMAP's web page

Simon Wilson reported that there have been many delays, both on the side of the web developer and the Secretariat, in the implementation of a new web page for AMAP. Testing and debugging is still ongoing, however, it is now a live development site. The new site can be tailored to individual interests, with tagging used for documents to appear based on different interest categories. There will be links to various projects and an AMAP Vimeo page has been established and is being populated with the AMAP films. There will also be a link to the Arctic Council website. The AMAP website now needs to be populated with updated content and this work is pending actions on the part of the Secretariat. After this work has been completed, the new site can be launched. This will be a major Secretariat priority after this meeting.

11 AMAP's work plan for 2013-2015 and beyond

The Chair introduced the draft work plan that had been prepared and distributed prior to the WG meeting: "Arctic Monitoring and Assessment Programme (AMAP) - Work Plan for 2013–2015 with tentative deliverables" (WG26/14.1/2).

The main headings of the plan were:

- AMAP Monitoring and Assessment
    - AMAP Trends and Effects Monitoring Programme
    - Ongoing and Planned AMAP Assessments
- Activities in cooperation with other AC Working Groups and Task Forces
- Sustaining Arctic Observing Networks (SAON)
- Communication and Outreach
- Support for International Activities
    - Projects and Joint Studies
    - Cooperation with Intergovernmental and International Organizations

The Chair introduced some changes that were highlighted with 'track changes'. In addition to this, he suggested that the WG should also add the Arctic Report Card.

In the discussion, the delegate of Denmark stated that the work plan should be further developed to reflect the discussions that had taken place during the meeting. In addition, there is a need to be more specific on the work to be conducted, and a preamble and references should also be

added to the document to state AMAP's mandate. The delegate of the United States supported these suggestions, noting that there were several places where more details could be added, including work on AACA and UAS, but stressed that the length is important.

The Chair responded that an introduction (i.e., AMAP's mandate) and references could be included, but the document has to be only four pages long, as prescribed by the SAO Chair and AC Secretariat, so there is not much room for details.

The Chair concluded the discussion by requesting comments on the work plan from all AMAP HoDs and PPs by mid-November. The work plan will then be revised and redistributed to the HoDs and PPs for final approval before submission to the AC Secretariat by 4 December.

Simon Wilson presented a document providing a production plan for deliverables to the May 2013 Ministerial Meeting (WG26/14.1/1). He reported that delays have accumulated as usual, so the top priority is the completion of the AOA assessment report. The time slot for editing the AMSA IIc report has been missed because the report has not yet been received for editing, but it is anticipated that the AOA assessment report will be submitted for editing by 1 December.

In the discussion, it was noted that the culture part of the AMSA IIc report has also been delayed; it is expected that this part will be completed by the end of December but the current draft indicates that it is much longer than anticipated. This will put an extra strain on the editing resources of AMAP.

12 Use of remote sensing, including Unmanned Aircraft Systems (UAS) Expert Group

The Co-Chairs of the UAS Expert Group (Brenda Mulac, USA and Rune Storvold, Norway) had prepared an overview for the WG meeting (WG26/12.1/1), stating that the report "Enabling Science Use of Unmanned Aircraft Systems for Environmental Monitoring" is in the final editorial round. The main conclusions of the report are:

- The scientific community has only recently begun to use unmanned aircraft for data collection in the Arctic.
- There is a wide range of applications where UAS could make a significant contribution to scientific programs.
- Most scientific missions are flown by small aircraft and are undertaken through universities and research institutes, typically by groups with little or no prior experience or competence as aircraft operators
- The main challenge identified to date and the main reason for having established the UAS Expert Group under AMAP is to gain access to airspace for scientific use of UAS in the Arctic.

Based on the above conclusions, the report proposed the following recommendations:

- A treaty among the Arctic States to improve airspace access over the High Seas of the Arctic Basin by UAS for scientific purposes should be established.

- A common approach should be established between the International Civil Aviation Organization (ICAO) Member States for providing services to the flight information regions (FIRs) for integrating scientific UAS operations into Arctic Basin airspace crossing one or more FIRs, and to facilitate the acceptance of UAS approved by a Member State.
- A handbook for scientific users of UAS in the Arctic needs to be developed and should include best practices, safety guidelines and risk assessment guidelines.

The Expert Group has drafted a white paper that defines suggested minimum requirements for accessing the airspace. This document will be circulated for review by Civil Aviation Authorities in order to secure agreement as part of a basis for establishing an Arctic treaty to improve UAS airspace access for science operations.

In addition, a UAS Handbook is under preparation that is intended to give scientists and science operators a comprehensive tool to enable them to perform safe operations in the Arctic (and elsewhere). The handbook will include safety guidelines, operational best practices, and recommendations that will enable these operators to acquire required competence to operate these systems for data collection in the Arctic.

The Expert Group continues to coordinate on upcoming science missions. The overarching goal is to be able to conduct Pan-Arctic coordinated collaborative campaigns.

In the discussion, the delegate of the United States noted that the group holds monthly telephone conferences, but that attendance by some has been sporadic. There has been a debate within the expert group concerning whether they should continue to report to AMAP, as they do now, or whether they should report directly to the SAOs; however, the group recognizes that AMAP is their 'home'.

Lars-Otto Reiersen informed the meeting, that the Expert Group would like to hand over their material before the Ministerial Meeting in 2013, and it was agreed to put approval of the group's report on the agenda for the next HoDs and PPs meeting.

13 AMAP National Implementation Plans (NIPs) and AMAP Project Directory

13.1 Ongoing and planned national activities relevant for AMAP core programme and AACA work

Simon Wilson reported that there is a continuing request for countries to report their National Implementation Plans (NIPS), either through relevant documentation or through entries in the AMAP Project Directory. NIPs were submitted for this meeting by the delegations of Iceland (WG26/13.1/1) and Norway (WG26/13.1/2); Canada is planning to update its NIP and Finland will update its Project Directory entries. The AMAP Human Health Assessment Group has decided to make a directory of projects on human health and will add them to the Project Directory. SAON will also be added to the Project Directory so that SAON information can be obtained from the same system; this may ultimately require an upgrading of the directory. All

SAON records have now been included in the Project Directory. The AMAP Project Directory now records information on over 900 projects the majority of which are not reported through the main AMAP NIP reporting.

13.2 Structure of the NIPs, including data inventories

Simon Wilson introduced a paper reviewing the status of data reporting to AMAP Thematic Data Centres (WG26/13.2/1). Regarding reporting of atmospheric data to the Air TDC at NILU, he reported that there has been regular reporting of data by most countries, although there is a backlog of reporting of some data from Canada, including data from the Russian mercury monitoring site at Amderma that is routed through the Canadian meteorological service for quality control. Data reporting from the USA is also lacking. Canada and other countries with a backlog of data reporting were requested to follow up on this so that these data could be included in data products that will be requested of NILU later in the year.

He then reviewed the submissions of data to the Marine TDC at ICES. Only three countries with institutes reporting to both AMAP and OSPAR have been routinely reporting their marine data to ICES. An application designed to assist in the preparation of data for delivery to the ICES TDC without requiring it to be first converted to ICES reporting formats has been developed. A workshop to train relevant individuals in the use of this data transfer mechanism, focusing on data reporting by additional institutes from Denmark and Norway, will be held at ICES in Copenhagen on 20–21 November. Participants will be requested to bring AMAP-relevant datasets to the workshop so that, in addition to training in its use, the new conversion system will hopefully be used to convert additional data into the ICES system. He noted that there is a major backlog in the submission of marine data and that funding is needed to support these submissions.

Delegates were requested to identify and support the participation of relevant persons in the marine data workshop at ICES in November.

Regarding the Freshwater and Terrestrial TDC in Alaska, a lot of marine data have been submitted there to avoid the detailed ICES requirements; one objective of planned work will be to convert these data for archiving at the ICES TDC. However, fewer data have been submitted to this TDC in recent years because the data mainly come from individual, more local projects and the TDC is effectively dormant at present.

In conclusion, the Chair emphasized the importance of the TDCs and the need to submit national data to them. Any questions concerning the formats or other issues should be discussed with Simon Wilson.

14 SAON

The SAON Co-Chair, Tom Armstrong (USA), reported on the outcome of the second meeting of the SAON Board, held in Potsdam, Germany, 1–2 October 2012. At the first and second Board meetings, much time had been spent reviewing how the members wanted SAON to operate, and also discussing the Terms of Reference (ToR) and Rules of Procedure (RoP). The outcome of the

first Board meeting had been reported to the SAO meeting in Stockholm in March 2012, which also was a platform for further development of the ToR. The relationship between SAON and the AC had been an issue of discussion, but it has now been concluded that SAON can operate outside the rules of procedure of both the AC and the IASC. After a great deal of work, particularly by Canada and the Permanent Participants, a reasonable compromise has been reached, and one outcome is that the ToR and RoP have been split into two sections.

Tom Armstrong explained that the goal of SAON is to serve as a network facilitator, not to own platforms. One of the cornerstones of SAON is the Tasks (projects), and the second Board meeting spent a significant amount of time reviewing the Tasks. This indicated the need for an overarching strategy. The second Board meeting also discussed the setup of a coordination mechanism to allow communication with the Tasks and funding. SAON will provide information on overall needs for monitoring and data collection in the Arctic. The second main topic discussed was data management, and the need for a plan on outreach and communication. The third element is a strategy for community-based monitoring: SAON has a strength in bringing in traditional knowledge, and this information should be encouraged.

SAON will take an adaptive management approach in that SAON will have a two-year review process starting in the summer or autumn of 2013, during which the ToR and RoP will also be reviewed.

In the discussion, the AMAP Chair noted that SAON has much stronger value-added based on the new strategy. As SAON is on the agenda of the Haparanda SAO meeting, the SAOs should be informed about the ToR, the planned review process, and the strategic development of SAON.

It was proposed that the report to the SAOs should clearly state the objectives of SAON, because there is currently a lack of understanding concerning this work; this report should also clearly state that SAON financing is on a national basis and is part of national responsibilities. Each country has been requested to develop their own national coordination committees to ensure that they have the resources to sustain the SAON tasks that have been agreed.

It was noted that the value of SAON has been apparent from the beginning. SAON makes people work together towards a common goal. SAON has a good format and process, and has started showing its value.

In conclusion, the Chair acknowledged the significant leadership role of Tom Armstrong, Jan Rene Larsen and Lars-Otto Reiersen in SAON, changing the course of its work and developing a strategic direction.

15 Cooperation with AC WGs and Task Forces

The SAO Chair, Gustaf Lind, addressed the meeting, stating that he wanted to encourage greater cooperation among the AC WGs by, among others, requesting that two-page summaries be prepared on the outcome of WG meetings. WGs will now be represented at informal sessions on the day before each SAO meeting, which should provide a better opportunity for Ministers to learn about the main products of the WGs. At the SAO meeting in November, discussions will be

held on how to present the main products, such as the AOA, SLCF, ABA, etc., reports. He noted that he wants to avoid overlaps and scheduling of meetings on the same days; some coordination is needed so the AC Secretariat can avoid too much travel. WGs should communicate with the AC Secretariat when they plan meetings. Communication with SAOs is also important so there will be no problems with decisions at SAO meetings; contact is important so that the products can work their way through the system.

15.1 Arctic Ocean Review (AOR)

Lars-Otto Reiersen and the Chair presented AMAP's contribution to the second Arctic Ocean Review (AOR II) report, which is a review of the various laws and regulations concerning the Arctic Ocean (WG26/15.1/1). AMAP Board has prepared a chapter on Arctic marine pollution as well as a smaller section on climate change; the aim is to identify gaps in laws and regulations in relation to pollution in the Arctic.

The Norwegian representative from PAME expressed appreciation for the valuable draft chapter that AMAP is preparing. This second phase of AOR concentrates on international laws. The overall report still needs some work and time is required for national consultations, but the aim is that it will be ready for the next Ministerial Meeting.

In discussing the draft AMAP contribution to AOR II regarding laws and regulations on pollution and climate change, the AMAP WG agreed that some additional information should be included and gaps should be filled. Accordingly, the WG agreed that this chapter should be reviewed again before it is submitted to PAME. National comments on the AOR chapter on pollution and climate change should be sent to the AMAP Secretariat by 10 October.

15.2 Circumpolar Biodiversity Monitoring Program (CBMP)

Based on the information available at the meeting, it appeared that the marine component of the CBMP is being implemented and the program for the freshwater biodiversity monitoring component has nearly been completed. Information was not available on the terrestrial or other components of the program, although requests for information on the status of the CBMP had been made to CAFF.

In the discussion, it was noted that although the CBMP should be a joint program with AMAP, no drafts of the program have been sent to AMAP for review. Furthermore, ambiguities in the reporting structure and communications in the CBMP hampered AMAP cooperation with the program and were also an issue in relation to SAON. The various national monitoring efforts should be coordinated at a national level, but it was not clear that this was currently the case.

It was proposed that a monitoring workshop be held that also included the program and guidelines for the CBMP. The CBMP structure and communications should also be discussed at the next joint meeting with CAFF.

15.3 Ecosystem-based management (EBM)

The WG noted that, in addition to the PAME work on this subject, the AC Secretariat has established a group to collect experience on ecosystem-based management. This AC Task Force will hold a workshop in Tromsø at which AMAP will be represented by Hein Rune Skjoldal (Norway). He has also represented AMAP at a recent PAME meeting on EBM, providing contributions mainly from the OGA and AMSA IIc work (WG26/15.3/1).

In the discussion, it was noted that ecosystem-based management is very important and the establishment of an AC Task Force on this topic emphasizes its importance, as the mention of EBM in the Nuuk Ministerial Declaration also indicated. EBM is a decision-making framework by which decisions will be made, for example, based on AMAP assessments. If this emphasis on EBM continues, it could have a large influence on the work of AMAP and also on the other AC WGs. It was suggested that EBM be included in the AACA and also be considered in relation to the AMAP Work Plan for 2013–2015. The issue should also be put on the agenda for the January 2013 AMAP HoDs and PPs meeting.

15.4 Other reports from CAFF, PAME, EPPR, ACAP and SDWG

It was noted that the AMAP Secretariat receives a great deal of information from the other AC WGs. So far this material has simply been distributed by the AMAP Secretary, Inger Utne, to all AMAP contacts. However, there is now so much material being distributed that it is difficult to keep track of it.

It was proposed that consideration be given to how this material should be distributed, and how much, at the next meeting of WG Chairs and at the SAO meeting in Haparanda. Consideration should also be given to the role of the AC Secretariat in the distribution of WG material. While it was agreed that it was useful to have all the information, discussions should be held on how the information can best be shared.

16 Cooperation with international organizations

The SAO Chair stated that the Arctic Council has been formally invited to participate in the UNEP Governing Council meeting to be held in Nairobi in February. The Swedish Environment Minister will attend that meeting, but at this stage there was no decision on whether the AC should also be represented.

However, the UNFCCC COP18 in Doha, Qatar in late November–early December is clearly an important event and there should be an Arctic Council statement given there. He requested AMAP to prepare the first draft of this statement, in association with other AC WGs, the AC SLCF Task Force, and also the SAOs. There is an urgency of negotiation at this stage and the AC should contribute to the considerations.

In response, the WG agreed that the AMAP Secretariat and Board will prepare a brief but pithy draft statement for COP18. Each country should review it and discuss it with their SAOs, while at the same time it should be distributed to the other AC WGs for their review prior to sending it

to the AC Secretariat. Due to timing constraints, the SAO Chair requested that AMAP HoDs manage the overall consultation process within their respective countries and to submit national reviews which would include comments from other WGs as well as SAOs and Foreign Affairs Ministries. It was noted that there is much information from this meeting that can be included in the statement, including the record loss of Arctic sea ice.

Mikala Klint (Denmark) reported that the fourth INC on the global agreement on mercury was held in Uruguay in June and July. The fifth and final INC meeting will be held in Geneva from 14 to 18 January 2013. There is still much left to be discussed, with the most important task being to set up a means for financing. Although there was little chance of holding a side event at INC5, statements by Arctic country delegations at that meeting were encouraged.

The UNEP Governing Council meeting in Nairobi will also consider the issue of mercury and delegations from Arctic countries will speak on mercury problems in the Arctic at that meeting.

17 AMAP's Next WG meeting

The next WG meeting will be held in about one year's time; no country had yet volunteered to host it. However, given the amount of work and the new activities, the WG agreed that a meeting of Heads of Delegation would be necessary in January 2013. The AMAP Chair (from Canada) offered to host this meeting in Ottawa. However, after the WG meeting, it was decided that the next AMAP HoDs and PP meeting will take place in Tromsø during the week of 22 January and be held back-to-back with the informal SAO meeting.

18 Messages from Observing Countries and organizations on their AMAP-related activities

The Observer from Japan, Mr Tetsuo Ohata from the Research Institute for Global Change, Japan Agency for Marine-Earth Science and Technology, described the Japanese work in the Arctic, including stations in Ny Ålesund, annual research vessel cruises, and circumpolar collaboration with Russian, U.S. and Mongolian stations (WG26/18/1). A Green Network of Excellence has been established for 2011 to 2016 with four strategic research themes, including Arctic research cruises. The Third International Symposium on Arctic Research "Detecting Change in the Arctic System" will be held in Tokyo on 15 to 17 January 2013.

It was noted that AMAP Deputy Executive Secretary Jan René Larsen will represent AMAP at that conference and give presentations on AMAP and SAON.

The Observer from the United Kingdom, Richard Wood, from the Met Office Hadley Centre, reported on AMAP-related activities in the UK, including Met Office modelling of climate change and its impacts seasonally and globally and the 'Ice to Sea' program which studies the dynamics of the melting of the Greenland Ice Sheet. The National Research Council is also supporting the long-term development of global models and is funding a new £15 million Arctic Research Program over the next five years to predict changes in various processes in the Arctic on a five- to ten-year perspective.

Frits Steenhuisen, Observer from the Netherlands, reported that there had recently been a call by the Arctic Centre at the University of Groningen for research projects in the Arctic; funding decisions on projects will be made in December. A new call will now be made regarding policy issues in the Arctic.

The Observer from China, Na Guangshui of the National Marine Environmental Monitoring Center, reported that work has been conducted on climate change issues. A fifth expedition to study Arctic biology and chemistry has been carried out using China's Arctic ice breaker, the XueLong. A new polar scientific research vessel will be constructed in the near future.

The APECS Observer, Alexey Pavlov, stated that the aim of APECS is career development, education and outreach, and interdisciplinary cooperation. He noted that early career scientists can contribute to the review of reports and to providing candidate scientists for assessment and other activities. Regarding the Arctic Ocean Acidification Conference, APECS would like to set up a panel for this conference and to help with on-line activities. APECS is also interested in participating in the Arctic Frontiers Conference in 2014.

Henrik Forsström, NEFCO Observer, stated that NEFCO is an international financial institution specializing in financing environmental projects in Russia, particularly in the Barents Sea, via loans and credits. Russia has been a main contributor to these funds. NEFCO has worked with ACAP on a number of projects in Russia. A new Project Support Instrument has been established, including a major contribution from the USA that will particularly support work in relation to black carbon, especially diesel-related black carbon from Russia.

Alona Yefimenko, Arctic Council Indigenous Peoples Secretariat, stated that there will be changes in that organization given that it will soon become part of the Arctic Council Secretariat in Tromsø.

19 Any other business

There was no other business. A list of actions agreed at the meeting is attached as Annex 3.

20 End of meeting

The Chair expressed great appreciation to the Swedish hosts, especially Jonas Rodhe and Tove Lundeberg, for their work in arranging the meeting and for the excellent facilities, warm hospitality, and social arrangements. He also thanked the participants for their active contributions to the discussions and closed the meeting at 12:30 hrs.

Annex 1
AMAP 26th Working Group Meeting
Stockholm, 3-5 October 2012

Agenda

Day 1 Wednesday 3rd October

0900 1. Opening of the WG meeting
1.1. Welcome statement
1.2. Practical information
1.3. Approval of the Agenda
1.4. Actions from last AMAP WG meeting and the Deputy Ministerial meeting
1.5. Administrative arrangements

0930 2. SWIPA: Follow up
2.1. Recommendations from the CEG workshop
2.2. Priority areas for the next assessments on Arctic climate change and the Cryosphere
2.3. CEG/modelling workshops:
- Plans for first CEG/modelling workshop in October in Seattle.
- Plans for the second CEG/modelling workshop (winter 2013 in Russia)
2.4. Coordination with on-going and planned International activities
2.5. Cooperation with UNFCCC SBSTA and IPCC
2.6. Time schedule and deliverables for 2013 – 2017
2.7. Decisions & Actions, including the work plan

1030 Health break

1050 SWIPA (continued)

1130 3. AACA: Adaptation Actions for a Changing Arctic
3.1. Status, summing up the ACA process
3.2. AACA part A **–** Status and review of the part of the document prepared by Colin Macdonald.
3.3. AACA, part B – Status
3.4. AACA part C – Discussion about the content - including review of the paper prepared by Colin.
3.5. Coordination of C work with priority work for Canada 2015 and USA 2017, the Swedish ARR, the Russian Arctic 2020 – the GEF-Hydrological project , IRIS (Canada), ACCESS, ice2Sea (EU) and other relevant ongoing national and international activities, and AC WGs projects.
3.6. Next step, the Work plan for C, planning of workshops needed, etc.
3.7. Time schedule and deliverables 2013-2017.
3.8. Decisions & Actions including the work plan for part C.

1300 – 1400 Lunch

1400 4. Arctic Ocean Acidification (AOA) assessment

4.1. Status for the assessment work. Presentation of results – conclusions and recommendations to WG

4.2. WG to discuss the policy relevant recommendations based on Science from AOA for delivery to SAOs/Ministers, including a tentative follow up assessment for 2015. Final decision in January 2013.

4.3. AOA communication and delivery plan. Review and approve the production of the Overview report in Layman style and the Executive summary and recommendations for the 2013 Ministerial.

Approve the Work plan to finalize the work and production of the reports and videos.

4.4. Deliverable to the Ministerial Meeting 2013: AOA Scientific assessment report, Summary report for policy-makers and a video.

4.5. The AMAP AOA International Conference in Bergen in 2013

4.6. Decisions & Actions, including the work plan

1500 Health break

1520 AOA continued

1620 5. AMAP Short Lived Climate Forcers (SLCF): Black Carbon, ozone and methane

5.1. Status: Progress made, composition of the expert groups, international cooperation with other organization focusing on SLCF.

5.2. Work plan and financial issues.

5.3. **Deliverable**s for the Ministerial Meetings in 2013 and 2015: Progress reports will be produced by the expert groups, and an Update on Issues of Concern and new Scientific reports

5.4. Decisions & Actions, including the work plan

1750 End of Day 1

Day 2: Thursday 4th October

0830 6. How to organize the future assessments and priority work 2013 - 2017.

6.1. Possible assessments of contaminants to be prepared: POPs, Mercury & Radionuclides. For Petroleum hydrocarbons see agenda item 8. Proposals from Lead Authors. How will this work be AMAP contributions to:
The next round of UNEP SC/UN ECE effectiveness and efficiency reviews - may need a product by 2014. INC to try to support that process in its final stages.

6.2. How can AMAP produce high quality reports on a shorter time line?
6.3. AMAP Expert groups – reorganization?
6.4. Decisions & Actions, including the work plan

1000 Health Break

1020 7. Human health related work

7.1. **Food and Water Security project** – a joint project of the Human Health Assessment (Expert) Group (HHAG, AMAP) and the Human Health Expert Group (HHEG, SDWG). Status and next steps – Review and Approve by SAOs at Nov 2012 meeting.
7.2. Priority work by the Health expert group, report from the meeting in Montreal.
7.3. ArcRisk status and work in progress.
7.4. The Arctic Frontiers 2014 Conference
7.5. Decisions & Actions including the work plan

1120 8. Oil and Gas Assessment (OGA) and AMSA IIC

8.1. Status for the production of the last OGA volume
8.2. Outreach for the OGA reports
8.3. AMAP follow up work related to OGA - include in 2013-2015 work plan
8.4 Status of the production of AMSA II C report with CAFF
8.5 Decisions & Actions, including the work plan

1300-1400 Lunch

1400 9. Communication and outreach strategy

9.1. The AMAP Communications and Outreach Strategy
9.2. The Arctic Report Card 2012 and beyond
9.3 AMAP input to COP-18 and UNEP GC-26
9.3. Deliverables to the Ministerial Meeting, 2013: The AMAP Communications and Outreach Strategy.
9.4. Decisions & Actions, including the work plan

1500 Health break

1520 10. AMAP's web page

10.1. Demonstration – Champagne and Comments - further work

10.2. Decisions & Actions, including the work plan

1550 11. AMAP's work plan for 2013-2015 and beyond

11.1. Summing up of all the Decisions and Actions

11.2. Special projects;

11.3. AMAP report to the SAO meeting in November

11.4. AMAP input to the Ministerial Declaration text.

11.5. Deliverables to the Ministerial meeting in May 2013.

11.6. Approval of List of Actions

1710 12. Use of remote sensing, including Unmanned Aircraft Systems (UAS) Expert Group

12.1. Status for the UAS work

12.2. Use of Satellites and drifting buoys, how to improve the cooperation with other international organizations – development of new sensors?

12.3. Work plan for the future

12.4. **Deliverables** to the Ministerial Meeting 2013: A report on guidelines for Safety operation of UAS will be presented at the Ministerial meeting for approval

12.5. Decisions & Actions, including the work plan

1745 End of Day 2.

1815-1915 Visit to 'Medeltidsmuseet' (The Medieval Museum)

1945 Dinner at the restaurant 'Borggården'

Day 3. Friday 5th October

0800 13. AMAP National Implementation Plans (NIPs) and AMAP Project Directory (PD)

13.1. Ongoing and planned National activities relevant for the AMAP core programme and the AACA work – (contaminants, climate, health) - to be reported online and oral
13.2. Structure of the NIPS, including data inventories
13.3. Priority work proposed by the expert groups, e.g. human health, SLCF, etc.
13.4. Decisions & Actions

0900 14. SAON

14.1. Status and plans for the future work, especially the two key areas for SAON: How to secure and improve the monitoring platforms and the access to data?
14.2. **Deliverables** to the Ministerial Meeting 2013: Progress report on SAON work and tasks.
14.3. Decisions & Actions, including the work plan

1000 Health break

1020 15. Cooperation with AC WGs and Task Forces

15.1 Arctic Ocean Review (AOR)
15.2 Circumpolar Biodiversity Monitoring Program (CBMP)
15.3. Ecosystem Based Management (EBM)
15.4. Other reports from CAFF, PAME, EPPR, ACAP & SDWG.

1100 16. Cooperation with international organizations:

UNEP, INC-4 for Global Hg Treaty, Stockholm Convention activities (June 2012 workshop), UNECE/LRTAP, EU, OSPAR, ICES, etc. Barents Euro-Arctic Council, etc.

1130 17. AMAP's Next WG meeting

Countries are welcome to invite to the next AMAP WG meeting.

1145 18. Messages from Observing countries and organizations on their AMAP related activities

1215 19. Any other business

1230 20. End of meeting

1230 Lunch and airport

Annex 2
AMAP 26th Working Group Meeting, Stockholm, Sweden, 3-5 October, 2012
List of Participants

Country	First name	Last name	Institute name	Mailing address	e-mail	Institute phone	Institute fax
AMAP Chair	Russel	Shearer	Aboriginal Affairs and Northern Development Canada (AANDC)	15 Eddy St. 14th Floor Gatineau, Québec KIA OH4	Russel.Shearer@aandc.gc.ca	+1 819 994 6466	+1 613 934 1390
Canada	James D.	Reist	Fisheries and Oceans Canada	501 University Crescent Winnipeg, Manitoba R3T 2N6	jim.reist@dfo-mpo.gc.ca	+1 204 983 5032	+1 204 984 2403
Canada	Robert	Kadas	Department of Foreign Affairs and International Trade Canada (DFAIT)	Lester B. Pearson Building 125 Sussex Drive, B4-213 Ottawa, Ontario K1A 0G2	robert.kadas@international.gc.ca.	+1 613 944 2189	
Denmark	Morten S.	Olsen	Danish Energy Agency Ministry of Climate, Energy and Buildings	Amaliegade 44 DK-1256 Copenhagen K	mso@ens.dk	+45 33 92 68 92	+45 25 65 02 47
Denmark	Mikala	Klint	Danish EPA Danish Ministry of the Environment	Strandgade 29 DK-1401 Copenhagen K	mkl@mst.dk	+45 72 54 42 33	+45 33 32 22 228
Faroe Islands	Maria	Dam	Environment Agency	Tradagøta 38 P.O. Box 2048 FO-165 Argir	MariaD@us.fo	+298 34 24 70	+298 34 24 01
Finland	Johanna	Ikävalko	Finnish Meteorological Institute	Erik Palmeninaukio 1 P.O.Box 503, 00101 Helsinki	johanna.ikavalko@fmi.fi	+358 400 291066 +358 29 539 2079	
Finland	Kaarle	Kupiainen	Finnish Environment Institute (SYKE)	P.O.Box 140, 00251 Helsinki	kaarle.kupiainen@ymparisto.fi, kupiain@iiasa.ac.at	+358 400 148 766	
Finland	Outi	Mähönen	Ministry of the Environment c/o Lapland ELY Centre	P.O.Box 8060 FIN-96101 Rovaniemi	outi.mahonen@ely-keskus.fi	+358 40 512 7393	+358 16 310 340
Greenland	Uiloq Mulvad	Jessen	Ministry of Domestic Affairs, Nature and Environment Department of Nature and Environment	P.O.Box 1614 3900 Nuuk	irum@nanoq.gl	+299 346 708	

Country	First name	Last name	Institute name	Mailing address	e-mail	Institute phone	Institute fax
Iceland	Helgi	Jensson	Environment Agency of Iceland	Sudurlandsbraut 24 IS-108 Reykjavik	helgij@ust.is	+354 591 2000	+354 591 2020
Norway	Per	Døvle	Climate and Pollution Agency	P.O.Box 8100 Dep. Strømsveien 96 N-0032 Oslo	per.dovle@klif.no	+47 22 57 34 37	+47 22 67 67 06
Norway	Barbro	Thomsen	Climate and Pollution Agency	P.O.Box 8100 Dep. Strømsveien 96 N-0032 Oslo	barbro.thomsen@klif.no	+47 22 57 35 76	+47 22 67 67 06
Norway	Øyvind	Christophersen	Climate and Pollution Agency	P.O.Box 8100 Dep. Strømsveien 96 N-0032 Oslo	oyvind.christophersen@klif.no	+47 22 57 37 24	+47 22 67 67 06
Norway	Solveig	Dysvik	Norwegian Radiation Protection Authority	P.O.Box 55 N-1332 Østerås	solveig.dysvik@nrpa.no	+47 67 16 26 55	+47 67 14 74 07
Norway	Louise Kiel	Jensen	Norwegian Radiation Protection Authority Dep. for Environmental Radioactivity	FRAM – High North Research Centre on Climate and the Environment NO-9296 Tromsø	Louise.Kiel.Jensen@nrpa.no	+ 47 77 75 01 67 Cell: +47 47 31 10 62	+ 47 77 75 01 71
Russia	Yuri	Tsaturov	Russian Federal Service for Hydrometeorology and Environmental Monitoring	Novovagankovsky Street, 12, 123995 Moscow	tsaturov@mecom.ru	+ 7 499 2520728	+ 7 499 2522429
Russia	Alexei	Konoplev	NPO "Typhoon" of Roshydromet	Lenina 82, Obninsk 249038, Kaluga region	konoplev@obninsk.com	+7 48439 71896	+7 48439 44204
Russia	Alexander	Klepikov	Arctic and Antarctic Research Institute of Roshydromet	38, Bering str., 199397 St. Petersburg	Klep@aari.ru	+7 812 337 3119	+7 812 337 3241
Sweden	Tove	Lundeberg	Swedish Environmental Protection Agency	SE-106 48 Stockholm	Tove.Lundeberg@naturvardsverket.se	+46 8 698 1000	+46 8 698 1600
Sweden	Jonas	Rodhe	Swedish Environmental Protection Agency	SE-106 48 Stockholm	Jonas.Rodhe@naturvardsverket.se	+46 10 698 1307	+46 8 698 1600
Sweden	Marianne	Lilliesköld	Swedish Environmental Protection Agency	SE-106 48 Stockholm	marianne.lillieskold@naturvardsverket.se	+46 10 698 1269	+46 8 698 1600
Sweden	Ann-Sofi Israelson	Israelson	Swedish Environmental Protection Agency	SE-106 48 Stockholm	ann-sofi.israelson@naturvardsverket.se	+46 10 698 1270	+46 8 698 1600

Country	First name	Last name	Institute name	Mailing address	e-mail	Institute phone	Institute fax
Sweden	Britta Hedlund	Hedlund	Swedish Environmental Protection Agency	SE-106 48 Stockholm	britta.hedlund@naturvardsverket.se	+46 10 698 1208	+46 8 698 1600
Sweden	Petra	Hagström	Swedish Environmental Protection Agency	SE-106 48 Stockholm	petra.hagstrom@naturvardsverket.se		
Sweden	Annette	Rosenberg	Swedish Ministry of Foreign Affaris		annette.rosenberg@foreign.ministry.se		
Sweden	Louise	Nordkvist	Swedish Ministry of Foreign Affairs		louise.nordkvist@foreign.ministry.se		
Sweden	Annika	Nilsson	Swedish Environment Institute	Kräftriket 2B SE 106 91 Stockholm	annika.nilsson@sei-international.org	+46 (0)8 674 7331	
Sweden	Fredrik	Hannerz	Ministry of the Environment		fredrik.hannerz@environment.ministry.se		
USA	Thomas	Armstrong	US Global Change Research Program Executive Office of the President	1717 Pennsylvania Ave, NW Suite 250 Washington DC 20006	tarmstrong@usgcrp.gov	+1 202 419 3460 Cell: +1 703 304 0229	+1 202 419 3460
PERMANENT PARTICIPANTS							
ICC	Eva	Kruemmel	Inuit Circumpolar Council (ICC)	Suite 1001 75 Albert Street Ottawa, Ontario K1P 5E7	EKruemmel@inuitcircumpolar.com	+1 613 563 26 42	+1 613 565 30 89
OBSERVER ORGANISATIONS							
Arctic Council Secretariat	Linnea	Nordström	Arctic Council Secretariat	The Fram Centre N-9296 Tromsø	linnea.nordstrom@arctic-council.org	+47 77 75 01 40	+47 77 75 05 01
Arctic Council Indigenous Peoples' Secretariat	Alona	Yefimenko	Arctic Council Indigenous Peoples' Secretariat	Strandegade 91 DK - 1401 Copenhagen K	alona.yefimenko@arcticpeoples.org	+45 32 83 37 90	+45 32 83 37 91
APECS	Alexey	Pavlov	Association of Polar Early Career Scientists (APECS)	Tromsø	alexey.pavlov@apecs.is	+47 77 64 61 02 Cell: +47 94 84 53 42	
NEFCO	Henrik	Forsström	Nordic Environmental Finance Corporation	Nordic Environmental Finance Corporation	Henrik.Forsstrom@nefco.fi		

Country	First name	Last name	Institute name	Mailing address	e-mail	Institute phone	Institute fax
OBSERVER COUNTRIES							
China	Guangshui	Na	National Marine Environmental Center	42 Liugke Street Shakekore District Dalian 116023	gsna@nmemc.gov.cn	+86 411 8478 2402	+86 411 8478 2402
Japan	Tetsuo	Ohata	Northern Hemisphere Cryosphere Program Research Institute for Global Change	Japan Agency for Marine-Earth Science and Technology Natsushima-cho 2-15 Yokosuka Kanagawa 237-0061	ohatat@jamstec.go.jp	+81 46 867 9250	+81 46 867 9250
Japan	Hideo	Keage	Embassy of Japan in Sweden	Gärdesgatan 10, 115 27 Stockholm	hideo.keage@mofa.go.jp	+46 0 8 579 35300	+46 0 8 661 8820
The Netherlands	Frits	Steenhuisen	Arctic Centre University of Groningen	P.O.Box 716 NL-9700 AS Groningen	f.steehuisen@rug.nl	+31 503 63 68 34	
United Kingdom	Richard	Wood	Met Office Hadley Centre	FitzRoy Road, Exeter EX1 3PB	richard.wood@metoffice.gov.uk	+44 (0)1392 886641	+44 (0)1392 885681
AMAP Secretariat							
AMAP	Lars-Otto	Reiersen	Arctic Monitoring and Assessment Programme Secretariat	Gaustadalléen 21 N-0349 Oslo	lars-otto.reiersen@amap.no	+47 22 95 83 43	+47 22 60 44 27
AMAP	Simon	Wilson	Arctic Monitoring and Assessment Programme Secretariat	Gaustadalléen 21 N-0349 Oslo	s.wilson@inter.nl.net	+31 10 466 29 89	+47 22 60 44 27
AMAP	Janet F.	Pawlak	Arctic Monitoring and Assessment Programme (AMAP) Secretariat	Gaustadalléen 21 N-0349 Oslo	jpawlak@dahm.dk	+45 39 64 18 65	+45 39 64 17 75
AMAP	Jan René	Larsen	Arctic Monitoring and Assessment Programme Secretariat	Gaustadalléen 21 N-0349 Oslo	jan@jrl.dk	+45 23 61 81 77	+47 22 60 44 27
AMAP	Inger	Utne	Arctic Monitoring and Assessment Programme Secretariat	Gaustadalléen 21 N-0349 Oslo	inger.utne@amap.no	+47 22 95 83 40	+47 22 60 44 27

Annex 3

26th Working Group Meeting, October 2012

Action list

Action no	Agenda item	Subject	Action	For	By
1	3	AACA	Send comments on AACA Section C work plan to AMAP Secretariat	AMAP HoDs ad PPs	9 October 2012 (done)
2	3	AACA	Distribute revised AACA Section C work plan to countries and PPs for final review	AMAP Chair	10 October 2012 (done)
3	3	AACA	Send final AACA Section C text to Swedish Chair	AMAP Chair	12 October 2012 (done)
4	3	AACA	With input from WG, compile an overview of relevant activities and projects that could have links to AACA Part C	AMAP Secretariat	10 January 2013
5	3	AACA	Seek approval of draft work plans at SAOs meeting in Haparanda. Follow up with SAO Chair and other WG Chairs on issue of need for consultations among AC WGs in relation to the development of items on work plans that require input from another WG	AMAP Chair	15 November 2012
6	3	AACA	On the basis of on-going consultations with the WG, further develop the AACA (part C) for external communication	AMAP Secretariat	15 November 2012
7	3	AACA	Approach other AC WGs and other potential partner organizations concerning possible interest and support for the activities proposed for the various periods between now and 2017	AMAP Secretariat	15 November 2012
8	3	AACA	Hold discussions with SAO Chair and Chairs of other AC WGs concerning integration of AACA Part C follow-up into the work plans of the other AC WGs	AMAP Chair and Board	4 December 2012
9	3	AACA	Make WG Chairs consultations more effective, also when it comes to development of WG plans that need to be addressed well in advance of SAO and Ministerial Meetings	AC Secretariat	4 December 2012
10	3	AACA	Identify national experts to be engaged in Arctic 2020/GEF project	AMAP HoDs	1 December 2012

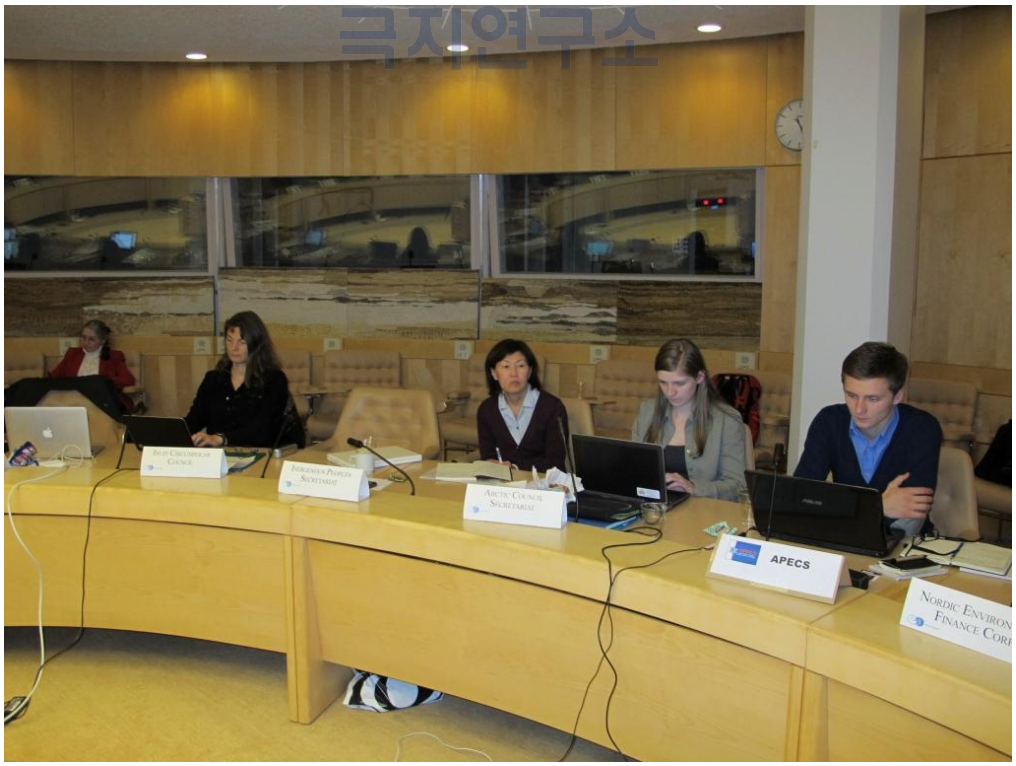
Action no	Agenda item	Subject	Action	For	By
11	4	AOA	Request lead authors of AOA assessment to expand and clarify the text of their conclusions, including more relevant background detail, for presentation at SAO meeting in Haparanda.	AMAP Secretariat	8 November 2012
12	4	AOA	Include final WG approval of AOA assessment on the agenda of a January meeting of AMAP HoDs	AMAP Secretariat	1 December 2012
13	4	AOA	Agree on final AOA assessment conclusions, recommendations, and report	AMAP HoDs and PPs	31 January 2013
14	4	AOA	Conduct practical work associated with the arrangement of the AOA Conference in Bergen	AMAP Secretariat and assessment leads	5 May 2013
15	4	AOA	Ensure that SAOs are aware of the plans for the delivery of the AOA assessment and advertise the conference within their respective countries; advise AMAP Secretariat of possible needs, e.g., regarding translated version of the films	AMAP HoDs	31 January 2013
16	5	SLCFs	Prepare progress report for 2013 Ministerial Meeting	SLCF Expert Groups	10 January 2013
17	6	Expert Groups	AMAP HoDs to provide written comments on the paper on the organization of future AMAP assessments and structure of Expert Groups.	AMAP HoDs and PPs	3 December 2012
18	6	Expert Groups	Prepare revised paper on the organization of future AMAP assessments and structure of Expert Groups based on AMAP WG comments provided at meeting and possible written comments	AMAP Secretariat	10 January 2013
19	6.2	Radioactivity Expert Group	Nominate experts for the Radioactivity Expert Group and confirm their participation in the meeting in January 2013 in Roskilde, Denmark	AMAP HoDs and PPs	1 December 2012
20	8	OGA	Complete the tables prepared at Victoria HoDs meeting on actions carried out to follow up the oil and gas assessment recommendations, including updates on pollution issues and laws and regulations on oil and gas activities in the Arctic	HoDs from Canada, Norway, Russia, and USA	10 January 2013

Action no	Agenda item	Subject	Action	For	By
21	9	C&O	Based on comments provided at WG meeting, revise and consolidate the communications and outreach strategy document and prepare a list of actions and time plan for the work	AMAP Secretariat	10 January 2013
22	9.2	Arctic Report Card	Discuss the ARC issue with NOAA leadership in order to assess their position as to the formal role of AMAP in the ARC development and release	Tom Armstrong, USA	1 January 2013
23	10	AMAP website	Launch final version of AMAP website	AMAP Secretariat	3 December 2012
24	11	Work plan	Send comments on Work Plan for 2013-2015 to Chair and Secretariat	AMAP HoDs and PPs	16 November 2012
25	11	Work plan	Revise Work Plan for 2013-2015 based on any comments received and send to AMAP HoDs for final approval	AMAP Chair and Secretariat	23 November 2012
26	11	Work plan	Send final draft Work Plan for 2013-2015 to AC Secretariat	AMAP Chair and Secretariat	4 December 2012
27	12	UAS	Include approval of UAS EG report to next WG meeting	AMAP Secretariat	1 December 2012
28	13	NIPs	Ensure annual reporting of atmospheric, marine, terrestrial/freshwater, and radionuclide monitoring data to the relevant Thematic Data Centre. Identify gaps in historical reporting and fill them.	AMAP member and observer countries	Ongoing
29	13	NIPs	Report National Implementation Plans either directly or via the Project Directory	AMAP member and observer countries	Ongoing
30	13	Data reporting	Identify and support the participation of relevant persons in the marine data reporting workshop at ICES in Copenhagen on 20–21 November 2012	AMAP HoDs	10 November 2012
31	15.1	AOR	Send national comments on AOR chapters on pollution and climate change to the AMAP Secretariat	AMAP HoDs	10 October 2012
32	16	COP18	Prepare a draft one-page statement for COP18	AMAP Board	17 October 2012 (done)
33	16	COP18	Distribute draft one-page statement for COP18 AMAP HoDs, AC WGs, and PPs for comments (AMAP HoDs are to consult SAOs during the review process)	AMAP Secretariat and Board	18 October 2012 (done)

Action no	Agenda item	Subject	Action	For	By
34	16	COP18	Consolidate all comments per country (include comments from national representatives in other relevant WGs and SAOs) and send comments to AMAP Secretariat	AMAP HoDs	26 October 2012
35	16	COP18	Revise one-page statement based on comments received and send revise draft statement to AMAP HoDs for national approval	AMAP Secretariat and Board	2 November 2012
36	16	COP18	Ensure national acceptance of revised draft (including national representatives in other relevant WGs and SAOs) and inform AMAP Secretariat of national acceptance	AMAP HoDs	9 November 2012
37	16	COP18	Send final nationally accepted statement to AC Chair for approval at SAOs meeting.	AMAP Secretariat and Board	9 November 2012

AMAP 26th Working Group Meeting


CANADA
DANEMARK
DENMARK
GREENLAND
FINLANDE
FINLAND


APECS