

Minutes of the 20th Meeting of the Arctic Monitoring and Assessment Programme (AMAP) Working Group

Stockholm, Sweden

28-30 June 2006

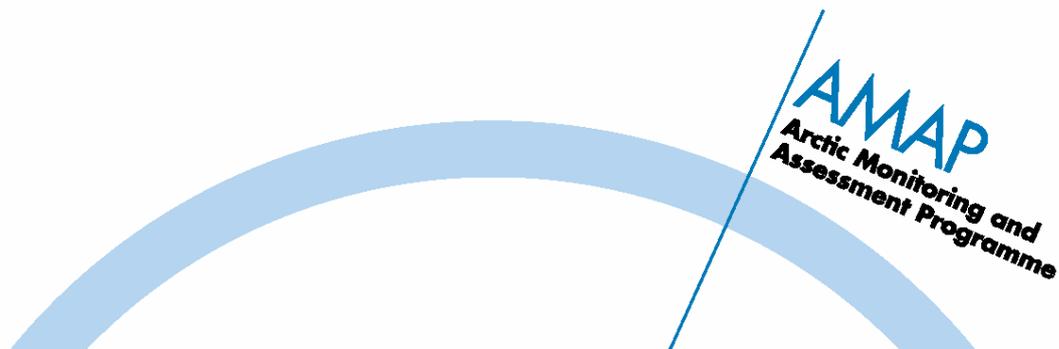


Table of Content

1. Opening of the meeting	1
2. Approval of the Agenda	1
3. Short report from Chair and Secretariat	1
4. Acidification and Arctic Haze Assessment (AAHA)	2
5. Oil and Gas Assessment (OGA)	3
6. AMAP Expert Groups	7
7. ACIA Follow-up	12
8. AMAP National Implementation Plans (NIPs)	13
9. Cooperation with AC Working Groups	15
10. International Cooperation	17
11. Special Projects	19
12. AMAP report to the SAO and Ministerial meeting	20
13. Next WG meeting	21
14. Election of Chair and Vice Chair	21
15. Any Other Business	21
16. Close of Meeting	21

List of Annexes

- Annex 1. List of Participants at the 20th Working Group Meeting of the Arctic Monitoring and Assessment Programme.
- Annex 2. List of Documents for the 20th AMAP WG meeting.
- Annex 3. Draft Agenda for the 20th AMAP WG meeting.
- Annex 4. List of Actions arising from the 20th AMAP WG meeting.
- Annex 5. List of possible AMAP Deliverables and timeline for their production during the coming years.
- Annex 6. Updated overview of NIP reporting

Minutes of the 20th AMAP WG Meeting, Stockholm, Sweden, 28-30 June 2006

1. Opening of the meeting

The AMAP WG Chair, John Calder (USA), opened the 20th AMAP WG meeting.

Manuella Notter of the Swedish EPA welcomed the meeting participants to Stockholm, gave a brief overview of the activities of the Swedish EPA and their relationship to the work of AMAP, and provided practical information. She noted the change in the lead of the Swedish Delegation to the AMAP WG, from Cindy de Wit to Yngve Brodin and Jonas Rodhe, who would share this role; Cindy de Wit would continue in her role as co-lead of the AMAP POPs Expert Group.

All the participants introduced themselves; the list of participants is attached as Annex 1.

The documents for the meeting were reviewed; a list of documents for the meeting is attached as Annex 2.

2. Approval of the Agenda

The draft agenda was adopted without changes, and is attached as Annex 3.

A list of Actions arising from the WG meeting is attached as Annex 4.

3. Short report from Chair and Secretariat

Lars-Otto Reiersen (AMAP Executive Secretary) reviewed the lists of actions from previous WG meeting, and the AMAP Heads of Delegation meeting held in Copenhagen in May 2006. He reported that all the major actions had been completed; the few outstanding actions would be revisited under relevant agenda items.

The Executive Secretary and Chair further updated the WG on developments following the SAOs meeting in Syktyvar at the end of April, making reference to agenda items where important issues would be considered. These included the results of the dialogue with the EU; climate change follow-up activities including the priorities established by the Focal Point, and consideration of the AMAP role in the ACIA follow-up process under the Arctic Council; discussions with representatives of the IPY Steering Body; collaboration with the UNEP-Chemicals Stockholm Convention Secretariat as part of the preparation for the COP-2, and to assist in the development of the global POPs monitoring programme; and the (cancellation of the) planned AMAP-CAFF workshop in Washington.

Yngve Brodin (Sweden) expressed a concern that the minutes of the AMAP Heads of Delegation meeting in Copenhagen might give an incorrect impression that AMAP should take the lead for all climate issues within the Arctic Council. The WG Chair reconfirmed that no consensus had been reached during the AMAP HoDs meeting concerning the possible role that AMAP should have with respect to ACIA follow-up.

4. Acidification and Arctic Haze Assessment (AAHA)

The Chair invited the Vice-Chair, Per Dovle, to chair the parts of the meeting dealing with the ongoing assessment activities (agenda items 4 and 5).

Simon Wilson (AMAP Secretariat) summarized the status of the AAHA assessment. He reported that the Scientific Assessment Report was essentially complete, it had undergone peer review, technical and linguistic editing was completed, and the files had now been delivered for final layout prior. The texts of the scientific assessment report had been distributed to the WG as documents WG20/4/1-7.

The Overview Report and Executive Summary were also well advanced, having been redrafted following the Copenhagen HoDs meeting, and subjected to final national review; these documents were ready for publication pending WG approval. The texts of the final draft of the overview report were available as document WG20/4/10, together with a list summarising the comments received during the final round of national review and how these had been handled (document WG20/4/11). The draft of the Executive summary was available as document WG20/4/8, similarly with an overview list of comments received and how these had been addressed (document WG20/4/9). It was noted that a number of comments had arrived after the agreed deadlines and that some of these would need to be discussed and resolved during the WG meeting.

Outi Mahonen (Finland) noted that although the lead of the AAHA, Martin Forsius, was unable to attend the WG meeting due to other commitments, he was available by phone if necessary; also the scientific secretary for the AAHA, Marjut Nyman, and several of the lead authors and experts for parts of the assessment (John Derome, Jesper Christensen and Brit Lisa Skjelkvåle) were participating in the WG meeting to answer questions arising. The WG agreed to address the approval of the Overview report by considering document WG20/4/10 line-by-line, taking into account also the review of comments presented in document WG20/4/11.

Some of the points raised during the discussions on the overview report were identified as issues that would need to be checked or reflected in the science report. For example the fact that the assessment mentions but does not address changes in ocean pH (related to atmospheric-ocean CO₂ exchange and climate change), or effects of S, N and ozone on materials should be explained in the Preface to the scientific report. Such issues could be identified in the overview report as subjects that might warrant future assessment, possibly as part of a more integrated assessment Arctic air pollution with a wider scope than consideration of just acidification and Arctic haze.

Experts present at the meeting assisted in redrafting texts of the overview report in response to questions concerning episodic events, use of calculated (e.g. modelled) vs measured data, and issues such as the influence of soot derived from forest fires on Arctic haze - and the possible need to reflect these issues in recommendations regarding gaps in knowledge.

Carolyn Symon, the author of the overview report, took note any revisions introduced during the approval process and produced an updated version of the document prior to the end of the meeting (WG20/4/10-REV).

Considering the draft Executive Summary (document WG20/4/8) the WG decided that this should be reduced in size and focus more on conclusions directly supporting the recommendations. It was therefore agreed that the draft Executive Summary would be reformatted and appear as Chapter 8 – Conclusions and Recommendations – in the Scientific

Assessment Report, and that before it was considered by the WG, a small drafting group (comprising Helgi Jennsson, Simon Wilson, and the participating assessment experts) should extract the recommendations and relevant supporting texts into a ‘shortened version’ of the Executive Summary for the Overview Report.

This ‘shortened version’ of the Executive Summary was produced, essentially re-using texts from the original draft and ‘compiling’ and prioritising the recommendations as requested by Sweden. This version was then considered for approval by the WG. Comments and further revisions were made during the meeting resulting in a revised draft that was endorsed by the AMAP WG.

The Overview report, as revised during the WG meeting (document WG20/4/10-REV) was approved by the WG, in principle, for publication. The WG were, however, given a week (deadline 7 July) during which they could notify the Secretariat of any last minute factual errors or editorial corrections to be applied; substantive or potentially controversial would not be accepted.

The Executive Summary, as revised during the WG meeting (document WG20/4/8-REV) was approved by the WG, in principle, for publication. The WG were, however, given a week (deadline 7 July) during which they could notify the Secretariat of any last minute factual errors or editorial corrections to be applied; substantive or potentially controversial would not be accepted.

It was noted that the Executive Summary of the Overview report, including recommendations, needs to be presented to the SAOs by mid-August.

The WG were informed of the time schedule for production of the AAHA reports, as follows:

Science report – layout during July, final proofing during August, printing in September

Overview report – layout during August/September, final proofing during week 37 (11-15 September), printing during weeks 38- 40 (18 September – 6 October)

The WG recognized that this timetable is tight, but would hopefully allow the reports to be available for the SAO & Ministerial meeting during the week of 23-27 October. In the worst case, it is possible that the printed reports may not be available, but in this case printouts of the final PDF files could be provided for the Ministerial meeting that would be identical in content and layout to the final reports.

In order to finalise the selection of a printer for the reports, the Finnish leads urgently needed estimates for the final production volumes for copies of the AAHA science and overview reports. The Executive Secretary called on all delegations to provide preliminary information on their needs in this respect by the end of the meeting, to be confirmed within one week (deadline July 7).

5. Oil and Gas Assessment (OGA)

Simon Wilson reminded the WG of the discussions at the AMAP HoDs meeting in Copenhagen, where the OGA authors has proposed a plan that was aimed at delivering an electronic version of the overview report and ‘signed off’ science report chapters by the time of the October Ministerial meeting; he reiterated that even in May this plan was considered

‘unlikely’ to succeed. He then presented an update on the status of the preparation of the OGA reports, as follows:

Science report:

A series of phone conferences had been held to track progress, as requested at the AMAP HoDs meeting in May. Progress, however, had not met the critical targets presented to the HoDs meeting.

The circulation of the drafts of the main chapters for peer-review, that had been scheduled for May 30, had now been delayed until June 30, and at least two chapters (5 and 6) had indicated that they would be even further delayed (by at least one week more). Peer-reviewers had been notified that they should expect the drafts on 30 June, and that the deadline for return of comments is 15 August, and had been asked to confirm that they would still be able to undertake the review during this period; however few responses had been received. The additional delays and the resulting need to re-schedule critical activities during the vacation/field work period introduced obvious problems.

In addition to the time-tabling problems, there are still issues relating to ‘content’ of the assessment, mainly related to the (reworking of the) Russian contribution, but also including outstanding contributions, e.g. from the USA for chapter 6 (CAFF-related information on seabirds, etc.). Some information is required to address significant comments arising from the initial national review, and obtaining this promised input remains a critical issue - with implications for author sign-off and timing of deliverables for the Ministerial meeting.

As a result of discussions during the HoDs meeting, SAOs had been informed that the science report would not be available at the time of the Ministerial meeting, but that it was hoped that author ‘sign-off’ of the content of the un-edited but peer-reviewed science chapter drafts would be accomplished. The SAOs had acknowledged this situation and reiterated that the quality of the assessment should not be compromised.

The latest re-scheduling of activities included a meeting of lead authors in the Hague (Netherlands), 10-12 July, to draft chapter 7 (Conclusion and Recommendations) of the Science report, which would then be included in the peer-review process. A further meeting of the OGA lead authors was scheduled to take place in Victoria (Canada), 12-15 September – to address final issues related to comments to the peer review and discuss any necessary re-organization of materials connected with chapter overlap.

Following author ‘sign-off’ the editing of the report would be initiated, with the plan being to produce the science report, probably as a series of chapter volumes, during 2007. He indicated that ‘substantive editing and restructuring’ would probably be required in addition to the normal technical and linguistic editing.

Lead authors of the science report are keen to finish their work and move on to other things; however the drafts remain essentially independent works that should preferably be reduced in size and will ultimately need to be restructured to address issues of cross-chapter overlap and reorganization of material. Such work, prior to publication, will probably necessitate professional assistance – with additional financial implications for work to be carried out until at least the summer of 2007.

Overview report:

Based on the circulated peer-review drafts of the science report, a revised draft of the overview report is planned to be distributed 1 August for national review and critical review

by lead authors. An updated version, incorporating amendments necessary as a result of peer-review of the science report (based on author discussions at the meeting in Victoria) would then be prepared prior to the AMAP WG meeting end-September, with a view to this version being approved at that meeting.

Simon Wilson pointed out a number of problems with the above-described rescheduling, including:

- likelihood that peer-review would not be accomplished within the 15 August deadline
- need to also address need for review of OGA reports by other groups, including Arctic Council PPs and Observers, etc.
- lack of time for consideration of updated draft of overview report prior to end-of-September WG meeting
- time-schedule in relation to deadlines for submitting ‘approved’ documents (including conclusions and recommendations) to the Arctic Council Secretariat at least one-month before the Ministerial meeting.
- lack of time available to translate an eventually ‘approved’ draft of the overview report into a product (even an electronic product) that could be delivered to the Ministerial meeting.

His conclusion was that the timetable was now critically compromised, as had been indicated would be the case at the AMAP HoDs meeting if several critical milestones (including the original deadline for distribution of the peer-review drafts) were not met.

Ministerial Deliverables

The WG accepted this general assessment of the situation and the resulting discussion focussed on the question ‘Where do we go from here?’

Yuri Tsaturov (Russia) reiterated that Russia had attempted to deliver the information requested through implementing various solutions, but where this had not been possible it was due to national regulations restricting access to information.

Russel Shearer (Canada) informed the WG of discussions in Canada that had been held in anticipation of a possibility that the timeline agreed at the AMAP HoDs meeting would not be met. He presented an alternative proposal, whereby no OGA reports (either printed or electronic) would be delivered to the Ministerial meeting, but rather the OGA ‘deliverable’ would take the form of a high-quality Power Point presentation of ‘Key Findings’ of the scientific assessment – as identified by the OGA authors following the completion of the peer review. This could be accompanied by a request that Ministers give SAOs the authority to complete the OGA process by the 2008 Ministerial meeting, including publication of the overview report, at least, during 2007, and possibly in connection with some relevant ‘event’ (such as a major oil and gas Conference). The WG agreed to try to identify an appropriate event in 2007 and take contact with the organizers as soon as possible.

Simon Wilson noted that an important question to address in relation to the proposed strategy would be ‘What do we want the 2006 Ministerial Declaration to say’ in relation to the OGA. He also pointed out that, even if the goal is only to produce a presentation, some accelerated effort on graphical production would be required. Progress had been made on

establishing a team to conduct graphical production work for the OGA but a number of the intended ‘key graphics’ are still pending the incorporation of currently ‘unavailable’ data.

The Canadian proposal for a way forward was supported by Iceland, who stressed that any such presentation should be limited to include only the scientific conclusions. This raised another question, namely what, if anything might be done for the 2006 Ministerial with respect to ‘proposals for recommendations’? Jim Tate (United States) expressed the view that if no conclusions are presented, then there is a risk that others, for example the press, will draw their own on the basis of the results presented. His view was that if review comments are available by late-September, then it should be possible to prepare a set of recommendations for presentation to the Ministerial meeting in 2006. He asked who would be responsible for preparing the ‘key findings’ and recommendations. The conclusion on this point was that the OGA authors would prepare an initial draft, and the WG would then be responsible for extracting those key findings (and, if relevant, recommendations) that they might wish to present to the Ministers. The OGA authors could start to do this during their meeting in the Hague, with the WG completing this process at its meeting at the end of September.

A meeting of the AMAP WG, as late as possible in September would still be required to ‘approve’ the presentation of ‘key findings’. Denmark and Norway supported this proposed strategy. All delegations agreed that it is important to go back and contact their SAOs to report on and discuss this situation, including obtaining a mandate to continue activities during the period between end-September (the deadline for input to the Ministerial meeting) and the Ministerial meeting. The mandate should also aim to maintain the momentum that exists to complete the OGA and produce the reports, including allocation of necessary finances.

Recognizing the fact that the current ‘international peer review’ of the science report drafts also represents the last opportunity for ‘national review’, and that this review should not just include AMAP but also the other Arctic Council WGs, the PPs, and the Arctic Council observers, the WG agreed that:

- drafts sent for peer review should also be circulated for final ‘national review’; this review should be coordinated nationally (i.e. between the national AMAP, CAFF, EPPR, PAME and SDWG representatives) so as to include experts that would ‘represent’ all Arctic Council WGs, with comments being returned through a single national contact point (the AMAP HoD being nominally responsible for this) and compiled in a coordinated way so as to avoid conflicting responses from different national experts.
- drafts sent for peer review should also be circulated for review by the PPs and Arctic Council observers.
- The AMAP national representative at the WG meeting end-September should be mandated to act as a ‘national representative’ representing all the Arctic Council WGs (at least in the event that national representatives of other Arctic Council WGs could not attend), so that any decisions at that meeting were supported by all the Arctic Council bodies responsible for delivering the OGA.

[Action – AMAP HoDs to coordinate national review activities and responses, and to make sure that this is done in cooperation with other AC WG representatives: AMAP Chair to contact Chairs of other AC WGs to explain this process, etc.]

Concerning the Arctic Council request for input to the Ministerial meeting in mid-August, the WG concluded that it would not be possible to meet this deadline as any recommendations that might arise from the OGA would first need to be considered by the WG at their meeting end-September.

The Canadian representative suggested some phrases that might be proposed for inclusion in the 2006 Ministerial Declaration, to reflect the situation regarding the OGA. The WG agreed to consider these proposals and comment during the meeting, with a view to developing a text that could be proposed to the SAOs as requested in mid-August. A small drafting group prepared a revised version of the draft proposal, the result being the following:

‘Ministers were pleased to receive the presentation of the key findings of the assessment of oil and gas activities in the Arctic coordinated by AMAP, and would like to acknowledge the role of Norway and the United States as lead countries for this assessment. Ministers look forward to the release of the overview report in 2007 and the publication of the scientific assessment report.

SAOs are tasked with coordinating the finalization and release of the overview and scientific assessment reports before the Ministerial meeting to be held in 2008. SAOs are instructed to consider recommendations for follow-up activities and give guidance to the AC WGs on priorities and report back to Ministers by 2008.’

The WG were requested to consider this revised draft and respond with any further comments within one week (deadline 7 July)

Finland reminded the WG that, in addition to reporting on the status of the OGA, the AMAP Progress Report to the SAOs – which will need to be approved at the next AMAP meeting - should include the results of the AAHA, and that the Executive Summary of this assessment should be delivered to the Arctic Council Secretariat as soon as it is available.

The Executive Secretary reported on the financial situation for the OGA, including the fact that the drafts were substantially larger than envisaged in the original budget with significant implications for editing and printing costs. In addition, finances provided to support the assessment had been used to facilitate delivery of information from Russia and provide expert assistance to lead authors to assist in processing of received information and various writing tasks, in particular related to chapter 6. Consequently, he suggested that an updated budget be prepared, also incorporating the possible need to expert assistance to conduct substantive editing and restructuring work. He further requested countries to update their preliminary orders for copies of the OGA reports, which is the main basis for funding the assessment production. Since the OGA reports are likely to attract considerable external interest, especially if advertised, this might represent an additional source of income. Offers of in-kind assistance or additional financial support from the countries would be welcome. The WG agreed that the Secretariat should prepare a revised budget for production of the OGA.

6. AMAP Expert Groups

AMAP POPs Expert Group

Cynthia de Wit presented the report from the Burlington meeting of the AMAP POPs Expert Group (APEG). Several new members have been nominated to the group, and the nomination of experts is still open.

At the workshop held in March in Burlington, the APEG had discussed priorities and possible deliverables, including trend assessment products. The POPs group plan to prepare reports in 2008 on listed POPs as input to work under the Stockholm Convention and UN ECE. The report for the Stockholm Convention, in May 2008, will be a year delayed compared to original plan discussed in Burlington. For the Arctic Council, the APEG are planning to produce review articles during 2007 that could be presented to the Ministerial meeting in 2008, using a similar process to that used for the recently published article on BFRs in the Arctic. Cynthia de Wit agreed to prepare a prospectus for such reports, including a possible report on combined effects of climate and POPs, by 1 September 2006.

AMAP need to investigate options to allow dual-publication of such review articles as both AMAP reports and papers in the peer-reviewed scientific literature that secure the interest of the writers and also copyright for AMAP. The AMAP Secretariat together with Cynthia de Wit would draft a proposal on this subject.

The discussions on temporal trends had revealed that many of the ongoing programmes lacked adequate power to detect trends, in terms of consideration of protocols for sampling frequency, replicates, and time periods of monitoring, etc. This matter would be addressed by the APEG in their review of the monitoring guidelines.

AMAP Radioactivity Expert Group

A short report from the AMAP Radioactivity Expert Group (AREG) was presented by Gunnar Futsæter. The group met at Lawrence Livermore National Laboratory, USA in January. A few new experts have been nominated, but the group is still open for new nominations. Some countries have yet to nominate their experts, see document WG20/6/1-2. It has been suggested that the marine environment may be the focus of the next radioactivity assessment, however no timing for this has yet been proposed. Further information on plans and programmes will be presented after next meeting of the AREG, which is scheduled to be held in Helsinki in October 2006.

AMAP Human Health Expert Group

Jens C. Hansen, Co-chair of the AMAP human health group (HHAG), presented the report from the group. Several new members have been nominated and participated at the meeting held in May in Reykjavik, Iceland. The group is still open for new nomination, and some countries have yet to nominate experts, see has not nominated, see document WG20/6/1-3. A workshop for young scientists was arranged back-to-back with the HHAG meeting, with financial support from Canada, IASC and AMAP Secretariat, and this proved a good means of securing involvement of new scientist. It was agreed that WHO should be invited to attend the HHAG.

The core AMAP human health monitoring programme has been updated, including new contaminants and adjustment to the programme to make it compatible with the planned global POPs monitoring programme for the Stockholm Convention. The work under AMAP shows that breast milk and blood give comparable results. One of the proposed changes to the programme is to perform biomarker studies instead of chemical analyses of human tissues for dioxins, as this is a precise and cheaper alternative methodology.

Effect studies are important but costly; however, there is a need for more information from human exposure studies as animal exposure tests cannot always be extrapolated to humans (as has been demonstrated from studies on chlorinated products).

Two new special projects have been initiated: one investigating contaminants in relation to sex ratio (based on the results from the PTS report); and the second looking at the influence of smoking on POPs metabolism. A third project on the combined effects of climate, contaminants and human health is under preparation, as a follow-up to the World Bank initiative that was reported to the WG at their 19th meeting. A workshop will be held late summer to further design this project. This work will be coordinated with work under the expert group on climate and UV.

There are several IPY project proposals relevant for the human health group, but two proposals are of special interest: 1) A workshop to evaluate the work done over the last 10 years, involving scientists from outside the AMAP expert group; and 2) A communication workshop between AMAP experts and the people providing samples.

The HHAG has developed a plan to prepare an updated assessment of human health in the Arctic, aiming at producing a major deliverable for the 2008 Ministerial meeting. Canada is intending to prepare a national update report in parallel with this process, as was done when the 2002 assessment was conducted.

Jan Idar Solbakken (Saami Council) asked how AMAP could secure the participation of indigenous people's representatives in the AMAP expert groups. This is essentially a financial issue that needs to be addressed within the respective countries. In some cases financial support has been made available to the AMAP Secretariat to support participation of indigenous peoples (e.g. funding from Finland to support participation of Saami representatives).

AMAP Mercury Expert Group

Simon Wilson provided an update on the plans of the AMAP Mercury Expert Group (AMEG). Nominations to the group have been received from all countries. The group is co-chaired by Peter Outridge (Canada) and Rune Dietz (Denmark). The group have not met in 2006, but a workshop involving some members of the AMEG is planned for October 2006, in Stockholm, with the specific objectives of updating the (statistical) analyses of time series datasets on mercury in biota. The products from this activity will be available in 2008. The next comprehensive AMAP assessment of mercury in the Arctic is tentatively scheduled for delivery in 2010. Canada requested a list of datasets that have been supplied for consideration at the workshop so that this could be checked for possible omissions and so that national contact points could take action to obtain missing datasets. The AMAP Secretariat agreed to circulate this list as soon as possible after the summer.

Lars-Otto Reiersen drew the attention of the WG to the availability of the 'Final Summary Report of the International Interdisciplinary Workshop for Research of Mercury in Polar Regions', which had taken place in Toronto, Canada in 2005. The outcome of this workshop had been previously reported to the AMAP WG at their 19th WG meeting.

Simon Wilson also reported on an activity, external to AMAP, under which a group of European scientists were proposing to produce three review papers on mercury issues, including an update on mercury depletion chemistry in the Arctic. Members of the AMEG present at the meeting of this group in Grenoble had suggested that this might be accomplished as a combined activity with AMAP, consistent with the recommendations arising from the Toronto workshop on Mercury in Polar Regions which had also proposed that AMAP produce an update report on Arctic MDE in 2007. Although the objectives/focus of the two 'updates' might be slightly different, and therefore result in two separate publications, there would be a strong overlap in these activities so collaboration would be

efficient. The AMAP WG agreed to ask Sandy Steffen (MSC) to act as AMAP liaison to coordinate as far as possible these two initiatives.

The Executive Secretary introduced an invitation for AMAP to contribute to a side-event at the IFCS V Forum (WG20/6/4), and the WG agreed that, if feasible, AMAP should contribute information to this event.

AMAP Climate (and UV) Expert Group

John Walsh, co-chair of the AMAP Climate Expert Group (CEG) presented the outcome of the work by the CEG, which had held its first meeting in Oslo in February 2006. The expert group has good representation from the Arctic countries. Based on the results of the February workshop, a list of potential priorities for the AMAP workplan were presented, as follows:

1) An Arctic Carbon Cycle Synthesis Workshop (ACS) to be arranged during the winter 2006/2007 with USA and Sweden as co-leads. A review paper will be prepared for publication both in the international scientific literature and as an AMAP report. The list of experts to be invited will be updated and invitation sent out as soon as possible. The AMAP Secretariat will assist in the preparation of the workshop.

2) A workshop on Pan Arctic Downscaling of Climate Model Output (PAD) will be arranged, with Norway as the lead. The workshop will consider technical details, comparable methods, and implementation arrangements. The AMAP Secretariat will assist in the preparation of the workshop.

3) State of Arctic (Climate) Annual Report (SAAR). A draft of a 'State of the Arctic Climate' report prepared by the USA was circulated prior to the WG meeting. The report was prepared by a limited group of experts and focussed on physical parameters. It was proposed that this report could serve as a model for an annually-updated report to be prepared by relevant AMAP CEG experts, with the entire CEG serving as the review group for such a product. The WG was generally positive to the proposal to prepare such reports, although the need to produce updates on an annual basis was questioned.

4) Establishment of an Arctic Observing Network (AON) is an important part of the AMAP work, aimed at securing a long-term record of information on climate parameters, contaminants, biological effects, and human health, etc. Establishing such a network and securing the financial resources to operate stations/platforms within their own territories and also international waters is a major task for all Arctic countries. The WG Chair proposed that a workshop on Arctic observing networks be planned for late in 2006 or early 2007, and that this workshop should include addressing issues related to pertinent IPY projects.

5) Synthesis of Post-ACIA Model Projections for the Arctic and related Arctic Information from the IPCC 4th Assessment. The ACIA 2004 report was based on models developed and used for the 3rd IPCC Assessment (2001). Since that time, substantial improvements have been made regarding the models, and there will be a lot of new Arctic information in several chapters of the 4th IPCC Assessment.

A core group of experts based on lead authors from ACIA and experts involved in the 4th IPCC Assessment will be identified to take on the role to draft a report synthesising Arctic information in the 4th IPCC assessment and recent model predictions for the Arctic. As part of this process, a workshop will be arranged during winter 2007/2008. The AMAP Secretariat will assist in the preparation and implementation of the workshop, consulting with other relevant international organizations.

6) Climate Change and Human Health is an area that AMAP has already started working on, with a project currently under development. This work involves close cooperation between the AMAP CEG and the AMAP expert groups on POPs, Mercury, and Human Health.

7) Coupled UV/biological monitoring has been part of the AMAPs programme since 1998. Proposals for updating the programme have been received and will be followed-up.

8) Use of Paleo-climatic data in climate assessment is very important, however, the CEG considered that these research areas are well taken care of by existing international groups.

9) Mass balance studies of the Greenland Ice Sheet and Arctic glaciers are largely covered by work in Denmark and other Arctic countries.

In the ensuing discussions, Lars-Otto Reiersen informed that the Nordic Council of Ministers have identified climate and contaminants as a priority area. AMAP has already received support from NCM to develop a project in this area, and AMAP will continue to call for additional support. Nordic experts should recognize this as a potential source of financing for related projects.

Sweden found the proposals raised by the CEG very interesting, but raised the question of whether some of the proposed activities go beyond the AMAP mandate and responsibilities. Denmark similarly found the proposal very relevant, but stressed the need to look for partners. Iceland also supported including the proposals in the AMAP workplan, with the addition that other WGs should be contacted where relevant.

Denmark further noted that changing access to resources has a higher priority for Arctic inhabitants than assessments of health effects. Jan Idar Solbakken raised the related question of where the adaptation and the socio-economic part of the ACIA follow-up were addressed. The AMAP Secretariat responded that at present these issues are out of AMAPs mandate and therefore not covered by the CEGs consideration. These issues were however discussed at the adaptation workshop held by Norway in Oslo in mid-June. A proposal from that workshop will be considered at the Focal Point meeting planned for September.

The Working Group approved the inclusion of proposals 1-6 in the AMAP workplan, in addition to item 7 which is already incorporated. The AMAP WG concurred with the CEG view that it was unnecessary for AMAP to initiate any activities in the areas of Paleo-climate research or Mass balance of ice-sheets and glaciers, apart from establishing necessary contacts for future assessments. For all issues, the WG agreed that appropriate international cooperation should be established to achieve cost efficient solutions.

The AMAP Secretariat were requested to look into the possibility to arrange one or more of the proposed workshops in connection with the ASSW 2007, scheduled to be held in Hanover, USA, in March 2007.

Other Expert Group Issues

The USA presented a proposal that the ACIA Science report be indexed – including preparation of an electronic index to the Science report PDF files. The AMAP WG expressed its support for this activity and asked John Walsh to communicate with Simon Wilson at the AMAP Secretariat on these plans. On a related issue, the AMAP Secretariat had received a communication that the University of Alaska were unable to continue their responsibility to maintain a long-term operation of the ACIA website. The WG agreed that the AMAP Secretariat should take necessary steps to secure that all information from this

site be replicated and maintained on the AMAP website. The Executive Secretary informed that all the independent review comments to the ACIA Science chapters and also the translations of the ACIA Overview report were now available from the AMAP website.

Denmark asked how AMAP are communicating information to a wider audience. This concern was supported by Canada. The WG agreed that AMAP should develop an updated communication plan as a matter of priority.

The AMAP Secretariat were asked to call on all expert groups to provide draft texts on any issues of concern that should be included in the AMAP Report to Ministers. Any such inputs should reach the Secretariat by **1 September 2006**.

Both the POPS and Human Health Expert Groups expressed the view that it was somewhat difficult to integrate climate change aspects with POPs and human health assessments, respectively, and that additional consideration should be given to how best this should be achieved.

The WG stressed the importance that all the AMAP Expert groups communicate and coordinate their activities.

7. ACIA Follow up

ACIA follow-up and the function of the Focal Point (FP) had been a major topic of discussion at the HoDs meeting in Copenhagen. These discussions were continued at the WG meeting.

The general feeling among the WG was that there is a need to restructure the mechanism to direct ACIA follow-up by the Arctic Council WGs after the October Ministerial meeting. The FP has fulfilled a part of the task given to it in 2004, e.g. preparing an overview of the general plans of the AC WGs plans for ACIA follow-up; however it currently lacks the key expertise necessary to function as a leading body for all questions on the agenda.

The WG identified the need for a structure that could oversee the production of future assessments and provide scientific and other advice to the Arctic Council on climate related issues. Before such a body can be established the final detailed workplans for the AC WGs and related bodies would need to be considered. Any new structure should ensure involvement of relevant scientists for the issues to be addressed, indigenous people's representatives and national experts on adaptation and mitigation.

The WG was informed that CAFF had discussed ACIA follow-up at their meeting in Finland in June, but had only focussed on the CAFF content of the FP report relating to CBMP, seabirds, and flora; CAFF did not discuss the general issues of the FP and ACIA follow-up in general.

Canada proposed that a discussion paper on this issue be prepared for consideration by the FP at their meeting in early-September, which might be the basis for a subsequent proposal to the SAOs. The WG view was that this paper should not be prepared by AMAP. Canada therefore proposed that one or more countries might undertake this task and suggested that the incoming SAO Chair might be the appropriate person to prepare such a paper. Norway agreed to discuss this suggestion with the incoming SAO Chair.

John Calder reported on the process leading to, and the outcome of the Adaptation workshop held in Oslo on the two days prior to the AMAP WG meeting. He informed that the workshop had identified the need for a mechanism to address adaptation under the Arctic Council, but that no specific proposals had been made on this. In the ensuing discussions it

was noted that a definition of adaptation would be useful; the new IPCC definition might be used, but this might not cover all subjects.

8. AMAP National Implementation Plans (NIPs)

Simon Wilson reported that Canada had provided an updated NIP for 2006-2007, focussing on contaminants and based on the Canadian Northern Contaminants Programme. Inclusion of climate components in the Canadian NIP is pending decisions on Arctic climate monitoring, however ongoing activities under ArcticNet will form a large contribution to this. Russia had also reported on their NIP implementation during 2005, involving several studies conducted by Roshydromet (gathering data on contamination of soil and water from 34 stations; North Pole 2005 expedition; Svalbard 2005 expedition; and work in other arctic regions). Russia has so far only been able to deliver aggregated data to AMAP from its NIP activities and it is generally not possible to evaluate these data for comparability with other data sets; consequently aggregated data are difficult to use in AMAP assessments. Yuri Tsaturov reported that there are cost implications associated with delivery of non-aggregated data. The AMAP Secretariat will discuss with Russia to seek a solution to this problem. Other countries reported on the status of their NIPs as follows:

Denmark is working on a forward looking NIP (5- year perspective). The core monitoring of contaminants will be continued; Zackenberg will continue as a key station in the climate network and a new station will be constructed at Nuuk with similar objectives. The Nuuk station will offer possibilities for international cooperation. POPs monitoring will be moved from Nuuk to Disco Bay. Concerning climate observations, observations of ozone & UV will also be introduced on Greenland, and ongoing monitoring of the Greenland icesheet will be extended, including work on the salt and heat budgets in the Atlantic. Work on downscaling of climate models is also being undertaken.

Finland's AMAP NIP is based on ongoing implementation of long-term monitoring activities, thus there are no major changes from the previously reported NIP. Climate change components are still missing, but will be included, based partly on developing the Pallas station (jointly operated with Sweden) using the Zackenberg model.

Iceland has not yet updated its NIPs (an outstanding action from WG19), but this will be done soon. The work continues to focus on monitoring of contaminants in biota and air. At present there is no information on climate programmes. A new permanent lake monitoring station is being developed at Tingvallur Lake.

Norway was also still updating its NIP (an outstanding action from WG19). This will also be based on ongoing programmes that cover most of the AMAP programme. The Norwegian NIP has had an increase in the focus on screening for new substances, and considerable work in this area has been conducted in recent years. A national follow up of ACIA is under preparation.

Sweden informed that their previously reported AMAP NIP, based on ongoing programmes, is still relevant. The national monitoring programmes are currently being revised, and after this has been completed (early next year) the NIP may be updated. Screening activities for new chemicals are being extended. New expeditions in 2006 (SWEDARCTIC 2006) will cover several Arctic areas including Wrangel Island, parts of the Canadian Arctic and North Greenland. Specimen banking is an integrated component of the Swedish monitoring system.

The USA has not reported on their AMAP NIP for several years. The USA has continuing heavy involvement in climate related studies, however monitoring of contaminants in Arctic areas has declined. Atmospheric mercury monitoring at Barrow has ceased, and the 4-station network monitoring Arctic Haze is likely to close this year. Human health activities are, however, ongoing. A question was raised concerning how work in the Arctic by EPA, NOAA and other relevant agencies was coordinated – the response being that ‘this is more than difficult’. It was proposed that AMAP should call for an improvement in the situation regarding contaminants monitoring in Arctic USA.

The Netherlands reported on its preparation for IPY, and national funding decisions to support projects on climate issues and on bird health at Spitsbergen. Further details would be reported later.

The reporting of NIPS and update of the AMAP PD was discussed. It was suggested that reporting of NIPs could be simplified if all ongoing long-term activities that constituted part of the AMAP NIPs were documented in the AMAP PD (and updated when any changes occurred), such that NIPs reporting to the WG could be restricted to other activities. The WG agreed that the HoDs should ensure that the AMAP PD was updated – either by themselves or national scientists. The first update should be made prior to September 1. All funded IPY projects relevant to AMAP should also be added to the AMAP PD.

Since a number of stations are being set up using the Zackenberg model, Simon Wilson raised the possibility that the Zackenberg data handling systems might also be made available to other countries so that they could maintain their data from similar stations in a compatible manner, and save resources in developing new systems. Denmark agreed to look into this request.

Simon Wilson further informed on the status of data reporting to AMAP TDCs. Data from most countries are routinely reported to the atmospheric TDC at NILU. An updated data report from NILU had been prepared and would be circulated after the meeting. Some questions concerning reporting of POPs data from Canadian stations (and stations in Russia operated under bilateral cooperation) were raised, and AMAP Secretariat would work with the Canadian HoD to resolve these.

Reporting of data to the marine TDC at ICES remains a problem. Within Denmark, a project proposal is under consideration to develop an application allow Danish/Greenlandic data to be converted from spreadsheet format to the format required by ICES. Simon Wilson asked if this solution might be developed in a generic manner that might make it also useful for other countries with similar problems reporting data to ICES. The Danish HoD agreed to provide the project proposal to AMAP Secretariat for information and possible comment. The Norwegian HoD reported that all Norwegian marine monitoring contracts issued in connection with AMAP included the requirement that data were reported to the AMAP TDC. He requested an update on the Norwegian reporting to ICES and would follow-up on any data that had not been reported. The AMAP Secretariat informed that an updated status of data reported to ICES was under preparation and would be distributed as soon as possible after the meeting to all HoDs.

Denmark requested whether, as part of their work the AMAP expert groups could prepare an overview of permanent stations operating to monitor various parameters. The AMAP Secretariat informed that they had some such information for atmospheric monitoring stations, but that this was more difficult for other media. The AMAP Secretariat agreed to try to prepare an overview.

Arctic Portal

Simon Wilson reported on a recent meeting with Halldór Jóhannsson, lead of the ICEPORT group that are responsible for developing the Arctic Portal. During this meeting he had discussed the AMAP WG concerns regarding the development of the Arctic Portal (maintenance issues, extension of compatible existing systems rather than duplication, etc.), which were the basis for AMAPs request for a detailed feasibility study. He further conveyed the message that:

- the document on the Arctic Portal prepared for the last SAO meeting had not, in the view of AMAP, constituted the desired feasibility study, and
- concerns arising from the fact that there was a general lack of communication between ICEPORT and other interested parties, including AMAP, on the Arctic Portal development. This also included the lack of consultation prior to the submission of the (overambitious?) IPY proposal linked to the Arctic Portal.

Halldór Jóhannsson had acknowledged these points – part of the current situation was due to the fact that the work was proceeding without any funding. He informed that the ICEPORT group are currently working on a prototype that would be presented in July, for consideration at the next SOA meeting. Simon Wilson encouraged the ICEPORT group to seek comment on this prototype from others who had an interest in this development before it was released. Concerning maintenance, Halldór Jóhannsson had indicated that the University of Akureyri had offered to take on the role of maintaining the system (but not the content) for a five-year period – however it was pointed out that this was not a long-term commitment in terms of maintaining a legacy system, as 5-years would barely cover the period of the IPY. He had further promised improved consultation on the further development of the prototype system.

Denmark stressed the importance that SAOs were properly briefed about the AMAP concerns on the Arctic Portal. The AMAP Secretariat was requested to prepare a briefing document on this issue, and the follow-up discussions arising from the meeting between the ICEPORT and AMAP representatives, to be circulated to all HoDs prior to the next SAO meeting.

9. Cooperation with AC WGs

CAFF

The main cooperation with CAFF at present is the work aimed at establishing a joint monitoring programme. John Calder informed the WG about the workshop planned for May and reasons for its cancellation. This was primarily related to the lack of participation of relevant experts, despite the fact that both the AMAP and CAFF WGs had agreed to support this workshop; several experts were unable to attend due to the timing of the meeting and the fact that it was arranged at very short notice. He proposed that a new attempt be made to convene the workshop, including a new call for nominations of key experts to be involved. After nominations had been collected, the Secretariats would work directly with these individuals to identify a time and venue for the workshop that would allow most nominees to participate. It was noted that since it would probably not be possible to convene the workshop before October (due to the field season and vacation period), it was unlikely that the results of the workshop would be available for reporting to the Ministerial meeting in October.

Helgi Jensson (Iceland) stressed the need to identify ‘national experts’ rather than ‘AMAP’ or ‘CAFF’ experts.

Jan Idar Solbakken (Saami Council) asked whether and how indigenous peoples were being involved in this activity. The Secretariat informed that all PPs will receive the invitation to participate in the workshop, however funding to allow participation of indigenous experts would need to be raised through national agencies unless funds were provided to AMAP Secretariat for this purpose.

Canada suggested that one goal of the workshop might be to propose some pilot projects programme. Outi Mahonen (Finland) informed that CAFF had discussed proposing pilot projects on three key ‘species’ (Arctic Char, Polar bear, and Seabirds) – the CAFF management Board will meet 23-24 August 23-24 in Helsinki. The WG discussed this and agreed that establishing a few pilot project might have some short-term practical advantages, however, the overall objective of the CAFF programme is ‘biodiversity assessment’ and a joint AMAP-CAFF monitoring programme will need to take a broader approach than just focussing on a few species.

Denmark compliment Norway on the discussion paper that it had prepared for the cancelled workshop, and recommended that this paper be further developed if possible with input from other countries prior to the workshop

The WG supported the proposal to rearrange the cancelled workshop and asked the Chair and Secretariat to communicate further with CAFF to try to re-arrange the workshop.

PAME

Lars-Otto Reiersen reviewed the letter received from PAME containing a number of questions and requests for input from the other WGs on the implementation of ecosystem approach. The AMAP Secretariat had circulated a draft response to this request. With some minor adjustments, the WG asked the AMAP Secretariat to communicate this response to PAME. This included confirming that Hein Rune Skjoldal and Vladimir Pavlenko are the official Norwegian and Russian contact points for the Oil and Gas assessment, and confirming that Hein Rune should act as the AMAP liaison to PAME on matters concerning LMEs – although his immediate priority should be delivery of the OGA for which he is joint-lead.

Concerning the Arctic Marine Shipping Assessment (AMSA), PAME had previously requested nomination of experts from AMAP to participate in the assessment, but as reported to the AMAP HoDs meeting, PAME had been asked to provide a more detailed description of the type of expertise that they required. No further information had yet been received. Ross Macdonald – the contact point for the AMSA on mapping of shipping data - had been in touch with Simon Wilson concerning cooperation on GIS activities and this would be followed-up over the summer.

SDWG

The joint project on Human Health Risk Reduction in Russia, a follow-up to the PTS project, is the main collaborative activity between SDWG and AMAP. Russia informed that at least part of the 3.2 mill USD tagged for the project from Federal and regional budgets are available, and the SDWG Chair has reported that project development is on track.

ACIA follow-up is an area with considerable potential for close cooperation between AMAP and SDWG. This will be further developed following decisions at the Ministerial meeting in October.

The 'energy summit' proposed by the US and adopted as an SDWG project was discussed as a possible venue to launch the OGA overview report in 2007, however it was considered that this event focussed more on community energy supply than oil and gas resource development.

EPPR

Regarding the joint activity between AMAP and EPPR on development of the GIS mapping, the WG had agreed at its previous meeting that the Secretariat should continue this activity (based on minimal resources and as opportunities arose). With the exception of contacts between the AMAP Secretariat and some other groups involved in GIS, including some data exchange with the group involved in the Barents-Euro Arctic GIS initiative, little activity had taken place, due mainly to other work priorities. The WG agreed that the Secretariat should try to arrange a small workshop on this issue sometime during the latter part of the year or early in 2007.

ACAP

AMAP has been involved in all ACAP projects to date, and this has been advantageous for AMAP, providing access to additional detailed information on inventories of chemicals and their environmental levels, etc., for use in AMAP assessments.

The AMAP Secretariat is still a co-lead of the PCB project, which is now starting its third Phase; however the implementation of remediation projects is of less relevance to AMAP and so the WG agreed that the continued involvement of AMAP Secretariat in this project should be raised at the next ACAP Steering Group meeting.

AMAP Secretariat is also assisting Norway in the implementation of Phase I of the BFR project. The results show that, unlike the situation for the ACAP PCB, obsolete pesticides, and mercury projects, etc., Russia has used very little BFR compared to other Arctic countries. Future phases of the project will therefore need to focus not only on the situation in Russia. AMAP screening studies to identify new BFRs in the Arctic will be of particular relevance to this project.

10. International Cooperation

Stockholm Convention

Lars-Otto Reiersen reported on AMAP involvement in the arrangement of the 'Consultation Meeting on Arrangements for Effectiveness Evaluation (article 16) of the Stockholm Convention' in Bangkok, Thailand in May. This workshop was an important part of the preparation for the Stockholm Convention COP-2.

Russel Shearer informed the WG about the outcome of the Stockholm Convention COP-2, meeting in May 2006, including the establishment of a contact group to plan the Global POPs Monitoring Plan, which currently focuses on background (POPs) air monitoring and monitoring of POPs in human milk or blood, for the 12 POPs covered by the Stockholm Convention. AMAP is being used as a model for how regional cooperation on monitoring

might be organized, and how methodologies can be standardised, etc. A field testing component is currently ongoing, to establish monitoring in all the UNEP regions, with 'North-South' technical assistance/transfer being employed where possible. Funding available for the 2007 effectiveness evaluation (115K USD) and in the trust fund for 2007 (100+K USD) will be used to support activities in underdeveloped regions. An *ad hoc* technical committee (Technical Advisory Group) comprising 15 experts (3 from each of the 5 UNEP regions) was established by COP-2. The AMAP Secretariat has been requested to assist in an advisory role in preparing the work of this group. The Stockholm Convention COP-3 is due to be held in Senegal in May 2007.

Quasimeme & AMAP Human Health laboratory intercalibrations

Although AMAP have been a member of the Quasimeme Advisory Board for a number of years, the AMAP Secretariat has generally been unable to participate in their meetings due to conflicting meetings schedules. The AMAP Board has therefore recommended that Jarle Klungsoyr (Norway) take on this role for AMAP in the future, based on his involvement in both AMAP assessment activities and previous involvement in Quasimeme activities.

The AMAP human health laboratory intercalibration programme ('ring-tests') run by the laboratory in Quebec (Institut national de santé publique du Québec) continues to be successful, with laboratories from both Arctic and non-Arctic countries now participating. This programme is potentially very relevant to the Stockholm Convention Global POPs monitoring programme.

The AMAP WG was requested to ensure participation of relevant national laboratories in these laboratory QA activities.

GEOSS

A number of plans, tentative arrangements and action items are being generated by the GEO Secretariat office in Geneva; however there is currently no funding to implement any of these initiatives.

The Global GEOSS is largely centred around the satellite remote sensing community and at present – and relevance to AMAP may be more apparent in connection with climate monitoring systems.

An Arctic component of GEOSS is not currently planned; if this is desired it would be up to the Arctic Council to implement (and fund) this activity. The Arctic Council is an observer to the GEOSS process.

IPY

Lars-Otto Reiersen provided a short introduction of activities relating to IPY, including a meeting between the AMAP Board and a representative of the IPY Joint Steering Group (minutes of which had previously been distributed to the WG). Odd Rogne is currently working for the IPY Project Office and also part-time for the AMAP Secretariat and can potentially serve as a liaison between the two processes. Odd Rogne reiterated the importance of supporting funding for prioritized IPY projects, but the WG recognized that IPY project funding is mainly a responsibility for the national Research Councils and that AMAP has few if any direct possibilities for funding IPY activities.

Future cooperation with the IPY Project Office to ensure that AMAP activities are fully coordinated with (funded) IPY projects; that relevant data generated by IPY activities are reported to AMAP TDCs; and that AMAP have a close involvement in the IPY Conference planned for 2010, were identified as priority activities. Similarly, the AMAP WG supported the possible role, as discussed with the IPY representative, that AMAP might have in synthesising results from (AMAP-relevant) components of the IPY.

Concern was expressed that contaminant-related projects might not receive adequate funding in all countries, and that this was something AMAP should lobby for. Once funding decisions are known, during the latter part of 2006, the AMAP Secretariat should review the situation with respect to AMAP-relevant IPY projects to consider how best these might be coordinated with the ongoing AMAP monitoring activities, to maximise the results and benefits to both parties.

Finland informed the WG that AMAP had been recognized by CEP as a possible model for Antarctic monitoring and assessment activities. A non-paper by the UK had recommended establishment of links to AMAP. Under this French led initiative, Norway has been tasked to prepare a paper for CEP to consider in 2007.

ICARP II Follow-up

Lars-Otto Reiersen informed that the AMAP Secretariat had received an invitation to participate in the organization of the ICARP II follow-up workshop in Potsdam in November 2007, the main goal of which is to discuss how ICARP II plans might be implemented. This represents an opportunity for networking. The AMAP WG agreed that involvement of the AMAP Secretariat in this process could continue as long as this did not interfere with other work priorities during the period leading up to the Ministerial meeting. The WG asked that the Executive Secretary clarify whether the workshop organizers were requesting AMAP Secretariat to undertake a task that would require use of Secretariat resources, or simply to attend the workshop.

11. Special projects

Climate and Contaminants

Lars-Otto Reiersen reported that meetings would be arranged with relevant experts attending the DIOXIN 2006 conference in Oslo in August 2006 to develop proposals for projects on climate and contaminants.

Lena River Project

Lars-Otto Reiersen and Yuri Sychev (AMAP Secretariat) provided an update on the status of the Lena river project. They reviewed the history of the GEF proposal that had been connected to this project and which, after encouraging signals from UNEP had stalled in the GEF approval process. However, UNDP representatives had now shown an interest in this proposal, and it was therefore planned to regenerate the proposal and resubmit it through the UNDP GEF funding channels. At the same time UNDP had raised the possibility of expanding this from a 1 to 4 million USD project. The initial work on the project proposal had been sponsored by the Netherlands, and it was agreed that the Secretariat would prepare a report to the Netherlands to update them on the recent developments. Countries were requested to look into possibilities to identify matching funding and/or activities that might

be linked into the proposed project. A meeting between involved scientists from Russia, Canada, and the United States, possibly with linkages to related IPY projects, should be considered in 2007.

Arctic Observing Network

Lars-Otto Reiersen reported on developments in efforts to establish an integrated atmospheric monitoring station at Tiksi in eastern Siberia, as part of the plan to upgrade the circumpolar air monitoring network. The station would operate a 'climate monitoring system' similar to that operated at the Eureka station in Canada. Russia and United States have allocated funding for the station and several other Arctic countries (including Norway and Finland) had expressed interest in supporting this activity by covering costs associated with installing and operating equipment at the station. The WG discussed the possibility of moving the 'moth-balled' Canadian POPs sampling equipment from Pevek to Tiksi, to facilitate POPs monitoring at the site. In order to move the equipment this year (before September) the necessary paperwork from the Meteorological Service of Canada (the owners of the equipment currently on loan to Russia) would need to be obtained. Russel Shearer agreed to contact MSC to make the necessary arrangements. Lars-Otto Reiersen agreed to follow-up with Norway regarding their possible involvement in this activity. It was noted that a German monitoring site is operating close to Tiksi, and efforts should be made to coordinate activities with work at that station.

Franz Josef Land Project

Yuri Sychev provided information on the status of the Franz Josef Land Project, which had been developed with the support of the AMAP Secretariat. NEFCO and the Russian Federation have agreed to try to raise funding (each allocating 170K USD) to begin implementation of clean-up work on the most contaminated islands in August 2006; this work will include collection of samples for hydrocarbons and other measurements. Some last issues regarding access are being resolved. The WG welcomed this news. Two points made were whether it might be possible to supplement the activity with the deployment of passive samplers, that might provide evidence of the effectiveness of the operations, and the importance of ensuring that AMAP would have access to (detailed and unaggregated) data collected in the course of the project by including this requirement in the projects contractual arrangements.

12. AMAP report to the SAO and Ministerial meeting

It was agreed that a draft of the AMAP Report to the 2006 Ministerial meeting would be prepared and circulated to HoDs by 1 September 2006. This report would include, among other things, the findings of the AAHA; a progress report on the preparation of the OGA and any proposals for Key Findings and possibly Recommendations from the OGA (these to be further considered / approved at the next WG meeting), also including the proposed text for the Ministerial Declaration (see agenda item 5); a proposal concerning ACIA follow-up work by AMAP; and the updated list of proposed AMAP deliverables for the coming period – together with an associated (detailed) workplan for their preparation.

13. Next WG meeting

The next Working Group (WG21) meeting was scheduled for the last week of September, the proposed dates being 24-28 September or 25-26 September depending on the work to be accomplished. The main activities would be the preparation and approval of the OGA deliverables and the AMAP Report to the 2006 Ministerial meeting.

Canada and the United States offered to host the meeting. The venue for the meeting will be announced as soon as it is known.

The possibility to hold the following WG meeting (WG22) in connection with the ASSW meeting, which will take place in March 2007 in Hanover, USA, was raised, with possible dates for the AMAP meeting being March 12-14.

14. Election of Chair and Vice Chair

Helgi Jensson (Iceland) proposed that Chair and Vice-Chairs of the AMAP WG be re-elected for a further term, in order to see through the delivery of the ongoing assessments. Russel Shearer (Canada) seconded this proposal and it was unanimously agreed by the Working Group.

15. Any Other Business

No other business was raised.

16. Close of Meeting

John Calder thanked the Swedish delegation for hosting the 20th AMAP WG meeting and closed the meeting.

Annex 1. List of Participants: The 20th AMAP Working Group Meeting

Country	First name	Last name	Institute name	Mailing address	Direct phone	Direct fax	e-mail	Institute phone	Institute fax
Canada	Russel	Shearer	Northern Science and Contaminants Research Indian and Northern Affairs Canada	Rm. 658 10 Wellington St. Ottawa, Ontario K1A 0H4	+1 819 994 7484	+1 819 934 8980	shearerr@ainc-inac.gc.ca		+1 819 953 9066
Denmark	Jens C.	Hansen	University of Aarhus Dep. of Environmental and Occupational Medicine	Bldg. 260 Vennelyst Boulevard 6 DK-8000 Århus C.	+45 89 42 61 60	+45 89 42 61 99	jch@mil.au.dk	+45 89 42 61 57	+45 89 42 61 99
Denmark	Jesper	Christensen	National Environmental Research Institute	P.O.Box 358 DK-4000 Roskilde	+45 46 30 11 75	+ 45 46 30 12 14	jc@dmu.dk	+45 46 30 12 00	+ 45 46 30 12 14
Denmark	Morten S.	Olsen	Danish Environmental Protection Agency Ministry of Environment	Strandgade 29 DK-1401 Copenhagen K	+45 32 66 02 45	+45 32 66 02 01	mso@mst.dk	+45 32 66 01 00	+45 32 66 04 79
Faroe Islands	Jacob P.	Joensen	Faroese Food, Veterinary and Environmental Agency	Falkavegur 6 2 hædd FO-100 Tórshavn	+298 55 64 21	+298 35 64 01	jakuppj@hfs.fo	+298 356400	+298 35 64 01

Country	First name	Last name	Institute name	Mailing address	Direct phone	Direct fax	e-mail	Institute phone	Institute fax
Finland	John	Derome	Finnish Forest Research Institute (METLA) Rovaniemi Research Station	P.O.Box 16 FIN-96301 Rovaniemi	+358 10211 4552	+358 10211 4401	john.derome@metla.fi	+358 10211 4552	+358 10211 4401
Finland	Marjut	Nyman	Finnish Environment Institute (SYKE)	P.O. Box 140 FIN-00251 Helsinki	+358 9 40300 352	+358 9 40 300 390	marjut.nyman@ymparisto.fi	+358 9 403 00 408	+358 9 403 00 490
Finland	Outi	Mähönen	Ministry of the Environment Lapland Regional Environment Centre	P.O. Box 8060 FIN-96101 Rovaniemi	+358 40 512 7393	+358 16 310 340	outi.mahonen@ymparisto.fi	+358 16 329 4111	+358 16 310 340
Greenland	Anette	Hansen	Greenland Home Rule Government	P.O.Box 1614 DK-3900 Nuuk	+299 346709	+299 325286	anha@gh.gl	+299 346709	+299 325286
Iceland	Helgi	Jensson	Environment and Food Agency of Iceland	P.O. Box 8080 IS-128 Reykjavik	+354 591 2030	+354 591 2020	helgij@ust.is	+354 591 2000	+354 591 2020
Norway	Per	Døvle	Norwegian Pollution Control Authority	P.O.Box 8100 Dep. Strømsveien 96 N-0032 Oslo	+47 22 57 34 37	+47 22 67 67 06	per.dovle@sft.no	+47 22 57 34 00	+47 22 67 67 06
Norway	Gunnar	Futsæter	Norwegian Pollution Control Authority	P.O.Box 8100 Dep. Strømsveien 96 N-0032 Oslo	+47 22 57 34 49	+47 22 67 67 06	gunnar.futsater@sft.no	+47 22 57 34 00	+47 22 67 67 06
Norway	Tor	Johannessen	Norwegian Pollution Control Authority	P.O.Box 8100 Dep. Strømsveien 96 N-0032 Oslo	+47 22 57 34 87	+47 22 67 67 06	tor.johannessen@sft.no	+47 22 57 34 00	+47 22 67 67 06

Country	First name	Last name	Institute name	Mailing address	Direct phone	Direct fax	e-mail	Institute phone	Institute fax
Norway	Steinar	Sandøy	Directorate for Nature Management	Tungsletta 2 N-7485 Trondheim	+47 73 58 07 28	+47 73 58 05 01	Steinar.Sandoy@DIRNAT.NO	+47 73 58 05 00	+47 73 58 05 01
Norway	Brit Lisa	Skjeltvaale	Norwegian Institute for Water Research	P.O.Box 173 Kjelsås, 0411 OSLO			brit.skjeltvaale@niva.no	+47 22 18 51 00	+47 22 18 52 00
Russia	Yuri S.	Tsaturov	Russian Federal Service for Hydrometeorology and Environmental Monitoring	Novovagankovskiy Street 12 123995 Moscow	+ 7 495 252 0728	+ 7 495 252 24 29	tsaturov@mecom.ru	+7 095 252 24 29	+7 095 252 24 29
Sweden	Yngve	Brodin	Swedish Environmental Protection Agency	Blekhölmsterrassen 36 S-106 48 Stockholm	+46 8 698 13 06	+46 8 698 15 85	yngve.brodin@naturvardsverket.se	+46 8 698 1000	+46 8 698 1664
Sweden	Helena	Ödmark	Ministry for Foreign Affairs	S-10339 Stockholm	+46 8 405 3794	+46 8 723 1176	helena.odmark@foreign.ministry.se	+46 8 405 54 21	+46 8 723 1176
Sweden	Jonas	Rodhe	Swedish Environmental Protection Agency	Blekhölmsterrassen 36 S-106 48 Stockholm	+ 46 8 69 81 307	+46 8 698 15 85	jonas.rodhe@naturvardsverket.se	+46 8 698 1000	+46 8 698 1664
Sweden	Ida	Reuterswärd	Ministry of Sustainable Development Division for International Affairs	Vasagatan 8 - 10 SE-103 33 Stockholm	+46 8 405 2775	+46 8 10 38 07	ida.reutersward@sustainable.ministry.se		
Sweden	Cynthia	de Wit	Department of Applied Environmental Science (ITM) Stockholm University	S-106 91 Stockholm	+46 8 674 7180 Cell: +46 708 88 7180	+46 8 674 76 37	cynthia.de.wit@itm.su.se	+46 8 16 2000	+46 8 674 76 37

Country	First name	Last name	Institute name	Mailing address	Direct phone	Direct fax	e-mail	Institute phone	Institute fax
Sweden	Manuela	Notter	Swedish Environmental Protection Agency	Blekholmsterrassen 36 S-106 48 Stockholm	+46 8 698 10 61	+46 8 698 15 85	manuela.notter@naturvardsverket.se	+46 8 698 1000	+46 8 698 1664
USA	John A.	Calder	National Oceanic and Atmospheric Administration Arctic Research Program	1100 Wayne Avenue, Suite 1200 Silver Spring, MD 20910	+1 301 427 2348	+1 301 427 2082	john.calder@noaa.gov	+1 301 427 2348	+1 301 427 2082
USA	James	Tate	United States Department of the Interior	Office of the Secretary 1849 C Street, NW MS 6020 Washington, DC 20240	+1 202 208 4693	+1 202 208 2547	jim_tate@ios.doi.gov	+1 202 208 7351	+1 202 208 2547
Permanent Participants									
Arctic Council Indigenous Peoples' Secretariat	Alona	Yefimenko	Arctic Council Indigenous Peoples' Secretariat	Strandegade 91, 4th floor P.O. Box 2151 DK - 1016 Copenhagen K	+45 32 83 37 96	+45 32 83 37 91	ay@ghsdk.dk	+45 32 83 37 96	+45 32 83 37 91
Saami Council	Jan-Idar	Solbakken	Saami Council	Saami University N-9520 Guovdageaidnu	+47 78 48 77 29	+47 78 48 77 02	jan-idar.solbakken@samiskhs.no	+47 78 48 77 00	+47 78 48 77 02
Observer Organizations									
Association of World Reindeer Herders	Svein D.	Mathiesen	Association of World Reindeer Herders	P.O. Box 508 N-9255 Tromsø	+47 90 52 41 16 (Cell)		Svein.Mathiesen@veths.no	+47 77 65 64 00	+47 77 65 66 82
IASC (Will come on the meeting if possible)	Volker	Rachold	International Arctic Science Committee	P.O. Box 50003 Lilla Frescativaegan 4 104 05 Stockholm	+46 8 67 39 603	+46 8 15 20 57	volker.rachold@iasc.se or: iasc@iasc.se	+46 8 67 39 613	+46 8 15 20 57

Country	First name	Last name	Institute name	Mailing address	Direct phone	Direct fax	e-mail	Institute phone	Institute fax
UNEP GRID-Arendal	Hugo	Ahlenius	UNEP GRID-Arendal Stockholm Office	c/o SEI Box 2142 SE-10314 Stockholm	+46 8 412 1427/+46 733 467111	+46 8 723 0348	hugo.ahlenius@grida.no	+46 8 412 1427/+46 733 467111	+46 8 723 0348
Observer Countries									
The Netherlands	Frits	Steenhuisen	Arctic Centre University of Groningen	P.O.Box 716 NL-9700 AS Groningen	+31 503 63 60 56		f.steenhuisen@rug.nl	+31 503 63 68 34	
AMAP Expert Group Leads									
AMAP Expert Group Climate, UV and Ozone	John E.	Walsh	IARC University of Alaska, Fairbanks	930 Koyukuk Drive Fairbanks, AK 99775			jwalsh@iarc.uaf.edu	+1 907 474 2677	+1 907 474 2643
Azidification Overview Writer									
Environmental Editing Ltd	Carolyn	Symon	Environmental Editing Ltd	Arden House 6 High Street Tutbury Derbyshire DE13 9LP United Kingdom	+44 1283 814155		carolyn.symon@btinternet.com	+44 (0) 1283 814155	
AMAP Secretariat									
AMAP Secretariat	Lars-Otto	Reiersen	Arctic Monitoring and Assessment Programme Secretariat	P.O. Box 8100 Dep. N-0032 Oslo	+47 23 24 16 32	+47 22 67 67 06	lars-otto.reiersen@amap.no	+47 23 24 16 30	+47 22 67 67 06
AMAP Secretariat	Simon	Wilson	Arctic Monitoring and Assessment Programme Secretariat	P.O. Box 8100 Dep. N-0032 Oslo	+31 10 466 2989	+31 10 4662989	s.wilson@inter.nl.net	+47 23 24 16 30	+47 22 67 67 06
AMAP Secretariat	Jon Øyvind	Odland	Arctic Monitoring and Assessment Programme Secretariat	P.O. Box 8100 Dep. N-0032 Oslo	+47 23 24 16 34/75 58 41 66	+47 22 67 67 06 75 50 70 49	jon-oyvind.odland@amap.no/joodland@online.no	+47 23 24 16 30	+47 22 67 67 06

Country	First name	Last name	Institute name	Mailing address	Direct phone	Direct fax	e-mail	Institute phone	Institute fax
AMAP Secretariat	Odd	Rogne	Arctic Monitoring and Assessment Programme Secretariat	P.O. Box 8100 Dep. N-0032 Oslo	+47 23 24 16 34	+47 22 67 67 06	Odd.Rogne@amap.no or: oddr@hotmail.com	+47 23 24 16 30	+47 22 67 67 06
AMAP Secretariat	Yuri	Sychev	AMAP Secretariat c/o Polar Foundation	Seleznevskaya Str., 11A Moscow 113030	+7 495 692 7143/+47 23 24 1634	+7 495 692 7650/+47 22 67 6706	sychev@polarf.ru or: yuri.sychev@amap.no	+7 495 692 7143/+47 23 24 1634	+7 495 692 7650/+47 22 67 6706
AMAP Secretariat	Inger	Utne	Arctic Monitoring and Assessment Programme Secretariat	P.O. Box 8100 Dep. N-0032 Oslo	+ 47 23 24 16 35	+ 47 22 67 67 06	inger.utne@amap.no	+47 23 24 16 30	+47 22 67 67 06

Annex 2: List of Documents for the 20th AMAP Working Group Meeting

Ref.	Title
WG20/2/1	Draft Agenda and Time schedule for the 20th AMAP WG meeting, Stockholm, Sweden, 20 – 30 June, 2006
WG20/2/2	Draft List of Participants for the 20 th AMAP Working Group Meeting
WG20/3/1	List of Documents for the 20 th AMAP Working Group Meeting
WG20/3/2	Final Minutes from the AMAP Heads of Delegation Meeting, Copenhagen, Denmark, 5 – 6 April, 2006
WG20/3/3	List of AMAP Related Meetings - 2006
WG20/4/1	Science Report Chapters 1 and 2 – Edited for Layout
WG20/4/2	Science Report Chapters 3 – Edited for Layout
WG20/4/3	Science Report Chapters 4 – Edited for Layout
WG20/4/4	Science Report Chapters 5 – Edited for Layout
WG20/4/5	Science Report Chapters 6 – Edited for Layout
WG20/4/6	Science Report Chapters 7 – Edited for Layout
WG20/4/7	Science Report References – Edited for Layout
WG20/4/8	AAHA Executive Summary
WG20/4/9	Overview of review comments to AAHA Executive Summary
WG20/4/10	AAHA Overview Report
WG20/4/11	Overview of Reviewers Comments to AAHA Overview Report
WG20/6/1-1	Draft List of Nominated KNE and DCE of AMAP Expert Group on POPs, Version 10 May, 2006
WG20/6/1-2	Draft List of Nominated KNE and DCE of AMAP Expert Group on Radioactivity, Version 10 May, 2006
WG20/6/1-3	Draft List of Nominated KNE and DCE of AMAP Expert Group on Human Health, Version 10 May, 2006
WG20/6/1-4	Draft List of Nominated KNE and DCE of AMAP Expert Group on Mercury, Version 10 May, 2006
WG20/6/1-5	Draft List of Nominated KNE and DCE of AMAP Expert Group on Climate Change, Ozone and UV, Version 10 May, 2006
WG20/6/2	Minutes from the AMAP POPs workshop, Burlington, Canada, March 6-8, 2006
WG20/6/3	Invitation to Workshop on Statistical Analysis of Time Series Datasets on Mercury and Biota
WG20/6/4	AMAP Participation to IFCS V Forum Side-event

WG20/6/5	The AMAP Human Health Assessment Group, (HHAG). Priorities and Strategies.
WG20/6/6	AMAP Radio Expert Group Status Report
WG20/6/7	Draft Updated List of Deliverables
WG20/7/1	Carbon Cycle Workshop Proposal
WG20/7/2	Pan-Arctic Downscaling of Climate Model Output
WG20/7/3	Synthesis of Post-ACIA Model Projections
WG20/7/4	US State of Arctic Climate Report
WG20/7/5	IASC's Report to the AC Focal Point
WG/20/8/1	AMAP NIP Canada 06-07
WG/20/8/2	Progress in Implementation of the Russian NIP during 2005
WG20/9/1	AMAP CAFF Joint Monitoring Strategy – Norwegian Comments
WG/20/9/2	PAME: Request for AMAP Contribution to the Implementation of the Arctic Marine Strategic Plan (AMSP)
WG20/10/1	Proposals for AMAP Involvement in a Sustained Arctic Observing Network
WG20/10/2	Geo Committees and Work Groups – Membership List
WG20/10/3	Draft ICARP Workshop Plan
WG20/10/4	Quasimeme. Quest for Quality. EU Water Framework Directive
WG20/10/5	International Polar Year 2007/2008. Summary of ICES Initiative to Organize a Symposium “Polar Marine Ecosystems Changes” following IPY Activities

10. International cooperation
 - The Stockholm convention;
 - Report from the joint COP 2 meeting May 2-5 in Geneva.
 - QUASIMEME
 - AMAP policy for IPY projects
11. Special projects
12. Progress report to the SAO and Ministerial meeting in October, to be made by early September.
13. The AMAP WG meeting in August/September, venue and draft agenda.
14. Election of Chair and Vice-Chair
15. Any other Business
16. End of Meeting

Annex 4: List of Actions arising from the 20th AMAP WG meeting

Agenda item	Action	By	Due
4	WG to notify the Secretariat of any last minute factual errors or editorial corrections to the draft Overview report and its Executive Summary	HoDs	7 July
4	Deliver Executive Summary of the Overview report, including recommendations to the SAOs	AMAP Secretariat	mid-August.
4	Provide and confirm information on their numbers of copies of AAHA (science and overview) reports required	HoDs	July 7
5	Identify possible events in 2007 that might be used for 'release' of the OGA and its report(s) and take contact with the organizers	HoDs	asap
5	Report to national SAOs on situation with respect to OGA deliverables, and obtain a mandate to continue activities during the period between end-September (the deadline for input to the Ministerial meeting) and the Ministerial meeting.	HoDs	asap
5	To coordinate final national OGA review activities and and to make sure that this is done in cooperation with other national AC WG representatives (AMAP Chair to contact Chairs of other AC WGs to explain this process); and to compile responses for delivery by 15 August	HoDs Chair	asap / 15 August
5	Consider the proposed draft of suggested text for the Ministerial Declaration concerning the OGA and respond with any further comments	HoDs	7 July
5	Prepare an updated budget for the production of the OGA	AMAP Secretariat	asap

Agenda item	Action	By	Due
6	Prepare a prospectus for proposed update reports and other deliverables planned by the POPs expert groups, including a possible report on combined effects of climate and POPs	Cynthia de Wit	1 September
6	Draft a proposal on options to allow dual-publication of review articles as both AMAP reports and papers in the peer-reviewed scientific literature	AMAP Secretariat and Cynthia de Wit	asap
6	Invite WHO to attend HHAG meetings	AMAP Secretariat / HHAG	asap
6	Prepare a list of datasets that have been supplied for consideration at the workshop on trends of mercury in biota	AMAP Secretariat	asap after summer
6	Contact Sandy Steffen (MSC) to request that she act as AMAP liaison to coordinate as far as possible AMAP and external (Grenoble meeting) initiatives to produce update reports on MDEs	AMAP Secretariat / Canadian HoD	asap
6	Arrange, if feasible, for an AMAP contribution of information to a side-event at the IFCS V Forum	AMAP Secretariat	-
6	Update and distribute asap the list of experts to be invited to an Arctic Carbon Cycle Synthesis Workshop, and assist in preparation of this workshop; looking into the possibility to arrange one or more of the proposed workshops in connection with the ASSW 2007	AMAP Secretariat	asap
6	Assist in preparation of a workshop on Pan Arctic Downscaling of Climate Model Output (PAD); looking into the possibility to arrange one or more of the proposed workshops in connection with the ASSW 2007	AMAP Secretariat	-

Agenda item	Action	By	Due
6	Include proposals 1-6 in the activities proposed by the AMAP Climate Expert Group (CEG) in the AMAP workplan, in addition to item 7 which is already incorporated	AMAP Secretariat	asap
6	Communicate with Simon Wilson on plans to prepare an electronic index to the ACIA Science report PDF files	John Walsh	-
6	Develop an updated communication plan as a matter of priority	AMAP WG	asap
6	Call on all expert groups to provide draft texts on any issues of concern that should be included in the AMAP Report to Ministers. Any such inputs should reach the Secretariat by 1 September 2006	AMAP Secretariat	asap
7	Discuss with the incoming SAO Chair the suggestion to prepare a discussion paper on ACIA follow-up and functioning of the Focal Point, and the need for a structure that could oversee the production of future assessments and provide scientific and other advice to the Arctic Council on climate related issues.	Norway	asap
8	Deliver to the AMAP Secretariat an updated NIPs	Iceland, Norway	asap
8	Ensure that the AMAP PD is updated – with the first update made prior to September 1 (and eventually include all funded IPY projects that are relevant to AMAP)	HoDs	1 September
8	Look into the possibilities that the Zackenberg data handling systems might also be made available to other countries for use in maintaining data from similar stations in a compatible manner	Denmark	asap
8	Distribute an updated data report from the AMAP atmospheric TDC	AMAP Secretariat	asap
8	Look into and resolve any outstanding issues relating to the reporting of POPs data from	AMAP	asap

Agenda item	Action	By	Due
	Canadian stations (and stations in Russia operated under bilateral cooperation) to the AMAP atmospheric TDC	Secretariat / Canada	
8	Provide national project proposal to AMAP Secretariat and discuss possibilities to extend this to development of a generic application for use in reporting data to the AMAP marine TDC	Denmark	asap
8	AMAP Secretariat to provide updated overview of Norwegian data reported to the AMAP marine TDC, and Norway to follow-up to ensure reporting of any relevant unreported data. AMAP Secretariat to obtain and distribute to all countries an updated status of data reported to the AMAP marine TDC	AMAP Secretariat and Norway	asap
8	Attempt to prepare an overview of permanent stations operating to monitor various parameters (initially atmospheric monitoring stations)	AMAP Secretariat	asap
8	Prepare a briefing document for circulation to HoDs on the Arctic Portal pilot development, and follow-up discussions arising from the meeting between the ICEPORT and AMAP representatives	AMAP Secretariat	Before next SAO meeting
9	Communicate with CAFF to try to re-arrange the planned workshop on AMAP/CAFF coordinated monitoring	Chair and AMAP Secretariat	asap
9	Communicate AMAP response to PAME on their questions and requests	AMAP Secretariat	asap
9	Follow-up on contacts with AMSA representatives on mapping of shipping data and related cooperation on GIS activities	Simon Wilson	asap
9	Arrange a small workshop on GIS mapping cooperation during the latter part of the year	AMAP	-

Agenda item	Action	By	Due
	or early in 2007.	Secretariat	
9	Raise continued involvement of the AMAP Secretariat in the BFR project at the next ACAP Steering Group meeting	AMAP Secretariat	9 September
11	Prepare a report to the Netherlands to update them on the recent developments in the Lena River project	AMAP Secretariat	asap
11	Examine possibilities to identify matching funding and/or activities that might be linked into the proposed Lena River project	HoDs	asap
11	Contact MSC to make the necessary arrangements for possible re-deployment of Canadian POPs sampling equipment from Pevek to Tiksi.	Russel Shearer and	asap
11	Contact relevant institutes in Norway regarding their possible involvement in operating air monitoring equipment at Tiksi	Lars-Otto Reiersen	asap
12	Prepare and circulate to HoDs a draft of the AMAP Report to the 2006 Ministerial meeting	AMAP Secretariat	1 September

Annex 5. List of possible AMAP deliverables and timeline for their production during the coming years

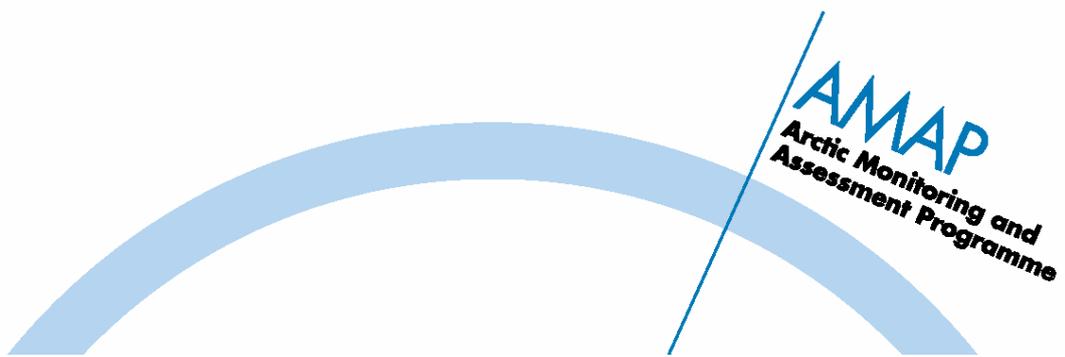
For	Delivery date	Product	Expert group	Notes
External Groups (UNEP, UN ECE)				
UN ECE Metals Protocol – effectiveness review 2007	2006	Time trend data products (Hg and other metals)	Hg (metals)	Statisticians and key time series data providers
UNEP Governing Council – Hg review status – Feb 2007	2006	Time trend data products (Hg and other metals)	“	ACAP contact with UNEP on Hg and BFRs?
“	“	Human health and Hg effects update	HHAG	
UNEP Stockholm Convention review of (regional) monitoring data - 2009	2008	Time trend data products POPs	POPs expert group	
UN ECE POPs Protocol – effectiveness review 2009	2008	Time trend data products POPs	“	
UN ECE POPs Protocol – sufficiency review 2009	2008	Scientific review of information on BFRs, PFOS/A, etc	“	
“	“	Human health and POPs effects update?	HHAG	
Arctic Council				
AC 2006	2006	AMAP Assessment of Acidification and Arctic Haze	AAH assessment group	
AC 2006	2006	Progress report on status, and possible presentation of key findings of AC Assessment of Oil and Gas Activities in the Arctic	OG assessment group	
AC 2006	2006	Short (<5 page) update message with new information/ results on mercury; contaminants and human health; climate and contaminants pathways; need to support research; progress in decommissioning of submarines.	Hg, HHAG, Radioactivity, Secretariat	No such products delivered to date

For	Delivery date	Product	Expert group	Notes
AC 2006	Spring 2006	Proposals for AMAP activities related to ACIA follow-up	AMAP climate expert group	
AC 2006	2006	Proposals for AC WGs activities related to ACIA follow-up	Focal Point (group on ACIA follow-up)	
AC 2006	2006	Arctic Portal Pilot Development		AMAP observations
AC 2007	2007	Proposals for joint AMAP/CAFF monitoring sites (for pilot implementation of harmonized monitoring)	Relevant AMAP expert groups (together with CAFF CBMP group)	
AC 2007	2007	MDE update report/review	Atmospheric Hg group	Meeting in connection with Hg conference, Wisconsin, USA
AC 2007	2007	AC Assessment of Oil and Gas Activities in the Arctic	OG assessment group	
AC 2007 (see above, UNEP)	“	Human health and Hg effects update	HHAG	
AC 2008	2008	Updated time trend assessment for POPs and review articles on new contaminants	POPs expert group	
AC 2008	2006/2007	Report on AMAP/CAFF pilot study(ies)	POPs/Hg/metals expert groups and/or CC expert group?	
AC 2008	2006/2007	Comprehensive update assessment on effects of contaminants on human health of Arctic populations	HHAG	Related to the proposal to convene an IPY human health symposium in Denmark in August 2008
AC 2010	2009	Comprehensive update assessment on mercury	Hg expert group	
AC 2010/2012	2009/2011?	Update assessment on climate and contaminants?	POPs/Hg/metals expert groups and/or CC expert group?	

For	Delivery date	Product	Expert group	Notes
AC 2012/2014	2011/2013?	Comprehensive update assessment on Arctic climate change (impacts, including ozone and UV)?	Climate assessment group	
AMAP WG				
AMAP 2007	2007	Updated version of the AMAP Trends & Effects Programme	All AMAP expert groups	
AMAP 2008?	2006-2007?	Assessment of the Arctic Carbon Cycle	Sub-group of the AMAP climate expert group?	Related to workshop to be arranged in February 2007; workshop product is not an AMAP approved report but could provide the basis for an AMAP product

Annex 6: Updated overview of NIP reporting

	NIP phase 2 (1998-2002)	Progress in implementation of work during 2002/2003	NIP 2004+	Progress in implementation of work during 2005	NIP 2006+	Recent update of PD entries
Canada	√	national (NCP) reports	√		√ (updated for 2006-2007)	
Denmark/Faroes/ Greenland	√	√			Report on current Danish climate/UV monitoring projects received	√
Finland	√	national report	√		2004+ NIP updated for climate/UV components	
Iceland	√		√			
Norway	√					
Russia	√	√		√		
Sweden	√		√		√ (2004+ NIP still applies)	√
USA	√					



ISBN 82-7971-047-7