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Minutes of the 28th Meeting of the AMAP Working Group
Whitehorse, Canada; 16-18 September 2014

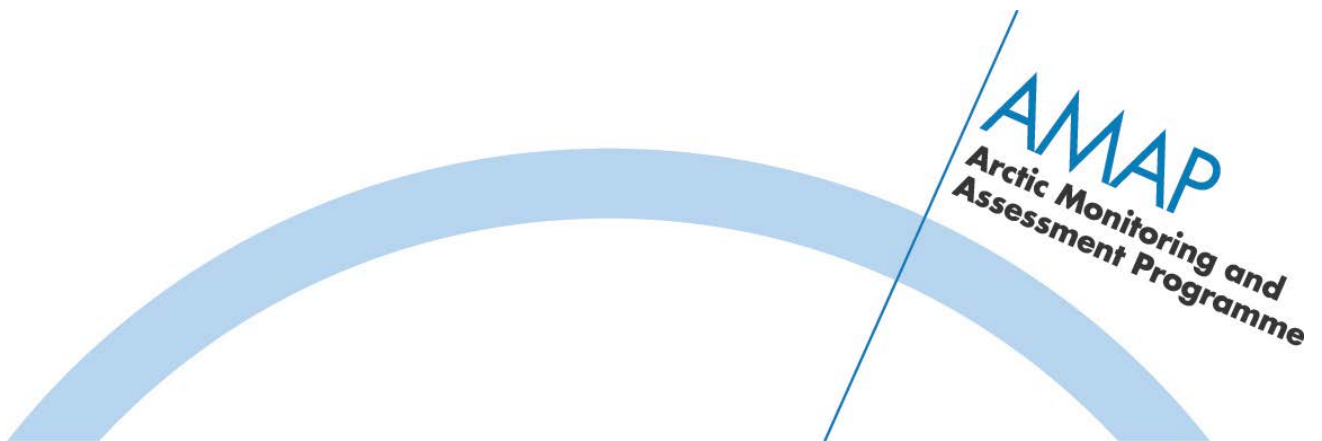


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Minutes of the 28th Meeting of the AMAP Working Group, Whitehorse, Canada; 16-18 September 2014

Opening of AMAP and PAME WG meetings

Morten Olsen (Chair of the AMAP WG) welcomed participants to the joint opening of the AMAP and PAME WG meetings and invited Betsy Jackson a representative of the First Nations to give a traditional blessing to the meeting. He expressed gratitude to the First Nations for allowing the groups to meet on their traditional lands.

Betsy Jackson delivered the blessing and wished the meeting success.

Hugi Olafsson (Chair of the PAME WG) also welcomed participants and thanked the people of Whitehorse, Government of Yukon and organizers of the meeting for the opportunity to hold the joint AMPA and PAME WG meeting in Whitehorse.

Bob van Dijken (Arctic Athabaskan Council and Council for Yukon First Nations) on behalf of Grand Chief Ruth Massie of the CYFN and AAC welcomed participants to Whitehorse and repeated the thanks to the First Nations for hosting this meeting on their territories. He emphasised the importance of the work of the Arctic Council groups in dealing with issues that affect the daily lives of the First nations and northern communities, such as land claims and management of development. He also referred to the benefit of the work of the groups to northern residents, the use of AMAP assessments and role of the Permanent Participants in the work to establish and support the Stockholm Convention and the engagement of AAC in the work of AMAP. AAC have a particular interest in ensuring that the Arctic Council meet their commitments to reduce emissions of short-lived climate forcers and look forward to seeing concrete and transparent actions on the part of the Arctic Council in this regard.

Susan Harper (Chair of the Senior Arctic Officials) offered her thanks to the First Nations, the City of Whitehorse and the Government of Yukon for hosting the meeting and thanked both WG Chairs for the opportunity to participate in and observe the meetings. She also welcomed the arrangement of the meeting in a location that allowed Permanent Participants to participate (with representatives present from five of the six PPs). She referred to the desire to avoid duplication of work with other organizations such as IMO and to coordinate activities of groups such as the AMAP SLCF expert groups and the AC task force (TFBCM); the joint session provides an opportunity to handle such issues effectively, especially with the involvement also of representatives from SDWG. The focus for the Canadian Chairmanship during the remaining 7-8 months of their Chairmanship will be the deliverables for the Ministerial meeting and facilitating a smooth hand-over to the USA.

The Chair of the AMAP WG concluded the joint opening, wishing both groups fruitful meetings and looking forward to the joint meeting on Wednesday; he thanked Susan Harper for her contribution to the opening session and for making time to attend the WG meetings.

1. Opening of the AMAP WG28 meeting, approval of agenda

Morten Olsen (Chair of the AMAP WG) opened the meeting, welcoming the fact that the Chair of the Senior Arctic Officials (Susan Harper) would attend parts of the meeting. He highlighted the priorities for the AMAP WG meeting, in particular the issues relating to AMAP deliverables for the 2015 AC Ministerial meeting.

Practical arrangements and the plan for the meeting were discussed. These included arrangements to allow experts unable to be present to call-in for parts of the meeting via conference call services, thus requiring strict time keeping for these agenda items.

The agenda for the meeting (Annex 1) was adopted with agreement on a request from Russia to try to discuss agenda item 11b earlier in the schedule. The AMAP WG Chair thanked the Secretariat for their work in preparing documents for the meeting, in particular in the light of the several expert group meetings that had been held just prior to the WG meeting. The list of documents for the meeting is attached at Annex 2.

2. Welcome statement and Practical information

Russel Shearer (Canadian HoD and AMAP Vice-Chair) welcomed the participants to Whitehorse and provided practical information concerning the meeting. A list of participants is attached at Annex 3.

3. Follow-up Actions

Lars-Otto Reiersen (AMAP Executive Secretary) reviewed actions from previous AMAP WG and HoDs meetings and confirmed that most actions had been fulfilled; some actions would be returned to during the course of the meeting under respective agenda items.

The WG Chair referred to the request received from the AC concerning WG input to the SAO meeting in Yellowknife in October. He also noted that AMAP proposals for revisions to the AMAP Rules of Procedure/Operating Guidelines had been delivered to the SAOs for their approval.

4. Activities with deliverables to the AC Ministerial meeting in April 2015

The preparation of deliverables for the 2015 AC Ministerial meeting was an identified priority of the WG meeting. Under agenda item 4, progress reports and preliminary findings were provided by leads of the expert groups responsible for these parts of the work, including leads attending the meeting and those participating via conference call dial-in facilities.

4a. The SLCF reports on Methane, BC & Ozone

Marjorie Shepherd (Canada) presented the progress report of the AMAP Expert Group on Short Lived Climate Forcers (Methane, document WG28/4a/3) and the group's preliminary Key Findings. She explained that the Expert Group had been charged to provide the scientific foundation to support potential methane mitigation options by the Arctic nations. The overall question driving the assessment work had been "What is the potential benefit, in terms of reduced Arctic warming, of methane mitigation by Arctic nations, and how might this be offset by potential increases in natural methane emissions from Arctic sources".

In the Key Findings it was concluded that limitations in understanding of carbon stocks and processes constrain evaluations of current risks and potential future changes. The most important greenhouse gas is CO₂ and focus on mitigating CO₂ must be maintained to avoid significant climate feedbacks from Arctic processes that affect the total global climate system.

The assessment report will also contain proposals for follow-up activities for the Expert Group and recommendations for long-term activities for AMAP.

The two AMAP Expert Groups on Short Lived Climate Forcers (Methane; Black Carbon and Tropospheric Ozone) have achieved general coordination of their approaches through common members, anthropogenic emissions information (GAINS/ECLIPSE v4a and v5) and to some degree, commonalities in climate modelling platforms.

In the discussion following the presentation, Tom Armstrong (USA) pointed out that there is a paucity of observations and that there is a need for more information. He also pointed out that the amount of warming from methane is small compared with CO₂, and that focus should continue to be on CO₂.

Morten Olsen agreed on the latter point, stating that this was in agreement with IPCC statements and added that the relative role of anthropogenic methane could decrease. He believed that the findings would be important for the AC Task Force on Black Carbon and Methane (TFCBM).

Russel Shearer thanked Marjorie Shepherd for the presentation and encouraged the Expert Group to identify future work. He believed that there is still work to be done, and this should be reflected in AMAP's work plan for 2015-2017.

Marjorie Shepherd agreed to do this at the coming meeting of the EG, noting that climate modelling and sustaining the monitoring would be the most important things to do.

Trish Quinn (USA) presented the progress report of the AMAP Expert Group on Short Lived Climate Forcers (Black Carbon and Tropospheric Ozone, document WG28/4a/5) and the group's Initial Findings. She emphasized that diagnosing small forcings and corresponding climate responses is a substantial challenge. She discussed emission inventories and noted that differences between available global emission inventories increase toward the Arctic. In this context she also mentioned that flaring emissions are potentially very large in the Arctic, but the uncertainties for this source are high.

On the timelines for the work, Trish Quinn pointed out that the EG will meet in Toronto in October 2014 and finalize the work.

The two Expert Groups were requested to provide the Secretariat with suggestions for work to be undertaken over the near term (1-2 years) and longer term (4+ years) which would ensure that AMAP and Arctic Council continue to have the scientific perspective required to understand the role of SLCFs on Arctic climate. The AMAP HoDs will consider what work should be undertaken, in context of possible reporting under the proposed Framework, the feasibility of an integrated SCLF modelling analysis, and ongoing parallel work by each Expert Group.

It was agreed that the WG would submit any comments to the draft SLCF key findings documents (WG28/4a/3 and WG28/4a/5) in writing to the Secretariat by Friday 3 October.

Morten Olsen introduced document WG 28/4a/4 which was a letter written to the co-chairs of the AC TFBCM on AMAP's experiences on reporting SLCF data. The letter expressed general concern on the proposed reporting sections outlined in the Framework document developed by the TF and in particular on the overlap with AMAP work. The proposed reporting was meant to be in agreement with CLRTAP and UNFCCC, but the details were unclear. Several countries supported this concern, expressing the view that AMAP should be the lead for such activities.

Morten Olsen concluded that there were many details in the reporting part of the Framework that need clarification and that AMAP HoDs should discuss this with the national representatives in the TF.

Jan Rene Larsen (AMAP Secretariat) explained that for the coming meeting of the TFCBM, the TF had asked for "an update from AMAPs expert group on black carbon and methane". The WG agreed that

the initial findings that had been presented could be brought forward to the TF as initial findings, not to be cited or circulated.

4b. The Human health assessment

Progress in the work of the AMAP human health assessment group (HHAG) was presented by Shawn Donaldson (co-Chair of the HHAG) (document WG28/4b/1). He also referred to the contribution prepared by the HHAG for the ongoing effectiveness evaluation under the Stockholm Convention on Arctic bio-monitoring results that was based mainly on results presented in the 2009 assessment.

The presentation covered the background to the ongoing update assessment, the preliminary key findings and the plan for finalizing the assessment. The assessment addresses the impacts of chemicals on people living in the Arctic with a focus on what has changed since the 2009 assessment, presenting new information (on bio-monitoring and health effects and risk communication, etc.) and presents conclusions for future human health work. The report under production comprises 7 chapters, an introduction and chapters on bio-monitoring; effects studies; risk assessment and future needs in Arctic; adaptation strategies; risk communication; and conclusions and knowledge gaps. Following the completion of a national review, an author's meeting was held in Anchorage (17-21 August) and work is now directed at developing chapters for external peer review during October 2014. The leads and lead authors are planning to meet in December with the aim to hand over the assessment at the end of the year for publication work at the start of 2015. In addition to the delivery of the human health findings as part of a policy-makers summary document for the AC Ministerial in April 2015, it is planned to launch the human health scientific assessment at the 16th International Congress on Circumpolar Health, in Oulu in Finland 8-12 June 2015. At their meeting in Anchorage, the HHAG reviewed the draft key findings of their assessment (document WG28/4b/2) and, subject to any changes associated with the results of the peer review, consider this document a good basis for the development of the policy-makers summary product for the 2015 Ministerial meeting.

In the ensuing discussions the following issues were raised:

Questions concerning the availability of Russian data were raised and HHAG representatives on the call-in noted that additional data from Russia had just been received. The Secretariat would also contact Jon Odland (co-Chair of the HHAG) for an update on the status of results of new analyses performed on Russian samples as part of the current assessment work.

It was noted that the draft assessment seemed to make little reference to the AMAP coordinated ArcRisk project (concerned with Impacts on health in the Arctic and Europe owing to climate-induced changes in contaminant cycling) that was completed in early 2014. The HHAG co-Chair agreed to discuss making greater use of the ArcRisk results with the authors of relevant chapters, with Janet Pawlak identified as the Secretariat contact person on this matter.

With respect to the contribution prepared by the HHAG as input to the Stockholm Convention effectiveness review, the Finnish delegation noted the need to be mindful of the timeframe on which reductions in exposure to chemicals in consumer products (e.g. brominated flame retardants and PFOS) might be expected, and cautioned against over-interpreting results in terms of direct response to recently adopted measures to control such contaminants.

The HHAG co-Chair (Shawn Donaldson) agreed to follow-up on all of the comments received.

Russel Shearer supported the timeline for completion of the assessment and encouraged the assessment leads to work closely with the science writer involved in the preparation of the policy-makers summary document. The HHAG co-Chairs agreed to be the point of contact for this engagement with the science writer. Canada also stressed the need to incorporate strategic planning concerning future development of the human health work into the AMAP work-plan for 2015-2017,

and to coordinate this with similar input from the POPs expert group. It was noted that addressing the human health threats from mercury should constitute an important part of the future planned work in the light of the agreement of the Minamata Convention. Finally, the Canadian delegation noted the sad passing of Eric Dewailly who had been a champion of the AMAP human health group for many years; Shawn Donaldson informed the WG of the plan to dedicate this human health assessment to Eric Dewailly.

Tom Armstrong (USA HoD) congratulated Shawn Donaldson on the leadership of the assessment and with reference to the strategic planning noted that a US report on climate change and human health was being prepared for release in 2016.

The need to connect the human health work to the AACA was stressed by Marianne Kroglund (Norwegian HoD), and Mikala Klint (Danish HoD) also referred to the need to coordinate the strategic aspects of the work of the HHAG with that of the POPs expert group.

It was agreed that the WG would submit any comments to the draft Human health key findings document (WG28/4b/2) in writing to the Secretariat by Friday 3 October.

4c. The Radioactivity assessment

Lars-Otto Reiersen reported on progress in the preparation of the update assessment of radioactivity in the Arctic, as described in document WG28/4c/1. He had participated in a small meeting of members of the AMAP radioactivity expert group held on September 7 in conjunction with a recent International Conference on Radioecology and Environmental Radioactivity (Barcelona, Spain). During this meeting the group reviewed a revised draft of the assessment report that addressed comments received following a national review performed over the summer. Progress on the preparation of the report was generally good, however, a few issues remained to be addressed prior to the international peer review planned for October. A lack of any contribution from the United States was noted.

Possible peer reviewers had been identified, but additional nominations were required. During the meeting in Barcelona, the group had prepared an input on suggested key findings for possible inclusion in the policy-makers summary deliverable for the 2015 Ministerial meeting (document WG28/4c/2) however this should be considered very provisional and would be updated later on, when results of the peer review process were available.

Yuri Tsaturov (Russia HoD and AMAP Vice-Chair), who also attended the meeting, informed that new information from joint Russian-Norwegian expeditions was now available, and remarked that all countries needed to review and update their information on potential sources of radioactive contamination to the Arctic.

In the discussions several delegations agreed to ensure that input still required (as listed in document WG28/4c/1) would be provided. Canada noted that in addition to reporting on decreasing levels, it was important that the assessment also discuss the implications of this on the threat level to individuals as part of the interpretation in the assessment.

It was agreed that the WG would submit any comments to the draft Radioactivity key findings document (WG28/4c/2) in writing to the Secretariat by Friday 3 October.

4d. The POPs assessment

Derek Muir (co-Chair of the AMAP POPs expert group) presented the plans for the continuing work on the POPs update assessment (document WG28/4d/1) comprising the finalisation of work on POPs temporal trends (during 2014) and work (during 2015-2016) on the assessment components concerned with emerging chemicals of Arctic concern, biological effects of POPs, and climate change

and POPs. The timeline for the work had been agreed at a meeting of the POPS expert group held in Basel, Switzerland in May 2014 in conjunction with the SETAC international conference. Outline tables of contents and leads for various parts of the work had been identified for many but not all parts of the work.

He informed the WG that a scientific secretary (Jennifer Balmer, USA) had been engaged to assist the co-Chairs in the preparation of the assessment of emerging chemicals of Arctic concern; initial contributions for this part of the assessment are due at the end of September 2014 and these will be further developed during 2015. This aspect of the work is strongly connected with the provision of information to the Stockholm Convention POPS Review Committee.

Work on temporal trends of (Stockholm Convention) POPs has been performed during 2013-2014 and a technical report on relevant AMAP results has been prepared (AMAP Technical report No. 7). The technical report, covering temporal trends of POPs in air, biota, and also relevant human bio-monitoring results) was delivered to the groups responsible for preparing the Stockholm Convention effectiveness evaluation due in 2015. The technical report is being expanded and further developed into the full AMAP POPs assessment temporal trends component; the intention is to complete this part of the assessment work by the end of the year.

Delegates were encouraged to continue to provide the managerial and financial support that will be necessary to ensure the engagement of experts required to complete the assessment work.

Simon Wilson (AMAP Secretariat) introduced the draft key findings on POPs proposed for inclusion in the policy-makers summary for the 2015 Ministerial meeting (document WG28/4d/2). Because several parts of the POPS assessment are still ongoing, the draft key findings are restricted to those concerning POPs temporal trends, based on the work completed to prepare the technical report for the Stockholm Convention. He noted that the POPS expert group had yet to confirm whether or not the draft texts concerning 'controlling chemicals in the future' were appropriate for inclusion in the policy-makers summary.

Discussing the presentation, Eva Krueemmel (ICC) requested that the traditional/local knowledge connections to the work be reflected in the POPs assessment, and reiterated the importance to better link the work of the POPs and Human Health expert groups in their respective assessments.

Timo Seppälä (Finland) noted the importance of the POPs assessment to the work of the Stockholm Convention POPs Review Committee, of which he is a member. He noted the challenges associated with managing new chemicals, many of which may not qualify as 'POPs' according to traditional criteria under the Conventions. Waste management is becoming an increasingly important aspect for POPs associated with consumer products. He further noted that references to 'widespread restrictions in use' may need to be checked and qualified, as a number of countries had not yet adopted restrictions agreed under the Stockholm Convention. Both the POPs and human health assessments need to take this into consideration when attributing trends to results of specific actions.

The POPs expert group co-Chair agreed, and noted that the findings of the POPs assessment essentially relate to the legacy POPs that have been subject to controls for many years, often introduced at the national level long before the agreement of the Stockholm Convention.

Mikala Klint noted that the assessment should also take account of the Strategic Approach to International Chemicals Management (SAICM) when discussing chemicals management aspects.

Russel Shearer indicated that although the subject of assessment work still to be completed, the policy-makers summary should refer to emerging chemicals issues where appropriate, as well as trends in legacy POPs (the subject of the completed assessment work), and supported the need to refer to the use of TLK in the POPs assessment work.

It was agreed that the WG would submit any comments to the draft POPs key findings document (WG28/4d/2) in writing to the Secretariat by Friday 3 October.

4e. Assessment report production

Simon Wilson introduced document WG28/4e/1 presenting an overview of the status and plans for production of five scientific/technical assessment reports, two overview reports and two-policy-makers summary documents over the coming period, the latter for delivery at the Ministerial meeting in 2015. The document addresses the work involved and timelines for producing these reports, including the Secretariat responsibilities in relation to this work. He informed that two science writers had been identified to participate in this work. He indicated that, with the exception of the policy-makers summaries that have clear priority, the exact scheduling of the report production work would depend on the order in which the experts groups complete their planned work, and likely reflect the order in which assessments are handed-over for editing.

The WG welcomed this overview and recognized that this represented a considerable amount of work to be undertaken over the next year. Canada informed that if additional science writing assistance was required they currently have a writer under contract who could also be involved and agreed to supply a name and contact information.

Concerning preparation of the policy-makers summary documents, it was agreed that Simon Wilson would compile written comments from the WG (due within two weeks) to the draft key findings documents prepared by the various assessment groups (see sections 4a-4d). These comments, together with any additional input from the expert groups, would be introduced into a consolidated 'pre-draft' of proposed texts that would be conveyed to the science-writers in mid-October. These 'pre-drafts' would constitute the basis for work by the science writers during October/November to prepare first drafts of the policy-makers summary documents. The first drafts would be circulated to HoDs and PPs by 1 December for comment before Christmas, following which updated drafts would be prepared for approval by AMAP HoDs/PPs at their meeting in February 2015. Possible opportunities for face-to-face meetings between science-writers and lead/key experts engaged in the various assessments in connection with meetings that will take place later in the year would be investigated, in addition to setting up teleconferences between the relevant parties.

The Secretariat (Simon Wilson) would follow-up on the plan with science-writers, the technical/linguistic editor, and graphical production/layout consultants, and with other members of the Secretariat to coordinate the production work.

4f. UAS recommendations for Operating Guidelines

Cliff Sweatte (USA) presented the status of the AMAP Unmanned Aircraft Systems (UAS) Expert Group and the group's work on the 'Handbook for UAS Science Operators' (document WG28/4f/2) and on the Arctic airspace access whitepaper: "Implementing Scientific Data Collection across the Arctic Oceanic Region Utilizing Unmanned Aircraft Systems (UAS)" (document WG28/4f/3).

A key concept in the regulation of aviation is the flight information region (FIR). The first step towards a Pan-Arctic FIR agreement for UAS is in establishing an understanding between the Arctic States administrating the airspace by defining the minimum safety and operational requirements for scientific UAS operations. This step would be coordinated via the Civil Aviation Authority (CAA) and Air Navigation Service Provider (ANSP) of each Arctic Council member state.

The group believes that there is a need for international collaboration and coordination on field activities, sensor development, inter-calibration and data analysis to obtain consistent datasets. The group recommends an open data policy for scientific datasets collected by UAS in the Arctic by adoption of the following points:

- Observational data, including metadata, should be fully, freely and openly available on the shortest feasible timescale.
- Long-term accessibility and preservation should be ensured by submission of data and associated metadata to relevant data centers.

The group also believes that AMAP shall take a coordinating role facilitating and encouraging multilateral field inter-comparison and calibration activities.

Morten Olsen thanked the co-chairs of the EG, Cliff Sweatte and Rune Stovold, for the excellent work, and wanted to know how AMAP could bring the work to the relevant authorities. He also wanted to know how far aviation authorities are in the formal discussions about this subject.

Cliff Sweatte responded that the CAAs are the granting authorities and that the document would have to go back to these. He also said that the International Civil Aviation Organisation (ICAO) is still years away from finalizing their work on this.

Morten Olsen asked the two co-chairs to provide a draft letter to the HoDs and a list of contact persons to whom the letter should be sent in the relevant regulatory authorities in the individual countries.

Bob Van Dijken (Arctic Athabaskan Council) noted that the plans to make the whitepaper a legally binding document could be of concern for indigenous and first nation people and that the Aboriginal entities and land claim bodies may need to be taken into account in any agreement on UAS, because there are considerations with regards to data collection and ownership, etc.

Tom Armstrong proposed that the aim of AMAP should be to establish an informal white paper and to let others decide if there is a need for a legally binding document. He believed that such a discussion is outside the authority of AMAP.

Russel Shearer noted that the EPPR uses the UAS EG work for a proposal on search-and-rescue. He further believed that the work could be of relevance to the AC Scientific Coordination TF and that the TF should be informed about this.

Morten Olsen concluded that there is agreement to take the data sharing part out of the whitepaper. He also concluded that by now the whitepaper will have status of an informal agreement to be seen as guiding principles for the use of UAS for scientific purposes in the Arctic. The SAOs will not receive the document by now, but the AMAP HoDs will discuss the whitepaper again at the next HoDs meeting. By then there will hopefully be more information about how many countries want to establish a treaty.

5. AACA – status and challenges

J Michael Kuperberg (AACA Integration Team co-chair) presented the status of the AACA project including the draft outline for the pan-Arctic report (documents WG 28/5/1 and WG 28/5/2). He underlined the goal of the project as being to inform adaptation actions and deliver knowledge that policy-makers need for taking actions, and not to produce a list of policy- or adaptation-measures.

He informed about the status of the project in each of the three pilot regions. All three regions have appointed co-chairs, and the Bering-Chukchi-Beaufort (BCB) and Barents regions have nominated most of their authors. The Baffin Bay/Davis Strait region is still in the process of discussing their regional report outline and nominating authors.

All three regional teams have arranged, or will in the near future arrange workshop with authors to discuss the way forward.

The INT co-chair informed that the three regions have flexibility in their approach to the work and thus the regional report outlines differ somewhat from each other. In particular, the thinking regarding how to address future socio-economic scenarios has given rise to considerable discussion.

Mikala Klint explained that socio-economic scenarios are of particular interest, and therefore supported the regional flexibility regarding how to include socio-economic issues in the reports. Canada (Russel Shearer) underlined that AACA is a multi-themed approach which is not an easy initiative. He emphasised that future long-term socio-economic thinking is difficult and it should not weaken the credibility of the reports. The reports should reflect the needs of stakeholders, and in this regard, a case-study approach can be important. Tove Lundeberg (Sweden HoD) confirmed that Sweden is committed to the AACA project; Sweden has nominated several authors for the Barents regional report with a special focus on the socio-economic scenarios in the Barents region. Jon L. Fuglestad (AMAP Secretariat) informed that a request has been sent to the SDWG Socio-economic and cultural expert group (SECEG) for nominations of social scientists to participate in the AACA, and that a new AMAP Technical report no. 9 "Socio-Economic Drivers of Change in the Arctic" will be published within the next week. The meeting concluded that there are different ways to look at the future, e.g. SSPs (shared socio-economic pathways) and case-studies, and that neither have the intention to predict the future. The results in each regional report should be backed by solid peer-reviewed work and we should make sure a common baseline from each of the regional reports can be used in the pan-Arctic report. The meeting supported the flexibility between the regional reports to meet their stakeholder needs.

The Integration team (INT) has two co-chairs and the INT co-chairs asked AMAP WG about the possibilities to identify a third co-chair with special responsibility for following the Baffin Bay/Davis Strait region. This third co-chair should ideally be nominated by the countries involved in that region. While there was some support to nominate a third co-chair, neither Canada nor the Kingdom of Denmark had resources to nominate an additional INT co-chairs. It was instead proposed to check the possibility to nominate a third co-chair/INT member from the Permanent Participant organizations.

The draft outline of the pan-Arctic report is at an early stage. There is a need to develop the outline further during the next few months. Canada suggested that the pan-Arctic report should draw on the results from the regional reports and not be a separate assessment. J Michael Kuperberg replied that the INT would pick up much of what the regional reports produce, but that the regional reports probably would not cover some pan-Arctic issues. Norway (Marianne Kroglund) informed that they had some comments to the draft outline and would forward these to the INT co-chairs.

Comments to the draft outline of the AACA pan-Arctic report should be sent to the AMAP Secretariat by 1 November.

The regional teams produce a short monthly report to INT to be able to follow the progress in each region. The meeting supported these monthly reports for internal use. For reporting to AMAP HoDs a quarterly report was appreciated.

The Integration Team and the 3 Regional Implementation Teams are planning to meet in-person on December 8th and 9th in Ottawa in conjunction with the international Arctic Change Conference.

6. SWIPA Follow up – status and challenges

Lars-Otto Reiersen presented the status on the plans for the production of a follow-up/update to AMAPs 2011 SWIPA ('Snow, Water, Ice, and Permafrost in the Arctic') report. A workshop to plan this work had been held in Oslo in August 2014 (Documents WG28/6/1 and WG28/6/2). Lead authors had been identified for most of the work, but it was emphasized that it would still be possible to nominate experts, also from observer countries.

Morten Olsen explained how focus during the workshop had been on feedbacks and uncertainties, and that emphasis will be put on this in the update. During the workshop there had been a discussion about the carbon budget in the Arctic, and it had been decided to add a chapter on terrestrial and marine methane.

The relationship between the SWIPA follow-up/update and the AACA had been discussed. It had been agreed that SWIPA Update Leads will prepare an initial draft by 15th October 2014, and that this would be the basis for a dialogue between SWIPA Update Leads, AMAP WG, and AACA co-chairs on how the SWIPA Update can contribute to AACA and vice-versa. It was also noted that the link between SWIPA and AACA is secured through the shared authors.

Outreach had been discussed during the workshop and it had been agreed to seek to publish the outcome in a special issue of a recognized international journal. This led to a discussion about the 2014 Arctic Report Card (ARC, document WG28/6/3) and followed from earlier discussions on how AMAP could contribute to the contents of ARC. Historically, AMAP has organized the external/peer review of the annual issue of the ARC, but AMAP had also wanted to play a more active role.

Tom Armstrong explained that there is a strong wish to establish a co-ownership from the ARC publisher, which is the US National Oceanic and Atmospheric Administration (NOAA). Work is still ongoing on how to develop more than a review ownership from AMAP.

It was agreed that AMAP should also review the 2014 issue of ARC. Countries, PPs and observers are encouraged to identify reviewers and submit these to the AMAP Secretariat. The AMAP Board will establish the final list of ARC reviewers.

7. AOA Follow up – status and challenges

Lars-Otto Reiersen presented the status on the plans for the production of a follow-up to the 2013 Arctic Ocean Acidification (AOA) assessment. A workshop had been held in May in Gothenburg, Sweden, and the draft minutes from the workshop was available (AMAP WG 28/7/1). Lars-Otto Reiersen pointed out that the aim of the work was three-fold: 1) Updating the 2013 report with new information and data, 2) Documenting Arctic Ocean acidification through selected cases, and 3) Add teleconnections.

In the following discussion it was emphasized that the socio-economic aspects of AOA should be prioritized, since this was a known weakness of the 2013 report. It was noted that the AACA has a strong socio-economic component and that the AOA follow-up should seek to reach out to the AACA experts on socio-economy.

Simon Wilson noted that one of the things that were missing in the 2013 assessment was food web modelling. Tom Armstrong believed that this would be addressed since University of Alaska has expertise within this area.

Tom Armstrong pointed out that AOA is of importance internally in the USA and will most likely be a priority of the coming AC US chairmanship.

8. SAON work – status and challenges

Tom Armstrong introduced document WG 28/8/1 in his capacity as the chair of SAON. At the meeting of the SAON Board in March 2014, it had been decided to establish two SAON Committees: One committee on observations and networks (CON), and one committee on information and data services (CDIS). The members of the SAON Board had appointed members for the two committees and chairmen for the committees had also been identified.

Peter Pulsifer (chair of CDIS, attending remotely) represented his views on what the CDIS should aim for. He noted that the management of Arctic observational data is an integral part of already existing Arctic observing networks. The long-term goal should be to establish multidisciplinary, quick and open access to observational data. Any systems that will be developed to serve this purpose should involve users in the design. He noted that there are already many centers that are managing and providing data services and that coordinating bodies and initiatives are emerging.

CDIS will hold its first meeting together with the IASC Data Standing Committee in November 2014. Priorities for this meeting would be to make plans for the development of data exchange standards (e.g. metadata, formats, structure, semantics, etc.) and for the development of applications using existing data services. Knowing that similar efforts are going on at the national as well as the international level, the work of the Committee will take place within a national and international governance model.

Lisa Loseto (Canada) introduced herself as the new chair of CON. The Committee plans to hold the first meeting in association with the Arctic Change Conference in Ottawa in December 2014.

9. Updating of the AMAP Monitoring and Assessment Guidelines / Research Coordination / Expert Groups

9a. Organization of work of the Arctic Council

Discussion of this item was deferred until the AMAP HoDs meeting.

9b. Monitoring guidelines

Referring to previous discussions with the WG and HoDs meetings regarding updating of the AMAP Trends and Effects Monitoring Programme guidelines, the Simon Wilson introduced document WG28/9b/1. He reminded that the group had agreed that guidelines associated with contaminants monitoring were updated but that work was required to present these in a more useful and appropriate manner; guidelines for monitoring related to climate variables were largely still lacking. He informed that the planned work to update/reformulate the contaminants monitoring guidelines had not been completed due to competing work priorities.

The goal of the (idealised) AMAP Trends and Effects Monitoring Programme is to provide the information required to perform AMAP assessments. In preparing document WG28/9b/1, a step-back was taken, to attempt to place the AMAP Trends and Effects Monitoring Programme in a wider context of ongoing relevant international activities, in order to identify those elements (in particular with respect to climate monitoring) that AMAP should focus on, and where coordination efforts with other activities should be focussed.

He also introduced a matrix approach to linking AMAP monitoring programme components to national implementation activities (under the AMAP Trends and Effects Monitoring Programme and also SAON implementation plans). Such an overview provides a means of comparing the idealised programme with national implementation priorities and gaps, again to identify where effort is best placed in updating the programme and its guidelines.

General appreciation was given to the document and the approaches as described for forwarding the work. Eva Kruemmel expressed a desire to see the SAON and TLK connections reflected in the document. Tom Armstrong noted the role that the SAON committee on observing systems could play in completing the overview.

Norway agreed with the need for the 'reality check' facilitated by work to compare the guidelines with implementation status, and Sweden and Finland also agreed on the need to involve climate

experts more in the work and conduct an evaluation of the programme in its entirety as well as the guidelines. Canada supported the need to identify complementing international initiatives.

There was general agreement on the strong need to forward this work and the WG discussions focussed on ways of conducting the activity. It was agreed that the Secretariat with external (consultant) help and assistance of a few key experts from the expert groups (and if possible observers) should complete the tables focussing on the climate components (starting with AOA, and SLCFs) and develop guidelines on the basis of this work. Screening monitoring for new contaminants should also be addressed. SAON should be involved in the work to document the implementation aspects. Prioritising this work in the coming period (when deliverables are due for the Ministerial meeting) remained a concern.

9c. Assessment guidelines

Simon Wilson introduced document WG28/9c/1, editorial guidelines for AMAP assessment reports prepared by the Secretariat and scientific/technical editor employed to work on AMAP reports. The document updates material extracted from previous AMAP assessment guideline documentation and is intended as a reference for AMAP assessment groups.

Eva Kruemmel noted that the editorial guidelines were very helpful in the development of the risk communication chapter of the human health assessment.

The WG agreed that the guidelines should be posted on the AMAP website and further updated as and when necessary.

Simon Wilson also introduced document WG28/9c/2, describing the role of experts in the work of AMAP and the process for nominating experts. This paper was prepared in response to a request from HoDs at their Rovaniemi meeting. He referred to questions from the expert groups regarding the process for handling nominations, including the possibility for experts groups to identify additional experts.

Several delegations referred to the need for a more rigorous process in connection with review of nominations and the need for a standardised description of how the peer review is conducted, others recognized the need for flexibility in this process.

It was agreed that it was appropriate for expert groups to identify and approach additional (designated/contributing) experts to involve in the work where necessary. Sami Council and ICC referred to the need to ensure TLK was appropriately reflected in the expert groups and raised the possible involvement of PPs in the selection of experts; in this connection mechanisms currently available for financing the involvement of PPs were discussed.

It was agreed that expert group feedback on this document (and also the editorial guidelines) would be taken into account in future updates. It was agreed that the WG should provide written comments on the question of who should appoint experts so that this part of the document could be updated for approval at the next HoDs meeting.

The Secretariat was requested to prepare a comparable paper on the peer review process for the next HoDs meeting.

9d. AMAP engagement in EU projects

Simon Wilson introduced document WG28/9b/1. Possible AMAP Secretariat engagement in the EU-Polarnet was discussed at the Rovaniemi HoDs meeting and subsequently supported by HoDs and the SAON Executive. The project, led by AWI (Germany) is related to implementing Arctic research activities under the EU-Horizon2020 initiative. AMAP Secretariat's engagement focusses on leading three tasks; the first concerns coordination of EU and in particular Canadian, United States and

Russian Arctic research initiatives; the other two are connected to SAON activities on optimizing monitoring programmes and data management. The proposal is currently under consideration with a decision expected in October. If successful, the AMAP Secretariat is hoping for support from Canada, USA and Russia, and SAON committees on the various project deliverables.

Canada and the United States both responded that the tripartite (EU/Canada/USA) cooperation on Arctic research coordination was recognized as a priority by their respective governments and expressed their willingness to support the Secretariat in an eventual work related to this proposal. Areas identified of particular interest to the United States include Arctic Ocean Acidification, closing the gap between weather and climate prediction, extreme weather events, and northern latitude freshwater availability for human and nature needs. Canadian-EU polar research coordination is organized through the office of the Canadian HoD so this should facilitate engagement on the part of Canada. The proposal has been communicated to the new committees on SAON with request for their collaboration in the work.

Jan Rene Larsen introduced the documents WG28/9d/2 and WG28/9d/4 on INTERACT. INTERACT is a circum-arctic network of 33 terrestrial field bases in northern Europe, Russia, USA, Canada, Greenland, Iceland, the Faroe Islands and Scotland. INTERACT is developing an application for its second phase, and the AMAP Secretariat has been asked to take a seat in the 'The Data Managers Forum' Advisory Group and in the Advisory Group for the Task 'Implementing CBMP at INTERACT stations'.

Lars-Otto Reiersen introduced the document WG28/9d/3 which was a synthesis report from one of the EU Horizon 2020 Advisory Groups, where he had had a seat.

9e. Use of the Project support instrument in AMAP work

Husamuddin Ahmadzai (NEFCO) presented the Project Support Instrument (PSI) and explained how applications for funding under this arrangement are expected to be handled.

10. Draft AMAP Work Programme 2015-2017

Morten Olsen introduced document WG28/10/1, a straw-man draft for the AMAP work-plan for 2015-2017 based on the existing AMAP work-plan. This document needs to be updated and finalised as part of the material that AMAP will submit for approval by SAOS and Ministers at the Ministerial meeting in 2015.

Norway noted the need to reflect the discussions during the joint meeting with PAME and representatives of SDWG regarding cooperation on EBA.

Canada identified a need to introduce a reference to the work of the climate expert group.

ICC and Sami Council proposed that TLK is referenced in a separate paragraph as well as in connection with specific assessments.

It was noted that the work-plan is normally part of the progress report delivered to SAOs for approval during the Ministerial meeting, but that the format disseminated by the ACS for preparing the progress report did not allow for inclusion of the work-plan in its current form. One possibility would be to attach the work-plan as an annex to the progress report.

The WG Chair agreed to clarify the format for delivery of the work-plan with the ACS/SAOs at the upcoming meeting in Yellowknife.

Following this clarification, the document would be updated to reflect comments received during the meeting and comments received in writing. Written comments should be submitted by the WG within 2 weeks.

A redrafted draft work-plan would be prepared during November for approval by HoDs prior to its delivery to SAOs. This approval would take place at the HoDs meeting in February 2015, or earlier if there is a need to deliver this document already by December 15 2014.

11. Updates and Information

11a. Work in pipeline

Status for the AMAP GEF Hydrology (Arctic Rivers) Project was given by Lars-Otto Reiersen. He explained that the project has started, but that it is coming too late to feed into ongoing assessment work.

Russel Shearer said that Canada has been looking for opportunities for in-kind support for the project, and wanted to know about the next step.

Lars-Otto Reiersen responded that experts will be invited, but that another option would be to use Mackenzie River experts to do a circum-Arctic assessment.

Alexander Klepikov (Russia, AMAP Secretariat) informed the AMAP WG that the GEF office will be established in December 2014 and will start operating in March 2015.

11b. Other AC groups

AC Scientific Coordination Task Force

The status of the work of the AC Scientific Coordination Task Force was discussed. The Task Force will develop a Framework document for scientific cooperation, and Yuri Tsaturov described how Russia, Sweden and USA had contributed to the document. He argued that a legally binding document should be signed in order to ensure for data exchange, joint expeditions and easier access to national territories by scientists. He noted that most countries are supporting the idea of a legally binding document, but not all. At the coming meeting in Tromsø a final decision should be made and this should promote IPI/IPPI (International Polar Initiative) as a continuation of IPY (International Polar Year). He asked for a more active involvement of the WGs in this, and argued that an agreement would impact the future of AMAP as a coordination body for the scientific work in the Arctic.

Morten Olsen responded that the AMAP WG works through consensus and that he did not believe that expressing support to the Framework would fall within the mandate of the AMAP WG. He asked the AMAP delegates to go through the national channels and discuss the Framework with national members of the TFs and with national SAOs. Technical comments to the Framework could be sent to the AMAP Secretariat.

AC Secretariat

Morten Olsen introduced document WG28/11b/5 on the 'AC Tracking Tool', the use of which had been requested by the SAOs. He added that he understood the need for keeping track of the many AC projects. The AMAP contribution to the tool had been to introduce the projects that are listed in the AMAP Work Plan. He mentioned that AC Working Groups are different, and while some WGs are doing discrete projects, others like AMAP are doing long term monitoring. He asked the delegates to discuss this with the national SAOs, and to point out that there is an obvious conflict between being very project oriented and being part of an organization that works with a longer perspective.

A related issue is the wish from the SAOs to evaluate the costing of the AMAP work through the 'AC Costing Tool'. It is very difficult to make estimates of the AMAP projects and as for the Tracking Tool, AMAP HoDs were asked to discuss this with the national SAOs. Currently, the estimates provided

only reflect the AMAP Secretariat effort, and this gives an incomplete picture. Morten Olsen repeated the need for clear guidance on the use of the tool.

Simon Wilson noted that in the Costing Tool, there are options for the reporting on PPs' and observers' 'meaningful contribution' to the projects, and he asked for a definition of this.

It was discussed, when new projects should enter the tools. Upcoming projects for the AMAP WG are the SWIPA and AOA follow up projects, and it is not obvious when these should be introduced. It was decided to seek clarification on these questions at the next SAO meeting.

CAFF and CBMP

Jan Rene Larsen gave an update of the status of the work of CAFF and CBMP. A key focus at present is the development of the Action plan for the implementation of the ABA recommendations. The development of the fourth and final CBMP monitoring plan addressing coastal biodiversity is now preparing to get underway. One of the upcoming products from CAFF's indicator work is in the final stages. It is the land cover change index.

Different AMAP appointed experts and members of the AMAP Secretariat have to a different degree followed the development of the individual CBMP monitoring plans. It was noted that the plans describe activities under headings like "State of the Arctic Marine Biodiversity Report", "State of the Arctic Freshwater Biodiversity Report".

It was agreed that the use of the term 'assessment' in the context of CBMP should be clarified.

PAME

Arctic Marine Strategy Plan

Morten Olsen reported on the workshop for the development of the Arctic Marine Strategy Plan which had been held immediately prior to the AMAP WG meeting (document WG28/11b/2). He expressed concern about the revision process and the status of the document. It was not clear, if the document ultimately would be a PAME document or an AC document. One scenario could be that the document would be guiding for the work of the AC in the future. He believed that AMAP should contribute and proposed a process that would bring together the WG Chairs and Secretariats instead of workshops.

In the following discussion, it was agreed that AMAP should seek to be involved in the process and that Morten Olsen should discuss the status and process of the document with the SAOs.

Ecosystem-based Approach

Jon L. Fuglestad introduced document WG28/11b/1 and reported on the PAME-EBM meeting in Vancouver.

All countries support the implementation of the ecosystem approach (EA) to management and follow the EA principles in their national administration. EA is a tool from assessment to policy making. Several delegates, however, pointed out that it was difficult to follow and understand how the PAME-led EA Expert Group is working. The intended outcomes of the EA Expert group work should therefore be clarified and the work of the group made more transparent. In this connection, the AMAP WG should specify what they expect of the EA Expert Group and it was therefore proposed that the AMAP, CAFF and SDWG Chairs should be more involved in the EA work to secure working groups' interests.

11c. International Organizations

IASC

Lars-Otto Reiersen announced that IASC's next Arctic Science Summit Week (ASSW) will be held in April 2015 in Japan. IASC continues the development of ICARP3, and AMAP will contribute through a meeting to be held in Potsdam in November 2014. Fred Wrona (Canada) noted that the Arctic Freshwater Synthesis is designed to contribute to ICARP3.

ICES

Lars-Otto Reiersen described that there is a long standing cooperation with ICES. ICES is interested in working with AMAP in order to avoid duplication of work. Part of the ICES area is also AMAP area, and currently the Barents Sea is a priority for ICES. AOA is another area of common interest, and the AMAP Secretariat has followed the work of the joint OSPAR-ICES Study Group on Ocean Acidification (SGOA). The AMAP and ICES Secretariats are continuously seeking to find opportunities where the organisations can benefit from each other's work and expertise.

UNEP

Simon Wilson presented information on future activities being planned by UNEP to prepare an update to their Global Mercury Assessment (GMA) for delivery in 2017. Through a collaboration established between AMAP and UNEP-DTIE, AMAP made a significant contribution to the preparation of the 2013 UNEP GMA; at that time the AMAP mercury assessment was under preparation so the Arctic work was readily combined into the global initiative. UNEP has approached the Nordic countries and Canada in particular to provide (financial) support to the preparation of a 2017 GMA and are looking for continuing engagement of AMAP and AMAP mercury experts in the future work. The situation may be somewhat different as AMAP currently has no plans for a mercury update assessment in 2016. He also informed about currently ongoing activities under UNEP to develop a 'global mercury monitoring programme' (similar to the Stockholm Convention POPs GMP) and the importance of ensuring that Arctic monitoring effort is well coordinated with this activity.

He also referred to the cooperation between AMAP and the Stockholm Convention to provide input to the Convention's ongoing effectiveness evaluation and POPs Review Committee (see 4d, above).

Denmark (Mikala Klint) provided further information on the UNEP application to the Nordic Council for support for the GMA update.

ICC (Eva Kruemmel) mentioned the importance of PP engagement in this work, referring to the effective way that the PPs had used AMAP information during the processes to negotiate the Stockholm and Minamata Conventions, and during work of the POP Review Committee (which was further underlined by Timo Seppälä). It was suggested that the AC might be encouraged to deliver statements at upcoming COPs referring to the engagement of the AC in the UNEP work and continued commitment to supporting this work in the future.

The WG agreed that the support for these UNEP initiatives was both appropriate and important and in compliance with the requests issued to AMAP by the AC Ministers regarding this. The Secretariat was requested to continue follow-up with relevant UNEP bodies regarding the mercury and POPs initiatives.

Countries, including both the Arctic and observer countries were encouraged to follow-up with their national UNEP (Minamata and Stockholm Convention) delegates to ensure that Arctic monitoring activities and results are taken into account, and Arctic experts engaged in the development of the global mercury monitoring program, the 2017 GMA update, and relevant activities under the Stockholm Convention.

The WG requested the Secretariat to prepare a discussion paper for the next HoDs meeting on the linkages between AC/AMAP work and that of (groups) under the UNEP Conventions and proposals for possible work to support relevant the UNEP initiatives.

11d. Conferences

Information was presented on two conferences of potential interest to the AMAP WG:

- The Biodiversity Congress, Trondheim, Norway, 2-4 December 2-4, 2014
- Arctic Change Conference, Ottawa, Canada, 8-12 December 2014

(see agenda item 11f for additional information)

11e. Other

Simon Wilson introduced document WG28/11e/1, with apologies that the action from the Rovaniemi HoDs meeting to redraft this document had been addressed late and therefore the revised product was still under development. He informed that specific suggestions noted during the last HoDs meeting discussions had been incorporated.

The WG reiterated the need to be clear on the target audience for this brochure and it was agreed that the brochure is intended for an external audience, including the general public to respond to the question 'what is AMAPs communication strategy?' (without needing to refer to the detailed internal AMAP communication strategy document).

It was agreed that the document should be further simplified if possible; ICC requested more mention of AMAPs work with stakeholders to improve clarity on this issue including clarity regarding who the 'stakeholders' are. It was further agreed that the document would be disseminated as a web (electronic) document and if possible include a built in form on which users could respond to identify who is using the brochure and register comments on whether they find it useful.

It was agreed that written comments/suggestions should be delivered to the Secretariat by 17 October.

The Secretariat would circulate an updated version and unless any objections were received post the revised brochure on the AMAP website as soon as possible.

11f. Outreach events

Simon Wilson presented document WG28/11f/1 noting that, to date, no specific outreach activities have been agreed other than the preparation of the policy-makers summaries for delivery at the 2015 Ministerial meeting and the assessment reports described in document WG28/4e/1. No response had been received from TFBCM on AMAP suggestions for possible joint preparation of outreach products on SLCFs; AMAP is still considering producing a video product on this issue, however, time is short. The document therefore is essentially a list of upcoming meetings that present opportunities for outreach on the various AMAP coordinated initiatives. Since the document was prepared, additional events have been identified and an updated list is attached as Annex 4.

The WG noted the plans to arrange an outreach event in Ottawa the day before the Ministerial meeting to showcase the work of the AC groups. The Canadian SAO (Susan Harper) informed the WG that plans for this event were currently under development and if the WG had specific requests these could be addressed to her and she would pass them on to the organizers of the event. She suggested that any outreach focus on educating and informing. The WG appreciated this advice and agreed that any outreach activities undertaken by AMAP would focus on the scientific information and avoid the policy aspects.

12. Information from Observers

Delegates from Japan and the Republic of Korea presented Arctic research activities being conducted by their countries, including a number of joint projects with the Arctic countries. Both countries mentioned their implementation plans for contributing to the ongoing and planned work of AMAP. Japan's strategic approach includes strengthening research cooperation with the Arctic Council in the key areas of ocean acidification and black carbon and methane. The Secretariat noted with appreciation the nomination of an expert from Japan to participate in the ongoing AMAP radioactivity assessment. The Republic of Korea has nominated experts to participate in the AACA and SWIPA work.

The delegates from China and the Netherlands provided information on the work in their countries of relevance to the ongoing work under AMAP. China has nominated experts to participate in the work under SWIPA and the ARC, and Netherlands is looking into identifying experts to participate in the AOA follow-up work.

Nikolaj Bock (EEA) presented information on EEA and EU activities relevant to the work of AMAP. New appointments and organizational arrangements within the EC are now in place with responsibilities for marine/fisheries and environment now linked, and energy/climate also linked. He referred to the relevance of the recently completed or about to end research projects ICE2SEA and ACCESS to the SWIPA assessment and AACA, respectively. He also noted the potential for the EC-JRC to contribute to the AACA. An Arctic chapter is now included in the EEA State and Outlook for the European Environment Report that will be released in 2015. Related to Horizon2020, an Arctic consultation process is currently ongoing (until 1 December) on EU Arctic-funding and delegations were encouraged to contribute to this via the online form available at: http://ec.europa.eu/dgs/maritimeaffairs_fisheries/consultations/arctic-eu-funding/index_en.htm. An EU-Indigenous Peoples dialogue + Sami Workshop will be held in Brussels (13-14 October 2014) in conjunction with the Arctic Futures Symposium (14-15 October 2014). He also informed about a recently completed EU 'Strategic Environmental Impact Assessment of development of the Arctic' and that the Council (EU) have requested that an EU Arctic Policy is to be tabled by December 2015.

Nikolaus Gantner (APECS) presented the organization and goals of the APECS network in engaging early career scientists in Arctic research and the work of AMAP. The AMAP WG Chair acknowledged the past contributions of APECS to AMAP work, and looked forward to continuing good cooperation and future engagement of APECS members in AMAP work.

13. List of Actions from the meeting

The list of actions arising from the meeting is attached as Annex 5.

14. Any other business

The AMAP WG Chair recognized with appreciation the contributions of Tom Armstrong (AMAP HoD for USA) and Per Dovle (long-time Norwegian HoD to AMAP, unable to attend the current meeting) for their many and valuable contributions to AMAP over the years. This appreciation was reflected by the entire WG, with very best wishes to Tom and Per for the future.

15. Next HoD and WG meetings

Denmark invited the AMAP HoDs to hold their next meeting in Copenhagen from 4-5 February 2015, ca. one month prior to the SAO meeting that will take place in March 2015. This invitation was gratefully accepted.

16. End of Meeting

The AMAP WG Chair closed the meeting at 14:30 on Thursday 18 September, thanking all the participants for their contributions.

Annex 1: Agenda

AMAP WG28 Meeting

Tuesday 16 September

Agenda Item

Opening of AMAP and PAME WG meetings

1. Opening of the AMAP WG28 meeting, approval of agenda
2. Welcome statement and Practical information
3. Follow up Actions
4. Activities with deliverables to the AC Ministerial meeting in April 2015
 - 4a. The SLCF reports on Methane, BC & Ozone
 - 4b. The Human health assessment
 - 4c. The Radioactivity assessment
 - 4d. The POPs assessment
 - 4e. Assessment report production
 - 4f. UAS recommendations for Operating Guidelines
5. AACA – status and challenges
6. SWIPA Follow up – status and challenges

AMAP WG dinner (Cork & Bull restaurant)

Wednesday 17 September

7. AOA Follow up – status and challenges
8. SAON work – status and challenges
9. Updating of the AMAP Monitoring and Assessment Guidelines / Research Coordination / Expert Groups
 - 9a. Organization of work of the Arctic Council
 - 9b. Monitoring guidelines
 - 9c. Assessment guidelines
 - 9d. AMAP engagement in EU projects
 - 9e. Use of the Project support instrument in AMAP work

Joint reception for AMAP and PAME WGs - Hosted by the Government of Yukon (venue: McBride Museum Courtyard)

Thursday 18 September

10. Draft AMAP Work Programme 2015-2017

11. Updates and Information

11a. Work in pipeline

11b. Other AC groups

11c. International Organizations

11d. Conferences

11e. Other

11f. Outreach events

12. Information from Observers

13. List of Actions from the meeting

14. Any other business

15. Next HoD and WG meetings

16. End of Meeting

Annex 2: List of documents

Agenda Item	Documents <i>Reporting/Minutes</i>
17. Opening of the meeting, approval of agenda	<ul style="list-style-type: none"> • AMAP WG 28/1/1-<u>Revised</u> Draft Agenda and Provisional Time-schedule for the 28th AMAP WG Meeting, Whitehorse, Canada, 16-18 September 2014 • WG28/1/2 Provisional list of documents • WG28/1/3 Provisional list of participants
18. Welcome statement and Practical information	
19. Follow up Actions	<ul style="list-style-type: none"> • WG28/3/1 Updated status of completion of actions posted online
20. Activities with deliverables to the AC Ministerial meeting in April 2015	
4g. The SLCF reports on Methane, BC & Ozone	<ul style="list-style-type: none"> • WG28/4a/1 Two-page progress report/ presentation on status of BC/O3 work • WG28/4a/2 Two-page progress report/ presentation on status of CH4 work • WG28/4a/3 Draft SLCF Key Findings/Message - Methane • WG28/4a/4 Proposal on AMAP follow-up work on SLCFs • WG28/4a/5 Draft SLCF Key Findings/Message - BC <p>(Minutes of relevant SLCFs group meetings: See background document)</p>
4h. The Human health assessment	<ul style="list-style-type: none"> • WG28/4b/1 Two-page progress report/ presentation on status of HHAG work • WG28/4b/2 Draft key findings/message • <p>(Minutes of the Reykjavik AMAP HHAG: See background documents)</p>
4i. The Radioactivity assessment	<ul style="list-style-type: none"> • WG28/4c/1 Two-page progress report/ presentation on status of AREG work • WG28/4c/2 Draft key findings/message
4j. The POPs assessment	<ul style="list-style-type: none"> • WG28/4d/1 Two-page progress report/ presentation on status of POPs EG work • WG28/4d/2 Draft key findings/message <p>(Minutes of AMAP PEG meeting, Basel, May 2014, see background document)</p>
4k. Assessment report production	<ul style="list-style-type: none"> • WG28/4e/1 Status and plans for production of SLCF, Health, Radioactivity and POPS scientific/ technical reports
4l. UAS recommendations for Operating Guidelines	<ul style="list-style-type: none"> • WG28/4f/1 Two-page progress report/ presentation on status of UAS work • WG28/4f/2 Draft of proposed “Handbook for science operators” • WG28/4f/3-<u>Revised</u> Draft of proposed “Arctic airspace access white paper”

21. AACA – status and challenges	
	<ul style="list-style-type: none"> • WG28/5/1 Two-page progress report on AACA status and challenges • WG28/5/2 AACA Pan-Arctic report Outline <p>(Minutes of the Vienna scenarios workshop, see background documents)</p>
22. SWIPA Follow up – status and challenges	
	<ul style="list-style-type: none"> • WG28/6/1 Two-page progress report on status of SWIPA follow-up work • WG28/6/2 Draft Oslo Workshop Report • WG28/6/3 Arctic Report Card Table of Content
23. AOA Follow up – status and challenges	
	<ul style="list-style-type: none"> • WG28/7/1 Two-page progress report on status of AOA follow-up work <p>(Minutes of the Gothenburg workshop, see background documents)</p>
24. SAON work – status and challenges	
	<ul style="list-style-type: none"> • WG28/8/1 Two-page progress report on SAON
25. Updating of the AMAP Monitoring and Assessment Guidelines / Research Coordination / Expert Groups	
9f. Organization of work of the Arctic Council	
9g. Monitoring guidelines	<ul style="list-style-type: none"> • WG28/9b/1 Discussion paper on approach to monitoring programme development
9h. Assessment guidelines	<ul style="list-style-type: none"> • WG28/9c/1 Author guidelines • WG28/9c/2 Description of the role of experts and process for nominating and supporting experts (update of existing assessment guidelines sections)
9i. AMAP engagement in EU projects	<ul style="list-style-type: none"> • WG28/9d/1 Polar-Net proposal • WG28/9d/2 Interact proposal • WG28/9d/3 Horizon 2020 • WG28/9d/4 Interact proposal (II)
9j. Use of the Project support instrument in AMAP work	<ul style="list-style-type: none"> • WG28/9e/1 Guidance on how to use the PSI in WG work

26. Draft AMAP Work Programme 2015-2017	<ul style="list-style-type: none"> • WG28/10/1 Draft updated AMAP work plan • WG28/10/2 Updated status of work plan implementation posted
27. Updates and Information	
11g. Work in pipeline	<ul style="list-style-type: none"> • WG28/11a/1 Russian GEF project status
11h. Other AC groups	<ul style="list-style-type: none"> • WG28/11b/1 Report from PAME-EBM Vancouver meeting • WG28/11b/2 Latest redraft of the Arctic Marine Strategy • WG28/11b/3 Possible report from SDWG TKI workshop • WG28/11b/4 Comments to proposal from the SCTF (Restricted circulation) • WG28/11b/5 Clarification on use of tracking tool
11i. International Organizations	
11j. Conferences	
11k. Other	<ul style="list-style-type: none"> • WG28/11e/1 Revised C&O brochure • WG28/11e/2 AMAP web statistics
11l. Outreach events (AC Ministerial, AACA, COP20 Paris, etc.)	<ul style="list-style-type: none"> • WG28/11f/1 Overview of planned AMAP outreach activities
28. Information from Observers	
29. List of Actions from the meeting	
30. Any other business	
31. Next HoD and WG meetings	
32. End of Meeting	

Annex 3: List of Participants

Country/ Organization	First name	Last name	Institute name	e-mail
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Annex 4: Updated list of upcoming Meetings, Conferences and Outreach opportunities

Type	Event	Timing
2014		
IPCC	40th Session of the IPCC (SYR AR5), Copenhagen, Denmark	27-31 October
AC	SAOs meeting, Yellowknife, Canada	21-23 October
Symposia	EU-Indigenous Peoples dialog / Sami Workshop, Brussels Arctic Futures Symposium, Brussels, Belgium	13-14 October 14-15 October
SC	Tenth meeting of the Persistent Organic Pollutants Review Committee (POPRC.10), Rome, Italy	27-30 October
Symposia	Transatlantic Science Week 2014, Toronto, Canada	27-28 October
Conference	(IOC/IAEA (OA-ICC) 2 nd International Ocean Research Conference 'One Planet One Ocean', Barcelona, Spain (http://www.iocunesco-oneplanetoneocean.fnob.org/)	17-21 November
COP (UNFCCC)	UNFCCC COP20, Lima, Peru	1-12 December
Conference	Arctic Biodiversity Congress, Trondheim, Norway	2-4 December
Conference	International Arctic Change 2014 Conference, Ottawa, Canada	8-12 December
Conference	AGU Fall Session, San Francisco, USA	15-19 December
2015		
Conference	Arctic Frontiers, Tromsø, Norway	18-23 January
AMAP HoDs	AMAP HoDs meeting, Copenhagen, Denmark	4-5 February
AC	SAOs meeting	March
AC	Arctic Council Ministerial outreach events, Ottawa	23 April
AC	Arctic Council Ministerial Meeting, Iqaluit	24-25 April
Conference	ASSW 2015, Toyama, Japan with 4th International Symposium on the Arctic Research (ISAR-4) and 3 rd International Conference on the Arctic Research Planning (ICARP III)	23-30 April 27-30 April
COP (SC)	Stockholm Convention COP7 (biannual)	Spring
Conference	16th International Congress on Circumpolar Health, in Oulu in Finland	8-12 June
COP (UNFCCC)	UNFCCC COP21, Paris, France	30 November - 11 December

Annex 5: List of Actions

Action	For	By	Agenda item(s)	Status
Submit in writing to the Secretariat comments to the draft key findings documents on: <ul style="list-style-type: none"> • SLCF (docs. WG28/4a/3 and WG28/4a/5) • Human health (doc. WG28/4b/2) • Radioactivity (doc. WG28/4c/2) • POPs (doc. WG28/4d/2) 	WG	3 Oct.	4a, 4b, 4c	
Discuss with their national representatives in the TFBCM the need for clarification on parts of the TF Framework document regarding reporting requirements	AMAP HoDs	30 Sep.	4a	
Provide Secretariat with suggestions for work to be undertaken over the near term (1-2 years) and longer term (4+ years) which would ensure that AMAP and Arctic Council continue to have the scientific perspective required to understand the role of SLCFs on Arctic climate.	BC/O3 and CH4 expert groups	15 Nov.	4a	
Nominate additional experts for the international review of BC/O3 assessment	HoDs/PPs	26 Sept.	4a	
Contact Jon Odland for an update on the status of results of new analyses performed on Russian human bio-monitoring samples	Secretariat (JP)	15 Oct.	4b	
Follow-up on WG comments including making greater use of the ArcRisk results	HHAG leads/ Secretariat (JP)	15 Oct.	4b	
Review and update information in draft radioactivity assessment concerning potential sources of radioactive contamination to the Arctic	WG	1 Nov.	4c	
Ensure that input to radioactivity assessment still required (as listed in document WG28/4c/1) is provided	USA / HoDs/PPs	1 Nov.	4c	
Supply name and contact details of possible science writer	Canada	3 Oct.	4e	
Follow-up on the plan with science-writers, the technical/linguistic editor, and graphical production/layout consultants, and with other members of the Secretariat to coordinate the production work	Secretariat (SW)	15 Oct.	4e	
Prepare a draft letter for HoDs to send, together with a list of contact persons in the relevant regulatory authorities in the various countries to whom the letter should be sent	UAS expert group co-chairs	15 Oct.	4f	

Develop a paper for the AMAP HoDs on how the UAS whitepaper can be brought forward to relevant national authorities	Secretariat LOR/JRL) (in consultation with the UAS co-chairs)	1 Nov.	4f	
Comments to the draft outline of the AACA pan-Arctic report to be sent to the AMAP Secretariat	WG	1 Nov.	5	
Nominate experts for the review of the Arctic Report Card	HoDs/PPs	3 Oct.	6	
Establish the final list of reviewers for the Arctic Report Card	AMAP Board	15 Oct.	6	
Nominate experts for the AOA assessment	HoDs/PPs	1 Nov.	7	
Assist in completing review of AMAP monitoring programme implementation	SAON committee	June 2015	9b	
Complete monitoring guidelines tables in doc. WG28/9b/1 and continue work to develop guidelines on the basis of this work.	Secretariat (with assistance)	June 2015	9b	
Post editorial guidelines on AMAP website	Secretariat (SW)	15 Oct.	9c	
Provide written comments on the question of who should appoint experts so that guidelines on this can be updated for approval at the next HoDs meeting	WG	15 Nov.	9c	
Develop a paper on a more rigorous process for the peer review of AMAP WG assessments for the next HoDs meeting	Secretariat	31 Dec.	9c	
Clarify the format for delivery of the work-plan with the ACS/SAOs	WG Chair	SAO meeting Yellow-knife	10	
Provide written comments on the draft AMAP work-plan for 2015-2017	HoDs/PPs	3 Oct.	10	
Update draft work-plan for approval by HoDs prior to its delivery to SAOs	AMAP Board	Nov.	10	
Provide technical comments on the Framework of the Scientific Cooperation Task Force to the AMAP Secretariat	HoDs/PPs	26 Sept.	11b	
Provide non-technical comments to the national representatives in the Task Force and to the national SAOs				
Seek clarification on questions relating to when new projects should be added to the tracking tool	WG Chair	SAO meeting Yellow-knife	11b	
Seek clarification from CAFF on the CBMP assessments	WG Chair / Secretariat	26 Sept.	11b	✓

Follow up with ICES on the reporting of Greenland's contaminants data	Secretariat (SW/JRL)	1 Nov.	11c (ICES)	
Follow-up with relevant UNEP bodies regarding the mercury and POPs initiatives; Develop plans for the next HoDs meeting on AMAP's contribution to the Minamata Convention	Secretariat (with UNEP and HoDs/PPs)	31 Dec.	11c (UNEP)	
Prepare a discussion paper for the next HoDs meeting on the linkages between AC/AMAP work and that of (groups) under the UNEP Conventions and proposals for possible work to support relevant the UNEP initiatives	Secretariat	31 Dec.	11c (UNEP)	
Follow-up with their national UNEP (Minamata and Stockholm Convention) delegates to ensure that Arctic monitoring activities and results are taken into account, and Arctic experts engaged in the development of the global mercury monitoring program, the 2017 GMA update, and relevant activities under the Stockholm Convention	HoDs	31 Dec.	11c (UNEP)	
Provide written comments/suggestions to the redrafted C&O brochure (doc. WG28/11e/1)	HoDs/PPs (esp. ICC)	17 Oct.	11e	
Finalise and post the redrafted AMAP C&O brochure on the AMAP website	Secretariat (SW)	15 Nov.	11e	