Draft Forum of Arctic Research Operators Meeting minutes ASSW 2012 15 April, 8:30 -13:00 Dom Polonia, Kraków, Poland

1. Opening and reporting session

1.1 Welcome and introduction

Magnus Tannerfeldt welcomed the attendees, briefly outlined the intention of the meeting and suggested a brief round of introduction. Furthermore, he thanked the ASSW 2013 Organizing Committee and the secretariat for help with organising the meeting.

1.2 Approval of last meeting's minutes in Montreal, Canada

Magnus Tannerfeldt asked for changes to the minutes of the last FARO meeting in Montreal, Canada 2012. The minutes were approved without comments.

1.3 Adoption of the agenda

Magnus Tannerfeldt asked for suggested changes to the agenda. Magnus suggested two new items for the agenda: 3.7 GEOTRACES and 3.8 The Pacific Arctic Group (PAG). The agenda was subsequently approved.

1.4 Report from the chair

Magnus Tannerfeldt briefly outlined the items of the agenda and mentioned that:

- Interim groups. The future of the interim groups B and C has been discussed by the Executive Committee. Simon Stephenson will give a report/status from the Interim groups later (see 4.1).
- Terms of Reference (ToR). A new ToR has been drafted by the Executive Committee. Suggested ToR is presented for approval (4.2)
- Memorandum of Understanding (MoU) with IASC. A MoU with IASC has drafted by the chair of FARO and the president of IASC, and discussed in the Executive Committee. If approved by FARO (4.3) the MoU will be signed by the President of IASC and the Chair of FARO 16 April 16.
- Documents referring to the above-mentioned items and other items had been sent out to the members and friends of FARO for discussion and comments.

1.5 News from secretariat

Morten Rasch gave a brief overview of the secretariat's work since the last meeting. The secretariat has supported the Chair, arranged telephone conferences, sent out documents and disseminated information of relevance to members and stakeholders both through the website and by direct e-mails, and taken care of the website. At the 2012 FARO meeting, the members were asked to send information to be posted on the website and to send comments and suggestions about the website to the secretariat. However, the secretariat did receive very little response from the members.

2. Information from countries

Short news from each country on items of relevance to other members - each member gave a short presentation on logistical items of relevance to the other members.

2.1 Poland: Piotr Glowacki, Polish Academy of Science, informed about Polish activities in the Arctic.

Poland concentrates their research activities to Svalbard (one permanent station and two small temporary stations during spring and summer). Poland has two vessels are operating around Svalbard: 'Oceania' will be on a two-month cruise in the Greenland Sea. 'Horizon' will supply the stations on Svalbard on two cruises. Poland has started cooperation with the Norwegian Polar Institute.

2.2 Germany: Dirk Mengedoht, Alfred Wegener Institute, informed about 'German Arctic expeditions 2012 – 2013'.

See Dirk Mengedoht's presentation

2.3 UK: Cynan Ellis-Evans, National Environmental Research Council, informed about 'UK Activities 2012 – 2013'.

See Cynan Ellis-Evans' presentation

2.4a Norway: Kim Holmén, Norwegian Polar Institute, informed about Norwegian activities in the Arctic.

Norway has received funding for a new ice-strengthened research vessel designed for the needs of scientists. The new vessel will be operational from 2015. Furthermore, Kim Holmén gave a full overview of Svalbard Science Forum (http://www.forskningsradet.no/prognett-ssf/Home_page/1253969737234)

- **2.4b Norway:** Harald Steen, Norwegian Polar Institute, informed about a possible new Ice, Climate and Ecosystems (ICE) project. **6 August 2013:** The Norwegian Polar Institute has secured funding for a half-year long winter sea ice cruise starting in January 2015. The plan is to freeze RV Lance (http://www.npolar.no/en/about-us/lance/) into the ice north of Svalbard in January 2015 at about N83.5 E30 and let her drift with the ice. The drifting ice will probably bring her towards Fram Strait. If the ship is freed from the ice before early July 2015, she will be taken back to the starting position for to drift with the ice until the end of the cruise in early July 2015. If you have any questions please contact Harald Steen steen@npolar.no.
- **2.5 Korea:** Hyoung Chul Shin, Korea Polar Research Institute, informed about 'Korean Research Icebreaker 'Araon' Arctic cruises 2012 & 2013'

See Hyoung Chul Shin's presentation

2.6 Finland: Juha Flinkman, Finnish Environmental Institute, informed about 'Aranda - a state-of-the-art research vessel equipped for icy seas'.

See Juha Flinkman's presentation

2.7 Czech Republic: Jan Kavan, University of South Bohemia, informed about 'Czech research activities in Svalbard - logistics issues 2013'.

See Jan Kavan's presentation

2.8 Russia: Sergei Priamikov, Arctic and Antarctic Research Institute, informed about Russian activities and about Russian Drifting Research stations.

The research station at Svalbard had received money in order to finish the updating of the station (infrastructure). Russia will have ships in the Barents Sea and at Svalbard in 2013. For

information about the Russian Drifting Research stations, V. Sokolov and A. Makshtas please see the presentation.

See Sergei Priamikov's presentation

2.9a USA: Simon Stephenson, National Science Foundation (NSF), informed about NSF's activities

IARPC (Interagency Arctic Research Policy Committee) has monthly meetings to discuss US activities and activities in other countries/areas The new research vessel with ice breaking capability 'Sikuliaq' will be operational from 2014. A plan for 'Sikuliaq' and the Helix project will be ready during autumn 2013.

NSF continues their support for Summit Greenland, a year-round station, where NSF supports meteorological research, they also supports meteorological research by other countries research. NSF continues their support for the Helix project. Furthermore, NSF supports a SEARCH facility database.

2.9b USA: Kathy Crane, National Oceanic and Atmospheric Administration (NOAA), informed about NOAA's activities/focus.

NOAA is supporting projects with Russian and Finnish teams in the Arctic Ocean, and is building cooperation with China, Korea, Japan and Canada on the Pacific side. In October 2013, NOOA will have a P3 airplane in North Alaska.

2.10 Sweden: Magnus Tannerfeldt, Swedish Polar Research secretariat, informed about 'Swedish Arctic Research'.

See Magnus Tannerfeldt's presentation

2.11a Canada: David J. Scott, Canadian Polar Commission, informed about 'FARO 2013: Canadian update'.

See David J. Scott's presentation

2.11b Canada: Donald McLennan, Canadian High Arctic Research Station (CHARS), informed about CHARS.

CHARS has received 146 million dollars for construction and equipment. The station will be fully complete in 2017 and will receive 25 million dollars annually to keep it going. Fully staffed the station will have 40-45 people employed and have room for 30 scientists year round. CHARS's aim is to be an international player in ecological and social science and broker for science in the Canadian Arctic. CHARS will have an active programme in 2014.

2.12 China: Wang Yong, Chinese Arctic and Antarctic Administration, informed about Chinese activities in the Arctic.

The icebreaker 'Xuelong' will be docked in 2013. China will have ships/icebreakers in the Atlantic Ocean for the first time in 2013. Polar Research Institute of China is seeking money for a new ship/icebreaker – hoping the ship will be operational in 2015 – see presentation.

See Wang Yong's presentation

2.13 Japan: Kazuyuki Shiraishi, National Institute of Polar Research, informed about 'Japanese Arctic Activities 2012 – 2013'.

See Kazuyuki Shiraishi's presentation

2.14 Denmark: Morten Rasch, Aarhus University, informed about Greenlandic and Danish research logistics 2011-12.

See Morten Rasch's presentation

3. Other information

3.1 Svalbard Integrated Arctic Observing System (SIOS)

Nicole Biebow, SIOS Steering Board, gave a presentation of "Svalbard Integrated Earth Observing System from PP to .ORG – Status and Challenges".

See Nicole Biebow's presentation (I)

3.2 INTERACT

Terry Callaghan, Royal Swedish Academy of Sciences, Sweden, gave a presentation of "INTERACT - Access to the Arctic".

See Terry Callaghan's presentation

3.3 The ARICE initiative and the Polar Call for EUROFLEET 2

Nicole Biebow, Alfred Wegener Institute, Germany, gave a presentation of "ARICE – Arctic Research Icebreaker Consortium for Europe - A strategy for meeting the needs for marine research in the Arctic".

See Nicole Biebow's presentation (II)

3.4 Establishment of a new Danish research station at Station North, North Greenland

Morten Rasch, Aarhus University, Denmark, gave a presentation of "Research Station North".

See Morten Rasch's presentation

3.5 Third International Conference on Arctic Research Planning (ICARP III)

Volker Rachold, IASC, gave a presentation of the "Third International Conference on Arctic Research Planning (ICARP III)".

See Volker Rachold's presentation

3.6 Inspirational talk - innovation and environmentally sound monitoring

Kim Holmén, Norwegian Polar Institute, Norway, gave an 'Inspirational talk – innovation and environmentally sound monitoring'.

See Kim Holmén's presentation

3.7 GEOTRACES

Nicole Biebow, Alfred Wegener Institute, Germany, gave a presentation of "Status for GEOTRACES".

See Nicole Biebow's presentation (III)

3.8 The Pacific Arctic Group (PAG)

Jacqueline Grebmeier, University of Maryland, USA, gave a presentation of "The Pacific Arctic Group (PAG) and its activities".

See Jacqueline Grebmeier's presentation

4. Internal business

4.1 Report from the Interim groups

Group B: How can FARO help to make it easier to achieve an overview of application procedures in the different arctic countries? Group C: Future regulation of research in the Polar Sea related to UNCLOS.

Simon Stephenson:

FARO should take on the role of pointing you to the right person. For marine scientific research, the presentation given by Sergei Priamikov at the 2011 FARO meeting is very useful (see http://faro-arctic.org/annual-meetings/annual-meeting-2011/.

Norway has already produced the application form. All countries are more or less using the same application form – there are only small differences. The application processes are getting clearer. A good way to ease the application process is to discuss your programmes/projects with the ministries before applying.

Emergent issue: USA and Russia is creating a government body (an arctic council research group) to assist when dealing with issues like logistics, data, research projects, equipment, permits etc.

4.2 Suggested new Terms of Reference for FARO

Magnus Tannerfeldt presented the new Terms of Reference (ToR). The ToR was approved and it was decided that the ToR would be evaluated at the next annual FARO meeting.

4.3 Memorandum of Understanding between IASC and FARO

Magnus Tannerfeldt presented the Memorandum of Understanding (MoU). The MoU was approved, and subsequently signed by David Hik (President of IASC) and Magnus Tannerfeldt (Chair of FARO) during the IASC Council meeting 16 April 2013.

4.4 Election of a new Executive Committee

At last year's meeting, it was agreed that the existing Executive Committee was too large but because three of the members were not present, it was decided to let the Executive Committee continue for another year and then elect a new smaller Executive Committee in 2013. However, Magnus Tannerfeldt concluded that the last year's work/meetings had shown that the size of the Executive Committee was appropriate. Therefore, he suggested keeping the current size of the Executive Committee, which was approved.

Piotr Glowacki announced that he was resigning from the Executive Committee. New members of the Executive committee are James Drummond, Canada, and Cynan Ellis-Evans UK. It was decided, in order to keep the Executive Committee dynamic, that China and US will rotate out next year and give room for Japan.

The Executive Committee: Huigen Yang, China – Hyoung Chul Shin, Korea – Simon Stephenson, USA – Uwe Nixdorf, Germany – Sergey Priamikov, Russia - Magnus Tannerfeldt, Sweden – Cynan Ellis-Evans, UK – James Drummond, Canada - FARO secretariat, Denmark.

4.5 Enhanced inclusion and engagement of members and nations

Magnus Tannerfeldt asked for more information from each country about members and relevant organizations, aiming for information about analyses and reports concerning data management, new technology (drones), stations, ships/icebreakers, pointers to other organizations.

4.6 The FARO website - comments and ideas concerning the content

Lillian Magelund Jensen asked for comments and suggestions for the website. Furthermore, Lillian asked for information to be put on the website.

4.7 Next FARO meeting

The next FARO meeting will be at ASSW 2014, which takes place 5-8 April in Helsinki, Finland. The following items were suggested for the next meeting: Polar Technology and Innovation, and COMNAP.

4.8 Any other business

FARO is going to ask the ASSW 2014 Organizing Committee for more time for the annual meeting – a whole day will be preferred.

Participants

Members

Simon Stephenson, National Science Foundation, USA

Magnus Tannerfeldt, Swedish Polar Research Secretariat, Sweden

Piotr Glowacki, Polish Academy of Science, Poland

Morten Rasch, Department of Bioscience, Aarhus University, Denmark

Lillian Magelund Jensen, Department of Bioscience, Aarhus University, Denmark

Kazuyuki Shiraishi, National Institute of Polar Research, Japan

Kim Holmén, Norwegian Polar Institute, Norway

Wang Yong, Chinese Arctic and Antarctic Administration, China

Sergei Priamikov, Arctic and Antarctic Research Institute, Russia

Nalan Koc, Norwegian Polar Institute, Norway

Juha Flinkman, Finnish Environmental Institute, Marine Research Centre, Finland

Jan Kavan, Centre for Polar Ecology, Czech Republic

Hyoung Chul Shin, Korea Polar Research Institute, Korea

Cynan Ellis-Evans, National Environment Research Council, UK

Dirk Mengedoht, Alfred Wegener Institute, Germany

Donald McLennan, Canadian High Arctic Research Station, Canada

Kathy Crane, National Oceanic and Atmospheric Administration, USA

Enrico Brugnoli, National Research Council & Department of Earth System Science, Italy

Jim Drummond, Dalhousie University & Canadian Network of Northern Research Operators, Canada

Observers/guests

Åsa Lindgren, Swedish Polar Research Secretariat

Mats Andersson, Swedish Research Council, Sweden

Ulf Jonsell, Swedish Polar Research Secretariat, Sweden

Sung-Ho Kang, Korea Polar Research Institute, Korea

Harald Steen, Norwegian Polar Institute, Norway

Seonung "Sunny" Choi, Korea Polar Research Institute

Aleksey Ostrovskiy, Alliance Group, Russia

Hiroyuki Enomoto, National Institute of Polar Research, Japan

Nicole Biebow, Alfred Wegener Institute, Germany

Jackie Grebmeier, Centre for Environmental Science, University of Maryland/IASC, USA

David Hik, IASC & University of Alberta, Canada

David J. Scott, Canadian Polar Commission, Canada

Dongmin Jin, Korea Polar Research Institute, Korea

Volker Rachold, IASC

Terry Callaghan, Royal Swedish Academy of Sciences, Sheffield University and Tomsk State University