Newsletter – February 2016

Welcome to EU-PolarNet's second newsletter – thank you for joining us!

If you have any news, or would like to publicise an event, conference or course, or give us feedback please get in touch by emailing info@eu-polarnet.eu.

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COP21 Paris Side Event

EU-PolarNet was proud to take part in this year's historic Paris Climate Change Conference in December (COP21). A team from the consortium worked with colleagues from the EU-funded 'ICE-ARC' programme and the European Polar Board (EPB) to co-host an Arctic Side Event. A selection of five speakers from science and industry took part in this 90-minute briefing session in the EU pavilion to provide high-level decision-makers with a holistic overview of Arctic change and its multi-sector impacts (climatic, societal, and economic). Speakers of the session included the following experts:

- Sir David King, Foreign and Commonwealth Office Special Representative for Climate Change (UK): Physical Basis of Arctic change
- <u>Jean-Claude Gascard</u>, Senior Scientist, Centre National de la Recherche Scientifique (France): Scenarios for Arctic Change and Global Consequences
- <u>Anthony Hobley</u>, Chief Executive, Carbon Tracker Initiative (UK): What must investment markets consider about climate change impacts in the Arctic?
- <u>Sheila Watt-Cloutier</u>, Former Chair of the Inuit Circumpolar Conference, winner of the Right Livelihood Award 2015 (Canada): Societal consequences of Arctic change
- <u>Thorben Hoffmeister</u>, Department of Geopolitics & Geography, Bundeswehr Geoinformation Center (Germany): Geopolitical and security consequences of Arctic Change

This successful Arctic Side Event attracted more than 100 people and the European Commission reported that this had been the most popular event held in its pavilion. Tweets tagged to <u>#ArcticCOP21</u> give a flavour of the event with pictures of the speakers in action and you can read more about the side event programme on the <u>EU-PolarNet</u> website.

Denis Didier, Senior Research Scientist at CNRS, represented EU-PolarNet at the Side Event. He says: "The aim of our session was to stimulate new thinking and raise awareness of the importance of the Arctic. In previous COP meetings the Arctic has not featured strongly enough, and this side event went some way towards highlighting the increased prominence of Arctic issues for European and global society. The representation of indigenous populations was a particular strength and added fundamental value, while the other high-calibre speakers who ranged from scientists to economists to geopolitical commentators were able to stimulate discussion that crossed the boundaries between science and society."

2nd EU-PolarNet General Assembly

One year into the project, it is time for the second EU-PolarNet General Assembly, which coincides with this year's Arctic Science Summit Week in Fairbanks, Alaska. Divided into two parts, the morning session is closed and project internal, whereas anyone interested in the work of EU-PolarNet is welcome to the open afternoon session. A special focus of the second part of the meeting will lie on the project's stakeholder mapping, the identification of research priorities for European polar science and the development of a coordinated European Polar Data Infrastructure.

Date: Sunday, 13th March 2016 Time: 1.30pm - 5pm open part

Location: Bunnell Building, Schaible Auditorium /Fairbanks, Alaska

Stakeholder Workshop: Arctic Health and Wellness Research Needs

An important aspect of EU-PolarNet is 'connecting science with society', under which dialogue and cooperation with relevant Arctic stakeholders will ensure their input to the formulation of this research programme. AMAP will organize four annual stakeholder workshops to identify and formulate key Arctic research needs over the next five years. The first workshop will be held on 12 March 2016 in Fairbanks, Alaska in association with the Arctic Science Summit Week 2016. The central theme of this workshop is research needs associated with the health and wellness of Arctic residents.

The workshop will convene approximately 50 participants with expertise and/or interest in the topics ultimately chosen for the workshop. The meeting will be held in a round-table setting, with a short, focused introduction to each topic followed by discussion that will lead to the identification of key research needs. If there is a need and the venue holds the possibility, break-out groups may be established on the main topics to explore them in greater detail, with final reporting to the plenary.

If you are interested in participating in the workshop, please send a brief note on your background to Janet Pawlak: jpawlak@dahm.dk

For the full **meeting agenda** please visit the EU-PolarNet website.

Date: Saturday, 12th March 2016

Time: 9am - 5pm

Location: Duckering Building, Room 252 /Fairbanks, Alaska

Sneak preview: The second stakeholder workshop will be held in association with the ICES Annual Science Conference in Riga on 20th or 21st September. A link to the call for papers for the scientific session half of this workshop is below. This session will be held in the morning and the stakeholder workshop will follow in the afternoon, during which research needs will be discussed based on the scientific papers in the morning session and any other information that may be presented.

ICES call for papers: http://www.ices.dk/news-and-events/asc/ASC2016/Pages/Theme-session-P.aspx

Polar experts within reach - Two new expert groups

Two expert groups have been established within the past months, which will support the EU-PolarNet consortium in its strategic decisions, in brokering new partnerships and in giving advise to the European Commission and national policy makers: The External Expert Advisory Board and the Policy Guidance Panel.

The External Expert Advisory Board

The EU-PolarNet Advisory Board brings together six external polar leaders – all experts in their various fields, ranging from natural sciences, to politics, tourism and cultural heritage. This composition makes the Advisory Board an ideal body to stimulate new collaborations with international partners and organisations. The main task of the Advisory Board will hence be to advise EU-PolarNet in questions related to the implementation of a Transatlantic Research Alliance and to the cooperation with third countries. Furthermore the members will closely cooperate with the project's Executive Board and the Management Support Team to assist in strategic steering decisions and policy developments. Finally, the Advisory Board will critically review and give feedback to the project progress, reflected mainly in the deliverables, in order to ensure their relevance and excellence.

The board members were nominated and appointed by the EU-PolarNet General Assembly. In total the project participants nominated more than 30 polar experts. From this list of nominees the Executive Board carefully selected six people, striving to establish a well-balanced board in terms of Arctic and Antarctic issues, male and female board members and in regard to their areas of expertise.

The appointed members of the Advisory Board are:

- David Scott (President of Polar Knowledge Canada)
- Kim Crosbie (Executive Director IAATO)
- Carlota Escutia (ECORD Science Coordinator and Vice-Chair ECORD Science Support and Advisory Committee)
- Susan Barr (IASC President, Norwegian Directorate for Cultural Heritage)
- Fran Ulmer (Chair of the U.S. Arctic Research Commission)
- Steven Chown (Head of the School of Biological Sciences at Monash University)

Renuka Badhe, the Executive Secretary of the European Polar Board will chair the board.

The first meeting for the Advisory Board will take place at the second EU-PolarNet General Assembly, on March 13th, which is held in conjunction with this year's Arctic Science Summit Week in Fairbanks, Alaska.

The Policy Guidance Panel

The Policy Guidance Panel was implemented to provide evidence-based advice whenever the European Commission or other decision makers approach EU-PolarNet with policy-related questions. The panel thus has to react ad hoc to upcoming requests on pressing polar related policy issues, while ensuring that its views and services are in line with the consortium needs. In order to meet the diversified requirements, the 14 appointed panel members represent different key sectors of the Polar Regions.

The members of the Policy Guidance Panel are:

- Chair: Frej Sorento Dichmann (Danish Agency for Science, Technology and Innovation, Denmark)
- Deputy Chair: Björn Dahlbäck (Swedish Polar Research Secretariat, Sweden)
- Deputy Chair: Michał Łuszczuk (Polish Academy of Sciences, Poland)
- Jane Francis (British Antarctic Survey, UK)
- Naja Mikkelsen (Geological Survey of Denmark and Greenland, Denmark)
- Nalan Koc (Norwegian Polar Institute, Norway)
- Vito Vitale (National Research Council, Italy)
- Heidi Kassens (GEOMAR, Germany)
- Denis-Didier Rousseau (French National Centre for Scientific Research, France)
- Yves Frenot (Institut polaire français Paul Emile Victor, France)
- Halldor Johannssen (ArcticPortal, Island)
- Gonzalo Vieira (Instituto de Geografia e Ordenamento do Território, Portugal)
- Gertrude Saxinger (Austrian Polar Research Institute, Austria)
- Christine Valentin (World Ocean Council)

A glimpse on: Polar research in Poland

- given by Maja Lisowska, Executive Director of Secretariat at the Polish Polar Consortium

Roots and milestones of Polish polar research

The tradition of polar research in Poland goes back to the 19th century, when Polish scientists - political prisoners (Jan Czerski, Aleksander Czekanowski, Benedykt Dybowski and others) explored the Far East and North of the Russian empire.

Some of the most important dates in Polish polar research are the following:

- 1897-1899 Belgian Antarctic Expedition led by Adrien de Gerlache, the first winter expedition in the Antarctic. Two Polish scientists, Henryk Arctowski and Antoni Bolesław Dobrowolski took part, together with Roald Amundsen and others.
- 1932-1933 First Polish polar expedition (Czesław Centkiewicz, Władysław Łysakowski, Stanisław Siedlecki) to Bear Island as a contribution to the 2nd International Polar Year (geophysical research).
- 1957-1958 (3rd International Geophysical Year) The Polish Polar Station in Hornsund, Svalbard, was established, later named after the leader of the founding expedition, Stanisław Siedlecki; first wintering in the station. Expedition to Bunger Oasis in the eastern Antarctica.
- 1977 H. Arctowski Polish Antarctic Station on King George Island, South Shetland Islands, established.
- 1978 Polish Polar Station in Hornsund, Svalbard, started operating as a full year research station.

Motivation - why do Poles study polar regions?

Certainly, there is more than one answer to this crucial question. The top list includes:

- scientific curiosity;
- searching for better understanding of processes that formed the Polish landscape in recent geological past and are still active in the High North;
- monitoring of contemporary trends in climate and environmental changes in high latitudes which affect other parts of the globe, including the territory of Poland;
- Advising policy-makers to take responsible, knowledge-based decisions in relation to the polar issues discussed in international fora.

Polish scientists contribute to the worldwide network of research and monitoring of land and marine environments in polar zones. The results of these studies are crucial for understanding the dynamics of environmental and social changes all over the globe.

How is the polar community in Poland set up?

The current number of researchers conducting polar-connected research in Poland oscillates around 400, affiliated to about 25 academic and research institutions. Additionally, some Polish researchers located abroad collaborate with their colleagues in Poland on regular basis. That makes quite a big and diverse community. The scope of research covers a vast range of disciplines, including: geology, meteorology, climatology and paleoclimatology, glaciology, geography, oceanography, marine and terrestrial ecology, botany and zoology, social sciences and humanities. Polish polar scientists and research institutions actively cooperate at an international level, being involved in research and monitoring programs.

Learn more about the Polish polar community and important institutions...

Workplace or a second home? - Research stations and vessels

Polish polar research activities are concentrated in, though not limited to, two areas with Polish permanent research infrastructure: the Svalbard archipelago in the Norwegian Arctic and the South Shetland Islands in the Southern Ocean.

Research infrastructure in Svalbard:

- All-year Polish Polar Station Hornsund, operated by the Institute of Geophysics, PAS (long-term observations in meteorology, seismology, glaciology, Earth magnetism, ionospheric research, atmospheric physics, optics, environmental chemistry; shortterm research project in various disciplines)
- Summer stations operated by universities: Nicolaus Copernicus University Polar Station in Kaffiøyra, AMUPS - Adam Mickiewicz University Polar Station in Petuniabukta, Marie Skłodowska-Curie University Station in Calypsobyen (website in Polish), University of Wrocław Polar Station (website in Polish)
- Research vessel s/y Oceania, operated by the Institute of Oceanology, PAS.
 Oceania, built in 1985, is a sailing research vessel used for research expeditions in the Baltic and the European Arctic and mostly in the Svalbard region (hydrography, optics, aerosols, acoustics, chemistry, biology)

Research infrastructure in South Shetlands, Antarctica:

 all-year H. Arctowski Polish Antarctic Station, King George Island, operated by Institute of Biochemistry and Biophysics, PAS (long-term observations in: oceanography, geology, geomorphology, glaciology, meteorology, seismology, biology, ecology; short-term research projects in various disciplines)

All research stations are involved in numerous international research and monitoring programs.

What are the current initiatives in Polish polar research

In recent years, major effort was put to strengthen cooperation between research institutions, and beyond the polar community - with industry and policy makers. Establishing of the Polish Polar Consortium was one of the outcomes of this effort. Currently, three projects are running under the umbrella of the Consortium and in cooperation with the Committee on Polar Research, PAS:

- Polish Snow Program and initiative of cooperation in Svalbard based on advanced activity with long-term research and databases of Polish research groups in Svalbard, aiming at developing standardised measurement protocols, filling up knowledge gaps in snow science, and contributing to international monitoring.
- Polish Polar Database creating an integrated multidisciplinary meta-database, digitalization of historical datasets.
- National Polar Research Program for the next decade. The work on the Program, started in early 2014 and should be finished till the end of the 2016. The Program will serve as a roadmap in planning research projects, and will be vastly used when collaborating between the scientific community, industry and policy-makers.

Survey of existing Polar Research Data Systems

Which polar research data systems and infrastructures exist in Europe? What are their standards and good practice baselines, which policies do they follow and which scope do they have? These are the questions EU-PolarNet members Serge Scory from the Royal Belgian Institute of Natural Sciences and Stefano Nativi from the Florence Institute of Atmospheric Pollution Research currently are getting to the bottom of.

To get the full picture of existing polar research data systems, they set up a survey, which is especially targeted towards managers of existing data management systems. With their help Serge Scory and Stefano Nativi hope to gain a complete overview of data management systems from all branch of sciences – from social sciences, to ecology, chemistry, etc.

The first survey round ends on February 8th 2016. Then the collected information will be analysed and presented to the European Commission and the international polar community. Nonetheless, the survey will remain open and incoming information continuously reviewed.

The objective of the resulting overview is to promote and improve open access and interoperability for the polar research domain, paving the way towards a coordinated European polar data infrastructure.

Click here for more information about the survey and to participate: https://eupolarnetd31.typeform.com/to/hcxYeH

Arctic Vision: EU-PolarNet @ Arctic Frontiers

EU-PolarNet's project manager, Nicole Biebow, joined the panel for this year's Arctic Frontiers breakout session on 'Arctic Visions'. Asked to share a European research view, she kicked off her presentation with an insight to the European Commission's four key considerations for Arctic research. These being:

- increasing predictive capabilities through improving the quality, the frequency and the geographic coverage of sustained observations;
- facilitating open science, meaning open access to research infrastructure, to data and to scientific results:
- establishing a true and open international cooperation;
- involving indigenous people, local communities, and the relevant stakeholders in a sustainable development agenda.

These considerations, she stated, have led to three calls dedicated solely to Arctic research. EU-PolarNet was thereby involved in shaping those calls and will also support the European Commission in identifying polar topics for the work programme 2018 – 2020.

The second focus of her talk Nicole put on what might be one of the project's largest challenges and yet the one that could result in the biggest output: the implementation of a sustained and on-going dialogue with all relevant polar stakeholders. By looking at a word cloud created from an EU-PolarNet document on stakeholder engagement, she illustrated that most interaction will involve Arctic stakeholders—the most prominent actors standing out from the cloud being indigenous people and interest groups. The graph further highlighted two key points essential to a sustained dialogue: communication and understanding. This dialogue, she continued, is momentarily carefully prepared by mapping potential stakeholders.

To watch the entire Arctic Vision session, please visit: https://mediasite.uit.no/Mediasite/Play/c5369ba84fbf409abb1f11da86d31bf91d

Supporting the implementation of the "Transatlantic Research Alliance"

One of the tasks within EU-PolarNet's Work Package 1 is to support the European Commission in implementing the "Transatlantic Research Alliance" in regard to Arctic Research with the US and Canada. To inform North American colleagues about EU-PolarNet and the possibilities of cooperation with European researchers in Horizon2020 projects, EU-PolarNet participated in two large conferences in North America at the end of 2015: ArcticNet and the American Geophysical Union's (AGU) Fall Meeting.

The Canadian ArcticNet colleagues gave EU-PolarNet a unique opportunity to present the project's objectives and the European interests in cooperating with Canadian researchers: They invited project manager, Nicole Biebow, for a plenary talk at their Annual Scientific Meeting, which took place 07th to 11th December 2016 in Vancouver.

Directly after the ArcticNet meeting, EU PolarNet organised a Town Hall Meeting at the AGU Fall Meeting in San Francisco to liaise with the US Polar Community. Additionally, Nicole

Biebow was invited to introduce the current Arctic calls within Horizon2020 at the Town Hall Meeting of the NSF Division of Polar Programs and to present EU-PolarNet in the AGU Session "Looking to the Future of Antarctic and Southern Ocean Research".

Featured Conference: Arctic Science Summit Week and Arctic Observing Summit

The Arctic Science Summit Week and the Arctic Observing Summit will take place in Fairbanks, Alaska, this year. We got some interesting information on the conferences and the first International Arctic Assembly Day from Kristin Timm from the University of Alaska Fairbanks, which we would like to share with you.

Exciting Program Developing for the 2016 Arctic Observing Summit

The third Arctic Observing Summit (AOS) will be held from 15-18 March 2016 at the University of Alaska Fairbanks. It will be held in conjunction with the 2016 Arctic Science Summit Week and the Arctic Council's Senior Arctic Officials meeting. The Arctic Observing Summit is a high-level, biennial summit that aims to provide community-driven, science-based guidance for the design, implementation, coordination and sustained long-term (decades) operation of an international network of Arctic observing systems.

The program for the 2016 Arctic Observing Summit is developing to address urgent and broadly recognized needs of Arctic observing across all components of the Arctic system, including the human component. Each day of the summit will include a plenary session with keynote speakers, including leading scientists from several nations, including:

- Konrad Steffen, Swiss Federal Research Institute
- Naomi Harada, Japan Agency for Marine-Earth Science & Technology
- Lene Kielsen Holm, Greenland Climate Research Centre
- Peter Pulsifer, National Snow and Ice Data Center
- Barbara Ryan, Group on Earth Observations
- David Grimes, World Meteorological Organization
- Stephen Volz, National Oceanic and Atmospheric Administration

The first day will provide background on the Arctic Observing Summit, previous Summit recommendations, overviews of Arctic observing activities, and progress in Arctic observations. On the second day, the plenary session will highlight the key findings from the white paper submissions, including priorities, challenges, and progress for each AOS theme.

The 2016 Arctic Observing Summit themes include:

- Strategies for sustained support of long-term Arctic observing
- Technology and innovation for sustained Arctic observations
- Contributions of the Private Sector and Industry to sustained Arctic observations
- Actor and Stakeholder engagement and needs in sustained Arctic observations
- Arctic Observations in the context of Global Observing initiatives
- Interfacing Traditional Knowledge, Community-based Monitoring and Scientific Methods for sustained Arctic observations

Plenary sessions will be followed by thematic breakout sessions in the afternoon. Breakout sessions will be a place for discussion and iteration in order to focus the input from the white papers and statements.

The final day of the summit will be used to synthesize the results and discussions from the summit, including findings from breakout sessions and crosscutting issues relevant to implementation, collaboration, priorities, gaps, and sustained support for an international Arctic Observing System.

More information about the program is available at: http://www.arcticobservingsummit.org/general-schedule

Arctic science and policy leaders to speak at International Arctic Assembly Day

By: Kristin Timm, University of Alaska Fairbanks

Local, state, national and international policy makers, scientists, indigenous people, and other experts and stakeholders from within and outside the Arctic are invited to participate in the first International Arctic Assembly Day to be held on March 15, 2016 at the University of Alaska Fairbanks.

"It will be a wonderful opportunity to hear the visionary perspectives of those who are helping to guide our nations' in addressing the challenges of a rapidly changing Arctic," said Larry Hinzman, UAF Vice Chancellor for Research and the coordinator for the International Arctic Assembly Day.

The one-day event will harness the expertise of high-level officials who will be attending several international science and policy meetings in Fairbanks that week, including the Arctic Science Summit Week, Arctic Observing Summit and the Arctic Council's Senior Arctic Official's meeting. Distinguished speakers include U.S. Ambassador David Balton, Minister Plenipotentiary for Greenland Inuuteq Holm Olsen, U.S. Ambassador Mark Brzezinski and leading scientists and diplomats from about a dozen nations. Marcus Carson, a Senior Research Fellow at the Stockholm Environment Institute will discuss his research on change processes and obstacles involved in developing policy responses to climate change.

"International Arctic Assembly Day provides a great opportunity for those working within and alongside the Arctic Council to exchange ideas with a broad spectrum of people and organizations studying the Arctic and seeking solutions to the most important issues facing the region today," said U.S. Senior Arctic Official Julie Gourley. "Holding the International Arctic Assembly alongside the Senior Arctic Official's meeting provides a unique opportunity to enhance understanding of and support for the Arctic and its peoples."

Presenters, panels and discussions will examine how the people of the Arctic, researchers and policy makers can best work together to respond to a rapidly changing Arctic. The meeting comes at a time when increased tourism, shipping, resource extraction and other commercial and military activities in the Arctic are creating opportunities and challenges for state, national and international governing bodies. Information to make policy decisions is in

frequent demand, but the connection between research and policy is far from a strait line and often includes significant obstacles.

Broad participation is encouraged for the International Arctic Assembly Day. The International Arctic Assembly Day is included in the registration for the 2016 Arctic Science Summit Week or Arctic Observing Summit. A one-day registration option is available for anyone else who would like to attend. Registration includes the conference program, lunch, breaks and an unprecedented opportunity to network with international Arctic leaders in science and policy.

The International Arctic Assembly Day will also be live streamed from the Arctic Science Summit Week website. Discussion and questions will be encouraged from both in person and online participants.

The day will conclude with a banquet to celebrate the Arctic and international cooperation through cultural performances, remarks from Arctic leaders and a meal with many locally sourced foods from around Alaska.

The International Arctic Assembly Day agenda is available online at: https://assw2016.org/about/assembly

Remember to register for the 2016 Arctic Science Summit Week and Arctic Observing Summit by March 1!

All meeting participants are required to register for the conference. There are several registration options available, including one-day registration, just ASSW (12-15 March), just AOS (15-18 March), and full week registration (12-18 March 2016). Online registration will end on 1 March – so don't delay!

Begin your online registration: https://assw2016.org/register

Upcoming conferences and events

Ocean Sciences Meeting
Date: 21st – 26th Feb 2016
Location: New Orleans, USA

More information: http://osm.agu.org/2016/

Arctic ECRA workshop

Date: 25th (13:00) – 26th Feb 2016 (16:00)

Location: Brussels, Rue du Trône 98 (Helmholtz Association)

More information: http://ecra-climate.eu/index.php/collaborative-programmes/arctic-

ecra/arctic-events

International Partnerships in Ice Core Science – Second Open Science Conference

Date: 7th – 11th March 2016 **Location**: Hobart, Australia

More information: http://www.ipics2016.org/

Arctic Science Summit Week / Arctic Observing Summit

Date: 12th - 18th March 2016 **Location**: Fairbanks, Alaska

More information: https://assw2016.org/

Stakeholder Workshop: Arctic Health and Wellness Research Needs

Date: 12th March 2016

LocatioInn: Fairbanks. Alaska

More information: http://www.eu-polarnet.eu/news-and-events/conferences-and-

workshops.html

2nd EU-PolarNet General Assembly

Date: 13th March 2016 Location: Fairbanks, Alaska

More information: http://www.eu-polarnet.eu/news-and-events/conferences-and-

workshops.html

European Geosciences Union General Assembly 2016

Date: 17th – 22nd April 2016 Location: Vienna, Austria

More information: http://www.egu2016.eu/

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