

Follow-up EPB COVID-19 meeting

7th August 2020

Attendees:

K Latola (Co-Chair, Thule Institute), A Quesada (Co-Chair, MINECO), V Vitale (CNR), M Ojeda (CSIC), A Barbosa (MINECO), J Francis (NERC), H Burgess (NERC), C Krieger (polar.lu), N Koç (RCN), J Dahl (SPRS), H Savela (INTERACT), W Sielski (PAN), R Badhe (Executive Secretary), J Nolan (Policy Officer)

Agenda

1. Welcome
2. Roundtable of presentations by Members (Chaired by Kirsi Latola)
3. Short break
4. Discussion between Members (Chaired by Antonio Quesada)
5. End

1. Welcome

K Latola welcomed all to the meeting, a round of introductions was given. J Nolan gave an overview of the technical system for running the meeting online.

The meeting is a follow up to that held on the 1st July 2020, allowing Members to share information on the impact of the COVID-19 pandemic on their organisation's field seasons and plans in the Arctic and Antarctic, and for discussion on best practices on a way forward.

2. Roundtable of presentations by Members

W Sielski, station manager at the Polish station **Hornsund** in Svalbard presented on the impact of the COVID-19 crisis on the station. Hornsund is a year-round station, with approximately 10 permanent staff, who are exchanged each year around June.

The first big challenge for Hornsund in lockdown was the exchange of staff. Being in an isolated location, they themselves were safe. However, logistics of getting them home and bringing new staff to Hornsund was complex and improvised. Unforeseen difficulties included finding locations for safety training, finding accommodation for quarantine, etc. The situation was managed, but it was a struggle. In future, plans should be in place for similar situations, so that processes need not to be improvised.

Maintenance of the station also had difficulties. There is an urgent need to replace a boat house at Hornsund, which is deteriorating and may soon be lost into the sea. Plans had been made to replace the entire boat house this season, but ultimately only preparations and foundation work was possible. It is hoped that next season will not be too late.

The Polish provide services to partners around Svalbard, however with drastically reduced demand for cruises to Ny Alesund, these were cancelled this year.

There have been very few research visitors to Hornsund this season. 2019 saw ~1100 person days filled at the station, in 2020 only ~100 have been used, with only two research teams visiting the station.

Two possible scenarios are envisioned and planned for next season.

First, with most projects from 2020 postponed, 2021 will be very busy. Hornsund expects to struggle with capacity and may have to severely limit access, or even refuse access. Exactly how this will be managed is to be determined.

The second scenario is that 2021 is very similar to 2020, with very limited in-person use of the station possible by research teams. This would likely lead to a big increase in demand for remote and virtual access to the station. If this kind of access could be coordinated throughout Svalbard and elsewhere it would be very beneficial. The INTERACT programmes for remote and virtual station access can be the basis of this. INTERACT are working to better integrate remote and virtual access with their transnational access programme. This year there has only been a few projects using remote access at Hornsund. Staff training is required to increase capacity for this in future. Members noted the importance of exploring different and diverse modality of access for all kind of polar research to reduce risk and increase sustainability of research activities, in the Arctic and Antarctic.

Ultimately, Hornsund plan to avoid having to rely on improvisation and luck next season to run the station properly. It is important for all infrastructures to be prepared for unexpected scenarios such as a global pandemic, regardless of how unlikely they may seem at the time.

Procedures and protocols at Hornsund station itself to limit spread of the virus have been limited. There is no coordinated standard for what protocols should be at Svalbard research stations, as has been developed in COMNAP. Additionally, for several people Hornsund station is like a home, therefore it is not possible to apply protocols in the same way as in a public place or usual workplace. Research teams coming to the station have followed quarantine procedures according to Norwegian regulations. Members noted that the Italian station in Ny Alesund is treated as an Italian workplace, and so follows all the same rules and procedures as workplaces in Italy, along with Norwegian guidelines on quarantine when travelling to Svalbard.

There have been internal discussions about the COVID-19 outbreak in Poland, and how this may affect operations at Hornsund. Guidelines are largely improvised at the station, and it may be that access is simply denied to people coming from high-risk areas.

It is suggested that guidelines need to be developed in an international coordinated manner for stations to take in foreign visitors. Otherwise polar research will remain in national bubbles.

J Francis gave an update on planning for **BAS** activities in the Antarctica during the coming season. It is anticipated that the scenario with a minimum season is most likely, with only essential personnel exchange, station maintenance and work for long-term monitoring and projects to be completed. If the situation improves, more people may be able to travel to Antarctica, and more science may be possible. If possible, some ongoing construction work at Rothera will be completed. If possible, BAS aircraft will be taken to Antarctica, but currently there is difficulty in transporting them from Canada, where they are being serviced, through South America and to Antarctica.

It was noted that recent COMNAP discussions have been very useful. It appears that most nations are opting for a minimal season. One of the largest difficulties is access to the Antarctic gateway cities/ports, and the logistics of bypassing them if needed.

M Ojeda updated Members on the current situation for **Spain**, noting it is similar to the UK. Issues are largely focused around logistics of passing through the gateways to Antarctica in South America, but solutions may be possible soon. A final decision on how most countries will proceed with their Antarctic seasons will be made in September.

It is possible that the Spanish programme will travel by ship directly from Spain to Antarctica, where it will only complete necessary maintenance and resupply work, and services of long-term monitoring equipment.

The need for clear, well-defined and universally followed procedures for all activities is strongly emphasised. It is essential to keep Antarctica free of COVID-19, and if Antarctic research is to resume at its usual level, it will only be possible with strict rules followed to the same standards by all national programmes.

M Ojeda noted that a big issue for the Spanish programme is that the first part of the Antarctic season is in 2020 and so covered by the 2020 budget, whereas the final part of the season's costs are covered by the 2021 budget. It is possible that major reductions in the budget may be made in 2021, adding to operational difficulties.

Members noted that FARO and COMNAP both have resources and information available on the COVID-19 situation and its impacts on polar operations on their websites. It was noted that COMNAP has been very active in its coordinated efforts to develop common guidelines for operations in Antarctica during the pandemic. A similar approach in the Arctic would be very welcome.

J Dahl gave an update on **SPRS**'s operations and infrastructure. All research on the Oden has been postponed from 2020, including the planned resupply of MOSAiC and a SAS cruise. It was noted that before the coronavirus pandemic, SAS coordination did not secure participation of all vessels in the same year. Also a planned upgrade to on-board equipment has been postponed.

SPRS is working with three scenarios for future operations. The first is that a vaccine is successfully developed and widely available by the time of the departure for planned expeditions, in which case, researchers can be vaccinated and work can continue relatively normally. The second scenario is that a vaccine is developed but only for prioritised groups in the population, and that authorities can be convinced to prioritise polar researchers to be vaccinated. The third scenario is that no vaccination is developed and researchers are required to follow a strict quarantine process, similar to that of MOSAiC. For approximately 75 people on Oden for 16 days would lead to a huge additional cost.

Abisko station has been kept open in 2020, but with strong restrictions. Long-term projects and monitoring are prioritised and no non-science activities are allowed. Testing equipment for future Antarctic expeditions is also possible at Abisko, including for non-Swedish team.

Wasa and Svea Antarctic stations are open in summer only. No science or operational expeditions were planned for the 2020-2021 season. Next planned expedition is in 2021-2022. Station staff were able to safely get home before COVID-19 lockdowns began.

The Finnish station Aboa is directly adjacent to Wasa and Svea. It was noted that their planning is similar to that at the Swedish stations.

J Dahl noted that it is anticipated that there will be available capacity at Wasa and Svea in the coming Antarctic seasons. With many projects postponed by national programmes around the world, it is expected that many facilities in Antarctica will be very busy and in potentially unable to meet demands for space in the upcoming seasons. Swedish Stations Wasa and Svea can be available to relieve pressures on capacity at other Antarctic stations in expected very busy seasons.

V Vitale gave an update on **Italian** plans for activities in the Arctic and Antarctic.

In Antarctica, a schedule is fixed to reach the station by ship and exchange personnel. Cooperation with IPEV for exchange of over-winterers at Concordia is ongoing. The Antarctic scientific plan is defined, with a small campaign. Six scientific personnel will join expedition to service monitoring and long-term project equipment. Efforts are being made to minimise knock-on future impact in later seasons, which are expected to be busy. Teams will work to do as much as possible in the coming season.

In the Arctic, personnel will reach the Italian station in Svalbard later in 2020 to recover equipment that was not possible to reach earlier in summer. Otherwise, research activity has been postponed to next year.

N Koç gave an update on **Norwegian** polar research planning. The Norwegian government is regularly updating list of countries considered high risk for COVID-19 – this effects who can go to Norway and where Norwegians can go (without quarantine). It was noted that the situation and regulations are changing rapidly, and thus even with meticulous planning, flexibility and adaptability are essential, and the risk of projects being postponed or cancelled remains very high. Information on access to Svalbard is provided on EPB website, but Members are encouraged to follow associated links to reach the latest information from Norwegian authorities.

H Savela have an update on **INTERACT** and planned transnational access projects. 98 project access visits were planned this summer to 43 stations in 13 countries. COVID-19 has disrupted this hugely. Good communication with station managers and TA user groups has been key to managing the impacts. The current expected situation is that 18% of projects will be possible in autumn, 11% have been changed to remote access projects, 69% of projects have been postponed to summer 2021, and 1% are currently with unknown status or plans.

The next TA calls, for summer 2021 and autumn/winter 2021/2022 are currently being prepared. Discussions with stations about increased capacity to accommodate postponed projects are ongoing. Selection of projects in the TA calls will have to be adjusted accordingly.

INTERACT have taken the opportunity to bring forward the development of its virtual access programme. Work has begun early and the project is ahead of schedule on developing a new portal and metadata harvesting tool, which are expected to be launched later in 2020.

K Latola thanked all for their updates and presentations.

3. Short break

4. Discussion between Members

A Quesada suggested that the discussion look at the MOSAiC procedure to exchange crew during the pandemic, which has served as a basis for development of procedures by COMNAP, which are very comprehensive and publicly available. It was noted that the heterogeneity of rules and protocols in

different countries and between programmes causes challenges. The way to proceed is to follow whatever are the most strict regulations that apply. Members are encouraged to read the COMNAP protocols, noting that they are not a final document – updates will be made as knowledge advances.

A Quesada noted that a lot of emphasis has been placed on the psychological impact of the pandemic on personnel in Antarctica, both on staff travelling to Antarctica, and personnel returning home. Recommendations have been made to ensure very thorough information is shared with all participants in expeditions so that everyone is very aware of the situation. Medical regulations are understandable very strict and very tight to prevent the spread of the virus to Antarctica and to handle the situation should a person test positive at a station. Recommendations for those who should not travel to Antarctica on medical grounds are significantly stricter than usual. Programmes are recommended to enforce 14 days of quarantine for their staff at a gateway port before travel to Antarctica. Quarantine should be in a controlled facility with medical certificates, appropriate staff and COVID-19 testing facilities (not in hotels).

In Antarctica, stations and programmes are recommended to work in ‘bubbles’ with no exchange of staff or visits between facilities for any reason.

COMNAP protocols detail procedures to follow if any personnel test positive for COVID-19 in Antarctica at length. However, there is concern that not all stations have sufficient facilities or capacity to follow these procedures if needed.

Of the 18 countries that are active in Antarctic Peninsula area, 2 have completely cancelled their 2020 programme, 10 have reduced scientific activities, and the other 6 have not currently shared plans. Only 1 programme is planning an oceanographic cruise. Five countries will conduct international collaborative actions (following regulations). Only two countries will be available to provide search and rescue in the Peninsula area – Chile and Argentina. Members noted that only countries with own logistics capabilities to operate independently are likely to have science activities for the upcoming season. Members noted the need to plan much further to future as the virus is likely to be around for several years. Even if vaccination is developed, scientists unlikely to be priority for vaccination in most countries.

Many Members are already planning for 2021-22 season, and most members felt that the only way to keep science going in the future is through collaboration. While this year is the year of the “national bubbles”, the next few seasons, and years have to be collaborative, with all following the similar protocols.

It was noted that many programmes have issues with insurance for their operations, and that currently a solution has not been found.

Members noted that national regulations and measures to control COVID-19 change frequently, making planning difficult for programmes, particularly if working or travelling in countries other than their own.

Members further emphasised the importance of the gateway ports to Antarctic operations. It was noted that the possibility of scientific corridors, allowing Antarctic programme staff to travel through gateways without quarantining there on their way to and from Antarctica, is being explored in Chile. The Spanish programme is also exploring Uruguay and Peru as a potential alternative gateways to Antarctica. The British programme will travel through the Falklands, rather than Punta Arenas. The importance of being flexible and remaining open to all potential possibilities was underlined.

It was noted that where researchers are required to quarantine, there are differences between programmes for how the costs will be covered. For some, programmes will cover costs of quarantine stays, whereas some researchers will have to use their projects funds. Quarantine facilities are expensive – the Spanish programme estimates an additional € 350,000 in costs for the coming season if staff are required to quarantine. It was noted that as Antarctica is considered COVID-19-free, it is currently a safe location, and those returning will not have to quarantine in gateway cities.

Members discussed the need for protocols to be legally binding in order to be binding. It was noted that this is difficult to foresee being implemented as sovereignty issues and the nature of the Antarctic Treaty which provides the legal framework to govern Antarctic activities. Only recommendations can be made. It is with this context that programmes plan to work in bubbles in Antarctica, so not to rely of the compliance to other programmes to recommended protocols to ensure safety.

It was noted that some projects are vulnerable to losing or running out of funding if postponements continue for fieldwork. Short-term projects that are not prioritised are particularly vulnerable. Some projects also have a set deadline for completion and cannot be postponed indefinitely, even if funding is still available. It was noted that in several countries, projects have been given extensions to help avoid incompletions.

Members noted that the pandemic has focused attention on the current model by which research is organised, planned and managed in the polar regions. Future emergency situations, increasing concern for minimising environmental impact and pressures on funding, along with the opportunities presented by new technologies indicate that physical presence in the polar regions for research may reduce in coming years and decades. INTERACT's remote and virtual access programmes are examples of alternative ways in which polar research can continue with reduce physical presence in the field.

It is suggested that an EPB webinar could explore new approaches to research, in cooperation with INTERACT.

ACTION – Secretariat to explore possibilities for a webinar on new approaches to polar research with INTERACT.

In Antarctica there are possibilities for virtual and remote access to stations, but these would not be suitable everywhere with current conditions. Members noted that programmes plan to complete as much science as possible in the coming Antarctic season without scientists, however specialist information and experience using specific equipment limit what is possible. Great training and standardisation of equipment will help to improve capacity in this regard.

It was noted that information sharing between Members on science plans for the coming season would be a very useful portion of future EPB meetings, and would also help develop this information in the European Polar Infrastructure Database.

It was noted that in the Antarctic, countries are obliged to share data. However this is considered more a political issue, rather than scientific, and so data often suffers from poor interoperability, incomplete metadata and discoverability issues. Work on these issues continues with various international initiatives, but progress is challenging.

There was discussion on what constitutes science – is it collecting data, or is analysis of data afterwards also necessary.

It was noted that the situation in Antarctica, including the plans of national programmes, will be much clearer by the end of September. Currently plans are not set and programmes are still unsure of what will be possible. As such, further information sharing and reporting from Members at future EPB meetings will be important.

It was noted that little information has been shared with Members on the situation in different parts of the Arctic, especially the non-European Arctic. Members noted that some information is publicly available on the FARO website, a link to which is on the Members' area of the EPB website. It was also noted that specific information from individual stations and contacts is frequently more useful to understanding the situation in the Arctic, rather than national information. It was noted that Svalbard operated like a mini Antarctica, with stations belonging to many countries within the same territory. As such, coordination on Svalbard would be very welcome.

Members also noted that the potential shift to less in situ fieldwork by scientists presents an opportunity for better engagement and participation of local and Indigenous communities in research in the Arctic. Training and capacity building for science in these communities would reduce the need for researchers to travel themselves to remote locations.

The Executive Secretary and Chair thanked all the participants for very useful discussions.

End.