



Forum of Arctic Research Operators

FARO Annual Meeting 2021
19 March 2021, 10:00 - 16:00 (GMT)
Online meeting

Minutes

1. Opening and reporting Session (Jennifer Mercer, FARO Chair)

Jennifer Mercer welcomed all participants to this online FARO annual meeting, followed by a quick round of introductions of National Points of Contact (NPOC) and the newly established FARO review committee. The meeting minutes from annual meeting 2020 were approved without any comments. The Agenda was approved without any changes.

Report from the Chair:

ExCom held meetings approx. every other month, but only online as the COVID-19 pandemic prevented all in person conferences in 2020. In December 2020, Bettina Ovgaard from the Joint Arctic Command in Nuuk, Greenland, gave an overview of their science support and [ISAFFIK](#) – the arctic gateway (a logistics sharing platform).

The FARO Review committee was established in 2020 with the following members:

- Heinz Miller (Committee Chair) – Professor, AWI (Germany)
- Gerlis Fugmann –Executive Secretary of IASC (Iceland)
- Margareta Johansson – Coordinator of INTERACT (Sweden)
- Hajo Eicken – Director of UAF IARC (USA)
- Hiroyuki Enomoto - Vice Director-General of NIPR (Japan)

Communication and outreach:

The FARO secretariat continued to engage with NPOCs regularly through social media, email, etc.

On the FARO website regular updates on the COVID situation in the respective countries were posted.

Addressing Main Challenges: Re-convened facilitation of workshop on International Access to Research Infrastructure in the Arctic with INTERACT, ARICE, and APECS. This workshop will be held on March 23, 2021 during ASSW.

2. Updates from Countries

Canada, Jim Drummond

Covid-19 status: Difficult to get any information from people and the normal channels aren't working. Northern part of Canada is shut down and a 14-day quarantine imposed for anyone moving into the Northern Provinces.

Automatic stations are working. Collaborations with Indigenous partners.
Some restrictions are easing with vaccinations. Priority on the province to inoculate Indigenous communities, but not sure if there will be any scientific activity during the summer 2021.

China, Sandy Shan (slides missing)

Infrastructure includes two stations in Svalbard and Iceland, and two new ice breakers. One ship went to the Arctic - CHINARE-11 left for central Arctic Ocean in July-Sep 2020 and maintained routine research. Next voyage with CHINARE-12 to the Arctic Ocean in 2021 is still in development.

Denmark, Morten Rasch (slides available on FARO website)

Overview of the infrastructure in Greenland:

9 research stations, 2 research vessels; Sanna/Porsild. New vessel under construction. By 2025 Denmark hopes to have a new multi-purpose research ship ready - not an icebreaker but Arctic capable.

2 new stations open to external scientists; One in Qaanaaq, one in Sisimiut.

Currently modernizing the Arctic station in West Greenland, Qeqertarsuaq, where the capacity will be increased from 25 to 40 people.

Greenland is closed until 18 April, but restrictions may continue. Currently no COVID in Greenland.

Greenland Integrated Observing System (GIOS) is funded for 2021-2025. Will increase the observing capacity in Greenland and it is the first big infrastructure grant to the science community. New Arctic Strategy for the Kingdom of Denmark on its way.

Finland, no update

France, Jerome Chappellaz

Overview of two existing stations. Collaboration with Canada, running discussion between Canada and France, regarding Amundsen Ice Breaker. French has no icebreaker but uses the Canadian asset. Offering in return access to the French oceanographic fleet.

Germany, Dirk Mengedoht (slides available on FARO website)

MOSAIC expedition - everyone healthy. Outcome: 150 terabytes of data.

Polarstern- cancelled two out of the three Arctic cruises last year.

AWIPEV station remained operating while the wintering team took over much of the sampling. 47 projects registered.

Infrastructure planning: Replacing the Polarstern. European invitation to tender -> summer 2021

Netherlands update was included with Germany: SEES Cruise postponed to 2022. IceBird cancelled in 2020 and 2021. CATS project is running (Changing Arctic Transpolar System). People on standby until Covid-19 situation opens up.

Greenland, Sanna Djurhuus, colleague of Sten Lund (slides available on FARO website)

Few cases of COVID and no deaths. Few domestic restrictions. Vaccine mobility: low temp requirement makes it hard to reach remote areas.

Restricted access to international research stations. Loss of tourism, economic impact.

New research strategy will be published in 2021.

GIS Mapping – NatureMap, QGreenland, NunaGIS

Greenland Research Council –New council members appointed in 2020 for a 3-year term

Represent a broad spectrum of scientific research disciplines. Dr. Josephine Nymand is the chair of the council.

Allocates 1.2 million DKK yearly from the government's annual budget. Two application deadlines for research funding in spring and autumn. New website: www.nis.gl

Ilimmarfik – Planning an extension with new buildings, inc. increased capacity for visiting researchers. New state-of-the-art research vessel “Tarajoq” is arriving soon.

International Arctic Hub (IAG) – in Nuuk. Informational point of entry, liaison for international research interests.

Iceland, Anna Olafsdottir (slides available on FARO website)

New infrastructure report - overview of the infrastructure:

United Weather Center, 6 terrestrial stations (5 part of INTERACT). Three vessels (and in the early stages of planning 1 more) and two 2 aircraft.

The current entry requirements in Iceland: People can be tested at the airport. 5-day quarantine, and then tested again.

Italy – no presentation during meeting, but see slides online.

Japan, Takuji Nakamura (slides available on FARO website)

Arctic Challenge for Sustainability II is a 5-year project. Started in June of last year within natural and social science. Update on infrastructure – Vessels, satellites, data archive.

Mirai vessel - finished cruise in 2020.

ADS – Arctic Data Archive System. About 80% of users are international.

European Incoherent SCATter (EISCAT) – Space Weather. Radar in Northern Europe.

Korea, Sunhwi Kim (slides available on FARO website)

Mobile COVID-19 testing facility established in a 20 ft. ISO Dry Container. Installed and operated on research cruise. Now installed on KSJ where frequent personnel exchanges happen.

Two Antarctic stations, one arctic station, one icebreaker.

No field research in the first half of 2021. Reassessing second half.

One cruise, July to October.

KOPRI – second icebreaker project. Conducting feasibility study. Results in June 2021.

Synoptic Arctic Survey - Planning to participate this year.

Norway, Nalan Koc (slides available on FARO website)

Significant restrictions on entry to Norway and to Svalbard (10 days of quarantine)

<https://nyalesundresearch.no/covid-info/>.

New webpage for the research station <https://nyalesundresearch.no/research-and-monitoring/infrastructure/>.

Large campaigns – new EU funded project FaceIT on Arctic Biodiversity and Livelihoods.

Infrastructure – input from Research Flagships, priorities will be discussed by NySMAC, feasibility assessed by Kings Bay AS, follow-up pending financing, 10-year perspective.

Cruises with the RV Kronsprins Haakon. Cruises delayed from 2020 so will be very busy this year. Cruises run with single cabins, and quarantine before departure. 10-day full quarantine before departure. NANSEN legacy projects.

Portugal, Teresa Cabrita (slides available on FARO website)

Had to cancel three projects last year. Three other projects continued with their work.

Small program, so easier to manage COVID impacts.

Poland, Piotr Glowacki

Reduced activity and investment plan.

Six infrastructures in Arctic, all in Svalbard. Follows COVID restrictions from Norway.

Support for multidisciplinary laboratory for Polar Research. AREX 2020 – ocean expedition.

Russia – no attendance at annual meeting.

Sweden, Magnus Augner (slides available on FARO website)

Postponed the SAS expedition. Cancelled two support journeys to MOSAIC (Oden).

Abisko Station – implemented protocols and had no COVID cases. Ran at about 40% capacity in 2020.

Will carry out their part of SAS expedition with strict quarantines. Based off of Germany and COMNAP protocols.

Hoping to be more open this year.

New Swedish Arctic Strategy in Autumn of 2020. ARCOP – 2022.

Successor to Oden needed after 2025 – will be a ‘green ship’ using fossil free fuel.

Switzerland, Daniele Rod (slides available on FARO website)

Applied at the national level to get a status – national research infrastructure. Granted to few institutes. Have the status for four years. Step up from the current consortium to establish independent legal body. This is great news!

Grants substantial increase in funding. Launch a call for multi-annual polar program. Enable enter into mid- to long-term partnerships.

COVID19: 20 projects were supposed to go to field but only half managed to get some things done. Lesson on the importance of international partnerships and data sharing.

New program – funding focused on field campaigns. International collaboration to access infrastructure.

UK, Dave Wattam (slides available on FARO website)

COVID Impacts – unprecedented challenge. Lots of work postponed. No-cost extensions. Giving PhD students an extra year.

Sir David Attenborough icebreaker – undertaking sea trials.

Refurbished UK station on Ny-Ålesund.

Highlighted the Changing Arctic Ocean Program. 85 publications so far.

USA, Jennifer Mercer (slides available on FARO website)

Field research in 2020 was drastically reduced, but we did support several projects.

2021 Field Research: Working to support some field research, but primary goal is to not vector COVID-19 into Arctic. Will sustain Summit Station (Greenland), establishing PCR test capability in Kangerlussuaq. Several research cruises will proceed.

3. Arctic Science Cooperation Agreement - by Frej Sorento Dichmann

At the Kiruna Ministerial Meeting (2013), the Ministers decided to establish a “Task Force to work towards an arrangement on improved scientific research cooperation among the eight Arctic States”. Ratified by all parties and entered into force in May 2018.

The key word for this agreement is Access - access to areas, and data.

Areas covered by the agreement:

- Intellectual property and other matters
- Entry and exit of persons, equipment, and material
- Access to research infrastructure and facilities
- Access to research areas
- Access to data
- Education, career development, and training opportunities
- Traditional and local knowledge
- Laws, regulations, procedures, and policies

The parties meet once a year and discuss barriers and best cases, and information on how they implement the agreement. Different approach from the different countries. Russia will be responsible for hosting the meetings

in 2022 and 2023. Next meeting will be April 19, 2021.

For the future work:

- Terms of reference needs to be developed to have procedures on how to have a clear and collective understanding of the agreement, and follow up on the framework
- Need to determine how the agreement interlocks with other arctic initiatives

Discussion:

INTERACT, together with APECS, is gathering and making available rules and regulations for scientists travelling into Arctic countries. Hoping to launch this online in the next two weeks or so, after which it will be circulated among FARO NPOC's.

The agreement has resulted in the implementation of a reporting system for citizens of Arctic countries, where they can report barriers to their NPOC when experiencing a bottleneck working in other Arctic countries. There is currently no reporting system for scientists in non-arctic states, but the Agreement holder is looking into different options, one of these being through arctic organizations (e.g., IASC). FARO could also play a role in communicating barriers to parties to the agreement from FARO members that are not part of the eight Arctic countries.

The agreement parties recognize that there are issues with visas between countries and import/export regulations. This agreement will work within existing legal frameworks. Bringing issues forward to the group might impact it down the road.

- FARO should join the open part of future meetings within the Agreement, which should be held during ASSW
- FARO will share information on how to find national contact points of the Agreement and how to give feedback

4. APECS – by Josefine Lenz

The Association of Polar Early Career Scientists is an international and interdisciplinary organization for early career researchers working in the Polar and Alpine Regions and the wider Cryosphere and APECS council has 140 members from 43 countries.

Strategic Plan 2021-2025

APECS is also looking for a new host institution as the agreement with AWI ends in January.

Activity highlights:

- Online technical training programme together with ARICE
- Training the next generation of Arctic system science experts (MOSAIC school)
- Webinars
- Currently working on a Guide on Arctic Research Permit Systems and a Guide on CO₂ Reduction in Arctic Science together with INTERACT

5. Ocean Decade - Arctic Process by Christian Riisager-Simonsen, Danish Centre for Marine Research

The Ocean Decade's Arctic process - The development of a regional action plan for the Decade.

The mission is: Transformative ocean science solutions for sustainable development, connecting people and our ocean.

The Ocean Decades Arctic Process bring the global agenda down to a regional level so it may be implemented.

To reach the goals, several actions and calls give the opportunity to "harvest the momentum of the Ocean Decade to rally global scientific and societal capacities around the region's pressing challenges and opportunities". Danish Center for Marine Research is hosting and coordinating the Arctic process. Translating global objectives to

an Arctic process. The draft Ocean Decade – Arctic Action Plan is now available for public review 13 March – 11 April 2021. To provide comments see <https://www.oceandecade.dk/>. The Danish Center for Marine Research encourages all stakeholders to provide their feedback through email to Danish Center for Marine Research. Both scientists and institutions are welcome to provide input and feedback.

6. Promoting an Inclusive Work Environment in the Field – by Syndonia Bret-Harte

An example from Toolik Field Station - why work to promote an inclusive work environment in the field?

In a study from Clancy et al, 2014 (Survey of Academic Field Experiences (SAFE): Trainees Report Harassment and Assault) 64% of respondents reported sexual harassment in the field; 20% reported sexual assault. More women than men and happened mostly when they were trainees (students, postdocs). This study was a wake-up call for the station and therefore they started to provide training to raise awareness about this. Everyone who comes to Toolik Field Station must now take a short, online training and answer a quiz prior to arrival about:

- General code of conduct and expectations
- Guidelines – behaviors that violate the Code of Conduct
- “Ask once” if a person says no, do not pursue them

For the future, Toolik is working to address other forms of discrimination more explicitly such as racism and bullying. This includes coordinating with Arctic LTER Diversity, Equity, Inclusivity Committee to develop better resources for young scientists and improve diversity. Continuing to promote a culture of respect and caring.

The station has not had many complaints since they started this training, and the station has both a female and a male scientific leader so people can choose who they feel most comfortable talking to. IASC WGs are also supporting projects to reduce harassment in the Arctic, and there will be presentations on this topic during ASSW 2021.

Any best practices developed (including those developed by IASC) could be shared with FARO, but also INTERACT and APECS could be good to involve in sharing this information. FARO represents all infrastructure, stations, field camps, etc., and the discussions should continue in FARO and ExCom.

7. FARO review and evaluation of FARO

Discussion, Q/A with review committee.

The review committee was established in Autumn 2020 and has the following members:

- Heinz Miller (Committee Chair) – Professor, AWI (Germany)
- Gerlis Fugmann –Executive Secretary of IASC (Iceland)
- Margareta Johansson – Coordinator of INTERACT (Sweden)
- Hajo Eicken – Director of UAF IARC (USA)
- Hiroyuki Enomoto - Vice Director-General of NIPR (Japan)

The committee has met a few times, and this was the first meeting with FARO NPOC’s.

Discussion:

Hajo – there hasn’t been a review as mandated by FARO terms of reference. So blazing a trail. What, ideally, could the review provide?

Jen – Provide an in-depth review of FARO activities, operations, etc. A report of findings and recommendations, considerations, actionable items and any good or bad things that can improve the organization. This is the first review (even though it’s been in existence for over 20 years, and it’s supposed to be reviewed every 5), so no

template on which to work. A list created in collaboration with Heinz about potential areas for review.

Morten – FARO is a member organization, meaning different countries financially contribute. This review can document the investment/value of the member contributions and highlight the benefits of membership.

Gerlis – Linkages to other networks. MOU with IASC is one of the key collaboration agreements. What did you get out of the agreement? What is working well and what isn't?

IASC relationship with FARO is longstanding, even though the MOU is very recent.

Piotr – Middle of 2000, IASC was changing the structure that meant that FARO was separated from IASC and had to form an independent organization. Not a good decision from his perspective, but recently FARO has gained a little more visibility in the Arctic community.

Jim – Need for a tighter communication between IASC and FARO.

Nalan – Maybe switch the question around. Look to the Antarctic where SCAR like IASC deals with the science, and COMNAP like FARO deals with the logistics. It's the science body that comes with the need for information and science facilitation, and the logistical operators provide the facilities. The need for IASC and SCAR is for logistics organizations like FARO and COMNAP.

Magnus – In the Arctic facility platforms like INTERACT are really grassroots with a trans-national access program. While researchers going to Antarctic have to go through a government agency (COMNAP), researchers in the Arctic can go straight into the field. When they go through our organizations, they go through their own or another country. FARO is still searching for an identity. Why are we here and for whom? Maybe IASC can help us.

Morten – FARO has a role. Having a place where logistics operators can meet and discuss. Develop synergies. Synergies do come out of these meetings. But also agree that FARO's role is not formalized, which is different than COMNAP. But there's not much money in FARO, where for example the INTERACT project has significant funding. FARO can be the body where IASC can come for feasibility questions.

Dirk – More of an information sharing platform. COMNAP has a mandate, which is much more clear. In the Arctic – every national interest is more powerful than anything FARO could achieve.

Magnus - agree with Morten and Dirk. Predecessor to COMNAP – SCAR standing committee. FARO as a logistics think tank for IASC would be a big step forward.

Jim - FARO is needed, but it is very diffuse because it is not tied by geography nor funding. It is important that there is a place where we can look over the fence to see what is happening in other countries. Within that remit, we probably need more information flow through the system. Even within countries it is really difficult to bring together a single picture and we are trying to do that for the entire Arctic - but we do try.

Gerlis – What is the added benefit for the countries to also be FARO members?

Dave – new member, first FARO meeting. This resource has felt valuable to him as UK scientists come to him with questions about executing research in the Arctic. UK Arctic grants are quite a bit smaller than Antarctic grants, so it's difficult to get good support on shoestring budgets. See this as great leverage, having a pan-Arctic network of experts.

Jen – Arctic is geographically spread-out and owned by different countries. It is nice to be able to 'look over the fence' and see what's going on. For US, it's connection to other countries' resources that allows for a lot of successful operations to happen. US is routinely facilitating international access to the ice sheet through cost reimbursement. Each country has its own set of assets and contributions and this results in great collaboration. High demand for our US Ice Drills. BAS has the capability; we'll be using BAS drillers and drills for a project. But will also be benefitting station facility improvements.

Morten – Meeting people doing the same and learning from them has been a fantastic experience. Wouldn't know these people if it wasn't for FARO. When you have something challenging, you now know who to contact. FARO meets only once a year, but it does open up a lot of connection during the year.

Nalan – Fantastic network. Useful for sharing information and experiences. Important to think about the science and what scientists will need in the future. As we see how climate change is making an impact we need to

address the topic of observation networks and the need for more data from areas that are rapidly changing. Being able to say something useful for the future. Design of the Arctic Survey, coordination of a number of cruises. Needs a lot of coordination. Could FARO take a role in coordination?

Daniele – Joined recently. Feels really comfortable in this group to bring input and carry back information to national researchers. Confusingly high number of bodies dealing with funding Arctic research. A lot of overlap and a lot of discussion, but FARO doesn't do that. Gives the hands-on approach to what is going on. That is the strength and should be reinforced. Stay away from the number of growing groups that are trying to coordinate on Arctic topics.

Margareta - What are the topics that are appropriate for a FARO agenda and not covered when discussing with INTERACT and ARICE?

Jen – we do get updates from these more specialised groups/projects and there is a lot of overlap. FARO is a forum based on membership from nations that own infrastructure, while the other organizations are projects.

Morten – FARO covers both the Marine and Terrestrial domain and that's an important difference.

Jen – ARICE doesn't cover all of the vessels and vessel activities.

Jim – FARO is one of the few places where we talk about research operations, not the science – these are different groups. Length of time is important in developing relationships of people across the systems and this is important. People don't jump in and out. They stay and they learn for a long time. Deep relationships that allow you to move things forward.

Hiroyuki - History of FARO - 20 years of FARO was summarized by Piotr and Jim in 2018 publication, describing the two decades. Lots of changes in the two decades. Does FARO have a vision for the third decade of activity?

Jen - The document was a look back, it wasn't necessarily meant to charter a vision forward. But it is an interesting point, for FARO to create a decadal vision.

Jim – retrospective paper. FARO doesn't initiate big projects. It's not our job. We make things work. Some big issues that have come up are safety and mental health. For the future it could be automation and communication, indigenous science, etc.

Hajo - Importance of FARO as a networking space. Looking through discussion and past minutes there has been a working group on risk management. What do you see as the role of working groups under FARO as supplying additional support for these discussions.

Jen – risk management group hasn't met in some time, this was a past initiative. It met several times a year to pull that information together. But there hasn't been another working group during Jen's time.

Beyond the networking piece is the partnering piece. Leveraging resources to deliver science and make science happen. Advantage of FARO is also that it can be very flexible and focus on issues as they arrive; safety, satellite communication, inclusive environments, power production, etc.

Hiroyuki - Got some great information during the FARO meeting. Gateway to INTERACT, ARICE, etc. Seems a lot of parallel topics between FARO and IASC. Between IASC Council and FARO – possible connection point. Technical information is very useful and this could be a role for FARO. Increased information exchange between the IASC council and FARO would be fruitful.

FARO is very useful for the Asian countries as a forum where they get information about European activities in the Arctic.

Elmer Topp-Jørgensen from the FARO Secretariat represents FARO in the IASC Carbon Footprint Action Group and the European Polar Board Environmental Impact Action Group.

FARO secretariat will arrange a meeting with the ExCom and the review committee to continue the discussions and working on the review.

8. Internal business (Jennifer Mercer, FARO Chair, 60 minutes)

i. The FARO Secretariat - 2020 finance report

The FARO secretariat is responsible for the budget and finance accounting. As the secretariat is situated in Denmark, the annual fee has historically been collected in Danish crowns equal to 10900 DKK. At the annual meeting in 2019 it was decided to change the fee to 1500 EUR and report the budget and accounting in EUR instead of USD, starting from 2021. The reason for this is that Denmark conducts a fixed exchange rate policy against the euro, which means that the Danish crown is to be kept stable against the euro. This will make the reporting easier instead of using USD with changing exchange rates.

The invoices for the annual fee 2021 will be sent out by the end of March 2021.

Financial report: Our income in 2020 increased by one more paying member country. The expenditure was less than expected due to less travel, conferences and less hours spent in the secretariat due to the Covid-19 pandemic. The balance of the year is \$17,762 USD, and \$49,363 USD is carried over to 2021.

ii. 2021 budget

For 2021 the secretariat hopes to increase the level of activity – attending conferences and helping with the review. The cost for the review is set to \$5000 USD, which was approved at the last annual meeting, and this will be spent in 2021 instead of 2020. The travel budget is set at the same level as in 2020. The total budgeted expenses are a bit higher than expected outcome, but as FARO has a large buffer, this should not be a problem.

The budget was approved.

Jennifer suggested that we leave the discussion about the large buffer for now and wait and see how things evolve and discuss the buffer at the next annual meeting.

iii. Election of FARO Chair and FARO ExCom members for the period 2021-2024.

Members with terms expiring:

Jennifer Mercer

Nalan Koch

Takuji Nakamura

All ExCom members with expiring terms were nominated for a second term.

Jennifer accepted the nomination and will continue as FARO chair for one more term.

Nalan was honored to be nominated again, but did not accept, and suggested a change in NPOC.

Magnus nominated Anna from Iceland who accepted and will be new ExCom member.

Takuji was also nominated and accepted a second term.

Congratulations to all!

Nalan raised concern on the voting for ExCom members – anyone should be ready to take on this role, and FARO should keep a record of who has served their term and then change to new people. Geographic diversity is also very important (as stipulated in the ToR).

The FARO ExCom will discuss the election process and the concerns raised in a future ExCom meeting. FARO secretariat will make a list of who has served as NPOC in the past so we can have good rotation between NPOC's.

iv. Next FARO Annual meeting (Tromsø, Norway on 26 March - 1 April 2022)

It was suggested that it should be possible to join the FARO annual meeting virtually in the future. Hybrid meetings are most likely the next steps for ASSW, also as a climate friendly step.

v. Any other business

The observer status of Austria should not be honored – hopefully Austria will find the money and be able to join FARO later.















































We have not had any contact with the Russian NPOC Vladimir Sokolov, but all NPOC's are encouraged to try to make contact. Uwe Nixdorf should have a good communication with Vladimir Sokolov, so Dirk will try to push him on that channel.

























Minutes by Kate Ruck and Marie Frost Arndal

51 Participants in the open session:

Q Find a participant

- Marie Frost Arndal FARO s... (Co-host, me)
- Room A - Management (Host)
- TC Teresa Cabrita,PROPOLAR,... (Co-host)
- DR Danièle Rod (SPI) (Co-host)
- 1A 1. Anna H. Olafsdottir, MFRI, Ic... (Co-host)
- CR Christian Riisager-Simonsen (D... (Co-host)
- DW Dave Wattam - United Kingdom (Co-host)
- DM Dirk Mengedoht, Germany (Co-host)
- FS FARO ... (Co-host) [Ask to Unmute](#) [More >](#)
- FD Frej Dichmann/Denmark (Co-host)
- Gonçalo Vieira (Co-host)
- Jennifer Merc... (Co-host) [Ask to Unmute](#)
- JC Jérôme Chappellaz (IPEV - FRA... (Co-host)
- Josefine Lenz (APECS Int.) (Co-host)
- KR Kate Ruck USA (Co-host)
- MA Magnus Augner, Sweden (Co-host)
- M miller (Co-host)
- MR Morten Rasch (Co-host)
- NK Nalan Koc, NPI, Norway (Co-host)
- PG Piotr Głowacki (Poland) (Co-host)
- SS Sandy Shan CHINA (Co-host)

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|---|--|---|
| SS | Sandy Shan CHINA (Co-host) |   |
| SV | Sebastião Vieira (Co-host) |   |
| SK | Sunhwi Kim (Korea) (Co-host) |   |
| TN | Takuji Nakamura(Japan) (Co-host) |   |
| BS | Bryan Spears (UK CEH) |   |
|  | Frank Rack (USA) |   |
| GF | Gerlis Fugmann (IASC) (FARO Review Co... |   |
|  | Hajo Eicken (FARO Review Committee) |   |
| HS | Hannele Savela (Finland) |   |
|  | Hiroyuki Enomoto/Japan |   |
|  | Irek Sobota, Poland |   |
| IA | Ivan Alekseev |   |
| JD | Jim Drummond (Canada) |   |
| J | joocanario |   |
|  | Kelley Uhlig, NOAA, USA |   |
| K | korea |   |
| KR | KyongSa Ri |  |
| L | LYF |   |
|  | Margareta Johansson - Sweden (Review ... |   |
| MD | Minghu Ding (China) |  |
| MK | Monika Kedra (POLAND) |   |

| | | |
|--|------------------------------------|---|
|  NW | Naomi Whitty (US) |   |
|  | Neelu Singh (Norway) |   |
|  PP | Pedro Pina |   |
|  SC | Sara (Student from Denmark) |   |
|  | Shridhar Jawak. SIOS |   |
|  VW | Verónica Willmott (ARICE), Germany |   |
|  吴 | 吴广美 |   |
|  丹赫 | 王丹赫 |   |

22 participants in the closed session:

Participants (22)

Find a participant

- Marie Frost Arndal (Co-host, me)
- Room A - Management (Host)
- Jennifer Mercer, FARO Chair,... (Co-host)
- Sebastião Vieira (Room A - Man... (Co-host)
- 1. Anna H. Olafsdottir, MFRI, Iceland, IASC, ...
- Danièle Rod (SPI)
- Dave Wattam - Uni... [Ask to Unmute](#) [More >](#)
- Dirk Mengedoht, Germany
- FARO Secr Elmer Topp-Jørgensen
- Gerlis Fugmann (IASC) (Review Committee)
- Hajo Eicken (Review committee)
- Hiroyuki Enomoto
- Jérôme Chappellaz (IPEV - FRANCE)
- Jim Drummond (Canada)
- Kate Ruck
- Magnus Augner, Sweden
- Margareta Johansson (Review committee)
- Maria Teresa Cabrita
- Morten Rasch, Denmark, EcCom