

# 2024 2028

FORUM of ARCTIC  
RESEARCH OPERATORS

## STRATEGIC PLAN

BETTER ARCTIC SCIENCE THROUGH COORDINATED  
INTERNATIONAL OPERATIONS



SUPPORT FOR THE PRODUCTION OF THIS REPORT BY NSF

PHOTO | Korea Polar Research Institute (KOPRI)



TOOLIK FIELD STATION

Alaska | USA

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NOTE  
FROM THE

# FARO

## EXECUTIVE COMMITTEE

The Forum of Arctic Research Operators (FARO) was founded in 1998 and serves as an international platform for coordinating infrastructure to support science and logistics in the Arctic. FARO currently encompasses 19 member nations, representing a diverse set of pan-Arctic operations. These nations include Canada, China, Czech Republic, Denmark (including Greenland), Finland, France, Germany, Iceland, Italy, Japan, Republic of Korea, Netherlands, Norway, Poland, Portugal, Sweden, Switzerland, the United Kingdom, and the United States. As of June 2023, Russia's membership is paused due to the invasion of Ukraine.

FARO as an organization is well-represented by its logo: a lighthouse. Throughout history, lighthouses were essential infrastructure that served as beacons for navigational aid to explorers around the world. FARO seeks to emulate this spirit by serving as a platform to facilitate the friendly exchange of information, establish international cooperation, and nurture the development of new ideas among national operators of ships, stations, aircrafts, and other infrastructure in the Arctic. Anyone working in the Arctic with the financial support of a member nation can turn to the FARO community as a 'guiding light' for support in gathering information or solving operational challenges on an international level.

Efforts like FARO are especially important when considering the pan-Arctic impacts of the changing climate. The rapid pace of transformation in the polar North cannot be characterized by one nation alone. International collaboration is necessary for an increased understanding of the Arctic as a whole. We believe FARO will play an important role in the future of Arctic research and here we present our organization's first Strategic Plan. This plan lays the foundation for FARO's guiding principles and strategic initiatives to ensure we are able to serve the Arctic research community for decades to come.

It is our view that this Strategic Plan will enable FARO to continue its facilitation of cooperation on Arctic scientific research, which is vital to understanding our rapidly changing world.

~ FARO Executive Committee

# FARO

## OVERVIEW

The original proposal to establish a forum for Arctic logistics and research planning was initiated by Bonni Hrycyk of Canada (Director, Polar Continental Shelf Project) during the International Symposium “Polar Aspects on Global Change” 24-28 August 1998 in Tromsø Norway. Over its 25-year history, FARO has held an annual meeting in conjunction with the Arctic Science Summit Week (ASSW) to receive updates from member nations and discuss special topics.

Today, FARO currently encompasses 19 member nations and each nation has a designated national representative entity (e.g. institution or agency) and a corresponding National Point of Contact (NPOC). Any country engaged in Arctic research can become a member nation and participate in FARO activities. FARO member nations span three continents and represent a variety of national research priorities, Arctic infrastructure, and level of research investments. This diversity of resources under one membership organization promotes the common goal of facilitating logistics and operational support for scientific research in the Arctic. FARO also maintains strong working relationships with other international science and coordinating organizations including the International Arctic Science Committee (IASC) and its working groups; the Council of Managers of Antarctic Programs (COMNAP); the European Polar Board (EPB); the Pacific Arctic Group (PAG); Asian Forum for Polar Sciences (AFoPS); the International Network for Terrestrial Research and Monitoring in the Arctic (INTERACT); Association of Polar Early Career Scientists (APECS); Svalbard Integrated Arctic Earth Observing System (SIOS), Ny-Ålesund Science Managers Committee (NySMAC), Scientific Committee on Antarctic Research (SCAR), the Arctic Council and its working groups, and large operational projects such as the Arctic Research Icebreaker Consortium (ARICE) and the Multidisciplinary Drifting Observatory for the Study of Arctic Climate (MOSAIC) expedition.

Through its work, FARO aims to encourage and optimize logistics and operational support for scientific research in the Arctic. This objective is achieved through networking, the exchange of information, providing expert advice, and engaging with national funders and policy makers. In response to the first external review conducted in 2021-2022, the FARO Executive Committee has crafted the first Strategic Plan to set organizational goals and increase the impact of FARO in the Arctic research community.



POLISH POLAR STATION

Hornsund | Svalbard

Witek Kaszkin  
Zakopane, Poland







Member nations of FARO experience an added value through their affiliation by gaining access to a forum of international experts with deep experience in Arctic science and logistics. We will keep this membership benefit central to our future planning and ensure that we are improving what member nations gain by joining FARO.

KNOWLEDGE SHARING

NETWORKING

FACILITATING ACCESS

For this 2024-2028 Strategic Plan, FARO is focused on three facets: Knowledge Sharing, Networking, and Facilitating Access. Enhancing these aspects of our operation will have the largest impact on improving our ability to serve as an international platform for coordinating infrastructure to support science and logistics in the Arctic.

RV POLARSTERN

RV Polarstern during Cruise PS86  
(ARK-XXVIII/3 AURORA)

Stefanie Arndt  
Alfred-Wegener Institute, Germany



## Knowledge Sharing Between Infrastructure Operators

Since its inception, knowledge sharing between member nations has been a top priority for FARO. Understanding the international landscape of Arctic infrastructure and national priorities for Arctic research is the first step to potential future collaborations.

### GOAL 1

Knowledge of existing and future research platforms and their resources is foundational to understanding what is logistically possible for Arctic researchers when they are formulating polar science programs. FARO will enhance its ability to keep the Arctic research community up-to-date on national investments in existing Arctic infrastructure and future developments. FARO will also serve as a forum for international input on planned development and allow for discussion about how future facilities could better meet researcher needs.

### GOAL 2

Arctic operators of infrastructure often encounter similar obstacles when trying to maintain programs in such a harsh and ever-changing environment. FARO will act as a clearinghouse for the sharing and development of best practices related to infrastructure operation, risk management and safety, and environmental or climate impacts. This may help define common operating parameters across infrastructures and begin to standardize expectations for researchers.

### GOAL 3

New technologies are constantly being developed for science and infrastructure operations. Research infrastructure operators strive to minimize environmental and climate impacts and the infrastructure itself often serves a testbed for new technology. FARO will be a platform for sharing experiences with new technological solutions that can improve polar operations and help move the infrastructure community towards 0-emission facilities.

FACILITATING EXCHANGE  
OF INFORMATION ON  
EXISTING INFRASTRUCTURE  
AND FUTURE  
DEVELOPMENTS

SHARING BEST  
PRACTICES  
ON INFRASTRUCTURE  
OPERATIONS

DISCUSSING NEW  
TECHNOLOGY FOR USE IN  
POLAR OPERATIONS



GREENFJORD FLAGSHIP INITIATIVE

Sion | **Switzerland**

**Dominik Gräff**  
Swiss Polar Institute

## Networking with other Polar Organizations and Influencing Decision Making

Networking is a foundational piece of FARO's added value to member nations. This forum is unique in its focus on coordinating international research operators. In this respect, FARO has a unique viewpoint to offer in its interactions with other Polar organizations and national funding agencies. Under this strategic plan FARO will enhance its networking capabilities.

### NETWORKING BETWEEN ARCTIC AND ANTARCTIC ORGANIZATIONS

#### GOAL 1

FARO already has strong working relationships with several international science and infrastructure organizations but will aim to cultivate closer cooperation and engagement. The Council of Managers of National Antarctic Programs (COMNAP) is a similar organization that brings together entities with the responsibility for delivering and supporting scientific research in the Antarctic Treaty Area on behalf of their respective governments. It would be beneficial for FARO to strengthen ties with COMNAP and learn from their efforts.

### INFLUENCING ARCTIC SCIENCE POLICY

#### GOAL 2

FARO will aim to increase its influence in the international Arctic science policy space. As an initial effort, FARO is well-positioned to support the implementation of the Arctic Council Science Cooperation Agreement which was signed by the eight Arctic States in May 2017. We plan to prioritize FARO attendance at open sessions during agreement meetings and report any barriers or issues related to conducting research. We can also share any updates or new information about the agreement with the National Points of Contact of FARO member nations.

International science and infrastructure communities see a need for improved coordination among international and national science strategies. FARO can be a voice in advocating for better coordinated science and logistics efforts, the need for long-term infrastructure funding, and open access to infrastructure and science data.

### TRAINING THE NEXT GENERATION

#### GOAL 3

Improved future coordination of operations and logistics will strongly benefit from working with early career scientists on how best to integrate science and logistics. FARO will aim to strengthen its ties to APECS for future recruitment and to help cultivate the next generation of Arctic researchers and infrastructure operators.



#### JOINT SCIENCE EDUCATION PROJECT

Kangerlussuaq | Greenland

Lars Demant-Poort  
University of Greenland

## Facilitating Access

Physical access to research infrastructure in the Arctic is essential for successful polar research. FARO will focus on this facet of its activities and serve as a connection point for facilitating transnational access to nationally owned Arctic research infrastructure.

### IMPROVE FARO VISIBILITY WITHIN THE SCIENCE COMMUNITY

#### GOAL 1

To become a better connector between infrastructure operators and the scientific community, FARO will work to improve its visibility within the polar research community. This increased visibility will allow for FARO to act as a ‘hub’ for creating connections between users and operators of infrastructure that may not be aware of the needs and resources of their counterparts.

International infrastructure organizations (e.g. INTERACT) and large operational projects could benefit from FARO efforts to improve coordination and cooperation with national infrastructure operators. This could be done by utilizing FARO National Points of Contact to broker introductions between entities to initiate discussions about future efforts.

FARO will also work to expand its cooperation with IASC. IASC is currently coordinating a multi-year planning process for the Fourth International Conference on Arctic Research Planning (ICARP IV). FARO will aim to leverage the ICARP IV planning to develop opportunities for infrastructure operators to participate in and contribute to discussions around the state of Arctic science future research priorities. IASC also partners with SCAR to plan the International Polar Year (IPY). The next IPY is planned for 2032-2033 and a strong relationship between FARO and IASC will allow FARO to partner in that planning.

### LINK SCIENTIFIC NETWORKS AND POLAR INFRASTRUCTURE

#### GOAL 2

Through increasing our visibility in the science community, FARO will begin working with existing infrastructure networks and organizations to break down barriers between disciplines and nationalities. FARO already has connections to efforts like Isaaffik, the European Polar Board’s Polardex, the National Science Foundation’s Arctic Observing Viewer and Arctic Research Mapping Application, and the Polar Observing Assets Working Group sponsored by SAON. Having a thorough list of existing data collection networks, infrastructures, and their offered resources will contribute to breaking down barriers to trans-national access for Arctic researchers.

### SUPPORT COORDINATION OF LOGISTICS AND OPTIMIZED USE OF INFRASTRUCTURE ACROSS NATIONAL BORDERS

#### GOAL 3

FARO may then take the step to support coordination of logistics and optimized use of infrastructure across national borders. The promotion of logistics sharing platforms previously mentioned can create awareness about planned projects and promote the sharing of logistics. FARO could also facilitate the conceptualization and planning of large, international programs or campaigns by offering a general assembly to provide expertise on developing initiatives.



RADIOSONDE LAUNCH

Summit Station | Greenland

August Allen  
Polar Field Services



# CLOSING STATEMENT

Large-scale international research pursuits in the Arctic are vital to understanding our rapidly changing planet. FARO aspires to help these efforts through coordinating and encouraging knowledge sharing, networking, and facilitating access between its members and the greater polar research community. Through this Strategic Plan, FARO aims to serve as that ‘guiding light’ for its members and their national networks by being a resource for expertise on research operations and logistics in the Arctic. We look forward to the next five years and beyond!

BEAVER FLOATPLANES

Alaska | USA

Kevin Pettway  
Polar Field Services





VIEW FROM ZEPPELIN OBSERVATORY IN NY-ÅLESUND, SVALBARD

Christelle Guesnon  
Norwegian Polar Institute



FORUM of ARCTIC RESEARCH OPERATORS

BETTER ARCTIC SCIENCE THROUGH  
COORDINATED INTERNATIONAL OPERATIONS