



HORIZON 2020

Research and Innovation action

Grant Agreement No. 730965



ARICE: Arctic Research Icebreaker Consortium:

**A strategy for meeting the needs for marine-based research
in the Arctic**

Deliverable 4.6

Selection report of the ARICE Call for proposals

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1. Introduction

To provide Trans-National Access to research icebreakers is one of the main goals of ARICE. Two calls for proposals were opened in the first half of the ARICE project lifetime, the first in 2018 and the second in 2019, offering transnational access to the following icebreakers:

ARICE2018 was open from the 11th of April to 5th of July 2018 to apply for access onboard of: PRV Polarstern (Germany) in the frame of the MOSAiC Expedition, CCGS Amundsen (Canada) and RV Sikuliaq (USA).

ARICE2019 was open from the 15th of April to 3rd of July 2019 to apply for access onboard of: RV Kronprins Haakon (Norway), IB Oden (Sweden), and MSV Fennica (Finland).

Proposals requesting ARICE ship time were submitted through a unique entry point (see D4.2). A Scientific Liaison Panel (SLP) set up by ARICE (with experts in marine-based Arctic research, less than 50% from ARICE institutions) recommended external evaluators, and proposals were evaluated by at least three external experts. At a later stage of the evaluation process, the SLP convened for the Consensus Meetings to discuss the proposals and the external evaluations and to rank and recommend proposals for funding. In the case of ARICE2018 the consensus meeting was held in person and hosted in Brussels while for ARICE2019 the consensus meetings were organized by videoconference. The scientific evaluation of submitted proposals was followed by the logistic evaluation by the Operational Liaison Panel, a panel composed of the operators of the research vessels.

2. Evaluation and selection of proposals

2.1 The Scientific Liaison Panel (SLP)





The Scientific Liaison Panel (SLP) was established in May 2018 by the consortium nominating experts in marine-based Arctic research from a wide range of scientific disciplines. More than 50% of the SLP experts are from non-ARICE institutions (**Table 1**).




The tasks of the SLP experts are to: a) recommend external referees, b) participate in the Consensus Evaluation Meeting, c) provide a brief written statement summarizing the proposal evaluation (Consensus Summary Report), d) assess the Cruise Report after cruise completion, and e) give recommendations on guidelines for common scientific peer review criteria and durable transnational access modalities.

In addition to the experts, the SLP also includes an Ethical advisor (without voting rights). The Ethical advisor joins the SLP to ensure that all research funded by the EC complies with the H2020 ethical standards (no voting rights). A SLP Chair was elected among the SLP, coordinate the actions of the SLP.

Table 1: Members of the ACICE Scientific Liaison Panel (SLP)

	<p>Michele Rebesco, <i>Istituto Nazionale di Oceanografia e di Geofisica Sperimentale (OGS), Italy</i> Chair of the ARICE SLP</p> <p>Scientific interests: <i>Seismostratigraphy (contourites, geological/geophysical exploration of polar margins, aimed at depositional processes and glacial history reconstruction, interacting downslope and along slope deep sea sedimentary processes).</i></p> <p>Biography: <i>Since 1990, Michele Rebesco is a researcher at Istituto Nazionale di Oceanografia e di Geofisica Sperimentale (OGS), Italy. He participated at several national and international marine geological research cruises, partly in a coordinating function. He received a PhD in Earth Sciences from University of Parma, Italy.</i></p>
	<p>Henk Brinkhuis - <i>Royal Netherlands Institute for Sea Research NIOZ, Utrecht University, The Netherlands</i></p> <p>Scientific interests: <i>Marine geology/palynology/micropaleontology, geochemistry, palaeoceanography, paleoecology, and paleoclimatology. Specific interest in extreme climate transitions and related biostratigraphy, evolution, paleoecology, biogeochemistry of phytoplankton, and of dinoflagellates.</i></p> <p>Biography: <i>Henk Brinkhuis is director of the Royal Netherlands Institute for Sea Research NIOZ. He holds a professorship at Utrecht University (Marine Palynology and Palaeoceanography). He is the Chair of the Netherlands IODP Committee.</i></p>
	<p>Lars Eric Heimbürger – <i>Mediterranean Institute of Oceanography, Aix-Marseille-University, France</i></p> <p>Scientific Interests: <i>Chemical Oceanography, application of novel techniques to outstanding questions on trace metal cycling in the ocean, with an emphasis on low-level speciation, stable isotopes, sensor approaches and marine mercury dynamics.</i></p> <p>Biography: <i>Since 2015, Lars Eric Heimbürger is a CNRS researcher at the Mediterranean Institute of Oceanography at the Aix-Marseille-University. Before he worked at the University of Bremen and Geosciences Environment Toulouse. He holds a PhD in Oceanography of the University of Nice Sophia-Antipolis, France.</i></p>
	<p>Marcel Nicolaus - <i>Alfred Wegener Institute, Germany</i></p> <p>Scientific Interests: <i>Physical Properties of Sea Ice, Snow on Sea Ice, Autonomous (Buoy) Observations, Remotely Operated Vehicles under Sea Ice, Interdisciplinary Sea-Ice Studies,</i></p> <p>Biography: <i>Marcel Nicolaus is researcher at the Alfred Wegener Institute, Germany, at the division of Climate Sciences, section Sea Ice Physics. In the frame of MOSAiC, he is team leader ICE, coordinating the Ice Camp and Polarstern, ROV missions, ice buoys, snow and sea ice observations.</i></p>

	<p>Benjamin Rabe - Alfred Wegener Institute, Germany</p> <p><i>Scientific Interests:</i> Arctic ice and freshwater-related processes, autonomous drifting profiling CTD systems, shallow tropical Atlantic circulation; assimilation Models; exchange flows, experimental fluid dynamics.</p> <p><i>Biography:</i> Benjamin Rabe is a researcher at the Alfred-Wegener-Institut, Helmholtz-Centre for Polar and Marine Research (Bremerhaven, Germany). Before he worked at IFM-GEOMAR (Kiel, Germany) and the Southampton Oceanography Centre, UK. He holds a PhD in Oceanography (Southampton Oceanography Centre, UK).</p>
	<p>Marit Reigstad, University of Tromsø, Norway</p> <p><i>Scientific Interests:</i> Investigation of carbon cycling through pelagic-benthic coupling and regulation of vertical flux by lower trophic levels and through physical forcing. Interest is on advective processes of zooplankton, phytoplankton and biogeochemistry, primary-, new- and export production, and validation of physical-biological coupled models.</p> <p><i>Biography:</i> Marit Reigstad holds a professorship in Marine Ecology at the Department of Arctic and Marine Biology, Faculty of Biosciences, Fisheries and Economics, University of Tromsø, Norway. She is a Member of NordForsk network and ARCTOS network, and member of the Arctic Marine Systems Ecology.</p>
	<p>Søren Rysgaard, Aarhus University, Denmark</p> <p><i>Scientific interests:</i> Marine microbiology and biogeochemistry, pertaining to the structure and function of Arctic marine ecosystems. This includes benthic-pelagic coupling, carbon and nutrient cycling in Arctic waters, sea ice processes, glacier-fjord-ocean interactions, and global change.</p> <p><i>Biography:</i> Søren Rysgaard is a researcher at Arctic Research Centre, Aarhus University (Denmark), and is additionally affiliated at the Greenland Institute of Natural Resources (Greenland) and Centre for Earth Observation Science (CEOS) Clayton (University of Manitoba, Winnipeg, Canada). He holds a PhD from Aarhus University.</p>
	<p>Lise Lotte Sørensen Aarhus University, Denmark</p> <p><i>Scientific interests:</i> Atmosphere–surface exchange of CO₂, impact of lower sea-ice extent on Arctic greenhouse-gas exchange.</p> <p><i>Biography:</i> Since 2007, Lise Lotte Sørensen is researcher at the National Environmental Research Institute, Aarhus University, Denmark. She has been external lecturer at Aalborg University on Atmospheric pollution and has been teaching at an air pollution course at the Danish Technical University. She obtained a PhD in chemical meteorology from Copenhagen University.</p>

	<p>Jeremy Wilkinson <i>British Antarctic Survey (BAS), United Kingdom</i></p> <p><i>Scientific Interests:</i> Sea ice dynamics, thermodynamics and mechanics, ocean wave propagation through sea ice, and deep-convection and water mass modification.</p> <p><i>Biography:</i> Jeremy Wilkinson is a researcher at the British Antarctic Survey (BAS), UK. He represents the UK on the Arctic Ocean Science Board (AOSB)/ International Arctic Science Committee's (ISAC) in the Marine Science Working Group and is a member of the Programme Advisory Board for Arctic Science for the UK funding agency NERC. He is coordinator of EU FP7 project ICE ARC.</p>
	<p>Waldemar Walczowski - <i>Polish Academy of Sciences, Poland</i></p> <p><i>Scientific Interests:</i> Oceanography, ocean circulation, fjord/shelf oceanography, Investigations of structure, mass and heat transport, interannual variability of the West Spitsbergen Current. Oceanic fronts, cross-frontal exchange. Spitsbergen fjords, water masses, circulation.</p> <p><i>Biography:</i> Waldemar Walczowski is researcher at the Polish Academy of Sciences, Poland.</p>
	<p>Arne Riedel, <i>Ethical advisor, Ecologic Institute, Germany</i></p> <p><i>Scientific Interests:</i> Arctic Environmental Governance; International and European Environmental Law</p> <p><i>Biography:</i> Arne Riedel is a lawyer and Fellow at Ecologic Institute in Berlin, Germany, and coordinates the institute's activities on Arctic issues. He has contributed to Arctic policy assessments for the EU Commission (DG ENV), the German Federal Ministry of the Environment and the German Federal Environment Agency. He is also working on the monitoring of Arctic States' national policy implementation for the WWF International Arctic Programme.</p>

2.2 Summary of the evaluation process

2.2.1 Scientific evaluation

Proposals were submitted through a single-entry point. Upon call closure, the SLP was asked in the first instance to declare if they have a conflict of interest with any of the submitted proposals. In case a conflict of interest is declared at this stage, the SLP member is excluded for further interaction with the proposal evaluation. This conflict of interest is also extended to any proposal submitted to access the same vessel competing with. Conflict of interest is defined as:

"A conflict of interest exists, if the SLP member is a Principal Investigator (PI), partner, or belonging to an institution involved in this proposal. Conflict of interest may also include joint publications together with the applicant or partners within the past five years, active cooperation or if professional dependencies exist. In case of a conflict of interest, the SLP member will not participate in the evaluation of this particular proposal as well as proposals submitted for the same vessel."

Submitted proposals are assigned a so-called “watchdog” from the SLP, upon declaration of “No conflict of Interest” with the assigned proposal. Before starting the evaluation process, the SLP members recommend potential external reviewers, who are contacted by the ARICE evaluation office. The recommended reviewers are invited to participate in the evaluation process by the ARICE evaluation office. External reviewers are also obliged to declare their conflict of interest or sign a “no conflict of interest” clause. ARICE aims at three reviewers per proposal.

2.2.2 Criteria for evaluation of proposals

All proposals are evaluated using the same criteria. Six main criteria have been established with different weights for the final evaluation. A score between 0 (very poor) and 5 (excellent) is to be provided for each of the six evaluation criteria that include:

- 1) Scientific and technical quality of the **ship** time proposal (final weighting 30%).
- 2) Quality of the work program (final weighting 20%).
- 3) Impact on society and public outreach (final weighting 15%).
- 4) Technical capability and scientific qualifications/track record of the proposing PI and user group:
 - a) Technical capability to carry out the research cruise (final weighting 5%),
 - b) Scientific qualification/track record of the proposing PI and user group (10%).
- 5) Collaboration with international/national partners/industry (final weighting 10%).
- 6) Training of early career scientists (final weighting 10%).

Based on the total overall score, calculated from weighted partial scores, the final evaluation was discussed and agreed upon by the SLP members during the consensus meetings.

2.2.3 Consensus meeting

During the Consensus meetings the SLP convened to discuss the external evaluations and to rank the proposals recommended for implementation. Based on the meeting outcome, all proposals were categorized into three classes and for the A category subsequently ranked:

A – Recommended for funding (A1, A2, ...)

B – Needs improvement (B)

C – Not recommended for funding (C)

The SLP members send their Consensus Reports to the ARICE evaluation office and in the next step the reports have to be approved by the SLP chair.

2.2.4 Logistic Evaluation

The proposal ranking is sent to the Operational Liaison Panel (OLP), who evaluates the technical feasibility of recommended proposals, in the order established by the SLP.

Once the OLP confirms the feasibility, applicants are contacted and informed about the evaluation results, including the “Consensus Evaluation Report” drafted by the SLP.

3. The ARICE Call 2018

3.1 Proposals submitted

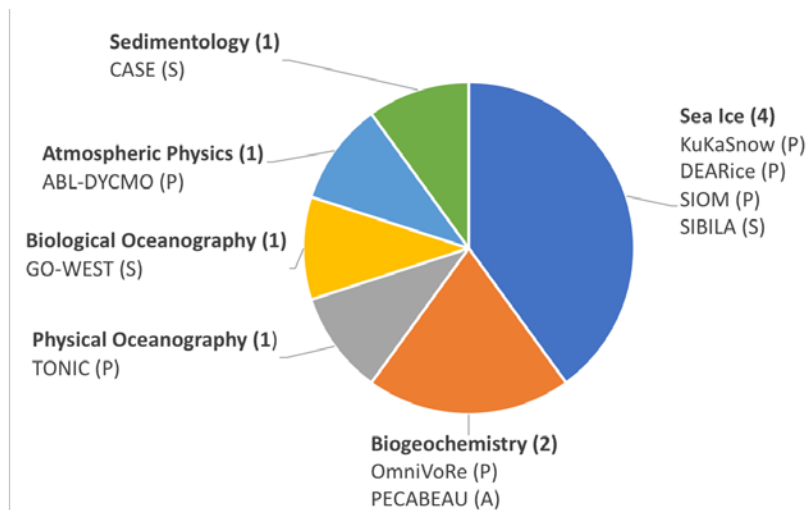
The ARICE call 2018 was open from 11th of April to 5th of July 2018. Ship time was offered on board PRV Polarstern (DE) in the frame of MOSAiC, RV Sikuliaq (USA), and CCGS Amundsen (CA). Eleven proposals were submitted to the call, but one proposal did not comply with the eligibility criteria and thus was excluded from further evaluation.

Six proposals requested ship time on board PRV Polarstern, three proposals on board RV Sikuliaq and one proposal on board CCGS Amundsen (**Table 2**). The scientific topics of the proposals are diverse, covering sea ice (partly multidisciplinary), biogeochemistry, physical oceanography, biological oceanography, atmospheric physics, and sedimentology (**Figure 1a**). The nationalities of the PIs of the submitted proposals are well balanced from nine different countries (**Figure 1b**), whereas the nationalities of PI and project partners even come from twelve different countries, including United States of America and Canada (**Figure 1c**). Two proposals are from countries without any national access to polar vessels (Switzerland and Austria).

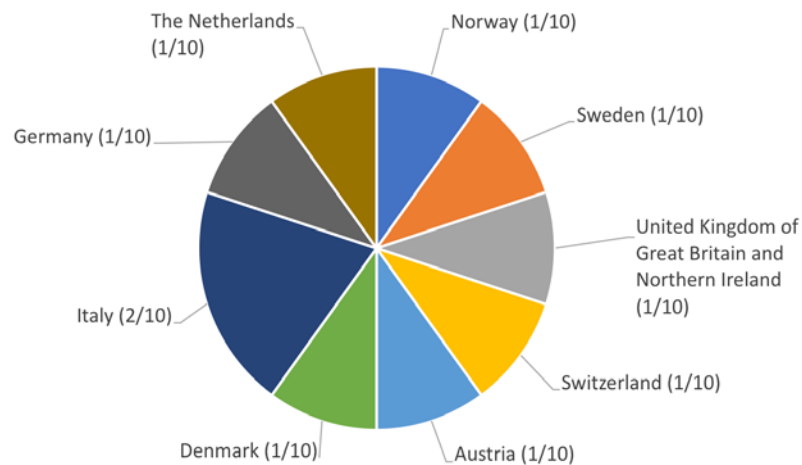
Table 2: Proposals for PRV Polarstern (6), RV Sikuliaq (3), and CCGS Amundsen (1). One proposal did not comply with the eligibility criteria (not shown here).

ARICE Research Icebreaker	-ID-	Project title	Acronym
PRV POLARSTERN	ARICE-349-011	Turbulent fluxes of oceanic heat and nutrients in the changing Arctic	TONIC
	ARICE-349-015	Integrating Arctic Boundary Layer Dynamics and Cloud Microphysics Observations	ABL-DYCMO
	ARICE-349-018	ARICE: Seasonal evolution of Ku and Ka band backscattering horizon over snow on first-year and multiyear sea ice	KuKaSnow
	ARICE-349-019	DEvelopment of snow/ice/ecosystem models using winter-to-summer ARctic observations of coupled snow, ice, and ecosystem processes	DEARice
	ARICE-349-022	Operatives of Mixotrophy and Nutrient Incorporation: Vignettes of Resource Exchange between Arctic sea ice and pelagic environments	OMNIVoRE
	ARICE-349-025	Sea-Ice Observation Operators and Microphysical and Process Modelling (SIOM)	SIOM
RV Sikuliaq	ARICE-349-012	Contourites of the Arctic Slope Environment	CASE
	ARICE-349-021	SEA ICE BEHAVIOUR IN LATE AUTUMN	SIBILA
	ARICE-349-024	Go West: Sea-ice association of polar cod and its prey in the western Arctic Ocean	GO-WEST
CCGS Amundsen	ARICE-349-013	How coastal erosion, fluvial export and submarine permafrost degradation impact the carbon budget on the Canadian Beaufort Shelf	PECABEAU

a)



b)



c)

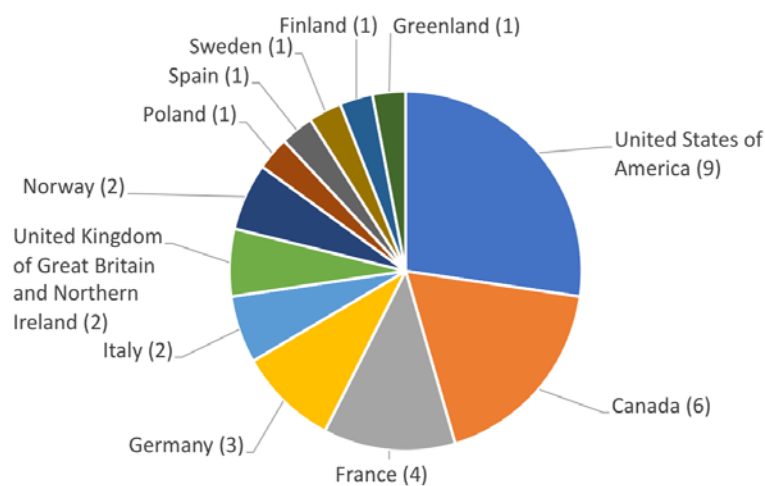
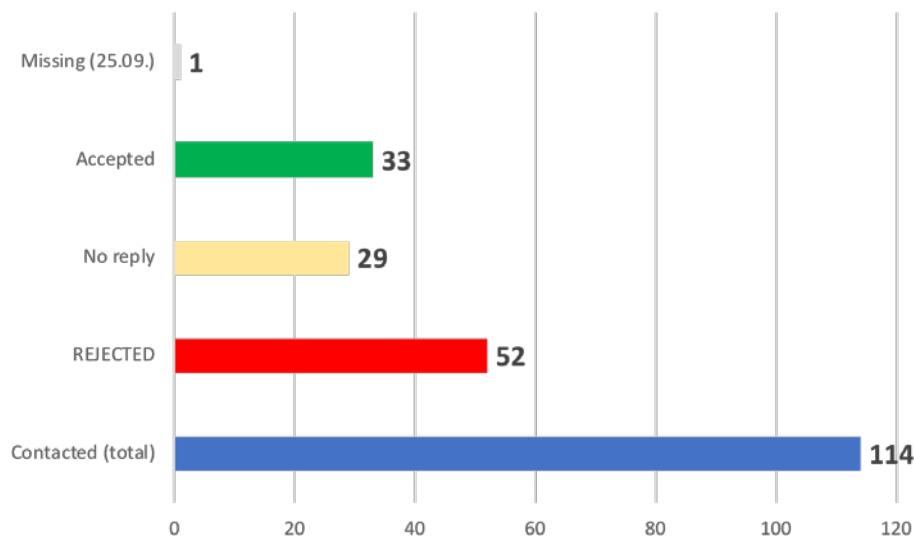


Fig. 1: Statistics of submitted proposals for ARICE 2018. **a)** Scientific fields of proposals, **b)** Nationality of PIs, and **c)** Nationality of PI's and Project partners.

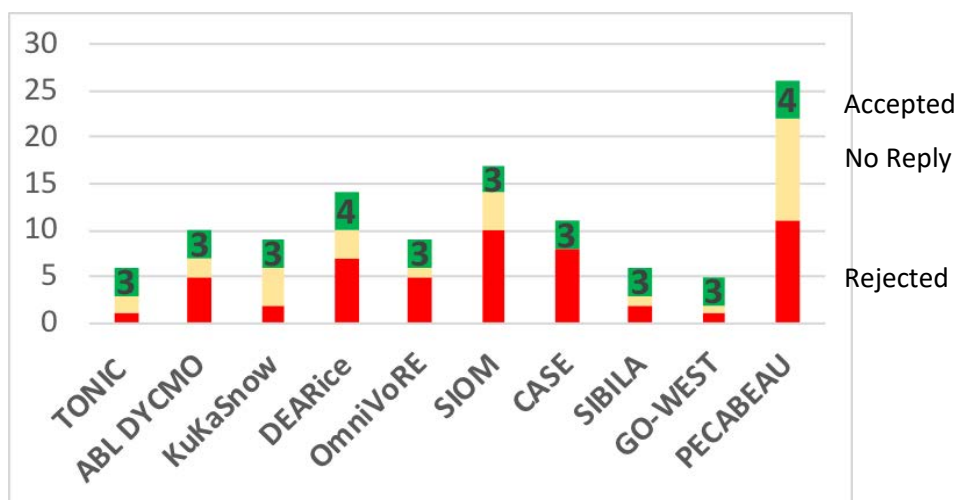
3.2 Evaluation of proposals 2018

For all 10 proposals, the ARICE evaluation office obtained at least three external reviews. In total 114 potential referees have been contacted; 33 reviewers accepted. A total of 62 rejections/no replies (**Figure 2**) are mainly due to the summer break (expedition time of potential reviewers or vacation).

a)



b)



c)

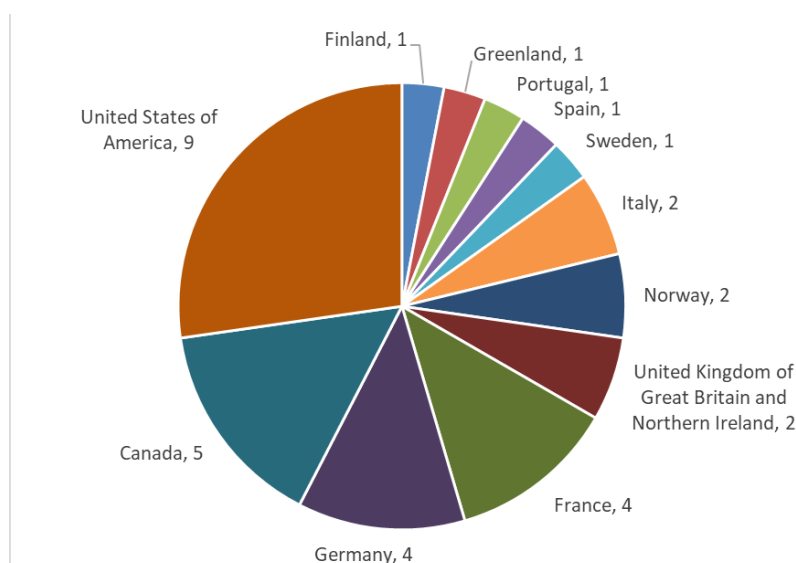


Fig. 2: Statistics of the external reviews for the submitted proposals to the ARICE call 2018 including: a) contacted reviewers b) contacted reviewers per proposal, and C) nationality of the reviewers.

3.3 The Consensus Meeting

The Consensus Meeting for the ARICE call 2018 took place 27-28 September 2018 in Brussels. The proposals and the reviews were presented by their ‘watchdogs’ and discussed and ranked by the panel members.

The SLP summarized that the proposals had a very high scientific quality. However, considering the evaluation criteria, some of the proposals could be further improved, as reported in the Consensus Evaluation Report drafted by the SLP members.

ARICE Research Icebreaker	-ID-	Acronym	SLP RANKING
PRV POLARSTERN	ARICE-349-019	DEARice	A1
	ARICE-349-022	OMNIVoRE	A2
	ARICE-349-025	SIOM	A3
	ARICE-349-018	KuKaSnow	A4
	ARICE-349-015	ABL-DYCMO	A5
	ARICE-349-011	TONIC	A6

RV Sikuliaq	ARICE-349-024	GO-WEST	A1
	ARICE-349-012	CASE	A2 (for Sikuliaq); A2 for Amundsen (set on hold)
	ARICE-349-021	SIBILA	A3
CCGS Amundsen	ARICE-349-013	PECABEAU	A1

The proposal CASE was kept on hold, waiting for the results of the 2nd call, in case there are any changes in the budget allocation that allow the implementation of an additional proposal.

3.4 Logistic Evaluation

The ranking was transferred to the Operational Liaison Panel (OLP) for their technical feasibility, who found no problems in the implementation of the recommended proposals.

ARICE Research Icebreaker	-ID-	Acronym	Accepted by vessel operator
PRV POLARSTERN	ARICE-349-019	DEARice	Yes
RV Sikuliaq	ARICE-349-024	GO-WEST	Yes
CCGS Amundsen	ARICE-349-013	PECABEAU	Yes

As a request of the SLP, the proposal CASE has been set on hold by the Scientific Liaison Panel for implementation on Sikuliaq, in case there are changes in the budget that allows the implementation of a fourth proposal.

After the logistic evaluation has been completed, all applicants were contacted (successful and unsuccessful) and informed about the results of the evaluation, including the Consensus Evaluation Report drafted by the SLP.

The results were published on the ARICE website.

The Consensus Evaluation Reports have been sent with the final decision of the OLP to the applicants.

4. The ARICE Call 2019

4.1 Proposals submitted

The ARICE call 2019 was open from 15th of April to 3rd of July 2019 and announced on the ARICE website. Information about call opening was also distributed to relevant research groups and institutions via different channels, including email communication and ArcticInfo newsletter.

Ship time was offered on board of three vessels: RV Kronprins Haakon (Norway), IB Oden (Sweden) and MSV Fennica (Finland).

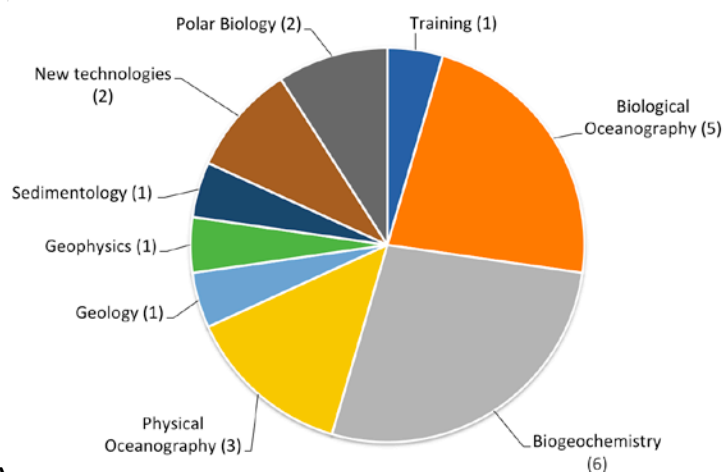
Altogether seven proposals were submitted applying for ship time on two research vessels, RV Kronprins Haakon and IB Oden (**Table 2**). No proposal was submitted for MSV Fennica, most likely due to the lesser knowledge the applicants had on the ship capabilities for research operations.

Four proposals requested ship time on board RV Kronprins Haakon and three proposals on board IB Oden (**Table 2**). The scientific topics of the proposals submitted to the second call covered a wide range of scientific disciplines. The largest number of proposals included biogeochemistry (6) and biological oceanography (5) components. Physical oceanography was included in 3 proposals, while new technologies and polar biology themes were represented in 2 proposals each. Single proposals covered sedimentology, geophysics and geology as well as training components (**Figure 3a**). The sum of different disciplines presented in the proposals exceeds the total number of proposals since most of them covered multidisciplinary activities. The PIs of the submitted proposals originated from five countries with the highest number of 3 PIs from Germany, followed by 2 PIs from Denmark. Single PIs applied from Italy, Portugal and UK (**Figure 3b**). The nationalities of the PIs and project partners spread across twelve different countries, with the highest number of partners from Germany (8), followed by Sweden, Denmark and US with 5 partners from each country (**Figure 3c**). Project partners in the submitted proposals originated not only from nine European countries but also from US, Canada and China. It nicely reflects the international character of the planned activities.

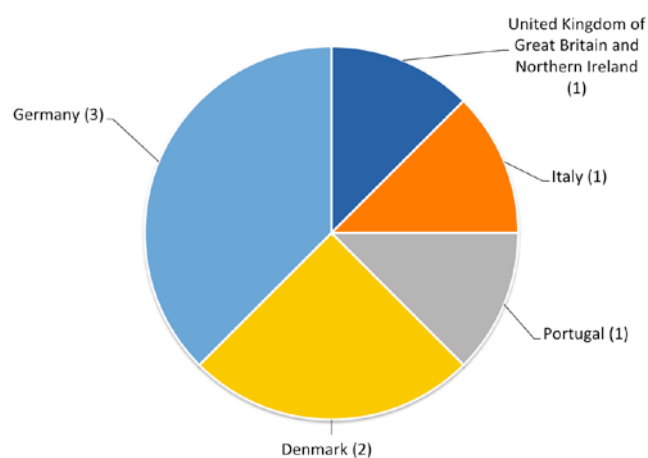
Table 2: Proposals for RV Kronprins Haakon (4) and IB Oden (3). No proposals were submitted for MSV Fennica.

ARICE Research Icebreaker	-ID-	Project title	Acronym
RV Kronprins Haakon (NO)	ARICE2019-012	MEscale Survey west Of Svalbard	MESOS
	ARICE2019-013	Decipher Climate Change Impacts on the Plankton Microbiome at the Transition from the Atlantic to the Arctic Ocean.	ArcticEdge
	ARICE2019-018	Novel Tracers of Arctic Carbon and water exchange in the Fram Strait	NoTAC
	ARICE2019-020	Ocean-driven melt of the 79 North Glacier: Interannual variability and impacts on the shelf circulation	Ocean79NG
IB Oden (SE)	ARICE2019-009	Production and export of phytoplankton-derived organic matter in the changing Arctic Ocean – Role of parasites, saprotrophs and mineral ballasting	ProMis
	ARICE2019-021	Ventilation and Anthropogenic Carbon in the Arctic Ocean (VACAO) – Supporting measurements of noble gases and ³⁹ Ar in the Central Arctic Ocean	VACAO
	ARICE2019-022	TRace gAses (N ₂ O, CO) Cycling in the Arctic marine Ecosystem (TRACE)	TRACE
MSV Fennica (FI)		No proposals submitted	

a)



b)



c)

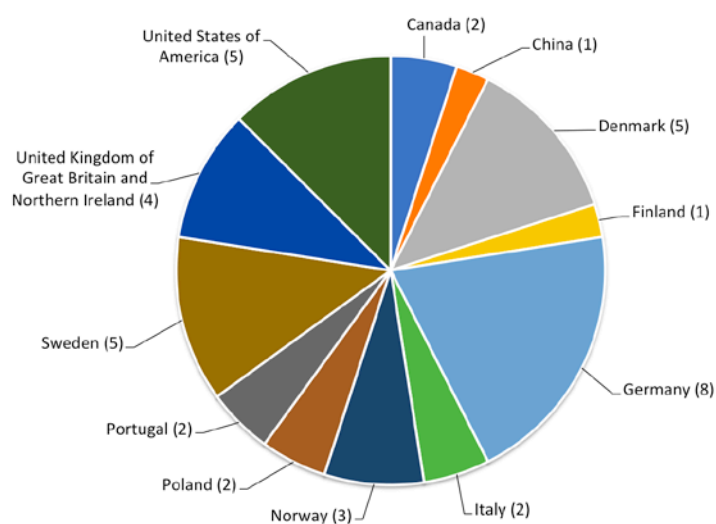


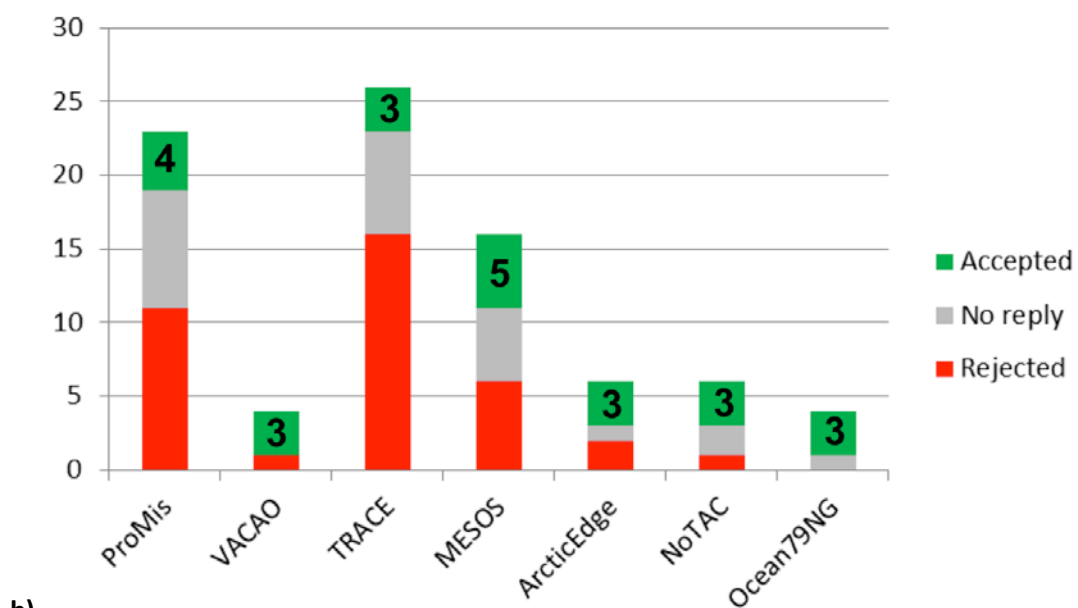
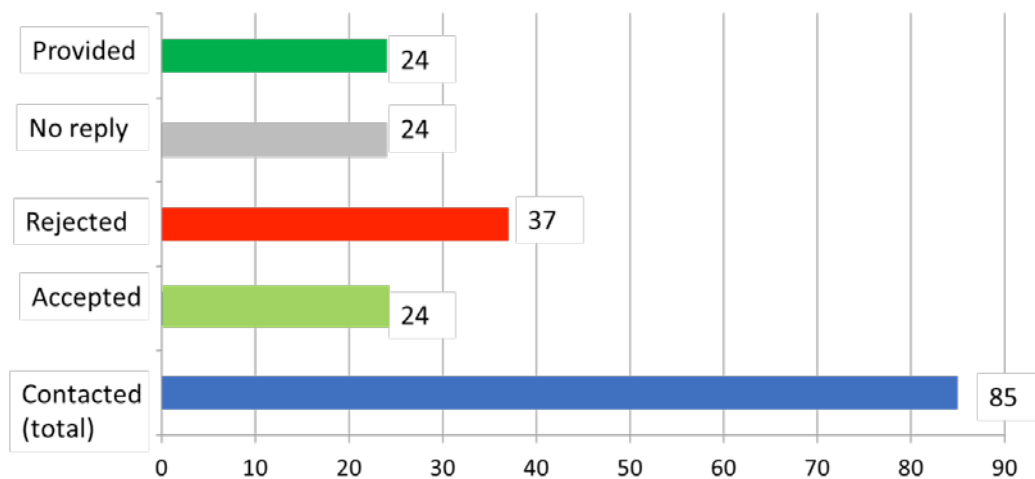
Fig. 3: Statistics of submitted proposals for ARICE 2019, including: **a)** Scientific fields of proposals, **b)** Nationality of PIs, **c)** Nationality of PIs and Project partners.

4.2 Evaluation of proposals 2019

For all seven proposals, the ARICE evaluation office obtained at least three external reviews. In total 85 potential referees have been contacted and 24 accepted the invitation to participate in the evaluation process. Many of the rejections/no replies (**Figure 4a**) were mainly due to the summer break (i.e. Arctic field work time of potential reviewers or vacation). Some were also caused by previously undetected conflict of interests, especially in case of ongoing collaborations. A lack of reply from the contacted experts resulted in longer waiting time and delayed the whole process of establishing at least the minimum team of reviewers for each proposal.

The highest number of reviewers came from Norway and US (5 experts from each country), followed by 4 experts from Canada and 3 from France (**Figure 4c**). Single reviewers originated from other European countries, and Australia.

a)



b)

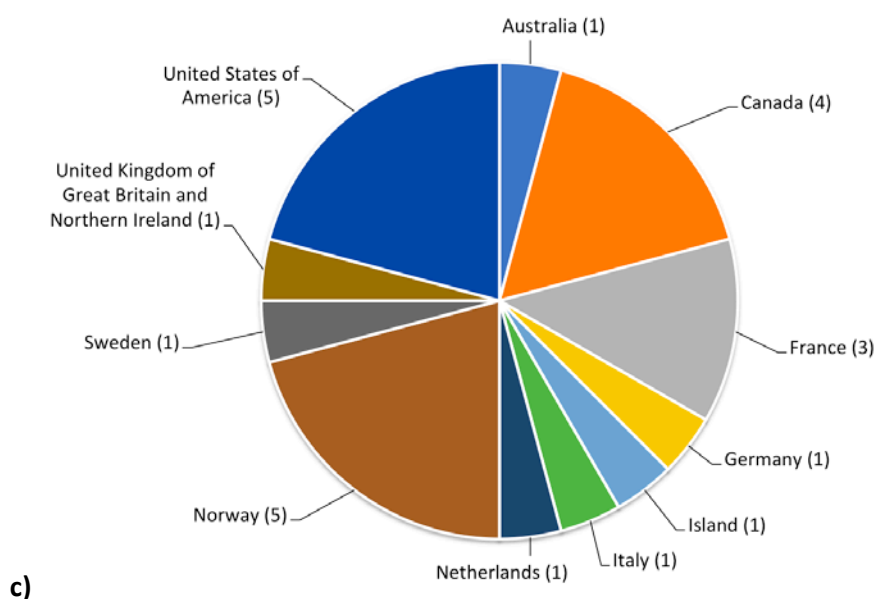


Fig. 4: Statistics of the external reviews for the submitted proposals to the ARICE2019 call including: **a)** contacted reviewers, **b)** reviewers per proposal and **c)** nationalities of reviewers.

4.3 The Consensus Meeting

The Consensus Meeting for the ARICE2019 call has been split into two separate videoconferences, one to rank the proposals submitted to IB Oden and a second one for the proposals submitted to RV Kronprins Haakon, on September 6th and September 11th, respectively. Due to unavailability of all SLP members at the same time for in-person meetings and a difficult time constraint due to the request of a prompt decision from the RV Kronprins Haakon management, both meetings were held as teleconferences. The proposals and the reviews were presented by their ‘watchdogs’ and discussed and ranked by the panel members.

The SLP members agreed that the submitted proposals had a very high scientific quality. However, some of the proposals could be further improved in their ‘training program’, ‘work plan’ and specific aspects related to the implementation of the field work, as described in the Consensus Evaluation Report, which is provided to the applicant as result of the evaluation.

The final ranking of the proposals applying for the ship time on IB Oden was agreed by the SLP members based on the evaluation process and is as follows:

A1 - TRACE - TRace gAses (N₂O, CO) Cycling in the Arctic marine Ecosystem,

A2 - VACAO - Ventilation and Anthropogenic Carbon in the Arctic Ocean (VACAO) – Supporting measurements of noble gases and ³⁹Ar in the Central Arctic Ocean,

A3 - ProMis - Production and export of phytoplankton-derived organic matter in the changing Arctic Ocean – Role of parasites, saprotrophs and mineral ballasting.

As all three proposals fit within the berth and ship time agreement with IB Oden, all three proposals were recommended for funding and implementation.

The final ranking of the proposals applying for the ship time on RV Kronprins Haakon was agreed by the SLP members based on the evaluation process and is as follows:

A1 - NOTAC - Novel Tracers of Arctic Carbon and water exchange in the Fram Strait,

A2 – Ocean79NG

A3 - MESOS - MEscale Survey west Of Svalbard

A4 - ArcticEdge - Decipher Climate Change Impacts on the Plankton Microbiome at the Transition from the Atlantic to the Arctic Ocean.

NoTAC was recommended for funding and implementation on board of RV Kronprins Haakon.

The second ranked proposal for this vessel, Ocean79N (Ocean-driven melt of the 79 North Glacier: Interannual variability and impacts on the shelf circulation) was recommended for implementation on MSV Fennica instead of RV Kronprins Haakon.

ARICE Research Icebreaker	-ID-	Acronym	SLP RANKING
RV Kronprins Haakon (NO)	ARICE019-018	NoTac	A1
IB Oden (SE)	ARICE019-022	TRACE	A1
	ARICE019-021	VACAO	A2
	ARICE019-009	PROMIS	A3
MSV Fennica (FI)	ARICE019-020	Ocean79NG	A1 (A2 for Kronprins Haakon)

4.4 Logistic Evaluation

The highest ranked proposals were transferred to the Operational Liaison Panel (OLP) for their technical feasibility, who found no problems in the implementation of the proposals for RV Kronprins Haakon and IB Oden. However due to the logistical issues, the proposal recommended for MSV Fennica has not been accepted by the ship operator.

ARICE Research Icebreaker	-ID-	Acronym	Accepted by vessel operator
RV Kronprins Haakon (NO)	ARICE019-018	NoTac	Yes
IB Oden (SE)	ARICE019-022	TRACE	Yes
	ARICE019-021	VACAO	Yes
	ARICE019-009	PROMIS	Yes
MSV Fennica (FI)	ARICE019-020	Ocean79NG	No

4.5 New ranking among proposals submitted to different calls

Upon the rejection by MSV Fennica to implement the selected cruise, the evaluation office convened a new videoconference with the Scientific Liaison Panel to recommend a new proposal for implementation.

In this new ranking, the following proposals were considered:

ARICE CALL	ARICE Research Icebreaker	-ID-	Acronym	SLP RANKING(original)
ARICE2018	RV Sikuliaq	ARICE-349-012	CASE	A2 (for Sikuliaq, first choice vessel); A2 for Amundsen (set on hold)
ARICE2019	RV Kronprins Haakon	ARICE019-020	Ocean79NG	A2
	RV Kronprins Haakon	ARICE2019-012	MESOS	A3

Proposals submitted to PRV Polarstern could not be considered because the MOSAiC expedition is already being implemented.

The Scientific Liaison Panel ranked the proposal in the following order, considering its scientific excellency and the fact that the proposal set on hold for Sikuliaq was indeed bringing a new user community on the vessel.

ARICE Research Icebreaker	-ID-	Acronym	SLP RANKING (new)
RV Sikuliaq	ARICE-349-012	CASE	A1
RV Kronprins Haakon	ARICE019-020	Ocean79NG	A2
	ARICE2019-012	MESOS	A3

At the time of writing this report, the proposal CASE has been offered to the operators of RV Sikuliaq and they foresee its implementation in fall 2020.

In case RV Sikuliaq rejects the implementation, the proposal will be offered to CCGS Amundsen.

At the time of writing this report, all successful applicants to date have been contacted, the remaining PIs have been informed of the new logistic evaluation.

A negotiation phase is currently taking place among the vessel operators and principal investigators, to settle the details of the implementation. Results will be published at the ARICE website as soon as the granting letters are issued.

5. Summary

The evaluation and selection process for the ARICE 2018 and ARICE 2019 calls was organized in a smooth and structured way, albeit finding the appropriate reviewers was a demanding challenge.

Due to the high level of international and institutional collaboration in the submitted proposals, very high number of potential reviewers had a conflict of interest with many of the proposals. In addition, the summertime, and therefore vacation and Arctic fieldwork season presented a challenge in finding available reviewers. Since the number of Arctic scientists with an expertise in some specific scientific disciplines represented in the proposals is rather limited and usually they have more or less established collaboration via the past or current projects, joint papers or plans for joint proposals, it takes a significant time to identify independent researchers to be invited as reviewers. A relatively high number of no replies and rejections presented a further obstacle, but despite of the difficulties we consider that external reviews are necessary to ensure a transparent and fair proposal evaluation.