

MEMORANDUM ON THE
ESTABLISHMENT OF AN ARCTIC
RESEARCH CENTRE (CER-ARCTIC)
AT THE UNIVERSITAT AUTÒNOMA
DE BARCELONA (UAB),
CATALONIA, SPAIN

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Barcelona (UAB), Catalonia, Spain

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1. Relevance, Context and Rationale

The Arctic is currently undergoing rapid and possibly irreversible environmental, social, economic and political change. Global processes are having impacts in Arctic societies and on people's everyday lives and well-being. Increasingly the region is being seen as a storehouse of resources and economic opportunities for actors within and outside of the region, not least due to decreasing ice, on sea and land.

The same processes also link the fate of the region to the wider global community which has vested interests in the sustainable and responsible development of the Arctic and its societies and biophysical systems. Research has a fundamental role to play in the production of relevant and robust knowledge that can educate the public and advise policy makers, also in parts of the world that are not classified as Arctic, but nevertheless have the capacity to contribute to a constructive and contextually sensitive dialogue on issues such as climate change or international governance issues that connect northern and southern latitudes in an urgent and direct manner. These questions are also increasingly relevant in the Mediterranean and other parts of the world, including Africa, a regional area in which scholars from the Universitat Autònoma de Barcelona (UAB) have broad experience.

The UAB Arctic Research Center will act as a center of expertise to produce and promote high-quality and salient research and scientific assessments with the aim of contributing to the quality of life for Arctic residents and the sustainability of the environments they call their home.

There is much need for a Centre of expertise and knowledge due to the increasing weight of the Arctic in an interconnected world, a Centre aiming at making more visible local/global complex processes, and giving a voice to people at the face of growing uncertainties on the future of their territories and their communities. The UAB, because of its expertise in socio-environmental sciences and governance, and its long experience in inter-disciplinary research in different parts of the world, is a relevant place for such a Centre.

The UAB, and Barcelona, as one of the main gateways to the Mediterranean, stands to gain from such a Research Centre on the Arctic,

that will constitute a transdisciplinary innovative Research Platform with the aim to steer major collaborations amongst scientists, policy makers and local populations of the High North and the Mediterranean region, including the South and Africa. It would be the first one in Spain of this kind.

After comprehensive and constructive discussions between the UAB Interfase research team and the Stefansson Arctic Institute, the following has been agreed upon:

1. The definition of the Arctic, arbitrarily defined as the region above the 66°N parallel, has depended largely upon the geo-political interests and the location and ideological point of view of the observer. In the face of a rapidly-changing Arctic and increasing global interconnectedness, this definition needs to be modified.
2. In his book *The Friendly Arctic* (1921) Canadian explorer and anthropologist Vilhjálmur Stefansson envisioned the Arctic Ocean as a new Mediterranean – a semi-enclosed sea bordered by different countries and a diversity of cultures. Recognising the singularities of both seas, the two regions share common trends and issues:
 - The Arctic as well as the Mediterranean is evolving quickly under a complex system of multiple pressures, at different scales, and within a framework of great uncertainty for human development and well-being of the populations.
 - They both share a high vulnerability to global changes, not only climatic, but political, economic, and cultural with repercussions for both local and indigenous cultures and communities.
3. The comparison is necessary in order to promote far-reaching innovative transdisciplinary research that would be able to cross the boundaries of academic disciplines and build strong links with local knowledge. This would lay the foundations to collectively explore, with the voices of local communities, what possible alternatives they see for their future. This kind of research aims to go far beyond currently perceived barriers and opportunities for adaptation, often based on a narrow environmental determinism. Focus will be placed on the Arctic as a homeland, where resources and rights are inextricably linked. Research into the Arctic inhabitant's relations with land and sea,

including their common access to wildlife and ecosystems services, will be undertaken with full participation of these inhabitants, as will analyses of how such aspects contribute to the identities and social experiences of Arctic peoples. This research programme will invite people of all ages and genders to collaborate and contribute.

4. Therefore the research should be considered as Responsible and Innovative Research (RRI), recommended by the EU H2020 research programme. *“Responsible research and innovation is key action of the ‘Science with and for Society’ objective. RRI is furthermore a ‘cross-cutting issue’ in Horizon 2020, which will be promoted throughout Horizon 2020 objectives. In many cases, inter- and transdisciplinary solutions will have to be developed, which cut across the multiple specific objectives of Horizon 2020... Responsible research and innovation is an approach that anticipates and assesses potential implications and societal expectations with regard to research and innovation, with the aim to foster the design of inclusive and sustainable research and innovation...Responsible Research and Innovation (RRI) implies that societal actors (researchers, citizens, policy makers, business, third sector organisations, etc.) work together during the whole research and innovation process in order to better align both the process and its outcomes with the values, needs and expectations of society”.* <https://ec.europa.eu/programmes/horizon2020/en/h2020-section/responsible-research-innovation>

As an example, global trends, such as mass tourism, may generate conflicts directly due to their appropriation of limited resources and space but also because of their environmental ideologies, and representations of wildlife and animal welfare. Without rights to resources human well being in the Arctic is undermined. Here it is argued that climate change and globalization impacts and adaptations are best understood through the prism of resource use in its locally-embedded social and cultural context.

Globalisation processes, difficult to adapt to by local communities, can create deep dysfunctions in the social fabric, cultures and people, including serious social and health problems, such as depression and suicide. Responses to these pressures can often be more difficult than merely adapting to climate change. However, this adds an extra layer of complexity, although not the only one, in communities with a narrow economic base, as is the case in many Arctic communities, but also in some Mediterranean and African ones.

The nature of peace and conflict in the Arctic is also a vital issue. The Arctic is currently a region of peace but this is fragile, not least because the region is increasingly seen by global superpowers as a storehouse of

resources, rather than a homeland for the people who live there. Therefore a comparative perspective from the Mediterranean region and Africa may be very valuable.

Such a research programme requires the deployment of all relevant knowledge from different academic disciplines and from local communities, in other words, a real transdisciplinary appraisal of tangled and convoluted issues. This programme will investigate the inherent complexity of relevant socio-ecological systems, local-global interactions, and scientific uncertainties, as well as modern energy related, political, economic and social transitions. The participation of communities, their perceptions of cultural identities, their rights and knowledge, is key to understanding the existing central issues of sustainability, stewardship, human development and democratic involvement as well as the fostering of responsible governance and citizen engagement.

The European Community is beginning to recognize that it has lost connection with its citizens. It can also be argued that the Community is having credibility and legitimacy problems in the Arctic, not least due to cultural differences concerning basic moral assumptions about wildlife harvesting and human-animal relations.

The underlying motive for the EU interest in the Arctic is about how the region can benefit the EU as a resource frontier. The problem is that this self-serving goal does not make the EU a credible or legitimate actor in the Arctic Homeland. EU needs to be better informed, and more sensitive to the needs of Arctic societies in terms of their self-defined human development.

It is affirmed here that exposing real problems and searching for the construction of a culturally-sensitive dialogue is the best way to build a better “living-together” and a pragmatic attitude to respecting the environment and enhancing human welfare and social responsibilities.

In summary, there is a need for innovative and interdisciplinary comparative research centred on people and citizens, their cultures, their everyday survival, their knowledge, and their future expectations, as well as their sense of territorial and resource rights and responsibilities. Research should aim at making visible the people living in challenging climatic, political and social conditions, who are facing important global

stressors that occidental dominant culture often fails to understand or appreciate.

2. Principal Research Agendas

The research agenda proposed here has been developed along shared thoughts and long conversations with Arctic researchers and communities 'representatives, between April and July 2017, to identify main strategic issues for the CER-ARCTIC.

Main research themes are planned around the following 15 issues¹:

1. The human dimension of Climate Change. How Local communities are dealing with impacts, risks, vulnerability and adaptation, and how they use their Lay and Traditional Knowledge (LTK). What are their main perception about climate change and its human dimension, in the Arctic and beyond?

2- Resource dependence and resilience in challenging environments: for communities leaving in closeness relationships to nature. Research efforts will be centred on harvesting and property rights, food security, and population health, with special focus on fisheries. Understanding the transformations of local communities and cultures during the last decades and identifying alternatives and appropriate and robust governance arrangements that are key results for this issue.

3. Human development for the communities and their habitats: Socio-ecological systems and future pathways. It is crucial to understand Indigenous and local community's expectative, and what they expect in terms of human development, incl. cultural identity, LTK, endangered languages and social challenges. This will include studies of the gender and youth questions, social perceptions and participative envisioning of the past and future of communities, habitats and biodiversity, in terms of sustainability.

4. Fisheries and aquaculture in wetlands and bays. Focus will be on exploitation history, development in coastal regions, community engagement and participatory governance. Conservation of biodiversity and habitats is at stake including culturally significant and sacred sites.

¹ Non-exhaustive list: only an initial proposal after first exchanges and revision of relevant recent literature. Environmental ideologies and governance are included in each issue.

Questions on how species and habitat can be managed for the recuperation of the fish stocks, the local's vision about MPAs, natural parks, no-take areas, etc., as well as habitat protection and fish and cetaceans' migration routes. These questions need a joint discussion and a shared decisions process for innovative governance models.

5- Cetaceans and other marine mammals in socio-ecological systems.

The ecology of whales and the social perceptions and attitudes of local communities, how local practices can impact stocks, life-cycle and migrations of marine mammals? Harvesting rights and conservation objectives are at stake here. Studies will deepen on consumptive and non-consumptive use and harvesting controversies. Identifying governance methods regimes for dialogue and non-conflict, and clarifying the differences between commercial and indigenous practices. Environmental ideologies between local and global, small-cycle subsistence economies and capital accumulation will be analysed as well as the different models of harvesting resources on land and sea and their impacts on human development.

6. The Arctic and globalisation: the example of Tourism development around whales and nature.

Changes and conflicts in the communities linked with new tourism activities will be looked-at. The question on how cultural habits of visitor's influence the local way of life will be explored. The transformation of former fishermen' villages by a growing tourism activities such as whale watch and cruise boats need urgent attention. Carrying capacity of the bays and fjords, access rights and co-management initiatives will also be under research scrutiny.

7- Archaeology, anthropology and cultural heritage (housing, boats, fishing and whaling, etc.).

A research line will be developed to better understand the cultural roots of arctic landscapes. The often very long relations among locals and indigene communities with the sea, the fish and marine mammals, but also with the inland and animal husbandry practices have to be better understood, including the old techniques and practices at sea and on land, the farmer-fishermen interactions, and the knowledges on landscape evolution, market and non-market products,

their social uses and economic relevance (exchange, trade, the commons and early privatisation of land and sea, etc.).

8. The Arctic Ocean, coastal and deep-sea issues, and its connections with adjacent regional seas. Questions on the governance of the Arctic will be raised. How it is organised? The role of states and non-state actors in a globalized Arctic will be examined. New frontiers and new activities: How to interpret and manage Blue Growth policies? Understanding Global vs local governance, resource rights and community viability, co-participation in the construction of alternatives at different scales. In increasingly interconnected seas, how management of activities and their impacts should be organised, to protect interconnected ecosystems and to recognize the local communities being at home.

9. Population trends and the urban factor. Processes of urbanisation in the Arctic are relatively recent but develop very quickly. Rural-urban historical developments and socio-cultural impacts need a scientific review including nature and the city, gentrification and migrations, access to services in the city network transformations. Women, elderly and the young main issues will be addressed, in the rural areas and their relations with the city.

See Arctic populations and migration chapter in AHDR II: <http://www.norden.org/sv/nordiska-ministerraadet/samarbetsministrarna-mr-sam/norden-i-fokus/norden-i-fokus-i-koebenhavn-1/201dtaking-the-temperature-on-the-arctic201d/heleniak-ahdr-presentation-to-ncm-october-7-2015.pdf>

A number of important issues are at stake such as migration into the Arctic, newcomers and their roles, Arctic diaspora populations (How many have left and connections back home?). Other linked processes are "Climigration" and its impacts, the deconstruction of coastal communities, terrestrial and marine impacts, transport and energy, central services and infrastructures.

10. Environmental history: The Arctic and globalization. From a local community-based fjord and bay "vision of Commons", to a frontier for

new resources (discovery and shipping routes in the Arctic, discovery of the richness in marine mammals as resources (including early Iberian whaling, Basques and Terra Nova), difficulties with the presence of ice and harsh climate, technological development for resource hunting, the rush for oil, gas and minerals, history of fishing including *Pêcheur d'Islande* with French Breton fishermen in Icelandic *waters* and later Cod Wars etc.). Relations between oil discovery and commercial whaling: the setting up of the environmental diplomacy among Nations around fish and whales, and its relations with energy and economic transitions.

11. Local connections to international markets and impacts of global financial crises on resource rights and livelihoods. The topic here is the growing influence and interests of international financial institutions in the terrestrial and marine resources of the north, not necessarily related to productive activity, but as sources of financial instruments, products and derivatives. What does the global financialization of northern resources mean for access and thereby human rights of northern indigenous groups and other inhabitants?

12. Globalization and impacts of western environmental perceptions in the north. The topic is animal welfare ideologies and well-being of human communities dependent on harvesting symbolically-significant animals. Southern attitudes matter in the north, so we may need to go south to Helsinki, Brussels and London rather than north to study social, cultural and political processes that affect Arctic well-being. It would still be Arctic research of value to Arctic societies.

13. Human-wildlife conflicts in the north: Contribution to constructive and culturally sensitive dialogue and pragmatic conservation. How can we use our research skills to provide analyses that can help to set up a dialogue or a conversation on conservation across very different nature perceptions and lived realities, a dialogue that protects livelihoods and promotes conservation? Whaling and whale watching are relevant examples.

Marine mammal issues continue to be of critical importance for Circumpolar discourses, local well-being, food security, cultural identities and international relations.

The geopolitical dimension of this became once again obvious not so long ago in the context of the Arctic Council when China fell collateral victim in its application for Observer status when the EU was punished for its ban on the import of seal products. The EU still does not have, 9 years after the initial application, an observer status in the Arctic Council. The topic is a key one for food security, economic and cultural reasons and needs to be addressed by researchers in an interdisciplinary manner which also can provide analysis and facilitate a dialogue between cultures that are at odds on fundamental basic assumptions about human-environmental relations.

14. Closing the commons as a tool of resource governance. The focus here is on the social, economic, financial, legal and ecological implications of rights-based resource management systems as a method of regulating common-pool natural resources. What are the societal impacts of the large-scale use of market-based governance philosophies? Are there viable alternatives to the introduction of private property rights regimes in the effective management of what have traditionally been perceived as common-property resources harvested within social relations of open access rights. A special emphasis could be on fisheries and fishing communities in the Arctic region but studies with an international perspective, including Mediterranean, and on the Atlantic (Galicia, Basque Country, Britain, West Africa etc.) are also needed, especially in increased interconnected seas.

15. Indigenous and experience based local knowledge and scientific ways of knowing. There is much discussion about the need to include traditional knowledge at all stages of research, especially in terms of resource governance and climate change monitoring and assessment. The practical processes of making this happen and practical results are however far from clear and convincing. We need to understand the dynamics of these processes as they unfold in order to be able to design guidelines that actually draw on the strengths of different forms of

knowledge production so that we do not continue to pay lip service to experience based knowledge.

3. The UAB Arctic Research Centre (CER-ARCTIC)

The UAB ARCTIC Research Centre has the aim of bringing together different disciplines in order to understand the complexity of the Arctic, promoting people-centred and policy relevant high quality research and building bridges with the Mediterranean and the South. This agenda will help to compare and better understand how very different local communities in a variety of settings are impacted by, and how they cope with, comparable types of pressures. Research emphasis is on the importance of culture in mediating impacts and providing sustainable and locally-informed governance solutions with social and political alternatives for the future. Its main perspective is that the Arctic is a "homeland for peoples" in a global context, not only a reservoir for resources or playground for geopolitics. It is also vital to understand that work towards the Arctic is under the responsibility of humankind, and that the humankind future depends greatly upon what is happening in the Arctic. The challenge of societal development in a changing climate will be the non-deterministic frame of the research programme.

International climate science has already understood the importance of a paradigm embracing multidisciplinary dialogue to cope with complexity. Economic, cultural and social predicaments, as well as political alternatives for people are also part of this complexity. These issues are at stake in the Arctic, and also in the Mediterranean and Africa. Therefore extracting lessons from their comparison is of core contemporary interest and value, especially in interconnected regions where societies are not divided by the ocean but connected by the sea.

The CER-ARCTIC commits itself to a holistic transdisciplinary approach where we look at social and biophysical processes as interconnected and inseparable. Thus the complexity of socio-ecosystems will be fully explored, where humans are seen as creative agents rather than passive and vulnerable recipients or victims of change in the same systems.

The CER-ARCTIC will be an internal research structure within the UAB:

1. UAB, through its Interfase Research Group led by Dr F. Breton, has conducted important research on the Mediterranean (e.g., The EU FP7

PEGASO Project 2010-2014) and North and West Africa (EU FP7 MEDINA project, WP5 in North Africa 2011-2014, and The IRD project PATEO international laboratory in West Africa, 2014-2017). Dr Níels Einarsson is the Director of the Stefansson Arctic Institute of Iceland, and has long and recognised research experience in the Arctic. Both have the knowledge and the relevant networks to form and lead such a Centre.

2. The UAB, as an internationally recognized institution of excellence and a gateway to the Mediterranean Europe, Gibraltar and the Atlantic, the Maghreb and Africa, will build a bridge to the Arctic. This will be done in collaboration with the Stefansson Arctic Institute, which has had long-standing and fruitful research relations with all the Arctic regions, indigenous cultures and universities, as well with the regional institutions and initiatives for governance, such as the Arctic Council. Through the CER-ARCTIC an international platform for permanent collaboration, formation and interactive dialogue will be ensured.

4. The functioning of the CER-ARCTIC

The centre will function as a UAB Research Centre.

For its implementation and norms of functioning, it will follow the basic requirements of the UAB Normative for the creation of a CER. *See the “Reglament del Centre d’Estudis I Recerca sobre l’Àrtic (CER-ARCTIC) de la Universitat Autònoma de Barcelona”.*

The CER-ARCTIC is thought as an inter-disciplinary, inter-institutional and international research centre. It will have members from different UAB departments and from other universities and research Centres, from the Mediterranean and the Arctic Regions, with different disciplinary backgrounds.

The deployment of the activities of the CER-ARCTIC will be organised along a planned agenda. The Centre will begin with the basic UAB requirements in order to function and the priority action will be to find funding for research and closely related activities as soon as the CER-ARCTIC will exist as such.

Some research is already on going and will be integrated into the CER-ARCTIC as soon as it is officially created (see paragraph on “Financial Plan”). The centre will be able to begin with some financial resources, and will also have human resources, people who are already working for the setting up and functioning of the centre, in the Arctic and at the UAB.

As the Centre develops, its programme and strategic research lines will be adjusted in accordance to the social and cultural needs of the Arctic and available resources.

The functioning of the centre will be based on the following activities.

4.1 Activities

A- The CER-ARCTIC will be mainly dedicated to research and knowledge production as its core activity.

B- Education of PhD, Post-Doc and young researchers will be an activity, directly linked with the first one.

C- Communication and dissemination, the third activity, will allow to make visible the working processes and results of the CER-ARCTIC. It will also be necessary for the aim of shared research with and for local communities. It will be a key tool for encouraging other stakeholders to actively participate.

D- Arctic living labs to work with citizens and help local Arctic Communities will be functioning as early as possible.

A. Research and Knowledge production

In its objectives the CER-ARCTIC identifies RESEARCH and KNOWLEDGE Production as its core activity.

- The proposed research agenda of 15 main issues, represents the strategic vision for research and knowledge production of the centre. It will be reviewed and modified along time, to answer main social and cultural needs of Arctic human development.

- The research Members

The CER-ARCTIC will begin to function with a reduced number of researchers, well balanced between the Mediterranean and the Arctic.

To do so, **a team of 10 Members**, 6 from the UAB and 4 from different research institutions of the Arctic will be set up. At that stage, we follow strictly the UAB norms. Research Members will grow pending of project funding.

The Members will have the role to develop some agreed responsibilities (e.g. being in charge of a Research theme and developing their own research in this theme, finding resources for participating in calls for proposals for the CER-ARCTIC. They will participate actively in the day-to-day management of the centre, and when they are required, as task force members or in other supportive action, etc.

The list of persons who could become a Member is being assembled through direct contacts with the identified persons, in which all the requirements (expertise, ethical positions, research lines, responsibilities, etc.) are discussed and agreed.

- **Bilateral agreements**

Bilateral agreements will be established between the UAB and interested institutions, on purpose for concrete collaboration. Work to be done, acceptance of the RRI framework, type of expertise, expected results and duration will be established in each case. A framework agreement template will be prepared to facilitate administrative processes. In its initiation the agreements with external experts or researchers will be written as a supportive collaboration, and reviewed as soon as funding projects are generated.

Once the CER-ARCTIC will get the first financed projects, new research members can be involved in the centre. Procedure to make open calls for positions, evaluation criteria and results will be published following UAB and EU public rules.

All procedures to recruit new researchers and members of the CER-ARCTIC will follow the UAB rules.

B. Formation and capacity building

- **PhD formation, Post graduate students and exchanges**

Students funded by grant such as ERASMUS as well as national grants will be welcome after CV presentation, interviews, and the identification of a coordinated supervision (Arctic institution-UAB or UAB-Arctic institution).

- **Exchanges of professors**

Strong collaborations require also mobility, from North to South and vice-versa. The research program will be established in each case, related with Grant availability.

- **Capacity building for local and indigenous communities**

This will be an activity based on the needs of local populations and developed in the frame of ad-hoc funded project, to organize capacity

building with local and indigenous communities, with the aim to establish effective collaborative and responsible science.

- **Organisation of specific courses**

A number of high level courses will be organised every year in the Arctic and in the Mediterranean (especially around the Gulf of Lion), on the Arctic socio-ecosystems, fisheries and fish stocks management by fishermen, the ocean ecology and the role of society at the face of its bio-diversity, the social perception of cetaceans, the role of the Marine Protected areas in the protection of interconnected seas, monitoring technics to follow water quality and cetaceans routes, recommendations for maritime and coastal planning, etc.

C. Communication

- **A communication Plan** will be produced during the first 6 months of the creation of the CER-ARCTIC

- **An Interactive and comprehensive web portal** will be created:

It will include:

Main information on the CER-ARCTIC activities and its programs

Virtual meetings online

Maps and reports made accessible

List of key Arctic institutions and organizations, and direct access to their webs

Ad-hoc Capacity building material

Main bibliography and documentation

Relevant videos and other multimedia to facilitate access to basic materials for all

Etc.

- **International events and high scientific lectures**

The first one is planned the 1st December 2017 at the UAB, for the inauguration of the CER-ARCTIC Research Centre. It will be organised jointly by the UAB and the Stefansson Arctic Institute, who will ensure the financial support, in the frame of the Annual Vilhjálmur Stefansson Memory Event. Well-known scientists, working on different Arctic Issues, will give High-level lectures on the Arctic. An exhibit on the “Warm Arctic” will also be organised at the UAB, brought by the Stefansson Arctic Institute for this event.

- **Communication and new projects**

Every new project will have a communication action that will support the CER-ARCTIC actions.

D. ARCTIC LIVING LABS

Living Labs are defined as user-centred, open innovation ecosystems based on a systematic user co-creation approach, integrating research and innovation processes in real life communities and settings. In practice, Living Labs place the citizen at the centre of innovation, and have thus shown the ability to better mould the opportunities offered by new ICT concepts and solutions to the specific needs and aspirations of local contexts, cultures, and creativity potentials.

The UAB Arctic living lab will work to respond to the Arctic communities helping them out.

The **European Network of Living Labs** (ENoLL) is the international federation of benchmarked Living Labs in Europe and worldwide. The CER-ARCTIC will apply to be in the Network.

<http://www.openlivinglabs.eu/aboutus>

4.2 Management and governance of the CER-ARCTIC

The management of the Centre is set up to answer the CER-ARCTIC main objectives, in the most efficient way. Therefore, the governance model is in phase with the philosophy of the centre. *See the “Reglament del Centre*

d'Estudis I Recerca sobre l'Àrtic (CER-ARCTIC) de la Universitat Autònoma de Barcelona).

A. The Executive Committee

The Executive Committee is formed by a Direction team supported by a technical secretariat. It has three primary responsibilities:

- (i) Ensuring from the beginning the setting-up of the CER-ARCTIC and the deployment of its functioning
- (ii) Developing and maintaining a strategic plan for the Research Centre that is compatible with the original objectives of the Centre as stated in its proposal;
- (iii) Ensuring the on-going, smooth operations of the Research Centre through the effective day-to-day implementation of its strategy in the short, mid and long term.

The Executive Committee is the primary vehicle through which the grant holders (the lead and co-lead investigators) can meet to determine and evaluate progress against the on-going strategy of the Centre.

The role and responsibilities of the Executive Committee include:

- Organizing and following up the operational work of the Centre
- Managing the allocation of Centre funding between projects/groups within the Centre, depending on needs and opportunities
- Ensuring that the cost-share requirements for the Centre are met and maintained on an on-going basis
- Ensuring that all reporting requirements are met in a timely fashion
- Determining and implementing a strategy for securing funding from donors sources and through the EU Horizon 2020 programme, and other research programmes relevant for the Arctic.
- Ensuring that day-to-date conflict of interest and research integrity issues are managed appropriately

For more details see the “Reglament del Centre d’Estudis I Recerca sobre l’Àrtic (CER-ARCTIC) de la Universitat Autònoma de Barcelona)

The CER-ARCTIC will have:

- **A Director**, from the UAB, in charge of the direction of the Centre, working in a coordinating manner with the researchers and the projects. The director will participate in research, as a member of the Centre.

The Director will be assisted by:

- **A Senior Arctic Adviser as assistant-director**; in charge of the presidency of the Advisory Board, conveying the best information and interactions among the Arctic network of universities, centres and scientists, as well Arctic Policy Forum. The Senior Adviser will also be research Member of the CER-ARCTIC.

The Direction team of the CER-ARCTIC will be assisted by:

- **A secretary**

The secretary will back the work of the director and the EC, reviewing mails, preparing meeting' logistics, writing the minutes, organising travel missions, participating in reporting and accountability tasks, audits, etc.

- **A technical expert in International projects**

Main responsibility will be to search for relevant calls and donors. He/she will support the Executive Committee and Members of the CER-ARCTIC in the writing of proposals.

The percentage of time dedicated to the centre could vary in function of the work load. This needs to be discussed with the UAB International project team and the Vice Rector for Research

The direction team together with the secretariat will form the Executive Committee.

- **The proposed Director**

Dr Françoise Breton is proposed as Director of the CER-ARCTIC, because she has been at the source of the idea and has developed the initiative of the CER-ARCTIC. Her mandate will be of two years, renewable for 2 years more. *See the "Reglament del Centre d'Estudis I Recerca sobre l'Àrtic (CER-ARCTIC) de la Universitat Autònoma de Barcelona).*

B. The Research Members

The UAB Research Members (RM) are listed below.

For the UAB:

Currently most of the cited persons have approved to be on the list and respond to requirements. Even if more than 6 are listed, 6 will be finally identified.

- **Dr Françoise Breton**, anthropologist/geographer, works on Marine mammals and their social representation, Nature-culture interactions, at 100%
- **Dr Eduard Ariza**, social and environmental science, expert on governance and ecosystem services, at 50%.
- **Dr Jaume Font**, ecologist, expert on urban development and land use changes, at 50%
- **Dr Antonia Casellas**, geographer, expert on local communities and conflict resolution, at 50%
- **Dr Isabel Pont**, environmental rights, maritime and coastal policies, at 50%
- **Dr Raquel Piqué**, Archaeologist, interested in the archaeology of fishing and whaling, and landscape history, funded by an ICREA-ACADEMIA during 5 years, at 50%
- **Dr Albert Pèlachs**, physical geographer, ice history and climate change, landscape of the past, at 50% (*in reserve*)
- **Dr F. Romagosa**, Tourist expert, UAB School of Tourism, at 50%, (*in reserve*)

For the Arctic:

A number of high recognised researchers are interested. However, research agreement will be passed between the UAB and each institution/researcher to guarantee a critical mass of Arctic scientists. On the agreement it will be clearly said that the contribution of the institution and of the scientists is pending on project funding. The international figure of Associated (“vinculat” in Catalan) Investigator will also be used, following the UAB norms for this figure. This allows having researchers

from abroad at the CER-ARCTIC contracted by their institution to work for the CER.

- **Dr Níels Einarsson** (Anthropology of the Arctic, expert also in Arctic marine policies and social impacts, Director of the Stefansson Arctic Institute, Akureyri, and Adjunct Professor of the University of Iceland). He will take part as a member and as Chair of the Scientific Advisory Board.
- **Dr Marianne Helene Rasmussen**, cetacean expert, Professor at the University of Iceland, Húsavík
- **Dr Anniken Førde**, social scientist, Associate Professor, Arctic Univ. of Norway, Trømsø, Norway
https://uit.no/om/enhet/ansatte/person?p_document_id=42325&p_dimension_id=88153
- **Dr Astrid E. J. Ogilvie**, Senior Scientist, Environmental history, Stefansson Arctic Institute, Akureyri

Other Universities and Institutions from the Arctic are welcome, but the Centre will begin with the minimum of 4 researcher/ institutions from abroad. Further contacts will be taken with the University of Iceland, Arctic University of Norway, University of Greenland, University of Svalbard, Dartmouth College in the USA, and other Arctic countries such as Sweden, Denmark, Finland, Canada, etc.

C. The Scientific Advisory Board

The Scientific Advisory Board is composed of a small number of leading international experts whose background largely represents the activities being pursued by the centre. Some of them should also represent indigenous and local communities. The recommended number of participants in the board will be a maximum of 8 individuals, plus the Chair a Senior Arctic Adviser, who is also assistant-Director of the CER-ARCTIC.

Chair Dr Níels Einarsson, Director, Stefansson Arctic Institute, anthropologist, Iceland, Chair

<http://www.svs.is/en/about-us/staff>

1. **Prof Oran Young**, Bren School of Environmental Science and Management, Univ. of California, political science, USA

http://www.bren.ucsb.edu/people/Faculty/oran_young.htm

2. **Prof. Ross Virginia**, ecosystem ecologist, Director of the Institute of Arctic Studies, Dickey Centre, Dartmouth College, USA

<http://dickey.dartmouth.edu/environment/about>

3. **Mr Rune Sverre Fjellheim**, economist, Director of the Saami Parliament in Norway

https://no.wikipedia.org/wiki/Rune_Sverre_Fjellheim

4. **Dr Olga Ulturgasheva**, a native Eveny from Siberia (Yakutsk). Lecturer in Social Anthropology, Department of Social Anthropology, University of Manchester Oxford Road Manchester. Editor of the book series "Studies in the Circumpolar North"

http://www.berghahnbooks.com/series.php?pg=stud_circ

5. **Prof. Sebastian Villasante**, ecological economics, Univ. de Santiago de Compostela, Galicia

https://www.researchgate.net/profile/Sebastian_Villasante

6. **Dr Yves Hénocque**, Marine biologist, Marine integrated policies, ocean governance, Integrated management of the coast and sea, Strategic planning of marine spaces, ecosystem approach, multinational cooperation /Asia-Pacific.

7. **Isabelle Autissier**, Navigator, President of the French branch of the World Wide Fund for Nature (WWF), Human rights ambassador, ocean scientist (IFREMER) working in the Antarctic.

8. **Dr Alassane Samba**, IRD Senegal, artisanal fisheries and local communities' conflicts.

The role and responsibilities of Scientific Advisory Board

The role of the Scientific Advisory Board (SAB) is to provide the Centre (and specifically the Executive Committee) with independent, impartial scientific advice on an on-going basis.

It will also be active in the collaboration with local and traditional knowledge communities. It will establish the best interactions possible between science, local communities and policy.

The Scientific Advisory Board should be regularly briefed of the progress of the centre's research projects and should provide feedback and ideas to accelerate the Centre's development and inform its strategic direction.

Activities may include providing suggestions towards scope and choice of research topics being pursued in the context of latest developments and specific needs. It will also review the scientific papers and reports of the CER-ARCTIC and give references for recruitment.

- The Scientific Advisory Board supports the leadership of the Arctic Centre by giving advice for research planning, science education, data management, communication and outreach.
- The Scientific Advisory advises on implementation of the Arctic Centre Strategy. The Board assesses whether the benchmarks set out in the Strategy are being achieved.
- The Scientific Advisory gives advice for evaluation of the quality of the work of the Arctic Centre. The Board supports Arctic Centre's national and international co-operation and networking with scientific partners as well as public and private sectors.
- The Scientific Advisory supports the Arctic Centre in gaining external funding by giving advice and status for the Arctic Centre.

Normal exchanges and discussions will be done online through mails and the Internet. The WEB Page will also be used (see paragraph on Communications). Face-to-face meeting will be organised pending on funding.

The Scientific Advisory Board should provide informed (yet non-binding) guidance to the Centre; ultimately the responsibility to decide direction and execute the research agenda of the Centre remains with the Director and its assistant-director, backed by the Executive Committee.

D. The CER-ARCTIC Council

The CER-ARCTIC Council will be open to all the members and projects/activities collaborators of the Centre. It will be associated to a one day annual meeting where results and publications will be presented.

The CER-ARCTIC Council will discuss and evaluate the work done during the year, to vote on the strategic work plan for the next year, to review the annual accounts and the next year economic plan.

The Director of the CER-ARCTIC is also the moderator of the CER-ARCTIC Council; he/she always can delegate this function to another member of the Executive Committee.

Most relevant decisions will be submitted to votes. *See the “Reglament del Centre d’Estudis I Recerca sobre l’Àrtic (CER-ARCTIC) de la Universitat Autònoma de Barcelona”.*

E. The CER-ARCTIC offices

The CER-ARCTIC is a Centre of Research depending on the UAB and the UAB government.

It will have different antennas in other places, in general nearby the sea in the Mediterranean Coast (along the Lion Gulf), Atlantic coast (Galicia) and in the Arctic (Húsavík). These antennas will be based on agreements with other centres from France, Iceland, Spain etc. and they will be used to make specialised courses (for example on cetaceans) and monitoring of the land/sea conditions, biodiversity, protected areas, economic sectors (example: tourism, whale watch, fishermen communities, mining, etc), and work with and for the local communities. Agreement will be passed with relevant associations and NGOs to build annual programs on Environmental education and citizen science in the antennas along the year, steering Living lab among other possible activities.

The direction and secretariat will be located in offices of the Geography department, at the UAB, where the researchers are presently working. An agreement will be proposed and discussed between the Direction of the CER-ARCTIC and the Department, once the CER-ARTIC will be approved by the UAB govern. The CER ARCTIC will create links with different research groups of the department of geography. He will also bring events and

lectures, contacts among scholars and network that will be a win-win for both the CER-ARCTIC and the Department. It will of course bring added value for the high level of the research. Agreements can also be discussed and passed to return to the department the cost of the office services through sharing a just part of the overheads. This agreement will be presented in the Department council once the CER-ARCTIC has been approved by the UAB president.

5. Strategic Action Plan

YEAR 1-2017

RESEARCH

- Continuing development of existing research themes and integrating them into the Centre as well as publications (ARC-PATH 2016-2020, Market based fishery governance in the NE Atlantic, MARKFISH 2017-2020; PATEO 2017-2021)
- Organisation and effort oriented towards successful funding, both for PhD venue and for projects.
- Organising the Scientific Advisory Board

COMMUNICATION

- Setting the web page of the CER-ARCTIC (discussing functionalities, design, and making first tests)
- Working on the Communication Plan
- Preparation of the CER-ARCTIC Inauguration and the Media campaign
- 1st December: inauguration of the CER-ARCTIC at the UAB (with support of The Stefansson Arctic Institute of Iceland). First International conference on the Arctic, and exhibition on the “Warm Arctic”, at the UAB.

NETWORKS consolidation

- Invitations of relevant people to the CER-ARCTIC Inauguration
- Inauguration will be associated to a work on the medias (in Catalunya, Spain, in the Arctic and the Med)
- Presentation of the CER-ARCTIC at the Generalitat.
- Presentation of the CER-ARCTIC at the EC (Living lab network, RRI in H2020, relevant DGs, Marie Curie ITN, etc.)
- Presentation of the CER-ARCTIC in policy meetings: at the Arctic Council and at the Mediterranean Convention (UNEP-MAP)

YEAR 2-2018

RESEARCH

- Continuing development of existing individual research themes and integrating them into the Centre as well as publications (continuing ARCPATH and MARKFISH)
- Organisation and effort oriented towards successful funding, both for PhD venue and for projects.
- Welcome of first PhD
- Presentation of the CER-ARCTIC at the Albert the 1st Foundation in Monaco going for a grant.
- Presentation of the CER-ARCTIC at the MAVA Foundation in Switzerland presenting the renewed Agri-coast proposal.
- Answering call for regional activities in France, with a French beneficiary, to set up an antenna in the gulf of Lion.
- Fieldwork in the Lion Gulf and “Pelagos sanctuary” (on MPAs and their role on cetaceans, fisheries and protection, emergence of whale watch, etc.)
- First granted project(s) Kick-off (End 2018)
- Sabbatical year of Níels Einarsson partly at the UAB/CER-ARCTIC

COMMUNICATION

- Publication of 2 scientific papers for ARCPATH
- WEB fully operative
- Antennas development in the Gulf of Lion France and in Iceland (Húsavík), steering of the LIVING LABS.
- Preparation of a documental on whales and men
- Preparation of new papers

NETWORKS consolidation

- Information campaign: presentation of the centre in policy meetings, at the Arctic Council, in Africa and in the Mediterranean Sea
- Visiting main Universities and research centres in the Arctic, presentation of the CER-ARCTIC
- Working programs with local Greenland communities.

INTERNAL

- Revising and agreeing with the Scientific Advisory Board strategic actions and activities.
- Evaluation of projects funding effort
- Annual report 2017-2018

YEAR 3-2019

RESEARCH

- Continuing development of existing individual research themes and integrating them into the Centre as well as publications (continuing ARCPATH and MARKFISH)
- Exchange of scholars and professors
- Beginning of the second granted project
- Organisation of a questionnaire along the Mediterranean coasts about the state of the sea, MPAs and cetaceans, doubled with long oral interviews
- Participation in the Maritime plans along the Lion Gulf and in the Arctic.

COMMUNICATION

- Web interface fully functioning: first virtual meetings
- Organisation of the 2nd international meeting in the Arctic.
- Opening of the Gulf of Lion antenna and inauguration
- First international course on whale ecology in the antenna of the Lion Gulf
- Agreements with local associations and NGOs for educational programs in Lion Gulf

NETWORKS

- Living labs fully functional
- Research consortiums working with firms and local communities
- Working programs with local Sami/yakoute communities (Norway, Finland, Siberia)

INTERNAL

- Mid-term Evaluation of governance → towards stability of the centre
- Mid-term functioning and financial evaluation
- Revising the secretariat support
- In December 2019 election of the Director of the CER-ARCTIC

YEAR 4 -2020

RESEARCH

- Ongoing
- Continuing development of existing individual research themes such as MARKFISH
- Final year of ARCPATH: publications
- Development of New funded projects
- New project opening

COMMUNICATION

- Third international meeting on the links Arctic-Mediterranean (Antenna Gulf of Lion- UAB)
- Full functioning of the web, the blog, Facebook, etc., adapted to revisions
- Full functioning of living labs: Work on educational and communication actions for main relevant stake holders in the Arctic
- Presentations of first PhD thesis

NETWORKS

- Extensions to Japan and Asia
- The Caribbean sea and the tropics
- The Antarctic
- Preparation of a Monographic on the Arctic and the Mediterranean

INTERNAL

- To a sustainable structuration of the centre

YEAR 5-2021

- Official Report on the CER-ARCTIC for the UAB: evaluation of the work done
- Big event for linking the research and the network

6. Financial Plan

6.1 The context in which the CER-ARCTIC is set-up

A. Ongoing activities and “seed money” to begin

In 2015, the NILS Research Program granted prof. F. Breton to develop a research on the social perception of marine mammals in the Arctic, collaborating with the Arctic University of Norway in Tromsø, and the University of Svalbard (UNIS).

As a follow up of the research work done then, in 2017, [the Stefansson Arctic Institute of Iceland](#) invited Dr F. Breton to continue the research work, focusing on whale watch in a bay and town in Northern Iceland, Skjálfandi and Húsavík.

This particular research, under the strategic lines 3, 5 and 7, will continue within [the Nordic Research Council Centre of Excellence in Arctic Research project ARCPATH \(2016-2020\)](#), which the Stefansson Institute, under the lead of the Nansen Centre at the University of Bergen, as F. Breton participate as Associate Scientist with other CER-ARCTIC members, in work packages 4 and 5.

Activities in the Mediterranean on issues of interest and high relevance to the Arctic have been also engaged through field work in the Lion Gulf and in the Pelagos Sanctuary (2017-2018) on Marine Protected Areas, fisheries and emergent whale watch activities. These activities will continue with regional [funds from the French Government](#).

E. Ariza and A. Casellas are working at UAB, with [INTERFASE grants](#), on Governance, fishery communities and conflict with tourism in the context of cruise ships and Barcelona. This research will be enlarged to make a comparison between the Mediterranean and the Arctic.

The Interfase research group will make some seed money available during 2017, allowing the setting up of the CER-ARCTIC.

The Stefansson Arctic Institute is interested in supporting the inaugural conference the First of December. [The CER-ARCTIC inauguration will coincide with the Annual Stefansson Memorial Lecture](#) that the institute

organises in collaboration with Dartmouth College Institute of Arctic Studies. See <http://www.svs.is/en/about-us/memorial-lectures>

Moreover, the Director of the Stefansson Institute is planning to spend time at the UAB to give support to the centre in his [sabbatical year in 2018](#).

B. Fund based research

The CER-ARCTIC will need funds. So since July 2017, efforts have been done to identify relevant calls and prepare and present proposals. UAB international projects officers will support this action.

[Among the call we look for application:](#)

- H2020
- Special calls on the Arctic
- Marie Curie ITN for the Arctic
- ERC grants opportunity
- ERASMUS + MUNDUS

Moreover, a review of the Foundations potentially interested by the issues the CER-ARCTIC is proposing will also be done, and contacts established. [The MAVA foundation](#) will be contacted as soon as possible as well as the [Albert the first Monaco Foundation](#).

CER-ARCTIC will also be included into an [emergent proposal on the “Market-Based Fisheries Governance in the North East Atlantic: A Sustainability Assessment \(MARKFISH\)”](#), a platform of experts to assess impacts and alternatives of this kind of management. Mediterranean fisheries would be included. Main objectives of this study are:

Convene an international, interdisciplinary working group to draw together existing expertise on market-based systems;

- Identify the compatibility of market-based institutions with conservation aims and policies, and any ecological issues that should to be considered as these management systems are advanced;

-Identify viable alternatives to market-based fisheries governance where necessary;

-Present these results in a book or special issue of a journal (Springer or Marine Policy); as a short essay suitable for publication as a Policy Forum article in Science; and through an easy-to-access and comprehensive web portal to provide information to the public and policy-makers.

The CER-ARCTIC has a great potential to find funds. However this will not be possible if there is not an official recognition of it at the UAB. The name of the CER-ARCTIC, and its added value, bridging North and South communities is important. It is the first Centre of this kind in Spain. It is a great opportunity for the [UAB, in its 50 years anniversary](#), to launch a high level inter-disciplinary scientific platform for the Arctic, comparing effects of human induced global changes in Northern and Southern latitudes.

6.2. Financing Plan

YEAR 1

September- October 2017:

-Contact [Foundation MAVA](#) to discuss feasibility of granting the Agricoast proposal that arrived in 4th position in an H2020 evaluation. Need to rephrase it and to include Arctic case studies in it.

-The [new SGR INTERFASE](#) has been presented in June 2017 and includes capitalization of the research work done in the ARCTIC.

-Fieldwork in Gulf of Lion and writing papers is planned for the [ARCPATH](#) project

-Answering call for a [Marie Curie Individual Fellowship](#) to contract a post-Doc during 2 years

-Preparing the documentation to integrate the [MARKFISH Pew platform](#)

-Opening of the call [Marie Curie ITN to reinforce the ARCTIC-MEDITERRANEAN Network](#). Dead Line in January 2018

-Opening of the call [Marie Curie intersectoral grants](#) to collaborate with the Whale Museum of Húsavík. Deadline April 2018.

-Contact the members of the CER-ARCTIC Scientific Advisory Board for funding advices near the Arctic institutions.

-[Visit of Dr Niels Einarsson](#) (Director of the Stefansson ARCTIC Institute) at the UAB in September 2017. Travel paid by the [Stefansson Arctic Institute](#)

He will be present at the Research Commission with F. Breton to present the CER-ARCTIC and answer the questions.

Meeting with the team of UAB Rectorate to prepare the inaugural event and its logistics, as well as the priority research activities of the CER-ARCTIC.

Eventually, visit to the Generalitat.

November-December 2017

-Contacts Arctic Research institutions: [NSF](#), [NORDSFORSK](#), [Office of Polar programs](#), etc.

-Contacts with Foundations: [Albert 1er de Monaco Foundation](#), [MEDSEA](#), [French Foundation for Bio-Diversity](#), [Tour du Valat](#), [Banc d'Arguin Foundation](#), etc.

-Assistance at the [Arctic Council annual meeting](#), presentation of the CER-ARCTIC (October 2017)

-Organisation of the [CER-ARCTIC inauguration event](#) financed by the [Stefansson Arctic Institute](#).

-[Inauguration of the CER-ARCTIC at the UAB](#), 1st December, with a Conference on the Arctic as a home place and an exhibition on the warm Arctic, supported by the Stefansson Arctic Institute.

-Venue of high research representatives and science excellence talks.

-Media campaign and TV programs.

-Funding campaign at the utmost intensity.

-First meeting of the scientific Advisory Board,

- Preparation of project proposals on the ARCTIC
- Organisation of the funding plan for 2018
- Presentation of the CER-ARCTIC to the Generalitat of Catalonia

YEAR 2- 2018

January 2018:

- Dead Line for submission of the [Marie Curie ITN](#)
- Preparation of projects proposals on the ARCTIC: Rephrase the Agricoast proposal to ask for [MAVA grant](#) and also to an ARCTIC grant
- Developing the [MARKFISH Pew platform](#)
- Presentation of the CER-ARCTIC to the [EC: DG MARE, DG-ENV and DG-Enterprise](#), and at the European Parliament
- Setting up of a [collaborative funding site](#)

February 2018:

- Fist notifications expected for granted PhD
- Welcome to new PhD and post doc
- Continuing work on research proposal
- Preparation of an [ERC Advanced Grant](#)

March 2018

- Continuing work on research proposal: ERC Advanced grant continuation
- Update of the website. Setting up the Blog and opening of the [collaborative funding site](#)

April 2018

- Dead line for [submission of the Marie Curie Inter-sectorial Grants](#) for the Arctic
- Preparation of a Special Monographic on the Arctic
- Continuing work on research proposals
- Continuing proposal making for an ERC

May 2018

- [Deadline for the presentation of the Advance ERC](#)
- Preparation of a Special Monographic on the Arctic
- Continuing work on research proposals

June 2018

- Preparation of a Special Monographic on the Arctic
- Continuing work on research proposals
- Preparation fieldwork in Greenland

July 2018

- Preparation of a Special Monographic on the Arctic
- Continuing work on research proposals
- Successful results of the Marie Curie ITN: organization of work
- Preparation fieldwork in Greenland

August 2018

- Fieldwork in Greenland, research development plans with INUITs community

September 2018

- Preparation of the 2018 Stefansson event
- Work recompilation on Greenland
- Preparation of a Special Monographic on the Arctic

November 2018

- First anniversary of the CER ARCTIC, Stefansson Arctic Institute Event in the Arctic (place to be decided), supported by the ITN Grant
- Publication and presentation of the Monographic on the Arctic
- General Assembly of the CER-ARCTIC
- Financial plan for 2019, and Expected grants and proposals for 2020-2021
- Supporting the ARCTIC Network of research of Excellence
- Continuing work on research proposals

Figure1. Structure proposed of CER-ARCTIC centre at UAB

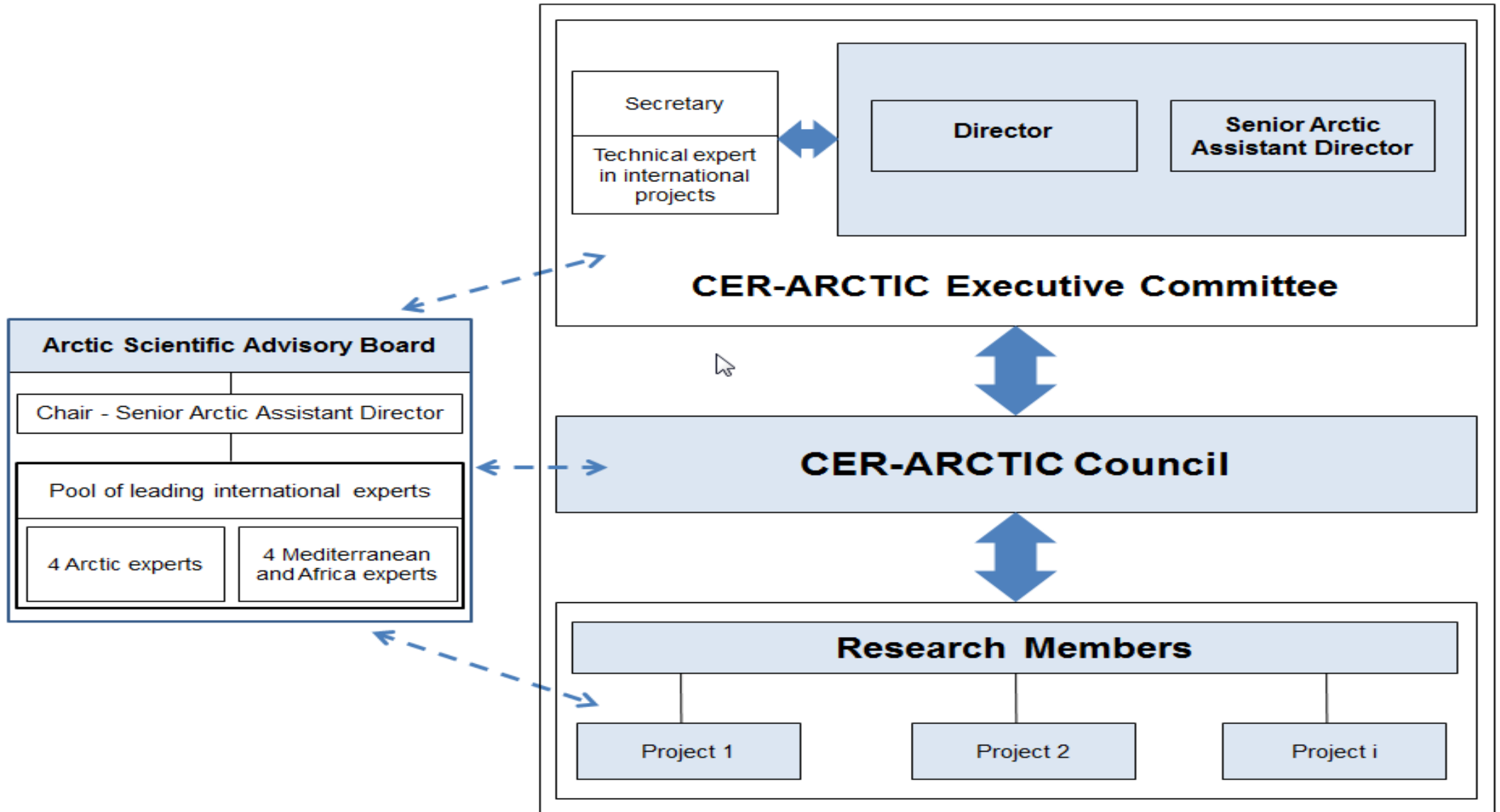


Figure2. Expected budget

Year	Project	Entries expected (euros)	Activities	Costs (euros)
2017	ARCPATH	20.000	Fieldwork in Iceland	2.400
	INTERFASE	40.000	Fieldwork in the Gulf of Lion	1000
			Fieldwork in PELAGOS	3.200
	Stefansson Arctic Institute	10.000	Inauguration of CER-ARCTIC	13.000
2018	MARKFISH	40.000	Participation in the platform	
	MAVA Foundation	800.000	Agricoast	
	SGR	10.000		
	Marie Curie ITN	1.200.000		
	Intersectoral grant	300.000		
	ERASMUS +	15.000		
2019	ERC Grant	1.200.000		
	Foundation Albert the 1st of Monaco	120.000		
	NORDFORSK on Arctic alteration	800.000		