

Work package No 2

Deliverable: D2.2 Report on national funding landscape and modalities

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The main outcomes

- The report provides an overview on the national funding modalities within the BANOS CSA geographical area. It allows identification of funding institutions also involved in specific areas.
- Major research as well as innovation funders from all involved countries were represented.
- The institutions have significant experience in transnational research and innovation funding and collaborations within EU funded research and innovation partnership initiatives.
- The proposed funding model for the intended BANOS Programme should be flexible as there is a great diversity of grant types and funding models applied by the different funding organisations.
- Majority of funding institutions cannot fund beneficiaries located in other countries.

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Description of task: (i.e. as in the Description of Work)

For agreeing the funding models of the future programme it is crucial to know the national research and innovation funding landscape and the variety of funding modalities within countries and national funding institutions (requests for own funding, grants, full cost versus additional cost systems, indirect cost rates, loans, eligibility and payment conditions and schedules etc.). These need to be known in detail for designing and agreeing the funding models and mechanisms. Besides committed and additional cash contributions, reaching of the ambitious goals of the new programme will necessitate mobilising in-kind contributions provided free of charge by the participating member states. There is a need to define what kind of in-kind contributions, and how much by each country can be allocated to the programme.

Based on the information from the above tasks, the funding model(s), mechanisms and principles and the financial structures will be designed and agreed by all countries involved. As a part of this task, participation mechanisms for the beneficiaries representing non-participant member states will be elaborated. The task should provide alternative scenarios as regards participation of non-EU countries and the most appropriate instruments to ensure optimal EU participation. This task will also produce recommendations for long-term sustainability strategy of the future programme.

Note:

Incremental report – Deliverable 2.2.2 is the implementation of D2.2

This report has been updated thanks to additional data from several funding bodies on their modalities for research funding in the geographical area addressed by BANOS CSA.

Type:

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Dissemination level:

PU	Public
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Executive summary

The overall objective of the BANOS CSA work package 2 *Implementation modalities* is to create the conditions (governance, management, financial, legal aspects and administration) for an effective implementation of the joint strategic Baltic Sea and North Sea marine and maritime research and innovation agenda. Among these conditions, it is required to agree on funding models for the future programme. Therefore, it is crucial to know the existing national research and innovation funding landscape and the variety of funding modalities that are currently used within the countries and applied by the national funding institutions (NFIs). For that purpose, a survey of existing funding modalities of the NFIs of the BANOS CSA geographical area was carried out.

A total of 34 funding institutions' modalities were collected and analysed. Among these institutions, few can fund only one type of research activity (i.e., fundamental, applied research and/or innovation). Most of the institutions can fund at least two types of activities. All institutions are using a grant model to support the beneficiaries. Half of the institutions present flexibility in respect to their funding modalities, adapting the types of grants according to the specificity of the calls for proposals. The second half are using only one of the potential types of grant models (i.e., individual, institutional or one grant per consortium). As most of the institutions, which responded the questionnaire sent to them, are from EU Member States, they must act according to EU regulation Framework for State aid for research and development and innovation (2014/C 198/01).

This report offers a good overview of the diversity of funding modalities in the geographical area addressed by BANOS CSA and highlights the complexity of designing a common funding model for the future programme.

1. Objectives of the task 2.2

The overall objective of the BANOS CSA work package 2 *Implementation modalities* is to create the conditions (governance, management, financial, legal aspects and administration) for an effective implementation of the joint strategic Baltic Sea and North Sea marine and maritime research and innovation agenda. The aim is to develop efficient, transparent and legally sound mechanism and tools to achieve a sound level of financial and management integration by using the experience gained by the ongoing BONUS Art. 185 programme and the best practice by similar initiatives.

To agree on the funding models of the future programme, it is crucial to know the existing national research and innovation funding landscape and the variety of existing funding modalities within the respective countries and the national funding institutions. This knowledge is essentially needed to design and agree on the funding models and mechanisms, as well as to develop model contracts and guidelines (task 2.3), for the new programme.

The task 2.2 - agreeing on funding models and instruments - is carried out in cooperation between Agence Nationale de la Recherche (ANR) and BONUS Secretariat. This document is the second deliverable of the task 2.2 and it serves as a basis for the other deliverables within the BANOS CSA WP2, mainly T2.3 (developing model contracts and guidelines) and T2.4 (development of on-line programme management tool). The task 2.2 consist of three deliverables: 1) Report on national funding landscape and modalities (D2.2, delivery month 8), 2) Agreement on the implementation

instrument (D2.3, delivery month 18) and 3) Agreement on programme funding principles including in-kind contributions provided free of charge (D2.5, delivery month 25).

2. Purpose of the report on national funding landscape and modalities

The main aim of the current task was to gather information on existing funding modalities and funding rules to elaborate on the commonalities and to develop the common funding practises for the future joint programme / calls (deliverable 2.5). Particularly, the goal was to identify the most challenging issues where the approaches from country to country and from institution to institution differ the most.

At the same time, the other aim was to identify the funding institutions, which could be involved in the future joint activities.

In addition, a mapping exercise of existing funding institutions within the BANOS CSA members states was carried out to identify gaps in the funding landscape - country wise and/or research category wise, so that the rest of the CSA duration can be used for elimination of the identified gaps by approaching and attracting the additional funding institutions to join the future programme.

3. Methodology

In order to understand in detail the national research and innovation funding landscape and the variety of funding modalities within countries and national funding institutions, a survey, targeting the countries of the Baltic and North Sea, was carried out.

To achieve this objective, the institutions funding research and innovation in the area of interest were first identified and mapped. After, a questionnaire was prepared and sent to the identified contact persons of the respective institutions. The institutions, which are not involved as BANOS CSA partners, were approached by sending a short information package about the future joint programme, as well as short description of current BONUS 185 activities to attract interest and if agreed, then to keep those institutions updated on further developments of the joint programme.

3.1. Selection of funding institutions

The initial list of funding institutions was collected based on ERA-LEARN information (<https://www.era-learn.eu/>) and the first selection of institutions was done according to the geographic coverage in the area of Baltic and North Sea and the thematic coverage. In addition, the BANOS CSA partners were asked to make suggestions, which institutions should be to included/excluded. ANR was in charge of the mapping exercise and contacting the funding institutions in the North Sea geographical zone and BONUS Secretariat in the Baltic Sea geographical zone, respectively. The countries located in both areas were shared between ANR and BONUS Secretariat.

3.2. Creation of the questionnaire

A questionnaire was developed in order to analyse the national research and innovation funding landscape modalities. The questionnaire presents three parts with a general description of the institution, funding in general and detailed questions about grants, including funding models:

- A. General description of the institution
- B. Funding in general
 1. Activities and research categories financed
 2. Technology readiness levels (TRL) financed (if the concept is used by the institution)
 3. Thematic areas covered
 4. Involvement in public-public partnerships (previous or ongoing)
 5. Financial support provided
 6. Type of grants used: individual (researcher), institutional (each research organisation among a consortium) or one grant per consortium (coordinator organisation)
 7. Type of beneficiaries
- C. Questions about grants
 8. Specific eligibility criteria for beneficiaries, if any
 9. Ability to give grants or other support to the beneficiaries located in other countries
 10. Use of open science as a criterion to benefit from funding
 11. Details about eligible cost / indirect cost – funding model

The definitions of activities and research categories used in the questionnaire were based on EU regulation 651/2014¹. The term *applied research* is typically defined as activities between fundamental research and innovation by research performing organisation and research funding organisation.

*The Technology Readiness Levels (TRLs)*² are indicators of the maturity level of particular technologies. This measurement system provides a common understanding of technology status and addresses the entire innovation chain. There are nine technology readiness levels; TRL 1 being the lowest and TRL 9 the highest.

The grant is the contract between the funding institution and beneficiaries. There are three main types of grants:

- Individual: direct contract between the funding institution and the researcher
- Institutional: contract between the funding institution and each research institution involved in the consortium, a researcher belonging to a research institution, whatever the legal status of the research institution
- One grant per consortium: a contract between the funding institution and the research institution of the project coordinator, as used by European Commission under H2020 programme

¹ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014R0651>

² <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/support/faq;keywords=/2890>

Here, *funding models* are the models used to determine the funding, including additional cost and full cost models. Additional costs are the cost triggered by the implementation of the funded project, the cost of standard running activities are not covered (i.e. permanent staff, depreciation of equipment). Full cost is defined by the full cost of the project's implementation.

The questionnaire was tested by ANR and BONUS Secretariat before being sent. After, the pre-filled questionnaires, based on available information on ERA-LEARN, was sent to the identified funding institution. The partners of the BANOS CSA provided their support in the process of the identification of contact persons. The entire questionnaire is available in Annex 1.

3.3. Implementation of the survey

The questionnaire was sent to the first group of institutions in February 2019. A second round was performed in March 2019, including additional institutions provided by the BANOS CSA partners. By the end of April 2019, 44 questionnaires had been sent and 30 responses had been received. The questionnaire had been sent one more time in June 2019. One more response was obtained.

An update of the report has been conducted between March and September 2020. For that purpose, additional questionnaires have been completed from funding modalities available online for several institutions, which did not answer the questionnaire, thanks to investigations of institutions' website content.

4. List of the funding institutions identified and included to the survey

The countries surrounding the area of Baltic and North Sea have one or several organisations funding research and/or innovation. The following 45 institutions were identified as a target group of the survey and they are presented here in respect to their geographical distribution (Figure 1). The institutions, which the questionnaire was completed, are indicated in bold (the full name of shortlisted institutions are listed in Annex 2):

- United Kingdom: **BBSRC**, British Academy, **BEIS**, **UKRI**, **DEFRA**, **DFID**, **EPSRC**, **INI**, **Innovate UK**, **SCOTENT**, **NERC** and **STFC**.
- Norway: **RCN**.
- Sweden: **SEPA**, **MISTRA**, **VR**, **FORMAS**, **VINNOVA**, **SWAM**.
- Finland: **AKA**, **BF**, **MMM**.
- Estonia: **EAS**, **ETAG**, **KIK**, **MEM**.
- Latvia: **VIAA**.
- Lithuania: **MITA**, **LMT**, **ZUM**.
- Poland: **NCBR**, **NCN**.
- Germany: **BMBF**, **BMEL**, **BMWI**.
- Denmark: **IFD**.
- Netherlands: **NWO**, **RVO**.
- Belgium: **BELSPO**, **FNRS**, **FWO**, **VLAIO**.
- France: **ADEME**, **AFD**, **ANR**.



Figure 1: Countries explored to identify funding institutions in the area of BANOS CSA

5. First analysis of the questionnaire

In the analyses, the funding institutions are presented with the ISO code³ of the countries followed by the institution's abbreviation (see Annex 2 for the full name).

5.1. Number of organisations identified per country

By the end of September 2020, 32 institutions, out of 44 originally contacted, had submitted the prefilled questionnaires and the data of 9 additional institutions were obtained from funding modalities available online (Table 1)

Country	Number of organisations questionnaire sent	Number of responses received	Number of questionnaires completed through funding modalities available online
Belgium	4	4	0
Denmark	1	1	0
Estonia	4	4	0
Finland	3	2	1
France	3	3	0
Germany	3	2	0
Latvia	1	1	0
Lithuania	3	3	0
Netherlands	2	2	0
Norway	1	1	0
Poland	2	2	0
Sweden	6	6	0
United Kingdom	12	1	8

Table 1: Institutions countrywide

³ <https://www.iso.org/obp/ui/#search>

5.2. Type of funding institutions for which the questionnaire has been completed

Of the organisations that responded to the survey in respect to their funding models and instruments, five are ministries (DE-BMBF, DE-BMWi, EE-MEM, FI-MMM, LT-ZUM), 12 are research funding agencies⁴, two are innovation funding institutions⁵ and 15 are mixed institutions (funding both research and innovation). In addition, for FR-AFD, funding of research and innovation is a minor activity. Few, like FR-ANR and SE-FORMAS, have as their main mission to fund research activities. The other ones have broader missions. For instance, five are ministries, of which one is dedicated to education and research, one to economy and energy, and three to rural affairs, agriculture and forestry including fishery and aquaculture.

Collecting data from the organisations, which did not answer the survey, it appeared that the organisation of funding institutions seemed to have changed in UK since the data collection on ERA-LEARN website. BEIS, a ministry, uses UKRI as operator to support research and innovation. BBSRC, EPSRC, NERC and STFC are research councils, which operate funding activities for UKRI to support basic and applied research projects in their respective area of expertise. These research councils are applying the same funding modalities. Innovate UK is also an operator of UKRI to support research and innovation activities by companies working with or without academic for that purpose. Furthermore, it has been observed on EC Funding & Tenders Portal that UKRI has replaced the different research councils and Innovate UK for Horizon 2020 framework programme. The data collected online from Innovate UK website and received from NERC are merged to present UKRI funding modalities.

Great majority of institutions are using state budget appropriations to fund R&I activities. In addition, some national institutions are not only financing research activities but also provide expert services and technical assistance by supporting network and promoting activities. Three exemptions are FR-AFD, SE-MISTRA and UK-DFID, of which SE-MISTRA, being a foundation founded in 1994 with a capital of 2.5 billion SEK by the Swedish government, is not using state budget appropriations. FR-AFD, is a public development bank with only few research funding programmes with a focus on emerging countries and in the French overseas regions. UK-DFID is a department addressing global challenges like poverty and disease, mass migration, insecurity and conflict in developing countries. FR-AFD and UK-DFID are not be taken into account in the following analyses as their funding activities are in general out of scope of the geographical area of interest.

Few institutions identified are regional organisations under the authority of local governments and supported by their budget. Several of them are supporting competitiveness of regional companies like BE-VLAIO for Belgian Flanders and UK-SCOTENT for Scotland.

All funding institutions, for which the questionnaire has been completed and which activities are in the scope of BANOS CSA, are fairly or very experienced in the EU-level co-operation: everyone has participated at least in one public-public partnership activity (including experiences in ERA-NETs⁶,

⁴ Research funding institutions: funding (mainly/only) fundamental research and applied research

⁵ Innovation funding institutions: fund (mainly/only) innovation

⁶ ERA-NET (under FP6): provided support for actors implementing public research programmes to coordinate their activities e.g. by developing joint activities; in particular, joint calls for transnational proposals. ERA-NET plus (under FP7): provided additional EU financial support to top-up research funding of a single joint call for proposals between national and/or regional programmes. (<https://www.era-learn.eu/>)

ERA-NET Cofunds⁷, Art 185 programmes⁸ and memberships in the governing bodies of the Joint Programming Initiatives⁹, Figure 2). 29 institutions out of 34 have been partners in ERA-NET Cofunds, 20 of them at same time also in Art 185 programmes. 19 institutions are represented in JPI governing boards and 13 in all partnerships.

ERA-NETs	ERA-NETs Cofund	Article 185	JPIs
DE-BMBF, DK-IFD, EE-MEM, FI-AKA, FI-MMM, FR-ANR, NL-NWO, NL-RVO, NO-RCN, SE-FORMAS, SE-VINNOVA, SE-VR, UK-UKRI			
BE-BELSPO, BE-FWO, UK-DEFRA, UK-SCOTENT			BE-BELSPO, BE-FWO, UK-DEFRA, UK-SCOTENT
BE-VLAIO, EE-ETAG, FI-BF, LT-LMT, PL-NCBR, SE-SEPA			
LV-VIAA			
BE-FNRS, DE-BMWI, FR-ADEME, LT-ZUM, PL-NCN			
EE-EAS		EE-EAS	
			SE-SWAM
		EE-KIK, LT-MITA, SE-MISTRA	

Figure 2: Experiences in Public-Public-Partnerships of the EU.

Among the Baltic Sea countries, primarily due to participation in the BONUS Programme, the participation in the Article 185 partnership has been more common than among the North Sea countries. In contrast, the transnational cooperation through ERA-NET Cofunds and JPIs is relatively more common in the North Sea countries.

5.3. Type of activities supported

The institutions were asked to indicate what type of activities they are funding, options including fundamental, applied research and / or innovation. The responses are synthesized in Figure 3.

⁷ ERA-NET Cofund (under Horizon 2020): instrument with the central and compulsory element of implementing one substantial call with top-up funding from the Commission (<https://www.era-learn.eu/>)

⁸ Article 185: multiannual programmes jointly implemented by several EU Member States and Associated Countries. The European Union participates by providing a significant financial contribution through the Framework Programme. (<https://www.era-learn.eu/>)

⁹ JPI: structured and strategic process whereby Member States agree, on a voluntary basis and in a partnership approach, on common visions and Strategic Research Agendas (SRA) to address major societal challenges.

Fundamental research	Applied research	Innovation
BE-FNRS, PL-NCN		
	LT-ZUM	
	BE-BELSP0, BE-FWO, EE-ETAG, FI-AKA, FR-ANR, LT-LMT, PL-NCBR, SE-MISTRA, SE-SEPA, SE-VR	
	DE-BMBF, EE-KIK, LV-VIAA, NL-NWO, NL-RVO, NO-RCN, SE-FORMAS, SE-SWAM, UK-UKRI	
	BE-VLAIO, DE-BMWI, DK-IFD, EE-EAS, EE-MEM, FI-BF, FI-MMM, FR-ADEME, LT-MITA, SE-VINNOVA, UK-DEFRA, UK-SCOTENT	

Figure 3: Representation of funding bodies according to research and innovation categories.

From these data, it can be highlighted that several funding institutions could be involved in several future joint activities. It is noticeable that all countries surrounding the sister seas could be involved in applied research programme as they have at least one funding institution supporting this type of research activities. However, for fundamental research, Denmark would not be represented as the funding institution identified for the survey do not support this type of research activities.

For innovation funding, all countries could be involved in the future programme. Although, Polish institutions have not directly stated that they fund also innovation, but in practise PL-NCBR is involved in funding industrial research, experimental development and pre-commercial/pre-implementation activities, in particular as a partner of EUROSTAR2 consortium, where projects with Polish partners are funded. Thus, it can be stated that all major innovation funders from participating states have been identified and included in the survey.

Funding institutions were asked the Technology Readiness Levels (TRL) they covered. The answers were incomplete or, for several funding institutions, not reliable with the answers on the type of research activities supported, these data were not considered.

5.4. Types of beneficiaries financed

The types of beneficiaries financed by each institution are presented in Figure 4.

All funding institutions which answered the survey are supporting public research organisations and public universities, except EE-EAS which funds are dedicated to SMEs. However, Estonian public research organisations and universities can be supported by other Estonian funding organisations.

It is important for future joint activities to know which kind of beneficiaries could be involved depending of the funding institutions supporting these activities. For instance, it would be of high interest to have funding institutions financially supporting enterprise to boost innovation and to be as close as possible to the market to meet and exceed its needs and expectations. Among the countries of the Baltic and North seas, there is at least one funding institution in each country, which

can support SMEs. However, it is not the same case for large enterprises; there are different restrictions concerning funding large enterprises, for example, in regards project's partnership composition (participation of SMEs and/or research organisations required).

Public research organisations & public universities	Private research organisations & private universities	Small- and Medium-size Enterprises	Large enterprises
BE-FNRS, BE-FWO, LT-ZUM, NL-NWO, SE-SWAM, SE-SEPA			
BE-BELSPO, SE-FORMAS, SE-VR			
		EE-EAS	
BE-VLAIO, DE-BMBF, DE-BMWI, DK-IFD, EE-ETAG, EE-KIK, EE-MEM, FI-BF, FR-ADEME, FR-ANR, LT-MITA, LV-VIAA, NL-RVO, NO-RCN, PL-NCBR, PL-NCN, SE-VINNOVA, UK-UKRI, UK-SCOTENT			
LT-LMT, FI-AKA, FI-MMM, SE-MISTRA, UK-DEFRA			

Figure 4: Representation of funding bodies according to the type of beneficiaries.

Most of the institutions have other eligibility criteria for funding. Quite commonly used criterion is qualification requirement of the researcher or the person in charge of the project. *Open science*, i.e. open access to funded project publications and to research data, is a requirement for eleven institutions. Some institutions apply certain specific criteria in some of their funding, such as the relevance of research or utilisation of the results.

Most of the institutions fund only national/regional beneficiaries. Only 8 institutions can also fund beneficiaries located in other countries (BE-BELSPO, BE-FWO, DK-IFD, FR-ADEME, NL-NWO, NO-RCN, SE-MISTRA and UK-UKRI). Two institutions did not answer this question. These national/regional constraints highlight legal issues that should be solved before considering the design of a “real common pot”¹⁰ for future joint activities.

5.5. Type of grants

All funding institutions, which were analysed, are using grants for financial support. EE-KIK, FI-BF, FR-ADEME, NL-RVO and UK-UKRI also use loans through innovation category of activities. Figure 5 represents the funding institutions according to the types of grants they provide.

¹⁰ National/regional funding organisations commit their funds to a jointly agreed common budget (cross-border funding). A central unit is managing and distributing the funds.
<https://www.era-learn.eu/support-for-p2ps/implementing-joint-calls/funding-of-projects/distribution-and-monitoring-of-funds/real-common-pot>

BE-FNRS, FI-BF, FI-MMM, NL-RVO, NO-RCN, PL-NCBR, PL-NCN, and SE-VR have flexible grant models. They provide grants to individuals (i.e. researcher), to institutions (each research organisation among a consortium) and to consortia (coordinator organisation).

14 funding institutions included in the survey out of 34 are using a single grant model: individual, institutional or consortium grant. For UK-DEFRA, the information on the grant model was not found.

These data highlight the diversity of grant models, which could reveal legal complexities to design future joint activities and, in particular, to reach a “real common pot” model suitable for the funding institutions involved for each type of activities developed.

Individual grant	Institutional grant	1 grant / consortium
According to the call: BE-FNRS, FI-BF, FI-MMM, NL-RVO, NO-RCN, PL-NCBR, PL-NCN, SE-VR		
DK-IFD, EE-ETAG, LT-LMT, LT-MITA, LV-VIAA		
	EE-EAS, SE-MISTRA, UK-UKRI, UK-SCOTENT	
FI-AKA, NL-NWO		FI-AKA, NL-NWO
SE-FORMAS, SE-SWAM, SE-SEPA	BE-BELSPO, DE-BMBF, DE-BMWI, EE-MEM, EE-KIK, FR-ADEME, FR-ANR, SE-VINNOVA	BE-VLAIO, BE-FWO, LT-ZUM

Figure 5: Representation of funding institutions according to type of grant

Many of the funding institutions, especially those operating in enterprise funding, provide also other kind of financial and non-financial support: loan funding, guarantees, networking, advisory and coaching services. These types of support are not analysed further in this report as those are not relevant as such for planning the future joint funding principles and mechanisms.

5.6. Funding models

There are two main funding models used by the funding institutions: an *additional cost model*, which considers only the additional costs created by the implementation of a project, and a *full cost model*, which covers a percentage of the full costs of implementing a project. The percentage of full costs depends on the type of beneficiaries, the call and the funder. It varies from 20 % to 100 %.

The funding model is also associated to the type of beneficiaries and institutions. In those funding institutions where both cost models are used, the additional cost model is used to support public research organisations and the full cost model private research organisation and companies.

Additional cost model	Both (according to the type of beneficiaries and/or the call)	Full cost model
<p>BE-FNRS, BE-FWO, DK-IFD, NL-NWO</p>	<p>DE-BMBF, DE-BMWI, FI-AKA, FR-ADEME, FR-ANR, SE-SWAM</p>	<p>BE-BELSPO, BE-VLAIO, EE-EAS, EE-ETAG, EE-KIK, EE-MEM, FI-BF, FI-MMM, LT-LMT, LT-MITA, LT-ZUM, LV-VIAA, NO-RCN, PL-NCBR, PL-NCN, SE-FORMAS, SE-MISTRA, SE-VINNOVA, SE-VR, SE-SEPA, UK-DEFRA, UK-UKRI, UK-SCOTENT</p>

Figure 6: Types of funding models used by the funding institutions

Additional costs model is implemented by BE-FNRS FR-ADEME and FR-ANR and it can cover non-permanent staff, training, equipment, scholarships, subcontracting, travels and other costs (e.g., consumables). Some funding institutions exclude certain cost categories – for example BE-FWO, DE-BMBF and DE-BMWi scholarships and NL-NWO subcontracting. SE-SWAM cannot fund equipment costs, except in special circumstances, but can cover the costs of permanent staff.

A full costs model is implemented by most of the institutions included in this analysis. In case of FI-AKA, NO-RCN, PL-NCN, SE-SEPA all types of project costs are eligible, however for NO-RCN numerous specific requirements apply. For the other institutions, various restrictions are in place. For example, most of the funding institutions do not cover scholarships nor training costs. In respect to funding equipment, the full costs of the equipment or depreciation of equipment is considered but rarely both of them. Staff costs (permanent and non-permanent), subcontracting and travels are covered by most of the funding institutions.

The “full cost” funding model must take into account the EU regulation Framework for State aid for research and development and innovation (2014/C 198/01), limiting the percentage of costs covered and/or excluding categories of costs like subcontracting and equipment.

These data show a very high complexity of funding models and eligibility of the different cost items. The development of future joint activities should take into account these aspects, especially if a “real common pot” model is designed.

NL-RVO did not provide information on funding models.

6. Conclusion of the survey

First, this update of the deliverable D2.2 allow to strengthen this report on national funding modalities with a good overview of the funding institutions of BANOS CSA geographical area. However, due to the Brexit, British funding institutions mention that they are in a “transition period” waiting for the effective termination of European Union membership.

Most of the institutions analysed have significant experience in transnational research funding collaborations associated with ERA-NETs Cofund actions and Art. 185, in which research projects are co-funded by EC. It would help to mobilize them in a future partnership. Furthermore, the results outlined in this report allow us to identify the funding institutions, which can be mobilised according to the type of activities to be implemented in the future programme. For instance, in respect to innovation actions, it will be possible to target specific funding institutions, which can support this type of activities.

In addition, the diversity of grant types and funding models indicates that it is relatively complex to design a common standard funding model for the future programme. Thus, it would be welcomed to think about a funding model that allows flexibility according to the model constraints of the funding institutions, in the case of these funding models are not determined by national law and /or regulations. It should be noted that institutions were not asked if they can transfer national funds to a common structure for central funding management as tested on a small scale already in BONUS Art. 185. In addition, the questionnaire did not include an item on the ability of organising a “real common pot” for funding. However, the great majority of institutions, which responded, mentioned that they cannot fund beneficiaries located in other countries. The funding model developed by other initiatives like Art. 185 PRIMA could also be investigated as it seems to succeed to deal with the diversity of modalities of funding institutions.

Annex 1 - Questionnaire sent to identified funding bodies

Questionnaire of the national research and innovation funding landscape

Name of the organisation	
Country	
Contact person and contact details (email)	
Origin of funds (public, private, charity; particularly mentioning if the organization has been implementing European Structural Funds)	
Short description of the organization	

Funding in general

1. Which activities or research categories do your organisation finance?	<input type="checkbox"/> Fundamental research <input type="checkbox"/> Applied research <input type="checkbox"/> Industrial research <input type="checkbox"/> Experimental development <input type="checkbox"/> Innovation <input type="checkbox"/> Other, please precise:
2. Please define technology readiness levels (if concept is used in the organisation)	<input type="checkbox"/> TRL 1: Basic principles observed <input type="checkbox"/> TRL 2: Technology concept formulated <input type="checkbox"/> TRL 3: Experimental proof of concept <input type="checkbox"/> TRL 4: Technology validated in lab <input type="checkbox"/> TRL 5: Technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies) <input type="checkbox"/> TRL 6: Technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies) <input type="checkbox"/> TRL 7: System prototype demonstration in operational environment <input type="checkbox"/> TRL 8: System complete and qualified <input type="checkbox"/> TRL 9: Actual system proven in operational environment (competitive manufacturing in the case of key enabling technologies; or in space)
3. Do you have any thematic areas in the funding?	<input type="checkbox"/> No specific thematic focus OR: <input type="checkbox"/> Energy

	<input type="checkbox"/> Environment <input type="checkbox"/> Food, agriculture and social relations <input type="checkbox"/> Health <input type="checkbox"/> Information and communication technologies <input type="checkbox"/> Industrial production <input type="checkbox"/> Materials <input type="checkbox"/> Nanosciences and nanotechnologies <input type="checkbox"/> Security and defense <input type="checkbox"/> Services <input type="checkbox"/> Socio-economics and humanities <input type="checkbox"/> Space <input type="checkbox"/> Transport <input type="checkbox"/> Other, please precise:
4. Is the organisation involved in any public-public partnerships (previous or ongoing)?	<input type="checkbox"/> ERA-NETs <input type="checkbox"/> ERA-NET Cofunds <input type="checkbox"/> Article 185 <input type="checkbox"/> JPIs governing board
5. What type of financial support your organisation provides?	<input type="checkbox"/> Grants <input type="checkbox"/> Loans <input type="checkbox"/> Guarantees <input type="checkbox"/> Scholarships <input type="checkbox"/> Prizes <input type="checkbox"/> Other, please precise:
6. Do you provide non-financial support?	<input type="checkbox"/> Yes, please precise: <input type="checkbox"/> No
7. Are the grants individual (researcher), institutional (each research organisation among a consortium) or one grant per consortium (coordinator organisation)?	<input type="checkbox"/> Individual (researcher) <input type="checkbox"/> Institutional (each research organisation among a consortium) <input type="checkbox"/> One grant per consortium (coordinator organisation)
8. Who are your beneficiaries?	<input type="checkbox"/> Public research organisations & public universities <input type="checkbox"/> Private research organisations & private universities <input type="checkbox"/> Public non-research entities <input type="checkbox"/> Small-size enterprises <input type="checkbox"/> Medium-size enterprises <input type="checkbox"/> Large enterprises <input type="checkbox"/> Non-governmental organisations <input type="checkbox"/> Other, please precise:

– **Questions about grants**

9. Do you have specific eligibility criteria for beneficiaries?	<input type="checkbox"/> Organisation type <input type="checkbox"/> Qualification requirements <input type="checkbox"/> Organisation's location <input type="checkbox"/> Other, please precise:
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10. Is it possible to give grants or other support to the beneficiaries located in other countries?	<input type="checkbox"/> Yes <input type="checkbox"/> No
11. Is open science a criterion to benefit from funding?	<input type="checkbox"/> Yes <input type="checkbox"/> No

12. Are the following cost eligible (Yes/No)? :

	Permanent staff	Non-permanent staff	Training	Equipment	Depreciation of equipment	Scholarships	Subcontracting	Travels	Other
For public research organisations & public universities									
For private research organisations & private universities									
For public non-research entities									
For small-size enterprises									
For Medium-size enterprises									
For large enterprises									
Non-governmental organisations									
Other									

13. Are there any other eligibility criteria applied?	<input type="checkbox"/> Yes, please precise: <input type="checkbox"/> No
---	--

14. Which cost method do you apply? Please indicate the maximum funding rate applied:

	Additional cost method	Full cost model
For public research organisations & public universities		
For private research organisations & private universities		
For public non-research entities		
For small-size enterprises		
For Medium-size enterprises		
For large enterprises		
Non-governmental organisations		
Other		

15. Are beneficiaries allowed to report indirect costs? Are indirect costs covered?

	Indirect cost covered (Yes/No)	If yes, method	If flat rate, please provide %
For public research organisations & public universities			
For private research organisations & private universities			
For public non-research entities			
For small-size enterprises			
For Medium-size enterprises			
For large enterprises			
Non-governmental organisations			
Other			

Annex 2– List of funding institutions identified

In Bold, the institutions which responded the questionnaire.

Belgium:

BELSPO - SERVICE PUBLIC FEDERAL DE PROGRAMMATION POLITIQUE SCIENTIFIQUE

FNRS - FONDS DE LA RECHERCHE SCIENTIFIQUE

FWO - FONDS VOOR WETENSCHAPPELIJK ONDERZOEK

VLAIO - AGENTSCHAP INNOVEREN EN ONDERNEMEN

Denmark:

IFD - INNOVATIONS FONDEN

Estonia:

EAS - ETTEVÖTLUSE ARENDAMISE SIHTASUTUS

ETAG - SIHTASUTUS EESTI TEADUSAGENTUUR

KIK - SIHTASUTUS KESKKONNA INVESTEERINGUTE KESKUS

MEM - EESTI VABARIIGI MAAELUMINISTEERIUM

Finland:

AKA - SUOMEN AKATEMIA

BF – BUSINESS FINLAND

MMM - MAA- JA METSÄTALOUSHMINISTERIÖ

France:

ADEME - AGENCE DE L'ENVIRONNEMENT ET MAITRISE DE L'ENERGIE

AFD - AGENCE FRANÇAISE DE DÉVELOPPEMENT

ANR – AGENCE NATIONALE DE LA RECHERCHE

Germany:

BMBF - BUNDESMINISTERIUM FUER BILDUNG UND FORSCHUNG

BMEL - BUNDESMINISTERIUM FÜR ERNÄHRUNG, LANDWIRTSCHAFT UND VERBRAUCHERSCHUTZ

BMWI - BUNDESMINISTERIUM FÜR WIRTSCHAFT UND ENERGIE

Latvia

VIAA - VALSTS IZGLITIBAS ATTISTIBAS AGENTURA

Lithuania:

MITA - MOKSLO, INOVACIJU IR TECHNOLOGIJU AGENTURA

LMT - LIETUVOS MOKSLO TARYBA

ZUM - LIETUVOS RESPUBLIKOS ŽEMĖS ŪKIO MINISTERIJA

Netherlands:

NOW - NEDERLANDSE ORGANISATIE VOOR WETENSCHAPPELIJK ONDERZOEK

RVO - RIJKSDIENST VOOR ONDERNEMEND NEDERLAND

Norway:

RCN - NORGES FORSKNINGSRAD

Poland:

NCBR - NARODOWE CENTRUM BADAŃ I ROZWOJU

NCN - NARODOWE CENTRUM NAUKI

Sweden:

SEPA - NATURVÅRDSVERKET

MISTRA - STIFTELSEN FÖR MILJÖSTRATEGISK FORSKNING

VR - VETENSKAPSRÅDET

FORMAS - FORSKNINGSRÅDET FORMAS

VINNOVA - SVERIGES INNOVATIONSMYNDIGHET VINNOVA

SWAM - HAVS- OCH VATTENMYNDIGHETEN

United Kingdom:

BBSRC - BIOTECHNOLOGY AND BIOLOGICAL SCIENCES RESEARCH COUNCIL

British Academy - BRITISH ACADEMY

BEIS - DEPARTMENT FOR BUSINESS, ENERGY & INDUSTRIAL STRATEGY

DEFRA - THE SECRETARY OF STATE FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS

DFID - DEPARTMENT FOR INTERNATIONAL DEVELOPMENT

EPSRC - ENGINEERING AND PHYSICAL SCIENCES RESEARCH COUNCIL

SCOTENT - SCOTTISH ENTERPRISE

Innovate UK - INNOVATE UK

INI - INVEST NORTHERN IRELAND

UKRI - UK RESEARCH AND INNOVATION

STFC - SCIENCE AND TECHNOLOGY FACILITIES COUNCIL

NERC - NATURAL ENVIRONMENT RESEARCH COUNCIL

Annex 3 – Short description of the funding institutions which answered the questionnaire

BE- BELSPO

The Belgian Science Policy Office (BELSPO) is a federal administration that is responsible for the preparation and implementation of research programmes in several fields (fundamental research, sustainable development, social cohesion, information society, space technology...). It is also responsible for 10 Federal Scientific Institutions. BELSPO manages an annual budget of about 513 million euro. BELSPO is also owner of several research infrastructures on behalf of the Belgian State (eg. oceanographic research vessel Belgica).

BE-FNRS

The mission of the Scientific Research Fund - FNRS is to develop fundamental scientific research within the context of initiatives put forward by the researchers. It encourages the production and development of knowledge by supporting, on the one hand, individual researchers and by financing, on the other hand, research programmes carried out within the laboratories and departments which are mainly located in the Universities of the Wallonia-Brussels Federation.

BE-FWO

The Research Foundation - Flanders (FWO) is the agency that supports ground-breaking fundamental and strategic research at the universities and research centres of the Flemish Community, within Belgium. The FWO also stimulates cooperation between the Flemish universities and other research institutes.

BE-VLAIO

Flemish agency, part of the Ministry for Economy, Science and Innovation of the Flemish Community in Belgium. Flanders Innovation & Entrepreneurship is the contact point for entrepreneurs in Flanders. We encourage and support innovation and entrepreneurship, and contribute to a favourable business climate. By being a one-stop-shop, we build a bridge towards stronger entrepreneurship.

DE-BMBF

The Federal Ministry of Education and Research receives its Budget from the Federal ministry. The department 725 (Marine, Coastal and Polar Research) funds research activities within the topics addressed in the Programme MARE (<https://www.fona.de/de/kuesten-meeres-und-polarforschung-fuer-nachhaltigkeit-19764.html>). The Federal Ministry of Research and Education promotes education, science and research to secure the country's prosperity (see <https://www.bmbf.de/en/objectives-and-tasks-1409.html>).

DE-BMWi

Federal Ministry of Economic Affairs and Energy (BMWi) is a governmental organisation (Ministry). The BMWi has many different tasks at national level within the framework of its responsibilities under the basic law. They include among others legislative, policy and coordination tasks. BMWi is a main entity for funding of applied maritime RTD in Germany. The maritime economy is of central importance to the federal government's economic policy. Experiences with research and development as a foundation for overcoming future challenges and ensuring competitiveness have consistently been positive. This has convinced the federal government to continue assuring continuity in research funding. The core of the successful previous funding instrument is incorporated into the new programme. The four prominent pillars of technology remain core

elements: marine engineering, production technology, navigation and marine technology. The objectives and focal areas have been tailored to the new requirements. The Maritime Research Programme (Maritimes Forschungsprogramm), which started 2018, has an annual budget of about 40 Mio. €.

DK-IFD

Innovation Fund Denmark (IFD) was established in April 2014 following a broad party-political agreement to consolidate three existing national funding bodies within a single new entity.

Innovation Fund Denmark:

- i) shall have the purpose of funding advances in science and technology, including advanced technology, in order thereby to boost research and facilitate innovative solutions for the benefit of growth and employment in Denmark.
- ii) shall focus on funding solutions to specific societal challenges and strengthen private-sector research and innovation initiatives in small and medium-sized enterprises.
- iii) shall establish a flexible model for supervising and evaluating projects that have been awarded funding in order to safeguard the progress of the projects.
- iv) funding application procedures shall be straightforward, flexible and reflect the complexity of each individual funding instrument and the size of each grant.

EE-EAS

Established in 2000, Enterprise Estonia (EAS) promotes business and regional policy in Estonia and is one of the largest institutions within the national support system for entrepreneurship by providing financial assistance, counselling, cooperation opportunities and training for entrepreneurs, research institutions, the public and non-profit sectors. Our activities contribute to the achievement of long-term strategic goals of the Estonian economy. To this end, we support the development of companies that have export capacity and create higher added value. Our long-term goal is to help Estonia become one of the most competitive countries in the world.

EE-ETAG

Estonian Research Council is a governmental foundation, established to concentrate the funding of R&D and guarantee better functioning of financing systems. ETAG is the main funding organization of R&D, consolidating different grants and types of funding and giving research more visibility in the society. ETAG supports researchers, awards research grants, and facilitates applied research in the fields of smart specialisation. ETAG represents Estonia at international organisations, coordinates participation in international cooperation programmes and supports international cooperation by means of counselling and co-funding. ETAG analyses research information and the impact of funding decisions, evaluates the efficiency and impact of grant usage, and the public access to research information. ETAG manages the Estonian Research Information System (ETIS) that contains information on R&D institutions, researchers, research projects and research outputs. ETAG helps to get young people attracted to science, technology, engineering and mathematics, and raises public awareness about science and its importance to society.

EE-KIK

The Environmental Investments Centre is a financial institution, mediating state budget funds (revenues from environmental charges), EU funds, funds from foreign aid programmes and the Green Investment Scheme and granting loans for the implementation of environmental projects. Our vision: Efficient cooperation between EIC and its partners has reduced Estonia's ecological footprint.

Our mission: To ensure maximum efficiency by channeling every euro for the benefit of the Estonian people, a healthy living environment, and resource-efficient development of the country.

EE-MEM

The area of government of the Ministry of Rural Affairs covers the planning and implementation of rural policy, agricultural policy, fishing industry of the fisheries policy and the trade policy of agricultural products, the organisation of ensuring food safety and compliance, the coordination of the activities related to animal health and protection and plant health and protection, the organisation of agricultural research and development and agricultural education and the preparation of corresponding draft legislation. Research and development, sectoral training and advisory system play an important role in the implementation of Estonia's agricultural and fisheries policy and increasing the competitiveness of enterprises related to agriculture, food industry, rural life and forestry. In many ways, the Ministry of Rural Affairs helps to organise agricultural research and development and implement the results in business. For example, the Ministry finances scientific analyses to plan political decisions, ensures the knowledge-based functioning of the authorities of the area of government, helps to raise the level of knowledge and professional training and provide consultations and research-based applications necessary for successful management. Additionally, the Ministry supports the use of alternative service of farmers. One important R&D aspect is coordinating the participation in international initiatives like joint programming initiatives (JPI), ERA-NETs and other related initiatives and funding the Estonian partners in joint projects.

FI-AKA

The Academy of Finland's (AKA) mission is to fund high-quality scientific research, provide expertise in science and science policy, and strengthen the position of science and research. AKA is an agency within the administrative branch of the Finnish Ministry of Education, Science and Culture. AKA works to contribute to the renewal, diversification and increasing internationalisation of Finnish research. AKA's activities cover the full spectrum of scientific disciplines. AKA has funding instruments for researchers, research teams including international joint calls, research organisations and for strategic research. In 2019, AKA's funding for research amounts to 458 million euros. Each year, our funding contributes to some 2,700 people's work (FTEs) at universities and research institutes.

FI-BF

Business Finland is an accelerator of global growth. It creates new growth by helping businesses go global and by supporting and funding innovations. The top experts and the latest research data enable companies to seize market opportunities and turn them into success stories.

Business Finland was created on 1st January 2018 by the merger of two organizations: Finpro, which offered services for internationalization, investments and tourism promotion, and Tekes, which offered funding for innovation activities. We aim to develop Finland to be the most attractive and competitive innovation environment in which companies are able to grow, change, and succeed.

FI-MMM

The Ministry of Agriculture and Forestry (MMM) steers the policy on sustainable use of natural resources. Legislative work is carried out as part of the Finnish Government and the EU institutions and decision-making. MMM participates closely to EU's Research and Innovation activities. MMM takes part to the work of The Standing Committee on Agricultural Research (SCAR), which more and more coordinates bioeconomy related research across the EU. The Ministry also participates in the committees of the EU's 8th Framework Programme for Research and innovation, Horizon 2020 and EU wide Joint Programming Initiatives (JPI), e.g. JPI FACCE and JPI Water. One of the corner stones of European research collaboration are research programmes under the European research funders'

network ERA-NET. ERA-NET is partly EU-funded research scheme designed to enhance cooperation between operators providing funding for national research programmes and projects and to form networks among national or regional programmes. MMM participates in numerous ERA-NET programmes as a funder.

FR-ADEME

ADEME is active in the implementation of public policy in the areas of the environment, energy and sustainable development. ADEME provides expertise and advisory services to businesses, local authorities and communities, government bodies and the public at large, to enable them to establish and consolidate their environmental action. As part of this work the agency helps finance projects, from research to implementation, in its areas of action.

FR-AFD

AFD is France's inclusive public development bank. AFD commit financing and technical assistance to projects that genuinely improve everyday life, both in developing and emerging countries and in the French overseas provinces.

FR-ANR

The French National Research Agency (ANR) was established by the French government in 2005. The main mission of ANR is to fund the best fundamental research, but also targeted and applied research in particular through partnerships between companies and public sector laboratories. ANR supports French research excellence and it is the ANR mission to strengthen international cooperation by contributing in particular to the funding of international consortia in partnership with other funding agencies in Europe and beyond. ANR's activities aim at:

- Developing science and technology
- Rallying teams around societal and S&T challenges
- Speeding up knowledge creation and transfer, and fostering academic-industry partnerships
- Promoting collaborative work and interdisciplinary dialogue
- Preparing a new generation of talents
- Facilitating European and international collaborations

The main challenges the ANR works on are part of the European Strategic Agenda. ANR has designed and deployed a range of funding instruments to satisfy both the project-based funding needs of the research communities and the public policy for research and innovation in France. Since 2010, the ANR has also been the principal operator of the Investments for the Future Programme in the field of higher education and research. In this role, it ensures the selection, funding and monitoring of projects relating to the centres of excellence, health, biotechnologies, and the transfer of technology and the creation of value from research.

LT-LMT

The council of Lithuania is the principal national institution providing competitive R&D funding in Lithuania. The Council started conducting the programme based competitive R&D funding in 2009, focusing on financing high level research projects. Half of the allocations for science in Lithuania are distributed via competitive funding programmes, with the other half remaining as the base funding. The Council regularly holds competitions for R&D in every area, taking responsibilities of conducting (administrative) verification, evaluation by experts, selection of winning projects and administrative management during implementation. Every year, the Council published more than in average 30 calls for proposals. The funding portfolio includes top-down schemes with pre-define research topics, such as National Research Programmes, national Lithuanian studies, as well as bottom-up schemes. The list of the programmes comprises in average 40 national and international programmes and the

EU funds' means designed to provide funding for different research, career, mobility and dissemination activities.

LT-MITA

Agency for Science, Innovation and Technology (MITA) is the main governmental institution, responsible for implementation of innovation policy in Lithuania. MITA provides free of charge services for clients from business, science and public sectors, interested in possibilities to develop strong cooperation relations with international partners and get financial support for research and innovation projects. The main activity is the coordination of national activities and international programmes (HORIZON2020, EUREKA, EUROSTARS) of research, technological development and innovation and other financial schemes (innovation vouchers, protection of industrial property rights). MITA provides national financial support for projects participants. MITA also promotes business and science cooperation, commercialization of research and protection of intellectual property rights. MITA welcomes innovators, inventors, entrepreneurs, businessmen, intellectuals, researchers and other individuals, which have innovative ideas and are not afraid of risk.

LT-ZUM

The Ministry of Agriculture is the state-budget institution of the Republic of Lithuania which formulates public policy, as well as organizes, coordinates and controls the implementation of the policy in the areas within the competence of the minister of agriculture. The objectives of the Ministry of Agriculture is to shape public policy in the areas of agri-food sector, fisheries (except for conservation and control of fish stocks in inland waters), rural development, land reform, land-use planning, geodesy, cartography, real estate cadastre, state control of land use, engineering development and technical progress of infrastructure in agricultural and rural areas, development of renewable energy resources, research training, education, application of innovative technologies in the fields of agriculture, food industry and fisheries, land reclamation and reclamation investment, plant production, livestock sector, plant protection, seed production, breeding, fish farming, phytosanitary and veterinary, and national heritage, as well as organize, coordinate and control the implementation of the above public policy.

LV-VIAA

The State Education Development Agency (SEDA; VIAA in Latvian) is a direct administration institution which is subordinated to the Ministry of Education and Science. SEDA operates in accordance with Cabinet Regulations of 18 December 2012 No. 934. In accordance with the Regulation, the aim of the activities of SEDA is to implement the national policy in the field of development of higher education and science, lifelong learning system, vocational education system and general education system and to implement and monitor projects financed by European Union (EU) Structural Funds, education innovation projects, EU programs and other financial instrument programs, projects and initiatives.

NL-NWO

NWO's mission is to advance world-class scientific research that has scientific and societal impact. NWO approaches that from its vision of being a connector and is guided by its core values: groundbreaking, committed, reliable, and connecting. For the coming strategic period, NWO has established five ambitions along which the mission will be shaped. NWO facilitates excellent, curiosity-driven disciplinary, interdisciplinary and multidisciplinary research. In this role, NWO focuses on all scientific disciplines and on the entire knowledge chain with an emphasis on fundamental research. NWO connects researchers from various disciplines and across the entire knowledge chain and brings researchers and societal partners together. NWO funds the personnel and material cost for scientific research and knowledge exchange and impact activities of Dutch universities and public research institutes. NWO invites partners from industry, the government and

societal organizations to contribute with their own knowledge agendas and questions to the programming, realization and co-funding of research. NWO operates with the following core values that are vital for realizing its ambitions:

- Groundbreaking: NWO pioneers and explores the boundaries of existing knowledge, applications and processes.
- Committed: NWO anticipates developments in science and in society.
- Reliable: NWO keeps its promises, is honest, transparent and meticulous.
- Connecting: NWO has an open attitude and connects actors, expertise and agendas.

NL-RVO

The Netherlands Enterprise Agency stimulates entrepreneurs in sustainable, agricultural, innovative and international business. It aims to improve opportunities for entrepreneurs, strengthen their position and help them realise their international ambitions with funding, networking, know-how and compliance with laws and regulations.

NO-RCN

The Research Council of Norway serves as the chief advisory body for the Government and government ministries on research policy issues, and distributes roughly NOK nine billion to research and innovation activities each year. The Council works to enhance the quality of Norwegian research and to promote innovation and sustainability. We take active steps to increase Norwegian participation in international research and innovation activities, and expand cooperation between research groups, trade and industry and the public sector. We also provide a platform for dialogue between researchers, users of research and research funders. The Research Council provides advice on how and in which areas to target investments in Norwegian research efforts. We have been charged with strengthening the knowledge base and encouraging research that can help to solve the Grand Challenges. The Research Council of Norway works to add value to the research system by facilitating research that actors in the system could not successfully achieve working on their own.

PL-NCN

NCN is a government agency, supervised by the Ministry of Science and Higher Education, set up in 2011 to support basic research in Poland. Basic research is defined as experimental or theoretical endeavours undertaken to gain new knowledge of the foundations of phenomena and observable facts, without any direct commercial use. With a budget of over € 313 M a year NCN funds projects in Arts, Humanities and Social Sciences, Life Sciences and Physical Sciences and Engineering. The NCN has set up 11 types of funding schemes dedicated to researchers at different stages of their career. Goals: supporting excellent research projects in all fields of science and humanities; funding doctoral scholarships and post-doctoral internships; financing research projects carried out by experienced researchers aimed at implementing pioneering research important for the development of science; inspiring international cooperation in basic research; supervising the implementation of the awarded research projects.

PL-NCBR

The main task of the National Centre for Research and Development is management and execution of strategic research and development programs, which lead directly to the development of innovativeness. Among the tasks of the National Centre for Research and Development, are the support of commercialization and other forms of transfer of scientific research results, the management of applied research programs and the performance of national security and defense projects. The Centre also attempts to provide young scientists with training and development opportunities i.a. by implementing international scientific mobility programs. Special attention is paid to the participation of young scientists in research programs. The Centre enables young researchers

to expand their business and intellectual property management skills and to learn how to commercialize research results. At the same time, via implemented initiatives, it draws attention to the necessity of raising the R&D staff's awareness of the importance of industrial property protection to the commercialization of modern solutions and international patent protection opportunities for research units.

SE-FORMAS

Formas is funding research of highest scientific quality and of relevance for our areas of responsibility through various calls. In total, we distribute 1,7 billion SEK to different research projects every year. We allocate about half of our means through our annual open call, where researchers identify research needs within our areas of responsibility: Environment, Agricultural Sciences and Spatial Planning. This means research within areas such as Climate, Circular economy, Food, Agriculture, Forestry and Urban planning. The other half of our research means goes to national and international calls that focus on specific research areas. How the funds are allocated is decided by Formas' Scientific Council, our decision-making body. We assess the research and development projects that we finance and assist the government with input to their research policy.

SE-MISTRA

The purpose of Mistra's research is to promote the development of strong environmental research environments with the aim of creating a good living environment for all. The investments Mistra makes are also intended to assist in enabling companies, public stakeholders and users to develop new products, services and working methods with a view to meeting society's environmental challenges. Another, simultaneous aim is for the initiatives to strengthen Swedish competitiveness. Every year, Mistra invests a sum of around SEK 200 million in various research initiatives. They involve collaboration among academic disciplines, as well as between research on the one hand and companies, public agencies and other stakeholders on the other. Mistra is an active research funder that monitors the progress of its initiatives to ensure that they provide public benefits in terms of a good living environment, and that various users develop new products, services and working methods to meet society's environmental challenges. The purposes of Mistra's investments are:

- To create strong, world-class research environments. For research to be of benefit, its high quality is crucial.
- To solve important environmental problems. Many environmental challenges are complex, and new solutions require research of strategic importance that combines varied knowledge and approaches from a range of different areas.
- To strengthen Swedish competitiveness. Companies, public stakeholders and other users are intended to develop new products, services and working methods that contribute to employment. The initiatives are also aimed at making Sweden, in a broad sense, a good place to live in.
- To be valuable to users.

The results should contribute to efforts to bring about sustainable development. Users and other key people are involved in the research, to ensure that it is put to practical use.

SE-SEPA

SEPA is the public agency in Sweden that is responsible for environmental issues. The Agency carries out assignments on behalf of the Swedish Government relating to the environment in Sweden, the EU and internationally. The Agency's remit is threefold:

- Compiling knowledge and documentation - to develop our own environmental efforts and those of others.

- Developing environmental policy - by providing the Government with a sound basis for decisions and by giving an impetus to EU and international efforts.
- Implementing environmental policy - by acting in such a way as to ensure compliance with the Swedish Environmental Code and achievement of the national environmental objectives.

The work of the Agency is funded through government appropriations. A proportion of the funding is spent on staff, premises and other ongoing efforts. The rest of the funding is allocated to environmental monitoring, environmental research and international environmental and climate collaborations. Every year, the Swedish Government establishes objectives, requirements and a budget for the Agency's efforts in what are known as 'appropriation directions'. The Agency's remit includes the allocation of government appropriations to other actors within fields such as the protection and maintenance of valuable natural environments, clean-up and remediation of polluted areas, compensation for damage caused by wildlife and support for outdoor recreation organisations.

SE-SWAM

The Swedish Agency for Marine and Water Management, SwAM, is a government agency that works for flourishing seas, lakes and streams for the benefit and enjoyment of all. Within its area of responsibility, SWAM promotes research and development activities and participates in the preparation of the Swedish Environmental Protection Agency's environmental research grant. It does support selected research organizations and projects, but funding calls is not amongst its main activities. We are responsible for managing the use and preventing the overuse of Sweden's marine and freshwater environments. We take into consideration the requirements of the ecosystem and people, both now and in the future. We do this by gathering knowledge, planning, and making decisions about actions to improve the environment. To be successful in these efforts, we coordinate and establish our efforts among everyone involved, both nationally and internationally.

SE-VINNOVA

VINNOVA promotes sustainable growth by funding needs-driven research and stimulating collaborations between companies, universities, research institutes and the public sector. The agency is also the national contact agency for the EU framework programme for research and innovation. VINNOVA's programmes and calls target actors in society who are important for Sweden's innovativeness such as research-focused companies, universities, research institutes and public sector organisations. Some of the calls are open to international and bilateral collaborations.

SE-VR

The Swedish Research Council is the largest public funding body for research at Swedish universities and higher education institutions. We fund research within all scientific disciplines by issuing calls for grant applications in open competition. Each year, the approximately 800 researchers who sit on our review panels deal with about 6 000 research applications. Each year, we award more than 6 billion SEK to fund Swedish research.

UK-DEFRA

DEFRA is the UK government department responsible for safeguarding UK natural environment, supporting UK world-leading food and farming industry, and sustaining a thriving rural economy. DEFRA broad remit means DEFRA plays a major role in people's day-to-day life, "from the food we eat, and the air we breathe, to the water we drink".

Defra is a ministerial department, supported by 33 agencies and public bodies.

UK-DFID

The Department for International Development (DFID) leads the UK's work to end extreme poverty. DFID is tackling the global challenges of our time including poverty and disease, mass migration, insecurity and conflict. DFID's work is building a safer, healthier, more prosperous world for people in developing countries and in the UK too.

UK-UKRI

UK Research and Innovation (UKRI) is the national funding agency investing in science and research in the UK. Operating across the whole of the UK with a combined budget of more than £6 billion, UKRI brings together the 7 Research Councils, Innovate UK and Research England. UKRI is an executive non-departmental public body, sponsored by the Department for Business, Energy & Industrial Strategy (**BEIS**), supported by 7 agencies and public bodies.

Biotechnology and Biological Sciences Research Council (BBSRC):

The Biotechnology and Biological Sciences Research Council (BBSRC) is a national funding agency investing in bioscience research and training in the UK. The Council aims to further scientific knowledge, promote economic growth and improve the quality of life in the UK and beyond. BBSRC works with the UK Research and Innovation (<https://bbsrc.ukri.org/>). BBSRC's mission is to promote and support, by any means, high-quality basic, strategic and applied research and related postgraduate training relating to the understanding and exploitation of biological systems. This includes advancing knowledge and technology (including the promotion and support of the exploitation of research outcomes), and providing trained scientists and engineers, which meet the needs of users and beneficiaries (including the agriculture, bioprocessing, chemical, food, healthcare, pharmaceutical and other biotechnological related industries), thereby contributing to the economic competitiveness of the United Kingdom and the quality of life.

Engineering and Physical Sciences Research Council (EPSRC)

The Engineering and Physical Sciences Research Council (EPSRC) is the main UK government agency for funding research and training in engineering and the physical sciences, investing more than £850 million a year in a broad range of subjects – from mathematics to materials science, and from information technology to structural engineering.

Natural Environment Research Council (NERC):

The Natural Environment Research Council is the driving force of investment in environmental science in the UK. NERC invests public money in world-leading science, designed to help UK sustain and benefit from natural resources, predict and respond to natural hazards and understand environmental change. NERC works closely with policymakers and industry to make sure the knowledge can support sustainable economic growth.

Science and Technology Facilities Council (STFC):

The Science and Technology Facilities Council (STFC) coordinates research on some of the most significant challenges facing society, such as future energy needs, monitoring and understanding climate change, and global security. It offers grants and support in particle physics, astronomy and nuclear physics. STFC provides research grant funding to UK Higher Education Institutions and other eligible research organisations for research in the fields of astronomy, particle physics and nuclear physics, and for associated technology development, research infrastructure and knowledge exchange.

Innovate UK:

Innovate UK is part of UK Research and Innovation, a non-departmental public body funded by a grant-in-aid from the UK government. Innovate UK provides funding to support and stimulate innovation in the UK economy. Innovate-Uk does this by encouraging businesses to work with other commercial and research organisations and requires that projects are led by businesses. Other types of organisation can apply in collaboration with a business partner. Innovation is never easy, especially if it involves multiple organisations or is in the early stages of taking a new idea to market. Sometimes numerous businesses might need to be brought together with the help of a Research and Technology Organisation (RTO) leading the project.

UK-SCOTENT

Scottish Enterprise is Scotland's national economic development agency and a non-departmental public body of the Scottish Government. To deliver a significant, lasting effect on the Scottish economy, they work with partners in the public and private sectors to find and exploit the best opportunities.