



Expanding the European Research Area in Molecular Plant Sciences

ERA-CAPS

1st Call for Proposals (2012)

Call Notice



November 2012

Call Notice: First ERA-CAPS Call

Expanding the European Research Area in Molecular Plant Sciences

1. Introduction

Plants are essential to human life, providing the majority of the food we consume, feed for our livestock, and valuable non-food products. Plant sciences therefore face important challenges at the European and global scale due to the increasing demands from a burgeoning world population. Competition for land, water and energy will increase and the need to adapt to and mitigate the effects of climate change is crucial.

To guarantee food security, the world requires new ways to produce adequate and stable food supplies in an environmentally sustainable manner. The challenge for plant sciences is to further improve current knowledge of plant biology and agronomy, to increase crop yields and enhance the access to a far greater diversity of safe and nutritious food on a global scale.

To meet these targets, the European research dialogue in the field of plant genomics was intensified in 2004 by establishing the ERA-PG (ERA-NET in Plant Genomics) programme, in order to enhance international and interdisciplinary cooperation and coordination in research activities. ERA-PG began with members from 11 countries and expanded to a network of 23 funding organisations from 17 countries until it ended in 2009. Under the remit of ERA-PG, two joint calls were launched in 2006 and 2008:

- 2006 Call: Structuring Plant Genomic Research in Europe
- 2008 Call: Strengthening the European Research Area in Plant Genomics – integrating new technologies in plant science

A total of 41 research projects were funded with a combined budget of €55M. This underlines the success of the programme in structuring the scientific and technological basis for plant genomics programmes in Europe.

The successfully established ERA-PG network is now continued by the ERA-CAPS (Coordinating Action in Plant Sciences) network, launched in 2012, in order to embed molecular plant sciences more firmly in national policies and processes whilst continuing to fund excellence-driven research in this area. ERA-CAPS aims to strengthen and expand the existing ERA-PG network within and beyond Europe. The ERA-CAPS network comprises currently 19 partners and 7 observers from funding organisations in 23 countries, including recent additions to the EU, and non-EU countries.

The ERA-CAPS research programme will incorporate two joint calls. In addition, interaction between researchers, funders, and relevant European initiatives will be promoted through external engagement. ERA-CAPS will assist in the systematic exchange of information to facilitate the expansion of the network and to involve new members and affiliates. The joint ambition of the scientific Councils, Ministries and Agencies collaborating in the ERA-CAPS network is to enhance synergies between scientific and economic capabilities to increase the quality and impact of a coordinated and sustainable transnational plant science research programme in Europe.

2. Purpose of the Call

The first ERA-CAPS call for proposals launched on November, 19th 2012 is entitled: **“Expanding the European Research Area in Molecular Plant Sciences”**.

This first ERA-CAPS call will fund high quality collaborative transnational research in fundamental molecular plant science (see section 4). The funding partners agree that this unifying approach is a fundamental prerequisite to maximise the utility of the limited resources available and to meet the European demand for molecular plant science innovation with a long-term perspective. Project proposals should indicate (i) the synergistic values of collaborative research between project partners and reduction of duplication. (ii) Each collaborative project should comprise scientists with different and complementary areas of expertise to create an inclusive body of research. (iii) Access to varied resources which will add value to the research effort should be identified.

3. Call Structure

16 ERA-CAPS partner organisations or ERA-CAPS associated organisations from 15 countries will participate in this first call (Table 1). The exact funds committed by each partner are not specified, though indications for individual countries may be given in National Annexes. It is expected however that the call will jointly provide funds in the order of 20 million Euros.

In parallel to the first ERA-CAPS call, the National Science Foundation of the United States – an observer in the ERA-CAPS network – will launch a call through its Plant Genome Research Program. By means of this parallel call, scientists from US research groups can participate in ERA-CAPS collaborative consortia.

Each national funding organisation will fund only the project participants from its own country.

Table 1. Funding organisations financially contributing to the first ERA-CAPS call

Abbreviation	Funding organisation	Country
FWF	Austrian Science Fund	AUSTRIA
F.R.S.-FNRS	Fonds National de la Recherche Scientifique	BELGIUM
DASTI	Forsknings- og Innovationsstyrelsen	DENMARK
INRA	Institut National de la Recherche Agronomique	FRANCE
DFG	Deutsche Forschungsgemeinschaft	GERMANY
DAFM	The Department of Agriculture, Food and the Marine	IRELAND
Teagasc	Teagasc - Agriculture and Food Development Authority	IRELAND
MOARD	Ministry of Agriculture and Rural Development	ISRAEL
LZA	Latvijas Zinatnu Akademija	LATVIA
MBIE	Ministry of Business, Innovation & Employment	NEW ZEALAND
NWO	Nederlandse Organisatie voor Wetenschappelijk Onderzoek	NETHERLANDS
RCN	Norges forskningsråd, Research Council Norway	NORWAY

NCBiR	Narodowe Centrum Badan i Rozwoju	POLAND
FCT	Fundacao Para a Ciencia e a Tecnologia	PORTUGAL
MPNTR	Ministry of Education, Science and Technological Development	SERBIA
BBSRC	Biotechnology and Biological Sciences Research Council	UNITED KINGDOM
NSF*	National Science Foundation	USA

* no direct financial contribution in ERA-CAPS, collaboration is offered by means of a parallel call (see section 5)

4. Themes of Research

By agreement of the funding organisations involved, the first joint call launched by ERA-CAPS is intended to allow maximum engagement of the plant science community and is therefore broad in scope, covering all areas of molecular plant science.

No specific topics have been defined; however, the themes below have been identified as being of common interest to several of the funding organisations. These are examples of areas of research where we would welcome high quality applications, but they **do not exclude** other areas of molecular plant science.

- **Food Security:** research that contributes to the sustainable and secure supply of safe and nutritious food for an increasing global population. This includes yield optimisation, quality traits and nutrient use efficiency, amongst other research areas.
- **Non-food crops:** this theme includes research into crops (or appropriate models) where the end-use includes bioenergy or industrial biotechnology.
- **Adaptation to a changing climate:** research that addresses how plants can adapt, or be adapted, to grow in a changing environment.
- **Biotic/abiotic stresses:** this theme includes research into plant responses to either biotic or abiotic stress, or how plants contend with a combination of biotic and abiotic stresses.

Applications in other areas of molecular plant science are welcomed where the research answers fundamental biological questions of relevance to the development of the European (and Global) Research Area in molecular plant science.

Applicants should note the following:

- Research must have a significant molecular aspect (including, but not limited to, genetics, 'omics technologies, molecular breeding, molecular evolution, developmental biology, molecular plant pathology etc.).
- Plants under investigation can be model plants or reference species as well as crops, including horticultural crops, ornamentals, trees and forage plants.

- Some funding organisations will only consider applications in specific research areas, or have identified research themes of importance to their country; these are identified in the National Annexes.
- Additionally, some funding agencies can only support basic underpinning research, or more applied research. Rules governing the involvement of industry in consortia vary for each partner. Applicants should check the National Annexes carefully when preparing their proposal.
- It is of central importance that proposals **demonstrate** the added value of collaborative research throughout the project.

The expected **duration of projects will be three years**.

5. Application

In formulating the applications the following should be noted:

- Proposals should take into account and search for solutions to the problems of data sharing, data management, and data access (see National Annexes for any specific national requirements).
- There should be due consideration of issues of protection of intellectual property and envisaged exploitations.
- Exchange of personnel for short periods during the lifetime of the project will be encouraged, funding for this purpose can be requested.

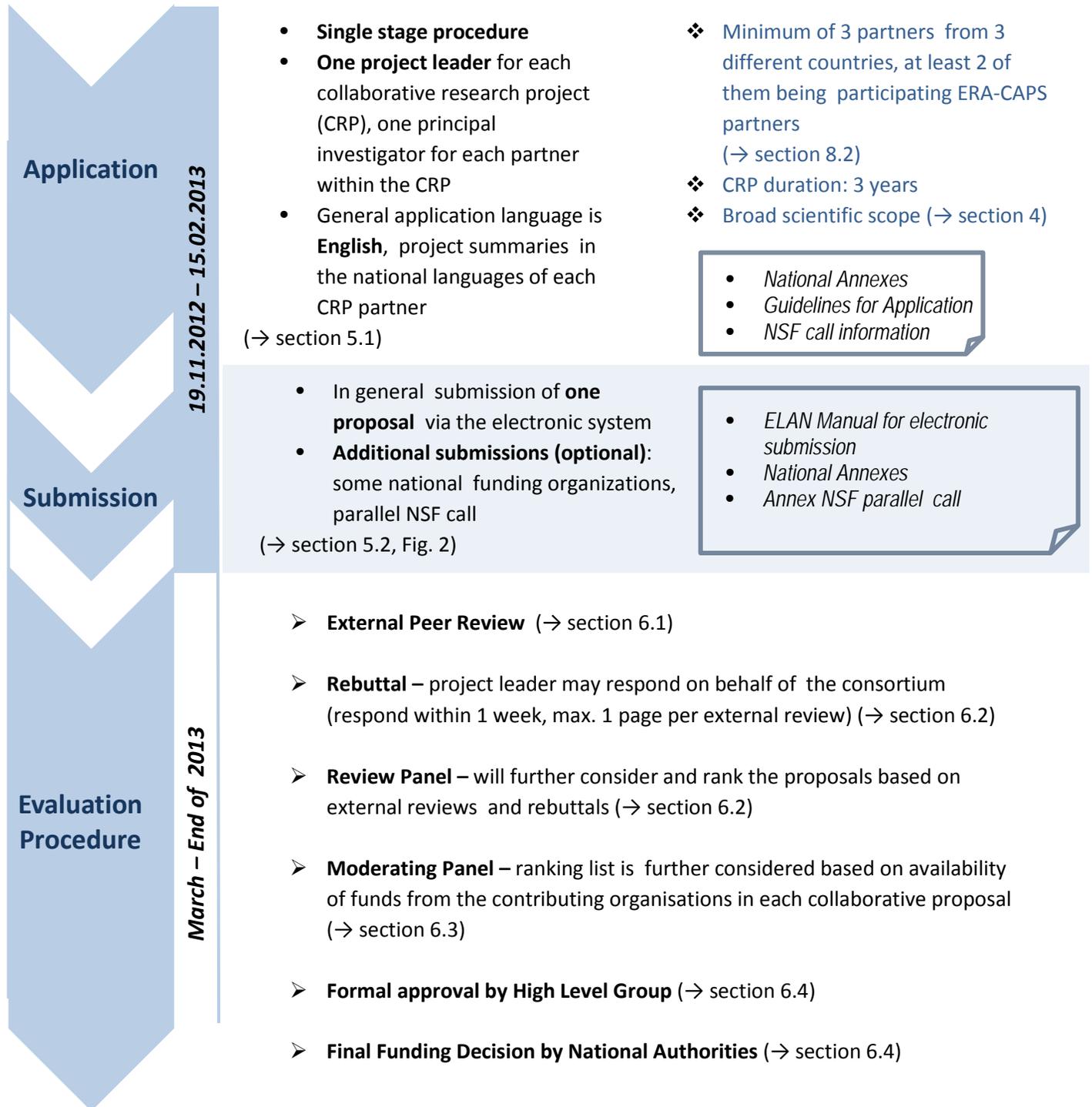
Since the call aims at developing new European cooperation as well as strengthening and enlarging existing partnerships, each joint proposal should encourage movement of personnel to carry out research in partner laboratories in countries other than their own when appropriate.

5.1. Application Procedure

The launch date of the call is **Monday, 19 November, 2012**.

Submission period ends on **Friday, 15 February, 2013, 17:00 CET**.

There is a **single stage** procedure for joint applications and accordingly a **single stage** review procedure (see Figure 1).



Grant award letters

Figure 1: General application and evaluation procedure, and timeline of first ERA-CAPS call

- Applicants should take note of regulations for individual partners mentioned in the *National Annexes*, and should contact their national call coordinator (see Section 12) for any queries related to these Annexes.
- Applicants should strictly follow the detailed instructions available in the ‘*Guidelines for Application*’ (Annex I, provided at the ERA-CAPS website).
- The application forms and the guidelines are available at <http://www.eracaps.org/joint-calls/era-caps-calls>
- All applications must be written in English. In addition, a project summary in the national language of each partner may be required (see application forms).
- A project leader (applicant 1) should be identified for each collaborative research project, who is the primary contact person for the consortium. In addition, a principal investigator should be designated from each of the other collaborative institutions (applicants 2, 3 etc.).

5.2. Proposal Design and Proposal Submission

- For each collaborative research project **one proposal** must be submitted to the electronic proposal submission system ELAN (Figure 2), which is provided by the central Call Secretariat (see section 10). When submitting the proposal, the responsible applicant should strictly follow the detailed instructions available in the ‘*ELAN Manual for electronic Submission of ERA-CAPS proposals*’, provided at the ERA-CAPS website (<http://www.eracaps.org/joint-calls/era-caps-calls>). Please note that the ‘responsible applicant’ does not have to be the project leader. However, s/he needs the formal consent of all project partners to submit the proposal on their behalf.
- In addition, some funding organisations require submission of **partial project information** to their national systems at the application stage (see Figure 2). Details are outlined in the corresponding National Annexes and summarized in the section “National submission” of the *Guidelines for Applications*.
- In the framework of the parallel call offered by the U.S. National Science Foundation, an ERA-CAPS project consortium can **collaborate with research groups from the United States**. In this case, two applications will be necessary: an US application and an ERA-CAPS application. The US application will just contain the US element of the full project, with an annex that describes the collaboration with an ERA-CAPS consortium (Figure 2). The ERA-CAPS proposal will contain an equivalent annex to describe the US part. Both the ERA-CAPS and NSF proposals will be peer-reviewed separately, but where possible, information will be shared between the two review processes. As such, the ERA-CAPS and NSF proposals should each be complete projects in their own right. The annex describing the added value of collaboration between the two projects will

be taken into account by reviewers. However, applicants should be aware that decisions on funding will be taken independently by the ERA-CAPS funding partners and by NSF (for further details see Annex NSF Parallel Call).

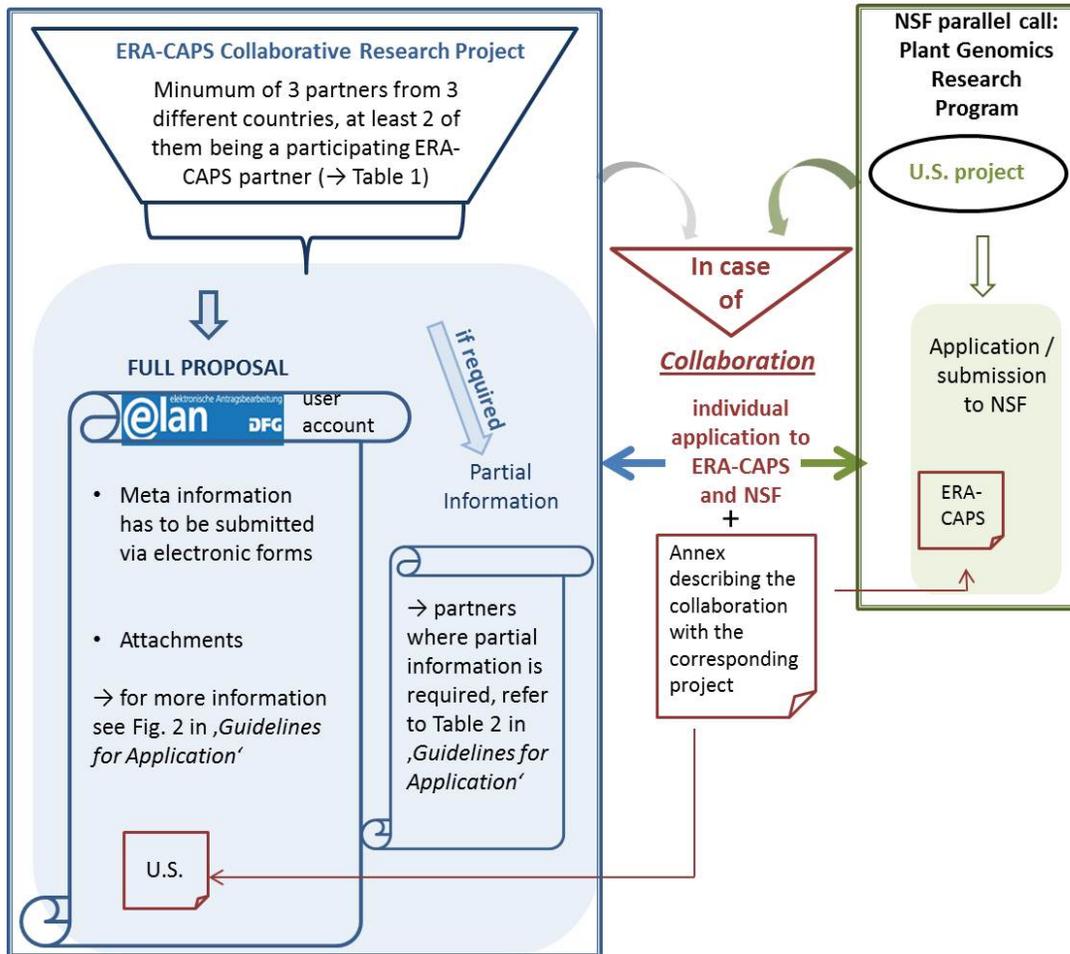


Figure 2: Overview of proposal design and proposal submission, depending on partners involved

6. Evaluation Procedure

6.1. Peer review

The proposals will be sent out for external peer review by a minimum of two reviewers. Evaluation of the proposals will be according to the following criteria:

- novel, innovative research within the scientific scope of the call
- scientific quality of the project
- feasibility of the project

- transnational added value and complementarity of expertise
- scientific track record and potential of applicants
- adequateness of resources, cost effectiveness and project management.
- economic, societal and environmental relevance (if appropriate)

6.2 Rebuttal and Review Panel

Before the Review Panel the anonymous referee reports are forwarded to the project leader, who on behalf of the consortium may comment briefly (within one week, max. 1 page per external review) if the applicants wish to do so.

The proposals, external reviewers' reports, and rebuttals are forwarded to the Review Panel who will further consider and rank the proposals. The Review Panel is selected from the international scientific community by the funding organisations of the call. Expertise within this Panel will cover the topics in the proposals and may be complemented by independent experts if appropriate. The Panel will be headed by an independent chairperson. Final agreement on the composition of the Review Panel will be reached by the High Level Group of ERA-CAPS.

A list of high quality proposals considered worthy of funding will be identified by the Review Panel.

6.3 Moderating Panel

The list of selected and ranked proposals will then be further considered by a Moderating Panel based on availability of funds from the contributing organisations in each collaborative proposal. The Moderating Panel will consist of representatives from the funding organisations responsible for the selected projects. The Moderating Panel will also have crossover membership from the Review Panel.

6.4 Further Approvals and Final Funding Decision

The final recommended list for funding will be formally approved by the ERA-CAPS High Level Group.

Once all evaluation steps have been completed, the final funding decisions rest with the corresponding national authorities and at the end of this process the decision will be communicated to the project leader by the Call Secretariat.

7. IPR, Consortium Agreement and State Aid Rules

Transnational co-operation at the level of Collaborative Research Projects needs special attention – in particular concerning rules related to Intellectual Property Rights (IPR) - which cannot be covered properly by the national funding regulations. In order to address this issue adequately, the funding

partners of the ERA-CAPS Call for Proposals agreed on “Intellectual Property Rights Conditions for Collaborative Research Projects” or “IPR Conditions” (Annex II).

These "IPR Conditions" are complementary to the national funding rules and their application is highly recommended to all funding organisations of ERA-CAPS. All funding decisions arising from this ERA-CAPS Call for Proposals will be in line with the regulations of the European State Aid Rules. Funding rates for participants of the Collaborative Research Projects cannot exceed the Community Framework for State Aid for Research and Development.

Each consortium is requested to sign a Consortium Agreement before the start of the project. Such an agreement shall not affect the participants' obligations to the national funding organisations and to one another arising out of the “IPR Conditions” or the national funding rules. The funding partners of a particular Collaborative Research Project may withhold the funding until the Consortium Agreement has been signed by all participants of that Collaborative Research Project.

With respect to the effective execution of Collaborative Research Projects (including using and disseminating of research results as well as protection of intellectual property rights arising from the Collaborative Research Projects), the Consortium Agreement shall address topics such as the intellectual property rights arrangements, confidentiality, publication, internal organisation of the consortium, and settlement of internal disputes. A model of a Consortium Agreement which is in line with the “*IPR Conditions*” can be downloaded from the ERA-CAPS website (<http://www.eracaps.org/joint-calls/era-caps-calls>).

8. Eligibility and Terms and Conditions

8.1 Themes, funders, and target group

This first ERA-CAPS Call is a broad call and has the ambition to open access to the ERA-CAPS network to all interested researchers in the broad field of molecular plant sciences.

All researchers working in the remit of this ERA-CAPS call as defined at section 4 and eligible to apply for financial support from the participating national research funding organisations are cordially invited to apply for funding. National funding organisations will only support the costs of eligible applicants from their own countries. Researchers from countries other than the countries mentioned in Table 1 are welcomed as participants in consortia, but should be able to provide evidence of funding support. Consortia who wish to include participants from countries **not** mentioned in Table 1 should satisfy themselves that the potential partners will be able to provide funding for their participation in the project.

Applicants are **strongly recommended** to contact their National Call Coordinators for guidance when preparing their applications. Additional information can also be obtained from the Call Secretariat. Contacts may be found at the end of this document (see section 11) or on the ERA-CAPS website (<http://www.eracaps.org/joint-calls/era-caps-calls>). Please also consult the *Frequently Asked Questions* list for further guidance.

8.2. Eligibility

Consortia for funding should consist of a minimum of three partners from three different countries. At least two of these must be ERA-CAPS partner or observer countries contributing funding to the call (see Table 1). There is no upper limit on the number of partners; however, the individual consortium must demonstrate that its size is manageable with respect to project coordination (see also section 2).

For applications with an NSF partner, the ERA-CAPS consortium should have a minimum of three partners in addition to the US partner. A proposal by two partners from countries participating in the ERA-CAPS Call plus one US partner applying for funds from NSF's Plant Genome Research Program will be eligible for evaluation. However, in this case, the consortium will be only be viable if both the funding decision by ERA-CAPS and the funding decision by NSF are positive.

Applicants should refer to the annexes of their national funding organisations for guidance on all details of eligibility and funding availability.

Applications should be in accordance with the Guidelines for Application.

8.3 Participation of Industry

Industrial participation is welcomed by most of the contributing funding organisations, and details of whether and how industry may participate in consortia is given in the individual National Annexes. Because of the different regulations of the contributing funding organisations on this specific issue, the participation of companies will not influence the rating of a proposal and will not be among the evaluation criteria. For clarification, a brief summary for each partner is provided in Table 2.

Table 2: National requirements towards industry participations

Organisation	Country	National requirements regarding industrial participation
FWF	AUSTRIA	Only natural persons are allowed to submit an application. Industrial participation is welcome as national or international partner but the immediate publication right must be guaranteed. The industrial partner cannot receive money from FWF.
F.R.S.-FNRS	BELGIUM	A company or other private partner can be involved as a project partner but FNRS will not fund industrial partners or any activity related to the private sector.
DASTI	DENMARK	Private-sector institutions and enterprises may, to a certain extent, receive funding through DASTI. Funding to the private sector is subject to the restrictions stated in the national guidelines.
INRA	FRANCE	Industrial participants are welcomed under normal INRA conditions. It should be noted that INRA will not provide funds for industry in grants.

DFG	GERMANY	Researchers at institutions that are not non-profit or which do not allow immediate publication of research findings in a generally accessible form are not eligible to submit proposals. However, researchers from industry can be involved as partners in DFG-funded projects without receiving public funding themselves.
DAFM/ Teagasc	IRELAND	DAFM/Teagasc will consider proposals for projects involving academic-industrial partnerships. DAFM/Teagasc supports science carried out by academic researchers in partnership with industry. DAFM/Teagasc will not provide funding to the industrial partner.
MOARD	ISRAEL	Commercial companies / entities, SMEs and organisations with other statutory nature are welcome as participants if an added value to the project is proven and if their costs are covered by their own resources or by other external sources.
LZA	LATVIA	Companies registered in the Register of Enterprises of the Republic of Latvia and carrying out their activities mainly in Latvia are eligible for funding in the framework of this ERA-CAPS call.
NWO	NETHERLANDS	A company or other private partner can be involved as a project partner if an added value to the project is proven and if their costs are covered by their own resources or by other external sources.
MBIE	NEW ZEALAND	Participation of New Zealand companies is encouraged. New Zealand researchers from industry may also be eligible to receive funding. However, the New Zealand part of the proposal must be led by an organisation whose primary purpose is research as opposed to commercial activity.
RCN	NORWAY	Norwegian companies can be project partners and can also receive funding from RCN if pre-conditions are met.
NCBiR	POLAND	Companies with a status as R&D centres, entities entrusted with legal personality and with registered headquarters in Poland, and companies performing scientific research in other forms are eligible for funding in the framework of this ERA-CAPS call.
FCT	PORTUGAL	Companies and other private partners that carry out or participate in scientific research activities can be eligible for funding in the framework of this ERA-CAPS call.
MPNTR	SERBIA	A company and /or a public enterprise can be a participant in the project under the National Programme if it provides work material, equipment and/or financial contributions. Such participants are not eligible for funding from MPNTR.
BBSRC	UNITED KINGDOM	BBSRC will consider proposals for projects involving academic-industrial partnerships. BBSRC supports science carried out by academic researchers in partnership with UK industry or other user organisations. The Council does not provide funding to the industrial partner.

9. Synopsis of the Time Schedule

Call announcement:	19 November 2012
Due-date proposals:	15 February 2013 - 17:00 CET

Peer review:	March – May 2013
Rebuttal:	June 2013
Communication of evaluation results:	September 2013
Grant award letters:	End of 2013
Start of selected projects:	1-5 months after final funding decision

10. Contact and Help

10.1 Call Secretariat

The ERA-CAPS Call Secretariat is the main contact point for the delivery of the joint call and is located at the DFG (Deutsche Forschungsgemeinschaft, German Research Foundation) in Germany.

The Call Secretariat is supported by a team of national contacts (National Call Coordinators), where each participating organisation provides at least one contact person.

The Call Secretariat is the contact point for the National Call Coordinators and the reviewers. Together with the National Call Coordinators, it supports the scientists during the application procedure and is the main contact address for all questions regarding proposal submission. For issues concerning requirements stated in the National Annexes, please contact the National Call Coordinators in the first instance. All national contact persons and addresses are listed in section 10.2.

Dr. Catherine Kistner

DFG – Deutsche Forschungsgemeinschaft (German Research Foundation)

Kennedyallee 40, 53175 Bonn, Germany

e-mail: catherine.kistner@dfg.de

phone: +49 228 885 2803

10.2 National Call Coordinators

Country	Contact person & Organisation	Email / Phone
AUSTRIA	Dr. Bettina Reitner Austrian Science Fund	Bettina.reitner@fwf.ac.at +43 1 5056740 8203
BELGIUM	Dr. Arnaud Goolaerts Fonds de la Recherche Scientifique - FNRS	Arnaud.goolaerts@frs-fnrs.be +32 2 504 9309
DENMARK	Anna Munck Laybourn Danish Council for Strategic Research	amla@fi.dk +45 72 31 83 98
FRANCE	Françoise Vedele INRA Centre de Versailles-Grignon	era-caps@versailles.inra.fr +33 30 83 36 56
GERMANY	Dr. Catherine Kistner Deutsche Forschungsgemeinschaft	Catherine.kistner@dfg.de +49 228 885 2803

IRELAND	DAFM: Ms. Ciara Daly	Ciara.daly@Agriculture.gov.ie +353 1 6072367
	Teagasc: Dr. Raymond Kelly	raymond.kelly@teagasc.ie +353 59 9183505
ISRAEL	Dr. Orit Shmueli Ministry of Agriculture and Rural Development	orits@moag.gov.il +972 3 9485430
LATVIA	Dr. Anita Draveniece Latvian Academy of Sciences	int@lza.lv +371 67227391
The NETHERLANDS	Dr. Theo Saat The Netherlands Organisation for Scientific Research	t.saat@nwo.nl +31 70 344 07 91
NEW ZEALAND	Dr. Marc Lubbers Ministry of Business, Innovation & Employment	Marc.Lubbers@msi.govt.nz +64 4 917 3053
NORWAY	Dr. Monica Bergem The Research Council of Norway	mbe@forskningsradet.no +47 22 03 74 22
POLAND	Edyta Roman National Centre for Research and Development	Edyta.roman@ncbr.gov.pl +48 22 24 42 858
PORTUGAL	Joana Pinheiro FCT – Fundação para a Ciência e a Tecnologia	Joana.Pinheiro@fct.pt +351 213924381
SERBIA	Zeljka Dukic Ministry of Education, Science and Technological Development	zeljka.dukic@mpn.gov.rs +381 11 3616 529
UNITED KINGDOM	Anna Macey Biotechnology and Biological Science Research Council	Anna.macey@bbsrc.ac.uk +44 1793 413268
	Dr. Paul Wiley Biotechnology and Biological Science Research Council	Paul.wiley@bbsrc.ac.uk +44 1793 413379
UNITED* STATES OF AMERICA	Dr. Jane Silverthorne National Science Foundation	jsilver@nsf.gov +1 703 292-8470

* no direct contribution in ERA-CAPS, collaboration is offered by means of a parallel call (see also section 6)

11. Annexes

Annex I – Guidelines for Application

Annex II – IPR Conditions

NSF Annex