

2017-2018 Belmont Forum / BiodivERsA Joint Call

## **Complete announcement of Opportunity**

The Partners of the Belmont Forum and BiodivERsA networks have joined efforts to organise and fund an

# International call on "Scenarios of Biodiversity and Ecosystem Services"

### (1) Introduction

The Belmont Forum is a group of the world's major and emerging funders of global environmental change research, with 20 funding organisations in 18 countries (http://www.belmontforum.org). It aims to accelerate delivery of the environmental research needed to remove critical barriers to sustainability by aligning and mobilizing international resources. It pursues the goals set in the <a href="Belmont Challenge">Belmont Challenge</a> by adding value to existing national investments and supporting international partnerships in interdisciplinary and transdisciplinary scientific endeavours.

BiodivERsA is a network of 32 public research funding organisations from 21 European countries supporting scientific research in the field of biodiversity (www.biodiversa.org). The network is funded as an ERA-NET Co-fund project under the European Union's Horizon 2020 Framework Programme. BiodivERsA Partners aim to develop a durable collaboration in research funding policy and practice, thereby creating added value in high quality biodiversity research across national boundaries. One objective of BiodivERsA is to organise a Pan-European research programme for research on biodiversity, ecosystem services and nature-based solutions (http://www.biodiversa.org/968).

27 national/regional funding organisations from 25 countries are contributing to the funding of the present joint call on "Biodiversity Scenarios" (see the updated list on the Belmont Forum and BiodivERsA websites).

# (1) Introduction to the 2017 joint Belmont Forum / BiodivERsA call for research proposals

Proposals should all explicitly address a scenario dimension, taking into account the following definition of scenarios:

"Scenarios of biodiversity and ecosystem services are the outputs of the combination of scenarios of indirect drivers and direct drivers — such as land use change, invasive alien species, overexploitation, climate change or pollution — and models of impacts of these drivers on biodiversity and ecosystem services."

The recently completed <u>IPBES Methodological Assessment of Scenarios and Models of Biodiversity and Ecosystem Services</u> provides an in-depth analysis and numerous example of how scenarios and models can and have made important contributions to decision-making. However, the assessment also finds that "several barriers have impeded widespread and productive use of scenarios and models of biodiversity and ecosystem services in policymaking and decision-making". There is a need

to progress the methodological state of the art in arriving at more accurate quantitative values around environmental co-benefits of biodiversity and ecosystem services.

Several research priorities that would help overcome these barriers have been identified, including:

- Ensuring that the types of scenarios, models and decision-support tools employed are aligned to the needs of each particular policy or decision context;
- Improving, and more widely applying, participatory scenario methods in order to enhance the relevance and acceptance of scenarios for biodiversity and ecosystem services;
- Addressing gaps in methods for modelling impacts of drivers and policy interventions on biodiversity and ecosystem services including:
  - Linking scenarios and models across spatial and temporal scales, and
  - Advancing the development of integrated system-level approaches to linking scenarios and models of indirect drivers, direct drivers, nature, nature's benefits to people and good quality of life to better account for important relationships and feedback between those components...;
- Developing practical and effective approaches to evaluating and communicating levels of uncertainty associated with scenarios and models;
- Improving the accessibility of data sources and working in close collaboration with research and observation communities to fill gaps in data collection and provision<sup>3</sup>;
- Enhancing human and technical capacity for scenario development and modeling including through the promotion of open access to scenarios and modeling tools, as well as to the data required for their development and testing.

This call for proposals follows up on calls launched by BiodivERsA in 2011-2012 and the Belmont Forum in 2014. The first phase of the Belmont Forum CRA "Scenarios of Biodiversity and Ecosystem Services" funded 4 projects that focused on international networking of scientists. BiodivERsA made a pioneer call in 2011-2012 that included scenarios of biodiversity and ecosystem services with 9 funded projects. This call is more ambitious than the 2011-2012 and 2014 calls mentioned above. This new call unites funders from the Belmont Forum and BiodivERsA, with the support of the European Commission.

The aim of this call is to promote innovative research for more informed decision-making by developing scenarios of biodiversity change and its associated ecosystem services, resulting from the complex interaction of socio-economic and global environmental trends. It focuses on foresight views up to the next 50 years for management of biodiversity, ecosystem services and their contributions to human well-being. This call is contributing to international research programs, assessment bodies, and multi-lateral environmental agreements.

While projects will have to be academically excellent, they should also explicitly engage stakeholders (e.g. managers and users in the field, businesses, policy actors, local administrations, and citizens), in order to maximise the societal benefits of this research. This may include co-design of projects with stakeholders, analysing stakeholders' needs and preferences and other relevant societal (e.g. governance) aspects through social/economic science approaches as well as developing practical management tools, guidelines, knowledge bases, etc. to be directly used by or in relation with stakeholders. For this, it is highly recommended that the BiodivERsA Stakeholder Engagement Handbook is used as source of guidance (cf. http://www.biodiversa.org/702).

Capacity building and participatory approaches are encouraged, in particular for scenario building in which multiple stakeholders explore different trajectories of development and adaptation for usefulness, accuracy and appropriation. This should increase the valorisation of research results, including the mobilization of scenarios and models to improve policy interventions and management practices for biodiversity and ecosystem services. In particular, using stakeholder input is critical to define contrasting scenarios, desirable or on the contrary feared endpoints, plausible socio-economic development pathways (e.g., IPCC SRES, MA scenarios, Global Biodiversity Outlook, and IPBES assessments and relevant policy tools), tests of specific policy or management actions, and "backcasting approaches" (i.e., working backwards from defined future endpoints).

#### (2) Priorities of the call

The two major (non-exclusive) priorities of the Call are the following:

- Development and application of scenarios of biodiversity and ecosystem services across spatial scales of relevance to multiple types of decisions Previous biodiversity scenarios have typically been highly scale specific. On the one hand, scenarios at global scales are difficult to translate into actions at regional/local scales, where many biodiversity relevant decisions are made. On the other hand, scenarios at local/regional scales often do not include global scale constraints and feedbacks (e.g., international trade, teleconnections, etc.) making them difficult to translate into international policy. Linking spatial scaling scales is one of the key barriers to greater integration of biodiversity scenarios into decision-making at global and national scales.
- Consideration of multiple dimensions of biodiversity and ecosystem services in biodiversity scenarios Previous biodiversity scenarios have typically focused on a very limited number of dimensions of biodiversity and ecosystem services (e.g. global extinctions, loss of species compared to natural systems). However, decision-making processes often require information on a much broader range of dimensions both because different decision-making processes may focus on different dimensions, and because some processes are purposely designed to address multiple dimensions (e.g. through multi-criteria trade-off analysis).

Projects should also pay particular attention to at least some of the following issues:

- Coupling of socio-economic and biodiversity dynamics. Fully integrated models of biodiversity
  and socio-economics (e.g., bio-economic models) can provide novel insights into the dynamics
  and long-term sustainability of socio-ecological systems.
- Improvement of models of impacts on biodiversity. Innovative work on genetic adaptation, rapid evolution, co-evolution, eco-evolutionary dynamics, comparative phylogeography, conserving endemic species, species interactions and hybrid zones is encouraged because these are key shortcomings in the current generation of models.
- Coupling models across gradients of human transformation in terrestrial, freshwater and marine systems. Biodiversity scenarios often focus on one type of system (e.g., terrestrial vs. marine) or on one part of the gradient of human transformation (e.g., "natural" vs. agricultural vs. urban systems). Interdisciplinary research on the interactions between systems is essential for making scenarios more representative of systems that decision-makers deal with.
- Developing early warning of (socio-)ecological breakpoints and regime shifts.
- Estimation and communication of uncertainty. Estimation of uncertainty can be based on a variety
  of methods including model validation using empirical observations, model validation using
  experimental simulations, and model-model comparison. This may include the analysis of past
  trends. Uncertainty also needs to be communicated in innovative and transparent ways to
  decision makers. Model validation will require close collaboration with observation systems.

Proposals may consider a wide range of approaches to socio-economic scenarios including extrapolations from current trends, probabilistic approaches, prospective approaches, etc. When relevant, the research questions should address gender balance.

#### (3) Expected international added value

Although the scientific research community working on biodiversity scenarios is rapidly developing, scientists operating in this landscape are still dispersed and not sufficiently structured. Furthermore, joining forces and skills across disciplines and across borders, and developing scenarios that have a

broader relevance are critical for this research domain. Recent efforts to coordinate this community and develop its international dimension have been made, e.g. through the Belmont Forum Call for supporting research networks. Whereas this is an important step forward, further encouragement and funding are needed to reinforce substantially the scientific community working on biodiversity scenarios and its capacity to develop collaborations between countries.

This Call thus targets transdisciplinary projects of 3 years, involving at least 3 partners from at least 3 different countries participating in the call to develop science-based projections of the dynamics of biodiversity and ecosystem services and reinforce the research capacity to develop such projections. Given the nature of the research to be supported through this call, proposals will include as needed collaboration and integration across several disciplines from natural sciences and/or social sciences and humanities.

Overlap with on-going international, European and national projects on this theme should be avoided. Complementing on-going research is however possible but should be clearly explained

The added value of international collaboration and the level of collaboration between teams from different countries should be clearly demonstrated, including for upscaling knowledge at the (sub-)regional level or for comparative approaches of different local contexts. Contributions to global research programs, assessment bodies, and multi-lateral environmental agreements, including but not limited to IPBES and SDGs, are encouraged.

#### (4) Procedures, eligibility and selection criteria

#### Submission, deadlines and time schedule

#### Submission

A two-step process will apply, with a mandatory submission of pre-registrations at step 1 and submission of full proposals at step two. Pre-registrations and full proposals (in English) must be submitted electronically with the Electronic Proposal Submission System (EPSS). Instructions for electronic submission will be available at www.biodiversa.org and www.belmontforum.org in October 2017.

- The online platform will stay open 5 minutes after the official deadline. Any proposals not correctly submitted at this moment will be declared ineligible.
- All completed proposals will be submitted automatically when the platform closes, to avoid a situation where an applicant does not have time to click on the submit button. In this situation, the proposal will be evaluated as it stands.

Applicants have to submit pre-registrations: information (in English) on the project consortia, a 5-page description of the project and the required budget for each partner must be submitted on the EPSS. **Submission of pre-registrations is mandatory**; it is not possible to enter the procedure at a later stage.

The information will be used to complete an eligibility check and help find appropriate reviewers for the evaluation of qualifying full proposals in the second step.

Only eligible pre-registrations will be invited to submit full proposals.

For technical questions regarding submission, please contact the Call Secretariat:

Sophie Germann: <a href="mailto:sophie.germann@agencerecherche.fr">sophie.germann@agencerecherche.fr</a>
or EPSS technical helpdesk – Taavi Tiirik: <a href="mailto:biodivscen@etag.ee">biodivscen@etag.ee</a>

For budgetary questions and other national/regional issues, please contact the relevant Funding organisation Contact Point - who are listed on the BiodivERsA and Belmont Forum websites. Funding

organisations' rules are advertised on the BiodivERsA and Belmont Forum websites and are mandatory. For any help on these, please contact the relevant Funding organisation Contact Point.

#### Deadlines and time schedule

The call will go through the following processes and applicants must pay attention to the deadlines outlined below in the time schedule\*:

26 July 2017:	Pre-announcement of the call		
2 October 2017:	Official launch of the call		
1 December 2017, 17:00 CET (local	Deadline for submitting pre-registration		
time in Brussels):			
2 January 2018:	Eligibility check completed		
	> Eligible pre-registrations are invited to submit their full proposals		
9 March 2018, 17:00 CET (local	Deadline for submitting full proposals		
time in Brussels):			
3 April 2018:	Second eligibility check completed		
Early June 2018:	Evaluation Panel meeting		
	> Ranked list of proposals established by the Panel		
Early July 2018:	Recommendation for funding projects by the GPC (group of		
	funding agencies participating to this call)		
October 2018:	Earliest possible start of funded projects		
March 2019:	Latest possible start of funded projects		

#### Eligibility of projects and research groups

The call is open to proposals and research consortia that meet the following criteria:

- 1. The international, scientific research projects are performed by eligible research organisations. National/regional eligibility criteria (see funding organisations' rules) apply to research organisations and for participation by private sector (profit and non-profit) organisations
- 2. The main applicant is employed by an eligible organisation in one of the countries participating to the call
- 3. The project proposal involves teams from at least three different countries participating in the joint Belmont Forum / BiodivERsA call and will be supported by at least three different funders.
- 4. The project duration is 3 years.
- 5. Proposals must be written in English.
- 6. The scope or scale of the proposed research should exceed a single country.

Compliance with funding organisation eligibility criteria and rules (e.g. eligible budget items) is mandatory; it is thus strongly recommended that applicants approach their respective Funding organisation Contact Point to make sure they respect all the eligibility criteria and rules (contact list and main Funding organisations' rules are available in the call documents published on the Belmont Forum and BiodivERsA websites).

Each partner will remain responsible for the decision of eligibility. In case of doubts, specific cases shall be reported by the Partner Organisation to the TPO and GPC as soon as possible and before the evaluation stage. In any case, eligibility issues should be duly discussed and agreed by the GPC after the submission of pre-registration and after the submission of full proposals.

#### Evaluation and selection

Potential applicants are advised to take careful note of the aims and scope of the call as described above and in the "Announcement of Opportunity" section. Applicants are strongly advised to assess the relevance of their proposed research against the thematic priorities set forth in the scientific text of the call. Any project that does not fit within the thematic priorities described in the call will not be recommended for funding, regardless of its quality.

Emphasis will be placed on the link between scientific excellence and relevance to policy and practice. Proposals will be evaluated against criteria of excellence, quality/efficiency of the implementation and impact<sup>1</sup>.

The following evaluation procedure will apply:

#### First step:

Only an eligibility check of pre- registrations will be performed. Eligible pre-registrations will be invited to submit full proposals.

#### Second step:

An eligibility check of full proposals is performed.

The full proposals are assessed by an independent Panel of Experts (PoE) and international external reviewers.

The (PoE) is composed of scientific and policy/management experts. The scientific experts assess the scientific excellence and quality/efficiency of the implementation of the proposals; the policy/management experts assess the impact of the proposals.

In addition, the scientific excellence and quality/efficiency of the implementation of the proposals will be assessed by at least 2 external reviewers (scientific experts) per proposal; the impact of the proposals will be assessed by at least 1 external reviewer (policy/management experts) per proposal.

The **Panel of experts** will consist of international experts in the natural and social sciences as well as professionals from the field of biodiversity policy and biodiversity conservation and management. It is comprised such so that it can cover the full range of topics within the scope of the call.

Members take part in the PoE as independent experts and do not represent any organisation nor can they send any replacements. This means that their work on this Panel does not represent any organization or nation.

The Chair and the Vice-Chair of the PoE are appointed by the Group of Programme Coordinators (GPC) representing the participating organisations. The Chair of the PoE is a scientific expert and the Vice-Chair of the PoE is a policy/management expert. The choice of the Chair and Vice-chair will take gender balance into account.

The Panel of experts members are selected upon a first suggested list of experts provided by each member of the GPC. The Chair and Vice-Chair of the PoE – nominated by GPC - will select a limited number of experts (depending on the number of submitted proposals), with attention to the relevance of their expertise for this particular call and balance in the field of expertise according to the themes addressed by the submitted proposals. The final composition of the PoE has to be approved by the GPC. A particular effort in setting up the PoE will be done to ensure the gender balance among its members. As far as possible, PoE members will be from countries that do not participate in the call to allow further flexibility in case of conflicting interests. If this is not possible, PoE members will not, as far as possible, evaluate proposals involving teams from their country.

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<sup>&</sup>lt;sup>1</sup> For the different criteria, see Annex 7

The PoE ranks the proposals based on the set of criteria defined (i.e. scientific excellence, quality/efficiency of the implementation and impact).

Within the Panel of experts (detailed in Annex 6), the scientific experts moderate the assessments provided by the scientific review procedure (external review reports) and assesses the proposals according to their scientific excellence (assessment criterion 1) and the quality/efficiency of their implementation (assessment criterion 2); the policy/management experts moderate the assessments provided by the societal impact review procedure (external review reports) and assesses the proposals according to their impact (assessment criterion 3).

The members of the Panel of experts (both scientific experts and policy/management experts) discuss on the proposals in order to establish the final ranking of proposals for the call.

For the selected proposals, the PoE will be asked to consider the suitability of the budgets and possibilities for budget cuts, as well as to give advice, where possible, on the importance of the entire undertaking of each tasks and/or workpackage in the collaborative projects.

More details on the evaluation procedure and the role of the Panel of experts can be found in Annex 6.

Please note that **no appeal can be brought to challenge the evaluation results** or decisions of the CSC.

#### (5) Funding

For this call a total amount of 20.3 to 23.7 M€ has been provisionally reserved by the participating funding organisations.

The European Commission will also provide funding for the funded projects depending on the final total funding amount for research proposals by the participating funding organisations eligible for EC-funding.

The indicative total budget for this call is thus of 26.3 to 29.7 M€.

Indicative budgets for each funding organisation are given below. Each participant in a funded project will be preferentially funded by his or her national/regional funding organisation(s) participating in the call. The additional funding provided by the EC for the funded project will be distributed through the H2020-eligible national/regional funding organisations.

The consortium of participating funding organisations will strive to ensure that the maximum number of top-ranked proposals are funded. The funding procedure is further described in Annex 4. Upon the final decision by the funding organisations, a list of funded projects will be published on the Belmont Forum and BiodivERsA websites.

#### PROVISIONAL LIST OF COMMITMENTS

Country	Funding organisation	Indicative budget (low) (EURO)	Indicative budget (high) (EURO)
Argentina	Mincyt <sup>#</sup>	To be communicated soon	To be communicated soon
Austria	FWF <sup>#</sup>	800 000	800 000
Belgium	BELSPO	TbC	TbC
Belgium	F.R.SFNRS#	200 000	200 000
Brazil (Sao Paulo)	FAPESP <sup>#</sup>	750 000	1 500 000
Bulgaria	BNSF <sup>#</sup>	450 000	450 000
Canada	NSERC-	600 000	700 000

	CRSNG <sup>#</sup>		
Canada (Quebec)	FRQ <sup>#</sup>	600 000	600 000
Estonia	ETAG <sup>#</sup>	100 000	100 000
Finland	AKA	850 000	850 000
France	ANR <sup>#</sup>	2 000 000	2 000 000
Germany	DFG	1 500 000	2 500 000
Germany	DLR-PT	2 000 000	3 000 000
Ireland	EPA <sup>#</sup>	500 000	500 000
Ivory Coast	PASRES#	75 000	75 000
Lithuania	RCL <sup>#</sup>	100 000	100 000
The Netherlands	NWO <sup>#</sup>	800 000	800 000
Norway	RCN <sup>#</sup>	1 000 000	1 500 000
Poland	NCN	500 000	500 000
Romania	UEFISCDI <sup>#</sup>	500 000	500 000
Slovakia	SAS <sup>#</sup>	240 000	240 000
Spain	MINECO <sup>#</sup>	1 000 000	1 000 000
Sweden	FORMAS#	1 800 000	1 800 000
Switzerland	SNSF	1 400 000	1 400 000
Turkey	Tübitak <sup>#</sup>	400 000	400 000
USA	NSF <sup>#</sup>	1 800 000	1 800 000

(TbC): To be Confirmed

#### (7) Programme structure and management

#### **Programme activities**

The funded projects are considered to form part of an international research programme for which joint activities will be organised, including a kick-off meeting at the beginning of the funding period, an interim project conference to promote the uptake of projects results and networking amongst projects and a final meeting to present and disseminate the project results at the end of the funding period. Participants of funded projects should participate in these joint activities. The costs for attendance to joint activities should be included in the budgets of the full proposals and must be announced in the Call.

#### Project management and reporting

Funded projects will be required to submit a mid-term report and a final report on both research progress and financial aspects. Some funding organisations may request additional specific reports.

#### (8) Eligible budget items

Eligible costs and the maximum allowed requested budget per project are governed by funding organisations' specific rules. Specific questions should be addressed to the Funding organisation Contact Points (list available on the Belmont Forum and BiodivERsA websites)

In case of a too high financial pressure on a participating country due to the high number of teams from this country in the submitted applications, the applicants may be asked to adjust downward their budget.

#### (9) Further information

<sup>\*</sup> The funding organisations marked by "#" have defined maximum allowed budget per project and/or per Partner. Please consult the funding organisations' rules and contact your FCP for more information.

The TPO, ensured by ANR with the support of FAPESP, is responsible for organising the procedure and for all communication with applicants.

However, for national/regional funding organisation eligibility criteria, the funding organisations' rules documents must be consulted and Funding organisation Contact Points (FCP) should be approached (both lists are available in the call documents published on the Belmont Forum and BiodivERsA websites), in particular with regard to eligibility of research groups, eligible costs and other country-specific aspects of the call. The compliance with Funding organisations' rules is mandatory, and relevant FCPs should be contacted to obtain further information if needed.

According to their respective rules, the funding organisations may require the project partners selected for funding to establish a project consortium agreement. The requirement will thus apply to all the project partners, even if their respective funding organisation does not require a project consortium agreement.

We draw the attention of the applicants to the fact that if they plan to use genetic resources and traditional knowledge associated with genetic resources in their project, they will have to ascertain towards the competent authorities and focal point that these used genetic resources and traditional knowledge associated with genetic resources have been accessed in accordance with applicable access and benefit-sharing legislation or regulatory requirements, and that benefits are fairly and equitably shared upon mutually agreed terms, in accordance with any applicable legislation or regulatory requirements.<sup>2</sup> Please refer to the competent authorities for more information.

<sup>2</sup> Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (ABS) to the Convention on Biological Diversity and REGULATION (EU) No 511/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on compliance measures for users from the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization in the Union and related implementing acts.