

# Project call definition and execution plan, published via BiCIKL website

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# BICIKL BIODIVERSITY COMMUNITY INTEGRATED KNOWLEDGE LIBRARY



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#### 1 Preface

In the text herein we provide an overview of the process we will use in the BiCIKL project to invite, review and select a small number of biodiversity related scientific proposals to evaluate how the various infrastructures in this project can collaborate to establish new and/or more efficient methods to extract and integrate data.

## 2 Summary

A key element of the new community that the BiCIKL project will create will be to understand how it can better support the scientific questions that arise from across the biodiversity world. One way we will do this is to run a "project call" process with the aim of identifying a small number of biodiversity case studies that require input from the infrastructures represented in BiCIKL. Having access to such real-world problems, will greatly assist in defining in the longer term how the infrastructures can technically and operationally work together to deliver scientific value. Within the project, we have set aside about 60 person months of resource, distributed across the various partners in Work Packages 4 and 5. Starting around month 18 of the project, we will open a proposal call, open to any bona-fide biodiversity researcher world-wide (defined in more detail below) to propose small projects, that require the various infrastructures to retrieve, integrate and deliver high value data sets and provide various other services in the scope of the relevant RIs back to the project proposers. Internally to the BiCIKL project we will run 1-3 pilot projects, which will help define the scope for the full call and serve as exemplars for the type of proposal we might expect. We anticipate we will run between 4 and 6 full projects, although this depends somewhat on the nature of the proposals. Projects will be selected using a combination of how scientifically compelling they are (based on external review) and inherent do-ability within the time, technical and budget envelope of the BiCIKL project as a whole. The final selections will be made by the BiCIKL Access Provision Panel. Once selected, work will proceed on the projects for up to 6-9 months. Outcomes of the work will be communicated to the proposers, about 3 months before BiCIKL will conclude, this is to give time for the proposers to fulfil the requirement to give feedback on the overall effectiveness of the process and the value of the insights achieved. This will form a key part of the final reports for Work Package 4 and the BiCIKL project overall.

#### 3 List of abbreviations

EU European Union

EMBL European Molecular Biology Laboratory

PM Person months

## 4 Project call definition and execution plan

#### 4.1 Introduction

The BiCIKL project aims to establish a new biodiversity focussed community that brings together experts from the museum, molecular, literature and taxonomic realms. The aim is to better support taxonomists, ecologists and environmental scientists. During this establishment phase, significant work on the infrastructures is needed before users can be actively supported by the new community. A key activity of the BiCIKL community in the longer term (subject to funding) would be to run open project calls across the scientific community in Europe. Many of the proposals we would expect to be made in those project calls will involve functionality that is not currently supported by the individual infrastructures. As a consequence, we do not plan to run a full project call in BiCIKL until the end of the second year, when much of this preparatory work will have been completed. Once the BiCIKL community is established and becomes more mature, it is expected that such project calls as described here, could be run on a routine basis, and continue even after the project expiration, if funding were available, for instance via future funded EC projects. Alternatively, or in addition, the use cases that we address herein, could help define a broader Biodiversity technical infrastructure that would start to reduce the hands-on support burden that is required, again subject to available funding.

#### 4.2 Purpose of this document

The purpose of this document is to describe the process that will be followed to articulate the eligibility criteria and scope, advertise the calls for proposals, review submitted proposals, select and execute the projects we will address as part of Pillar 2 in the BiCIKL project.

#### 4.3 Objectives of the Call Process

The objective of the call process is to identify a small number of diverse biodiversity-related projects that will test and calibrate the ability of the BiCIKL partners to provide integrated solutions to interdisciplinary biodiversity-related problems that span across at least 2 or more of the infrastructures in BiCIKL. In addition we hope we will identify the scientific value arising from the studies themselves that will also assist in articulating the value and impact of the new community.

## 4.4 Defining scope and eligibility criteria

This document will not describe the detailed eligibility criteria or scope of the call itself, as that will be partly informed by activities later in the project and published separately. That said, various high level statements at a strategic level are established here, as they are unlikely to be modified later in the process:

- a) Proposals must address a topic of relevance to biodiversity research, in its broadest sense, although the final scope may narrow this to a particular area, depending on the skill sets available to the project. Proposers may wish to review the pilot project reports (when they are available) which give a flavour of the type of project BiCIKL will be able to serve.
- b) Proposals must use data and services arising from at least 2 of the infrastructures that are represented in the BiCIKL project (See BiCIKL web site), as this is a core aim of the BICIKL community (i.e. to link diverse data types together in new ways). However, It will acceptable, and indeed encouraged, for proposals to include data and services from infrastructures not included in BiCIKL, although the precise mechanism whereby this could be achieved will be determined on a case by case basis.
- c) Proposals must be submitted by a bona fide researcher, employed through a recognised scientific organisation in any country world-wide with the caveat that overall the proportion of resources applied to third-country non-EU users will be limited to 20% of the overall budget.
- d) Submission of more than one proposal with the same lead(s) is not excluded.
- e) Work included in a proposed BiCIKL study must be significantly different from work funded by other sources although it may build on work from previous funding.
- f) There is no scope for the project proposers, or their institute, to receive funding, the projects should describe work that can be done on their behalf by the BiCIKL partners.
- g) Services supplied as part of the project are intended to be utilised by the applicant before the end of the BiCIKL project itself.
- h) Integral parts of the proposal applications should be the objectives, executive summary, the implementation plan, along with Deliverables and Milestones, relevance to BiCIKL project, compliance to eligibility criteria, impact and potential risks and ways for their elimination/mitigation... The total length of the proposal should not exceed approximately 2500 words.

## 4.5 Timing of calls

We will run 2 calls, the first an internal pilot (not described here in detail) designed to fully establish the process and technical methods we may need to adopt as projects are addressed. These 1-3 projects will be identified from within the BICIKL project partners, starting around M6-M8, with the work to deliver data packages or service offerings around the

projects starting around M12. Informed by the pilot, we will then fine-tune eligibility criteria and scope for a public project call that would open around M18, with selected projects starting within the BiCIKL partners around M24.

# 4.6 Overview of the external call process - dates subject to change

Finalise detailed proposal eligibility criteria and scope → 15th September 2022

Open Expression of Interest phase → 1st October 2022

Open call for submissions via BiCIKL website → 1st November 2022

Close call and evaluate submissions for eligibility → 15th February 2023

Conduct external scientific reviews, end date → 15th March 2023

Hold internal review panel to select projects → 15th April 2023

Projects to begin → 1st May 2023 (M24)

Projects complete → 1st November 2023

Evaluate project impact and effectiveness of project → March 2024

## 4.7 Scale and duration of proposed work

The resources available within BiCIKL are relatively limited and the scale of the projects should reflect that. We will not ask project proposers to indicate how much resource their projects may require from individual infrastructures, the BiCIKL project partners will determine that during the evaluation phase. Proposers should be aware that ambitious projects, which demonstrably will require large amounts of resources (ie > 12 PMs) are unlikely to make it through the project selection process, and will not be successful. The exception to that, are projects that are able to identify non-BiCIKL resources which can contribute to the project, for instance that contributed by the proposers themselves. It is planned to select 4-6 projects as a maximum.

## 4.8 Expressions of interest

There will be the opportunity for project proposers to submit an initial brief Expression of Interest for their project. This would be, a maximum of 500 words, including a description of the idea, the data required and the outcomes envisaged. The purpose of this step is to begin a dialogue between the applicants and the BiCIKL partners around the nature of the proposal, to include the scale and the complexity of the proposal and overall doability. This should help ensure each project is optimally framed for the capabilities and resources available within BiCIKL.

#### 4.9 Proposal Submission

The expression of interest and final proposal submission will be online via an electronic form. The URLs for the form will be made available when the call process opens. There will be word limits to the various sections in the submission form to constrain the length of the proposal.

Proposals will need to clearly articulate the scientific goals that will be addressed through the study, the data resources and/or services (ie proposals should identify what kind of cross-domain linked data and which infrastructures they will use) that will need to be accessed during the study and the scientific impact it is hoped will be realised.

Proposals need to be concise but readable and proposers should assume that reviewers are not fully versed with topic context and should explain it in their application.

Proposals must be submitted by the principal investigator. All named proposers will be notified that the proposal has been submitted.

#### 4.10 Eligibility and scope screening

All submitted proposals will be screened that they meet the eligibility criteria and scope of the call. The authors of the proposals should cite the relevance of their proposed project with the BiCIKL project and its compliance to the eligibility criteria, in specific sections. This will be completed by a subset of the BiCIKL Access Provision Panel (see below).

#### 4.11 Review

After eligibility and scope screening, eligible proposals will be sent to three external reviewers after the submission deadline, from a reviewer panel list maintained by the BiCIKL project. External reviewers will be chosen by the Pillar Plllar 2 lead, from a pool of previously identified scientists with relevant expertise. The reviews will be requested according to a predefined template and will be submitted via an electronic form.

#### 4.12 Evaluation and project selection Process

Proposals that meet the Eligibility Criteria and scope, and that have been reviewed by external scientific experts, will be reviewed by a BiCIKL Access Provision Panel, made up of community-oriented experts in the field of biodiversity, including at least one representative from each WP4/5 partner. This Committee, which we expect to meet virtually, could include members of the reviewing panel some of whom will have been active in the reviews themselves. In cases where a project proponent sits on the evaluation committee, they will step out of the review process when their project is discussed.

Members of the BiCIKL Access Provision Panel will be asked to represent at least one proposed project during the meeting, highlighting the strengths and weaknesses, and key points made by the reviewers.

Proposals will be reviewed by a minimum of three Evaluation Committee members against a predefined set of headline criteria under the following headings:

#### Scientific focus, scope, need

- a) Are the objectives of the proposal clearly defined?
- b) Does the proposal build upon existing biodiversity knowledge?
- c) Does the proposed work meet a demonstrated scientific need?
- d) Is the proposal innovative?

#### **Quality of science**

- a) Is the proposed study technically excellent? Is the proposed technical approach the most appropriate? Does the proposal explain the reasoning behind the choice of technical approach?
- b) Does the proposal address improving the integration of disparate data types in line with the broad aims of the BiCIKL project?
- c) Does the proposal represent good value for money?

#### Doability, within the resources available within BiCIKL

- a) A proportion of the data requirements must be addressable by at least 2 BiCIKL infrastructures
- b) Are the requested infrastructures contribution possible within the budget envelope of the Pillar 2, within BiCIKL
- c) Is the requested work technically feasible using currently available methodologies

#### Dissemination of the project after the funded phase

- a) A brief report from the applicants, to the BiCIKL coordinator will be required, due by March 31st 2024.
- b) What will be done during the project to ensure that its outputs are sustained after the end of the project?
- c) Beyond dissemination actions, what measures will the project put in place to collate evidence on the uptake (i.e. impact) of the project outputs during the project (where relevant) and after its completion?
- d) If the work is not carried out, what are the risks/consequences?
- e) There must be evidence that the resources provided by BiCIKL will be used for instance the proposers should indicate the resources that will be used to follow up on the data set supplied or services provided.

Following the evaluation of all the projects, the BiCIKL Access Provision Panel may choose to make a final project selection decision based on additional criteria, in order to take account of relevant diversity measures represented from across the applications, including gender balance, career position and nationality.

## 4.13 Scoring Scale

Each of the four Criteria will be given a score of 0-5, where:

- 0: Fails to address the criterion or missing information
- 1: Criterion poorly addressed/serious weaknesses are inherent in the methodology or are unlikely to be addressed without fundamental revision of proposed work
- 2: Fair/some weaknesses but these can be addressed with significant revision to proposed work
- 3: Good/shortcomings are present, minor revisions proposed
- 4: Very good/criterion well addressed
- 5: Excellent

Please note that half marks may be given.

Note that if we receive fewer proposals than can be accommodated by the funding envelope for the scheme there is no expectation that all proposals will be funded. Proposals will be evaluated against minimum acceptance criteria and only those reaching a minimum acceptable score will be accepted for further work.

Project selection will be made by the Access Provision Panel and will be final. There is insufficient time in the overall BiCIKL project to permit a rebuttal phase.

Following the evaluation committee decisions, the outcomes of the proposals will be communicated by email to each of the submitters. For successful projects the next stage will be to agree the execution plan, across the relevant project partners, for the work that will be done to address the proposal. The format for the project plan will be a brief project plan (1-2 pages max, bullet format), with agreed resources.

When the projects are completed a knowledge corpus, in a format to be agreed following the pilot phase will be communicated to the proposers, by email and via a meeting between the BiCIKL partners and the proposers.

#### **Contact person:**

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## 5 Acknowledgements

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