Ocean Drilling Legacy Assets Projects (LEAPs) provide a new mechanism for collaborations that maximize the impact of past scientific ocean drilling programs.

Ocean Drilling Legacy Assets Projects

Proposal Submission Guildelines



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IODP Science Evaluation Panel (SEP): Proposal Submission Guidelines

Approved by *JOIDES Resolution* Facility Board: **August 2023** Latest Revision: **January 2024**

Section 1: Introduction

Ocean Drilling Legacy Assets Projects (LEAPs) are standalone research endeavors that: (1) address at least one aspect of the <u>2050 Science Framework</u>, and (2) have objectives that maximize the return on the legacy assets of current and past scientific ocean drilling programs **without new drilling**. Examples of legacy assets are cores, samples, data, open boreholes, and downhole observatories from current and past scientific ocean drilling programs.

LEAPs are a new type of project for international and interdisciplinary collaborations under the umbrella of the scientific ocean drilling programs. They provide a mechanism for open community engagement and for promoting diversity of institutions, expertise, perspectives, and participants. LEAPs also provide an opportunity through which researchers can increase the visibility of their research and results.

Avenues of LEAP research could include, for example, the production of new data from samples, integration of data across multiple expeditions and/or multiple boreholes, incorporation of legacy borehole data with new data, application of a new method or technology that was not available when the legacy assets were collected, or measurements in legacy drillholes to address new problems in innovative and creative ways.

LEAPs do not replace other research mechanisms (e.g., individual proposals to funding agencies for sample requests or data analysis); instead, they are intended to provide a new avenue to facilitate collaboration at scales larger than conventional single or multi-proponent research projects.

The definition for LEAPs is deliberately broad to provide flexibility for new approaches, integrations, and technology uses that foster coordinated multidisciplinary and international research efforts. LEAPs are novel and different from established research endeavors because LEAPs:

- emphasize the use of legacy assets,
- require programmatic endorsement or approval from a review body,
- encourage open involvement and participation from the community,
- mentor early career scientists through inclusion in the science party, and
- require focused and dedicated time for the research.

Each LEAP must include a Principal Lead Proponent, who is responsible for implementing the project, and a science party with participants from multiple countries representing an interdisciplinary approach. There is no limit on the size of the science party, but all members of the science party and all proponents must have an active role in the proposed research. Proponents and science party members can come from any country; they are not limited to IODP-member countries.

1-1 Process Overview

LEAPs are proposal-driven research collaborations. Proposals are initiated within the scientific community and are submitted as a Preliminary Proposal to the International Ocean Discovery Program (IODP) Science Support Office (SSO) through the IODP Proposal Database System (PDB). The Science Evaluation Panel (SEP) reviews each proposal, and if positively reviewed, the proponent team invites broader community involvement and discussion through a workshop or other mechanism. Through this mechanism, participation in the LEAP is expanded to a science party that includes the original proponents and appropriate members of the broader science community. The proposal is then revised based on community input, submitted as a Full Proposal, and reviewed by SEP for endorsement as an official LEAP. Endorsement as an official LEAP does not guarantee access to the legacy assets or funding, but it does provide increased visibility for implementing the next steps.

Each LEAP proposal is submitted by a lead proponent who holds primary responsibility for the proposal and who serves as the point-of-contact with the SSO. It is the lead proponent's responsibility to make sure the proposal represents the proponent team and that the proponent team is kept up-to-date on the proposal's status. Scientists who are not part of the proponent team may also participate in LEAP research; these scientists and the proponent team make up the LEAP's science party.

1-2 Proposal and Data Confidentiality

All LEAP proposals are confidential documents throughout the evaluation process. Individuals who receive and review LEAP proposals must agree not to disclose or disseminate proposal contents and not to discuss the proposal outside the context of their roles within IODP. To encourage involvement from the broader community in projects, LEAP cover sheets and proponent lists will be publicly accessible on the <u>www.iodp.org</u> website upon acceptance of the proposal for consideration.

Section 2: Summary of Proposal Requirements

IODP collects all LEAP proposal material electronically in the IODP Proposal Database System (PDB), which is accessible through <u>www.iodp.org</u>. If you encounter submission problems, contact the IODP Science Support Office (science@iodp.org).

All proposals must adhere to the following formatting requirements:

- Paper Size: A4 or US Letter
- Font Size: 11 or 12 point
- Line Spacing: 1.5
- Margin: 2.5 cm all around
- Figures: Cannot be larger than a single-page A4 or US Letter
- In-text References: Must be (Author, year) and not numerical superscripts

Proposal deadlines will be announced on <u>www.iodp.org</u>. The maximum file size for the PDF of the main text, including figures, is 15 MB.

The table below provides a summary of the proposal requirements. All forms are available in the PDB and are completed within that electronic system. The remainder of this document provides important information about content requirements and should be read carefully.

| Proposal Components | Preliminary Proposal | Full Proposal |
|---|-------------------------------------|-------------------------------------|
| Cover Sheet | Required | Required |
| Abstract | ≤ 400 words | ≤ 400 words |
| Scientific Objectives | ≤ 250 words | ≤ 250 words |
| Management Plan | ≤ 600 words | ≤ 600 words |
| Engagement Plan / Results | ≤ 400 words | ≤ 400 words |
| Main Text (inc. figure and table captions) | ≤ 3,000 words | ≤ 5,000 words |
| Figures and Tables (inc. in Main Text PDF) | ≤ 5 | ≤ 8 |
| List of Proponents | Required (maximum of 10 proponents) | Required (maximum of 15 proponents) |
| Science Party | n/a | Required |
| Curriculum Vitae (CV) | Required for lead proponents | Required for lead proponents |
| Change Form | n/a | ≤ 400 words |

Table of Proposal Requirements

Section 3: Submitting a Preliminary Proposal

Proponents who have an idea for a LEAP must begin by submitting a Preliminary Proposal. The Preliminary Proposal should outline the science that addresses one or more of the Science Objectives and/or Flagship Initiatives in the *2050 Science Framework*, and the proposal may describe how the project addresses or uses one or more of the Enabling Elements.

For Preliminary Proposals that will use archived core, it is highly recommended that proponents contact the appropriate <u>IODP Curator(s)</u> before proposal submission in order to discuss sampling needs and core facility access. For Preliminary Proposals that use other types of data or legacy assets, contacting the appropriate manager(s) is also highly recommended. Early and regular contact with curators and managers will help proponents understand the availability of resources as they develop their proposal. Note that for Full Proposals, contacting the appropriate IODP Curator(s) or legacy asset manager(s) before submission is required.

3-1 Preliminary Proposal Format and Scope

A Preliminary Proposal should describe a compelling hypothesis, question, or idea that can be addressed using the legacy assets of the scientific ocean drilling programs. Legacy assets are defined inclusively as all material, data, and infrastructure resulting from past and present scientific ocean drilling programs (e.g., samples, data, open drillholes, and downhole observatories). LEAPs should not include new drilling. Proposals should be multidisciplinary and of interest to the global scientific community.

The main text of a Preliminary Proposal may contain no more than 3,000 words, including captions for figures and tables, and 5 or fewer figures and/or tables (Section 2). The Main Text of the Preliminary Proposal should:

- State the scientific objectives and explain how those objectives relate to or advance the *2050 Science Framework*.
- Describe the target legacy assets and justify the need for using legacy assets to accomplish the scientific objectives. If using legacy core, state the prime targets (i.e., specific sites, holes, and depth intervals).
- Describe the proposed research approach and methods with details on the suitability for addressing the scientific objectives.
- Reference any previous or relevant research.

- Describe any development or application of advanced and non-standard research or technical approaches.
- Note any relationships to other bio- or geoscience programs or initiatives and opportunities for international cooperation beyond IODP.
- Describe the expected outcomes, likelihood of success, and how success will be assessed and measured.

3-2 Additional Required Information

Preliminary Proposals include the following items that do not count against the word count limit (see Section 2) and that are created interactively or uploaded separately in PDB:

- An official proposal **cover sheet**, complete with an abstract containing no more than 400 words and a statement of the scientific objectives containing no more than 250 words.
- A **list of proponents** (maximum 10), specifying the name, affiliation, email address, ORCID identifier (when available), and role of each proponent. The Principal Lead Proponent, who will be responsible for implementing the LEAP, must be identified. Up to 2 additional lead proponents may also be specified. The proponent group must include participants from more than one country and who represent more than one discipline. All proponents must have an active and explicit role in the proposed research.
- A two-page **curriculum vitae** or biographical sketch for the lead proponents, combined into one PDF.
- An **Engagement Plan** that describes how the proponent group will open their initial project idea to input and participation from the broader community (e.g., through an in-person or virtual workshop). Part of the aim of the engagement activity is to build an inclusive science party.
- A **Management Plan** describing leadership and roles, project approaches, expected size of the science party, plans for obtaining funding to complete the research, and timelines for community engagement, research and analysis, and reporting. The Management Plan should also describe how the science party will collaborate in a focused or dedicated manner on the research (e.g., in-person sample party, weekly dedicated zooms, workshop before an AGU Fall Meeting).

• A separate PDF document of the proposal's **references** that are cited in the Main Text.

Upon acceptance of the proposal by the SSO, individuals listed as proponents will receive an automatic email notification to confirm that they have agreed to this role.

3-3 Review of Preliminary Proposals

The SSO sends Preliminary Proposals to the Science Evaluation Panel (SEP) for review. The SEP consists of members of the international scientific community who volunteer to serve IODP. The SEP is a rich advisory resource for proponents in providing guidance and critical advice about the science and feasibility of their proposals.

3-3-A Proposal Evaluation

The SEP Co-Chairs assign watchdogs to examine and present each Preliminary Proposal to the panel. This watchdog team typically includes three scientists to assess the scientific objectives presented in the proposal and, if appropriate for the proposal, a fourth watchdog to represent the asset or assets (e.g., IODP core curator, data manager).

The SEP assesses each Preliminary Proposal in terms of its relevance to the *2050 Science Framework*, the suitability of the legacy assets for addressing the proposed scientific objectives, and whether the achievement of those objectives would likely result in scientific advances. SEP will consider, based on input from the watchdogs, the following questions while reviewing the Preliminary Proposal:

- Will the proposal significantly advance one or more goals of the 2050 Science Framework?
- Is the plan for conducting the research well-reasoned, well-organized, and based on a sound rationale?
- How well qualified is the proponent team to conduct the proposed activities?
- Is it feasible for the available legacy assets to support the proposed scientific questions?
- Do the proponents present a strong plan for managing the project and completing the work in a timely manner?

• Does the Engagement Plan open the project to input and participation by the broader community?

3-3-B Proposal Decisions

After the SEP meeting, proponents receive a written summary of the proposal's review, which will include one of the following two decisions:

- <u>Request for Full Proposal</u>: The SEP recommends the development of a Full Proposal. A project must be opened to the broader community (e.g., through a workshop or other mechanism) for input before a Full Proposal can be submitted.
- <u>Decline</u>: The SEP declines the Preliminary Proposal if the science objectives are not well described or are not compelling, if the strategy for using legacy assets doesn't adequately support the science questions, and/or if the project is not feasible based on the available legacy assets. SEP can include a supportive message to re-scope the proposed research and submit a thoroughly new Preliminary Proposal.

It is recommended that a proponent contact the SSO (science@iodp.org) with any questions about the review or next steps in the proposal process.

Section 4: Submitting a Full Proposal

A Full Proposal expands an initial idea into a well-justified scientific plan that can be implemented with available legacy assets and within a reasonable length of time. Proponents may submit a Full Proposal if advised to do so by the SEP based on review of a Preliminary Proposal and if the project has solicited input and participation from the boarder community through a workshop or other mechanism.

For Full Proposals that will use archived core, proponents must contact the appropriate <u>IODP Curator(s)</u> before proposal submission in order to discuss sampling needs and core facility access. For Full Proposals that use other types of data or legacy assets, proponents should also contact the manager(s) of those legacy assets as appropriate. Early and regular contact with curators and managers will help proponents understand the availability of resources as they develop their proposal.

4-1 Full Proposal Format and Scope

A Full Proposal should describe all aspects of the scientific objectives, the use of legacy assets, the research approaches, and the timeline necessary to complete the work. The main text of a Full Proposal may contain no more than 5,000 words, including captions for figures and tables, and 8 or fewer figures and/or tables (see Section 2). The Main Text of the Full Proposal should:

- State the scientific objectives and explain how those objectives relate to or advance the *2050 Science Framework*.
- Describe the target legacy assets and justify the need for using legacy assets to accomplish the scientific objectives. If using legacy core, state the prime targets (i.e., specific site, holes, and depth intervals).
- Describe the proposed research approach and suitability of the methods for addressing the scientific objectives.
- Reference any previous or relevant research.
- Describe any development or application of advanced and non-standard research or technical approaches.
- Note any relationships to other bio- or geoscience programs or initiatives.
- Describe the expected outcomes, likelihood of success, and how success will be assessed and measured.

4-2 Additional Required Information

Full Proposals include the following items that do not count against the word count limit (see Section 2) and that are created interactively or uploaded separately in PDB:

- An official proposal **cover sheet**, complete with an abstract containing no more than 400 words and a statement of the scientific objectives containing no more than 250 words.
- A **list of proponents** (maximum 15), specifying the name, affiliation, email address, ORCID identifier (when available), and role of each proponent. The Principal Lead Proponent, who will be responsible for implementing the LEAP, must be identified. Up to 4 additional lead proponents may also be specified. The proponent group must include participants from more than one country and who represent more than one discipline.

- A list of the **science party**, specifying the name, affiliation, email address, ORCID identifier (when available), and role of each science party member. IODP encourages the participation of early career researchers and scientific, national, and cultural diversity.
- A two-page **curriculum vitae** or biographical sketch for the lead proponents, combined into one PDF.
- A summary of the **engagement results** that discusses whether the Engagement Plan was implemented as proposed, how many people participated and their demographics (e.g., country, discipline) in the engagement activity, and how the proposal changed as a result.
- A **Management Plan** describing leadership and roles, project approaches, expected size and make-up of the science party, plans for obtaining funding to complete the research, and timelines for community engagement, research and analysis, and reporting. The Management Plan should also describe how the science party will collaborate in a focused or dedicated manner on the research (e.g., in person sample party, weekly dedicated zooms, workshop before an AGU Fall Conference), and how results will be disseminated.
- A **Change Form** that summarizes how the proposal has evolved in response to the initial SEP review and in response to community engagement.
- A separate PDF document of the proposal's **references** that are cited in the Main Text.

Upon acceptance of the proposal by the SSO, individuals listed as proponents will receive an automatic email notification to confirm that they have agreed to this role.

4-3 Review of Full Proposals

The SSO sends Full Proposals to the Science Evaluation Panel (SEP) for review.

4-3-A Proposal Evaluation

The SEP Co-Chairs assign watchdogs to examine and present each Full Proposal to the panel. This watchdog team typically includes three scientists to assess the scientific objectives presented in the proposal and, if appropriate for the proposal, a

fourth watchdog to represent the asset or assets (e.g., IODP core curator, data manager).

The SEP assesses each Full Proposal in terms of its relevance to the *2050 Science Framework*, the suitability of the legacy assets for addressing the proposed scientific objectives, and whether the achievement of those objectives would likely result in scientific advances. SEP will consider, based on input from the watchdogs, the following questions while reviewing the Full Proposal:

- Will the proposal significantly advance one or more goals of the *2050 Science Framework*?
- Is the plan for conducting the research well-reasoned, well-organized, and based on a sound rationale?
- How well qualified is the proponent team to lead the proposed activity?
- How well has the strategy to access cores, samples, and/or data been defined?
- Is it feasible for the available legacy assets to support the proposed scientific questions?
- Do the proponents present a strong plan for managing the project and completing the work in a timely manner?

4-3-B <u>Proposal Decisions</u>

After the meeting, proponents receive a written summary of the SEP's review, which will include one of the following two decisions:

- <u>Endorsement</u>: If the SEP endorses the proposal as an official LEAP, the proposal will then receive a project number (e.g., LEAP 1, LEAP 2, LEAP 3) and will be placed on <u>www.iodp.org</u>. The SSO will contact the Principal Lead Proponent to discuss timelines and next steps.
- <u>Declined</u>: If the proposal is declined, then the proposal did not receive endorsement and is no longer active in the system. Proponents may consider the SEP comments and reenter the system through the submission of a new Preliminary Proposal. Reasons that a proposal might not advance include:
 - The science objectives are not well described or are not compelling.

- The strategy for using legacy assets doesn't adequately support the science questions.
- The project is not feasible because the necessary legacy assets are not available or because the research approaches are unlikely to be successful.
- The proponents were unresponsive to the SEP and/or community input.
- The proposal has scientific objectives that conform poorly with the overall goals of the *2050 Science Framework* or that do not bring added value to the scientific ocean drilling programs.

Section 5: Reporting

To document outcomes, the lead proponent of each endorsed LEAP must submit a project report summarizing the results of the research. LEAP reports must discuss the project's motivation, methods, and results. The report should contain an abstract summarizing key findings and contain a list of the project's science party.

The timeline for producing the report must be discussed in the proposal's Management Plan, and the report must be delivered as a PDF to the SSO (<u>science@iodp.org</u>). Accepted LEAP reports will be posted on <u>www.iodp.org</u>, as will references to any peer-reviewed publications resulting from the research and any references to newly produced data.