

## ICDP Guidelines for Proposal Submission

The International Continental Scientific Drilling Program (ICDP) offers international science teams the opportunity to compete for funds to support drilling operations. Calls for proposals will be published regularly on the ICDP webpage and in EOS. An independent panel, the Science Advisory Group (SAG), evaluates all proposals submitted from a scientific point of view and gives recommendations to the other panels, the Executive Committee and the Assembly of Governors for further process. The [ICDP Program Office](#) at GFZ, Potsdam, Germany handles all aspects of the proposal submission and review process.

ICDP considers four types of proposals for evaluation: preliminary proposals, workshop proposals, full proposals, and addenda to active proposals. All proposals must be submitted to the [ICDP Program Office](#) by the annual deadline of 15 January. Proponents should submit the proposal as a single PDF document, with all pages in A4 or letter size and using an 11 point font and 2.5 cm margins. The ICDP Program Office does not accept items that do not meet the specified requirements. Proposals that arrive late will be considered for evaluation the following year.

Proposals will be reviewed and assigned priority based on the following criteria (note that not all criteria apply to a pre- or workshop proposal, which are meant to accumulate the complete information needed for a full proposal):

1. **Quality of Science.** Does the project address fundamental scientific issues of global significance, rather than just local problems? Is it international in scope, so that the best drilling targets worldwide are being selected to address these scientific issues?
2. **Need for Drilling.** Is drilling necessary to achieve the stated scientific objectives, or can they be achieved with surface-based studies at lesser expense?
3. **Qualifications of Proponents.** Is the experience and productivity of the PIs plus the breadth and international diversity of the science team/workshop attendees sufficient?
4. **Societal Relevance.** Is the project relevant to societal needs, such as energy, mineral and water resources, environmental/climate change, geologic hazards, etc.?
5. **Budget.** Is the budget carefully prepared and reasonable given the scope of the workshop or drilling project?
6. **Responsiveness.** Where applicable, have previous ICDP recommendations been taken into account in the present proposal?
7. **Technical Feasibility.** Is there a well-considered and technologically sound drilling and operational plan? Is prior experience of the PIs or input from the ICDP Operational Support Group well utilized?
8. **Adequacy of Site Characterization.** Is the drilling target already well defined through geological and geophysical site surveys? Are permitting and environmental approvals at hand?
9. **Cost Effectiveness.** Is there a cost-effective drilling, sampling and downhole measurements plan, which minimizes the depth, difficulty and hence cost of the project while still ensuring that the scientific goals will be met? Does this plan take advantage of existing holes or financial/technical support from other institutions, agencies, or private industry?
10. **Project Organization.** Is there a sound project management plan, with clearly defined leadership and operational/scientific responsibilities outlined for all key aspects of the project? Is there a convincing education and outreach plan?

SAG forwards a proposal ranking and written assessments to the Executive Committee (EC) for review of managerial, financial and strategic issues. The EC authorizes workshops and recommends

full proposals for acceptance to the Assembly of Governors (AOG). AOG authorizes full proposals as an ICDP project, requests modifications or rejects. The EC and AOG meet in early summer after the SAG meeting. Following the panel reviews, PIs will receive the SAG review and a written summary of the EC and AOG deliberations instructing them of any requirements, conditions, or recommendations usually by July each year.

## Full Proposal

Proponents who have previously carried out an ICDP-funded drilling workshop, or who can otherwise demonstrate that they have held comprehensive, international scientific and technical planning meetings, may submit a full proposal.

A Full Proposal should contain:

1. Official ICDP proposal cover sheet\*
2. Main proposal of max. 20 pages (A4 or letter size, 11 point font, 2.5 cm margins), including all the points mentioned in the list overleaf. Details of the budget, technical and drilling plans, data management plans and site survey data (as listed below) may be included as appendices.
3. List of references
4. Standard 2-page curriculum vitae of all PIs listed in the cover sheet (see template)
5. Detailed budget including at least two full quotes from drilling contractors. These should include costs for site preparation, drilling, downhole measurements, on-site sample handling and analyses, downhole monitoring, logistics/ travel, etc. and should allow separation of costs for contracts, consumables, and services such as mob/demob as well as time-dependent services in different phases
6. Detailed technical plan, a permitting plan and authority  
Note: ICDP categorizes a project according to its technical complexity and requires different degrees of technical planning of executive operations
7. A detailed drilling, testing and logging schedule - time table
8. A project management plan, including roles and responsibilities for key personnel and all PIs in all essential scientific and operational aspects of the project
9. A detailed description of the available site-survey data and any plans for acquiring additional data, and discussion of how the drilling targets relate to those data
10. An Education and Outreach Plan, its implementation and the responsibilities
11. A simple Risk Matrix should be included already at this stage to identify possible major risks (see Figure 1 as an example) that might impact the project and define a first mitigation strategy to avoid or mitigate disasters and failures in budget, health and safety or environmental aspects  
**Note:** Depending on the type and size of project this needs to be deepened at least a few months before drilling.
12. Plans for data management and long-term sample curation
13. If this is a revised proposal, a clear response to ALL SAG comments should be included as a cover letter or appendix.

Proponents are advised to provide a clear table/overview of the content of appendices and avoid voluminous text. Published papers and other public material should be cited and other excessive material should be made available for download.

\*Note, all proponents listed in the cover sheet will be counted as Principal Investigators (PIs) for that proposal, and will be cited in the order listed.

The 20 pages main proposal shall include:

- Introduction (location and background information, project history)
- Motivation and goals: Discuss the scientific objectives and explain how those objectives relate to, or advance ICDP's scientific themes ([see ICDP science plan](#)).
- Explain why the drilling site and research goals are of global and far-reaching importance and why drilling is needed to achieve these goals. ICDP does not consider topics of local or regional relevance only.
- Discuss the societal relevance of the project, including a summary of plans for education and outreach plus the expected benefits. Detailed plans can be included as appendices
- Discuss the expected scientific outcome of drilling and any subsequent work required to complete the overall project. Mention previous and relevant work.
- Consider deep life studies. Can microbiological studies be integrated usefully into your project? Get the respective experts on board if so.
- Present a well-defined strategy for addressing the scientific objectives through drilling, core/cuttings/fluid sampling, down-hole measurements, laboratory testing on recovered samples, and integration with existing or planned surface-based studies.
- Describe the proposed drill site(s), summarizing evidence including geologic maps, seismic sections and other geophysical data, penetration depths, expected lithologies, and relevant information from prior drilling operations. Provide a geological or seismic section with projected drill path and depth or similar. The full details of site survey data can be included as appendices.
- Describe briefly any relationships of the drilling project or supplemental science investigations to other international geoscience programs.
- In case of similar projects already conducted via ICDP accurately describe the relationship to other proposals and to what degree this project differs from previous ones.
- Provide a budget plan (full details may be given in the appendices).
- Appendices should be clear and limited to the requirements listed above, with an associated table of contents.

<b>Project Risks</b>								
<b>4) General (based on previous ICDP project issues)</b>								
No	Description	Likelihood	Impact	Risk Pot.	Mitigation Strategy	Likelihood*	Impact*	Risk Pot.*
A	Delays, due to weather, incidents, permits	High	Low	Moderate	Flexible planning w/ variable time plans	Moderate	Low	Low
B	Cost overrun	High	Low	Moderate	Professional project management, better site survey, contingency funding (due diligent preparation)	Moderate	Low	Low
C	Missing 3 <sup>rd</sup> party funding	Moderate	High	High	Planning in phases or de-scoping opts	Low	High	Moderate
D	Understaffing	Moderate	Moderate	Moderate	Prof. project management, training courses, reducing on-site science to the minimum, increase budget	Low	Low	Low
E	Poor engineering planning and operational management	High	High	High	Prof. project management, training courses, implementation of drilling-well-on paper (DWOP) and QHSE procedures	Moderate	Moderate	Moderate
F	Unexpected geology	High	Moderate	High	Better site survey, flexible planning, contingency drill plans, <DWOP>	Moderate	Low	Low
G	Missing or short supplies of services and equipment	High	Moderate	Moderate	Prof. project management, detailed planning w/ Plan B	Low	Moderate	Low
H	Missing coordination	Moderate	Low	Low	Detailed planning workshops with all groups involved, DWOP, professional wellsite management	Low	Low	Low
I	Missing communication in Science Team and with OSG	High	Moderate	Moderate	Prof. project management with constant updates, involvement of key players, detailed planning workshops with all groups involved, kick-off meeting	Low	Moderate	Moderate
J	Late recognition of obstacles	Low	Moderate	Low	Early warning, daily communication between groups on site	Low	Low	Low

Figure 1: General project risks and respective mitigation strategies are already expected in a Full Proposal. Individual aspects need to be considered in much more detail for each project a few months before the drilling starts depending.

If further information is needed please contact the ICDP [Operational Support Group](#) in due time to get support with the proposal writing and use the [ICDP Primer “Planning, Managing, and Executing Continental Scientific Drilling Projects”](#) for proposal preparation.