

ICDP Guidelines for Proposal Submission

Full Proposals

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 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 assessment. The [ICDP Program Office](#) at GFZ, Potsdam, Germany handles all aspects of the proposal submission and organizes the review process.

ICDP considers six types of proposals for evaluation: preliminary proposals, workshop proposals, full proposals, Land-to-Sea proposals, fast-track full proposals, and addenda to active proposals. All proposals must be submitted via email to: proposal.submission@icdp-online.org by the annual deadline of 15 January. Proponents should submit the proposal as a single PDF document (do not create a pdf 'portfolio') using the current [proposal cover sheet](#) with all pages in A4 or letter size and using an 11-point font and 2.5 cm margins. Submissions of proposals of more than 10MB file size must be arranged with the ICDP office to avoid issues with email size limitations. Submissions of all proposals reviewed by ICDP in the past must be accompanied by a cover letter listing in detail how ICDPs previous recommendations have been addressed. 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:

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 **drilling project**?
6. **Responsiveness.** Where applicable, have previous SAG/ICDP recommendations been taken into account in the present proposal?
7. **Technical Feasibility.** Are the drilling and operational plans well-considered and technologically sound? 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 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? Were project risks identified, and mitigation strategies developed?
- 11. Data and Sample Management Plan.** Are there robust plans for the data and sample management? Is the curation of samples and data well organized and access to the international community secured?

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 spring 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 in early summer.

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. Current [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 **List A** 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 principal investigators (max. 4) and co-investigators (max. 10) 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 list of authorities where needed. 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 (see checklist)
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. Plans for data and sample management and long-term sample curation, including responsibilities, as well as required human and financial resources. This includes travel costs for the mandatory ICDP Data & Sample Management Training Course.
11. An Education and Outreach Plan, its implementation and the responsibilities

12. A comprehensive Risk Assessment in the form of a Risk Matrix (example provided in Figure 1). The assessment should identify and evaluate all major risks that may affect the successful implementation of the project, including, but not limited to: logistical, health, safety, security, and financial risks, as well as broader political and operational threats. The Risk Matrix should establish appropriate strategies and mitigation measures to prevent or minimize potential adverse impacts on the project's budget, health and safety, and environmental constraints and impacts. **Note:** Depending on the type and size of project, aspects of this Risk Assessment may need to be further developed a few months immediately before drilling in conjunction with the ICDP Program Office.
13. If this is a revised proposal, a clear response to ALL SAG comments should be included as a cover letter.

Proponents are advised to provide a clear table/overview of the content of appendices and to only include information relating to the requirements listed above. The appendices should not contain details on scientific rationale, concepts or analytical methods. Published papers and other public material should be cited but not included within the proposal.

*Note, all Principal Investigators (max. 4) and Co-Investigators (max. 10) listed in the cover sheet will be cited in the order listed.

List A: The 20 pages of the main proposal should 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 [ICDPs 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 that only have local relevance.
- 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 subsequent work required to complete the overall project. Mention previous and relevant work.
- Consider deep life studies. Can microbiological studies be integrated usefully into the project? Get the respective experts on board if so. If this is not possible, give a detailed explanation as to why not.
- 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), including geologic maps, seismic sections and other geophysical data, penetration depths, expected lithologies, and relevant information from prior drilling operations. Provide a geological and/or seismic section with projected drill path and depth or similar. The full details of site survey data can be included as appendices.
- Describe 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 summary (full details inclusive a plan from where matching funds will be solicited should be given in the appendices). Please note that postdrilling science (i.e. core analyses after the initial core-scanning, opening, and description) should not be included in the budget.

No	Description	Likelihood	Impact	Risk Pot.	Mitigation Strategy	Likelihood*	Impact*	Risk Pot.*
A	Delays, due to weather, incidents, permits	High	Low	Mode-rate	Flexible planning w/ variable time plans	Mode-rate	Low	Low
B	Cost overrun	High	Low	Mode-rate	Professional project management, better site survey, contingency funding (due diligent preparation)	Mode-rate	Low	Low
C	Missing 3 rd party funding	Mode-rate	High	High	Planning in phases or de-scoping opts	Low	High	Mode-rate
D	Understaffing	Mode-rate	Mode-rate	Mode-rate	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	Mode-rate	Mode-rate	Mode-rate
F	Unexpected geology	High	Mode-rate	High	Better site survey, flexible planning, contingency drill plans, <DWOP>	Mode-rate	Low	Low
G	Missing or short supplies of services and equipment	High	Mode-rate	Mode-rate	Prof. project management, detailed planning w/ Plan B	Low	Mode-rate	Low
H	Missing coordination	Mode-rate	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	Mode-rate	Mode-rate	Prof. project management with constant updates, involvement of key players, detailed planning workshops with all groups involved, kick-off meeting	Low	Mode-rate	Mode-rate
J	Late recognition of obstacles	Low	Mode-rate	Low	Early warning, daily communication between groups on site	Low	Low	Low
K	Missing documentation and reporting	High	Mode-rate	Mode-rate	Require DIS utilization and Initial Science Report in SD	Mode-rate	Low	Low
L	Missing safety planning and implementation	Mode-rate	High	High	Require safety planning in JRV according to host countries law, implementation of QHSE strategy and procedures	Low	Mode-rate	Mode-rate
M	Loss of equipment, loss of hole	Mode-rate	High	Mode-rate	Drilling engineering well planning, written operational procedures on site, DWOP, insurance coverage Contingency funding, Plan B	Low	Mode-rate	Mode-rate
N	Injury and/or fatality	Low	High	High	Increase safety planning and implementation	Negligible	High	Low
O	No public acceptance, NIMBY	Mode-rate	High	High	Outreach actions before drilling	Low	High	Mode-rate

* risk after treatment

Figure: Example of general project risks and respective mitigation strategies. A Full Proposal must include all project-specific risks and mitigation strategies.

If further information is needed, please contact the ICDP Operational Support Group in enough time to get support with the proposal writing.

Use the [ICDP Primer “Planning, Managing, and Executing Continental Scientific Drilling Projects”](#) for proposal preparation.