



Guidelines for joint review of “Amphibious Drilling Proposals” (ADPs)¹

Version 4 (8 June 2016)

The International Ocean Discovery Program (IODP) and the International Continental Scientific Drilling Program (ICDP) support scientific endeavours requiring drilling on the seafloor or on land, respectively. Both programs focus on challenging themes of global geoscientific and socio-economic relevance, including, but not limited to: 1) active faulting, earthquake, and geohazard processes; 2) heat and mass transport, global cycles, and planetary dynamics; 3) environmental and climate change; and 4) the hidden biosphere. Scientific interests in these topics potentially span onshore and offshore drilling objectives, though programmatically crossing the shoreline can be a challenge since IODP is focused on seafloor scientific drilling and ICDP is focused on continental scientific drilling. Although previous onshore-offshore coordinated drilling proposals have been successful (New Jersey sea level and Chicxulub impact structure), IODP and ICDP have developed protocols for joint review of proposals that require scientific drilling both onshore and offshore, here dubbed Amphibious Drilling Proposals (ADPs).

Definition: *Amphibious drilling proposals are those for which full achievement of the scientific objectives requires scientific drilling at both onshore and offshore sites.*

This guideline presents the recommended submission and coordinated evaluation procedures for ADPs in IODP and ICDP. To the extent possible, they generally preserve the normal deadlines and review procedures of the two programs, with an added final step to produce a single integrated review statement that is passed back to proponents and forwarded to both IODP Facility Boards and the ICDP Executive Committee (EC) for potential joint implementation. The joint implementation of a forwarded ADP then is to be resolved between the IODP Facility Boards and ICDP EC and Assembly of Governors, on a case-by-case basis.

ICDP Workshop Proposals and IODP Preliminary Proposals

Development of a successful ADP will normally require a joined workshop to bring together members of the IODP and ICDP communities and to justify the need for both onshore and offshore sites. **Figure 1** presents a flow chart to illustrate the recommended procedure for the coordinated evaluation of ICDP workshop proposals and IODP preliminary proposals for ADPs. ICDP formally accepts workshop proposals that can be funded by ICDP program funds. IODP has no formal workshop program, but most IODP national program member offices (PMOs) or consortium committees (e.g., ECORD) have workshop programs, noting that each has its own process for applying for funds (Magellan+ within ECORD, USSSP in the United States, JDESC in Japan, etc.). Proponents who wish to access workshop funds from these IODP-related

¹ Initially developed Jan/Feb 2015 by the joint ICDP-SAG IODP-SEP committee of Kenneth Miller (IODP SEP), Pierre Francus (ICDP EC), Flavio Anselmetti (ICDP SAG), Jochen Erbacher (IODP Forum), and Sean Gulick (IODP SEP)

programs are responsible for submitting a coordinated workshop proposal to one or more of these program(s).

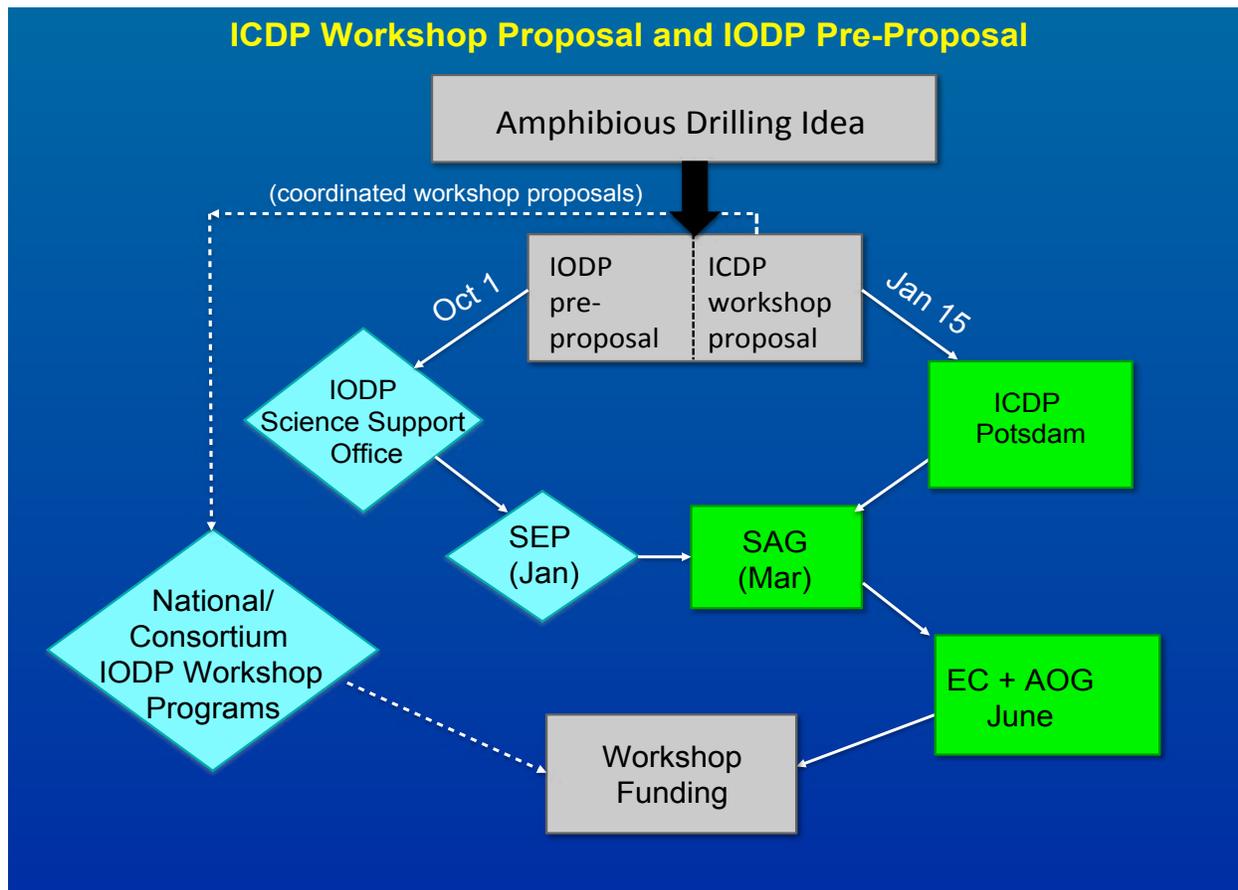


Figure 1. The recommended procedure for the coordinated evaluation of ICDP workshop proposals and IODP preliminary proposals.

Even though ICDP workshop proposals are in some ways equivalent to preliminary proposals within IODP, both have different purposes and thus a different evaluation is being implemented for ICDP workshop and IODP preliminary proposals. While pre-proposals are not required within IODP, they greatly enhance chances of success and lessen the need for future revision of a full proposal. The following recommended procedures for review of ADP workshop proposals and related IODP preliminary proposals, which present the same drilling project, involve coordination between the different ICDP and IODP procedures, but no significant changes to them. In order for timelines to coincide for submission of an ADP to both programs, the target submission date for the IODP preliminary proposal is the October 1 deadline and the target submission date of the ADP workshop proposal is the following January 15 deadline.

Formal ADP workshop proposals submitted to ICDP for its annual January 15 deadline will undergo normal review at the spring meeting of the ICDP SAG. The formal ICDP workshop proposal should be clearly identified as an ADP workshop proposal in the abstract of the submission. An ADP workshop proposal submission to ICDP should include a complete and

realistic workshop agenda, enabling the execution of the workshop and production of a workshop report within a maximum of 12 months following funding. The workshop proposal should describe the scientific objectives of the project, general drilling strategy, and the societal relevance. It is recommended that the workshop plan include: (1) invitation of international experts of the relevant disciplines to provide scientific input to the workshop themes and to foster international collaboration; (2) participation of experts in drilling strategies and technologies; and (3) participation of the operators (ICDP for onshore sites and from JRSO, ESO or CEDEX as appropriate for the offshore sites) to provide some idea of feasibility and preliminary cost estimates. The participation of young scientists should be especially encouraged.

The drilling project presented in the ADP workshop proposal should also be the basis of an IODP pre-proposal submitted to IODP’s October deadline that precedes the January submission of the workshop proposal to ICDP. Like all types of IODP proposals, the IODP pre-proposal must be submitted using the IODP Proposal Database (PDB) system (<http://proposals.iodp.org>) and must follow guidelines for pre-proposals specified in the IODP Proposal Submission Guidelines and the IODP Site Characterization Data Guidelines ([IODP Policies and Guidelines](#)).

The ICDP SAG/EC ADP will review workshop proposals following normal ICDP procedures, and the IODP SEP will review related IODP pre-proposals by following normal IODP procedures. The SEP review will generally occur at its regular January meeting, before the ICDP EC considers the SAG review and makes a decision about ICDP workshop funding. The SEP review will focus primarily on scientific and preliminary logistical feedback that can be provided along with the SAG review to proponents/workshop organizers well before any workshop actually occurs. Funding of an ICDP workshop proposal and a positive pre-proposal review by IODP SEP should lead to a joint IODP-ICDP Full ADP.

Full Proposals

Figure 2 presents a flow chart to illustrate the recommended procedure for the evaluation of ICDP and IODP full ADP proposals. It is recommended that full ADP proposals should be submitted for the 1 October IODP deadline using the IODP proposal template (modified to allow appendices as outlined below) and the IODP Proposal Database electronic submission system (<http://proposals.iodp.org>). If clearly identified as an ADP, the IODP Science Support Office will send a PDF document of the formal IODP submission to the ICDP science office for forwarding to SAG members. As there are differences in IODP and ICDP proposal formats (see next paragraph), proponents may also need to make coordinated ICDP submissions for the annual ICDP 15 January deadline, if required by ICDP. This submission timing will allow time for the IODP-SEP to evaluate the proposal in mid-January, to decide if the proposal warrants revision or external reviews (see IODP Proposal Submission Guidelines). If external reviews are sought, these should be obtained by mid-March, which would require that the reviews be fast tracked by the IODP Science Support Office. This process will allow time for the ICDP SAG to review the joint proposal plus IODP external reviews at its regular mid-March to early April annual meeting. The SAG will forward their review in time for the late spring ICDP EC/OAG meeting and to the IODP Science Support Office by May 1 in time for early summer IODP SEP, when the SEP would normally consider the external reviews plus any proponent response before

making a recommendation that could include endorsement and forwarding to the appropriate IODP facility board for potential implementation.

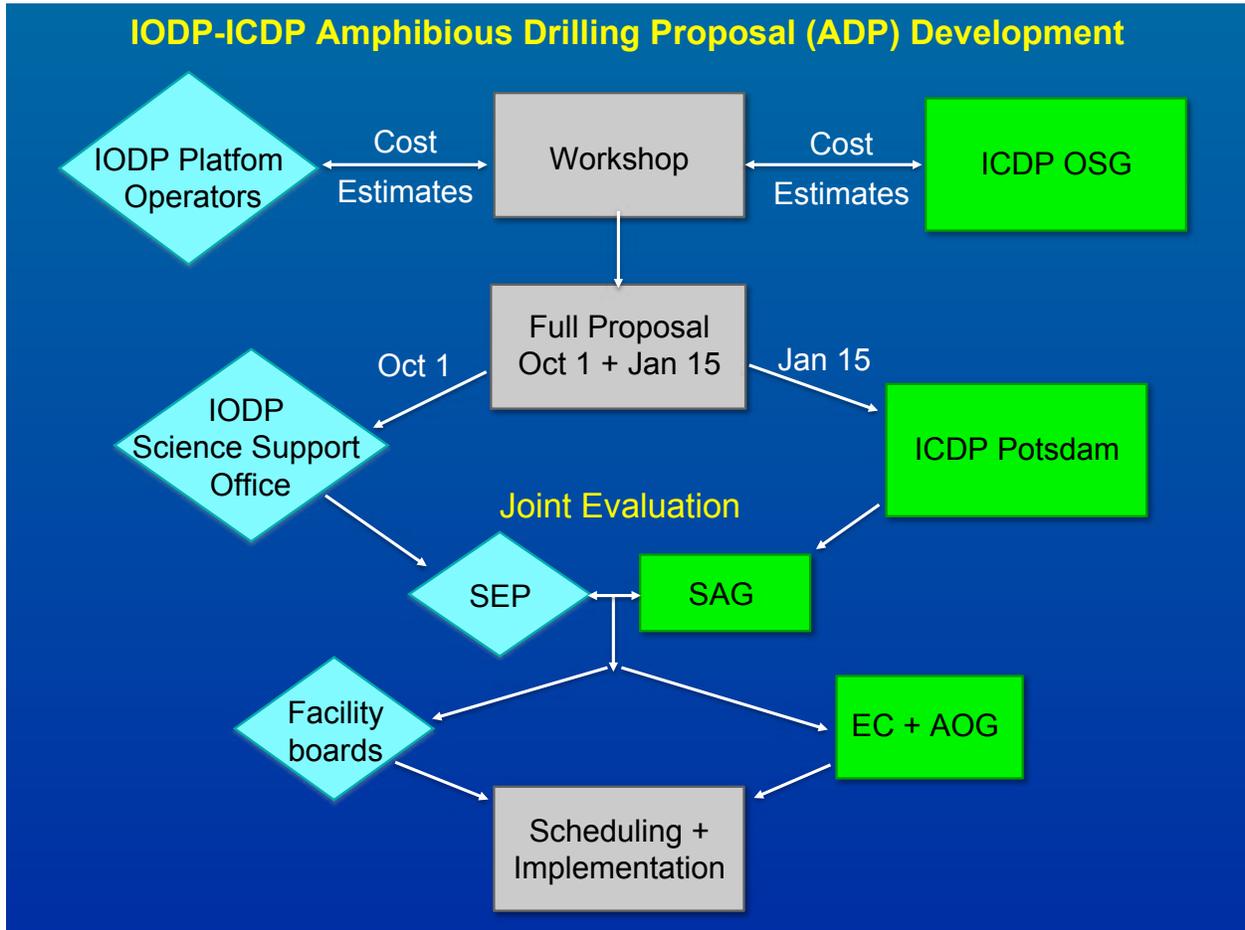


Figure 2. The recommended procedure for the evaluation of ICDP and IODP full ADP proposals.

Full Proposals differ to some extent in ICDP and IODP. In ICDP, key components, aside from the scientific goals and drilling strategy common to both, include developing the scientific team, ensuring that it is sufficiently international. ICDP proposals also include site survey, drilling strategy, and cost information in the body of the proposal, whereas IODP proposals include site survey information in proscribed tables following the proposal and do not include staffing suggestions. We suggest that these standard ICDP proposal components (non-binding science team, international representation, site survey description, and drilling strategy including costing) be included as an appendix to the formal IODP Full ADP submission. The formal IODP ADP must include all IODP Site Forms for offshore sites (and possibly onshore sites if recommended by ICDP) and follow IODP requirements for delivery of site survey information needed to drill offshore sites.

Following the SAG and SEP reviews, the Chairs of these two panels provide a joint evaluation, resulting in an integrated judgment and formal review document using the ADP Proposal

Evaluation Form. This could be accomplished electronically or by sending an appropriate SAG member to the early summer SEP meeting.

Implementation of an Approved ADP

If the full proposal is viewed favourably by the SAG (early spring) and SEP (early summer), it will be forwarded to both the Executive Committee/Assembly of Governors (ICDP) and the appropriate Facility Board (IODP) for consideration and possible implementation (Fig. 2). At this point, the appropriate IODP Facility Board and ICDP Operational Support Group (OSG) will discuss issues of coordination of the onshore and offshore components.

Further details of implementing the ADP (e.g. budgeting, staffing, sample and data curation, moratorium period, publications) are beyond the scope of this document. These are discussed in the related document “Recommendations – Implementing Amphibious Drilling Proposals (ADP) in IODP-ICDP.”