The SEP and EPSP Advisory
Panels report to the JOIDES
Resolution Facility Board (JRFB)
and are responsible for the
scientific peer review and the
safety evaluations, respectively, of
all IODP proposals and planned
primary and alternate drill sites.

JRFB Advisory Panels Terms of Reference

Science Evaluation Panel (SEP) and Environmental Protection and Safety Panel (EPSP)



Approved by the *JOIDES Resolution* Facility Board April 29, 2021.

SEP Terms of Reference

Approved by JOIDES Resolution Facility Board: April 29, 2021

(1) General Purpose

The Science Evaluation Panel (SEP) reports to the *JOIDES Resolution* Facility Board (JRFB) and is responsible for evaluation of all proposals in the context of:

- 1. The themes and initiatives of the IODP Science Plan;
- 2. The completeness of the site characterization data package and its adequacy for achieving the scientific objectives of the proposal.

The SEP is responsible for the peer review process and the selection of the best and most relevant proposals for forwarding to the JRFB or other Facility Board for development of annual and long-range schedules. The SEP also advises the JRFB on any shortcomings of the proposal pool with respect to themes and challenges of the IODP Science Plan, and makes suggestions for stimulating proposal pressure in those areas.

The latest version of the **SEP and EPSP Terms of Reference** can be downloaded from http://iodp.org/boards-and-panels/facility-boards.

(2) Mandate

The primary responsibility of the SEP is to evaluate all proposals submitted to IODP in terms of both scientific excellence and completeness and quality of the site characterization data packages. The internal organization of the SEP to conduct complete proposal evaluations is flexible (e.g., it may break into sub-panels) and will be determined by the two Co-chairs according to the needs at each meeting.

Specifically, the SEP is responsible for:

- 1. Evaluating pre-proposals, identifying pre-proposals to move forward towards a full proposal (path depends on the platform requested), and deactivating those proposals unlikely to succeed. The SEP also provides feedback to proponents regarding potential successful science and drilling strategies, and early guidance about necessary site characterization data.
- 2. Evaluating full proposals, including a review of site characterization data packages and verification of the completeness and adequacy of the site characterization data submitted by proponents to the IODP Site Survey Data Bank (SSDB). The SEP provides feedback to proponents on science and drilling strategies, and on the degree of completeness of the site characterization data package of each drill site.

- This will result in identification of those proposals needing revision, those having significant data gaps, and those to be sent for external review.
- 3. Selecting the best proposals for forwarding to the appropriate Facility Board for development of its annual and long-term platform schedules. Each forwarded proposal will be accompanied by a summary of key discussion points, including status of site characterization data, and justification for the rating assigned by the SEP, as well as a summary of the external reviews. The IODP Science Support Office (SSO) will create the proposal packages with all forwarded proposals for the appropriate Facility Board(s). Full proposals that the SEP identifies as among the scientifically most compelling, but in need of further site characterization or technological development based on review of the site characterization data, are placed in a "holding bin." When those further site characterization or technological needs are determined by the SEP to be satisfied, such proposals will be released by the SEP Co-chairs and included within the pool considered in developing annual and long-range platform schedules.
- **4.** Examining and encouraging opportunities for use of newly emerging site characterization technologies, and fostering (international) cooperation and coordination for site characterization data acquisition.
- **5.** Communicating with lead proponents throughout the SEP evaluation process. The SEP will provide a written evaluation addressing both the scientific goals and the completeness and adequacy for the site characterization data.

(3) Decisions

The SEP will normally reach decisions by consensus at a meeting or by email. A quorum will consist of at least two-thirds of the panel members. In cases for which a consensus is not possible, decisions will be reached by a simple majority of all members present and eligible to vote. In such cases, voting records will be reported in the panel minutes.

(4) Conflict of Interest

SEP follows the *JOIDES Resolution* Conflict of Interest Policy and Implementation Guidelines. Actual or perceived conflicts of interest will be declared at the start of each meeting and resolved by the SEP Co-chairs and/or the JRFB Chair, and treatment thereof will be recorded in the meeting minutes. Proponents will not be present during any part of a meeting when their proposal is nurtured, evaluated, or discussed.

(5) Meetings

Robert's Rules of Order will govern all meetings. The SEP will convene twice annually, as appropriately timed with proposal submission deadlines, and additional electronic meetings may be held as appropriate. This will allow for feedback to proponents within three months of the proposal deadlines. The SSO will produce draft minutes of the SEP plenary sessions, including detailed voting results, for approval by the SEP within one month following the meeting.

(6) Membership

The SEP membership is large and must strive to ensure sufficient breadth of expertise not only across all areas of the IODP Science Plan, but also in evaluation of site characterization data packages. The SEP Co-chairs will work with the JRFB and the IODP Program Member Offices (PMOs) to maintain balance of expertise and diversity in its broadest terms, and to ensure regular rotation of its membership. SEP members shall normally serve terms of three years. Candidates for SEP membership are recommended by the PMOs.

The JRFB approves the final selection based on the PMO recommendations and other considerations. When appropriate, non-voting specialists may be invited to SEP meetings on an *ad hoc* basis to assist with evaluation of proposals.

(7) Co-chairs

The SEP Co-chairs will provide leadership in the two areas of evaluation that are the responsibility of the SEP: scientific peer review of the proposals, and evaluation of the adequacy and completeness of the site characterization data. Both SEP Co-chairs are expected to attend SEP and JRFB meetings, one Co-chair is expected to attend the EFB, CIB, and EPSP meetings. The SEP Co-chairs may be invited to other IODP or community meetings, and they may attend those at their discretion and based on availability of travel funding.

The SEP Co-chairs will be nominated by members of the SEP and approved by the JRFB for a term of three years/6 meetings. At their 4th meeting, nominations for a replacement will be sought and discussed, and the selection process started. This process shall be completed no later than at the 5th meeting so the replacement Co-chair will then shadow the respective outgoing Co-chair at their final meeting. Replacement of the SEP Co-chairs shall be offset by at least 1 year. This process will ensure a smooth, seamless leadership transition. The roles of the SEP Co-chairs require substantial dedicated time, and they should be provided with appropriate salary and logistical support by the appropriate PMO.

(8) Liaisons

A liaison from the EPSP will attend SEP meetings to assist in evaluation of practical and safety aspects of the drilling proposals. Representatives from the IODP Science Operators may also attend SEP meetings for assessment of technological requirements for proposals under evaluation. Liaisons from other international geoscience initiatives should be encouraged to attend SEP meetings as appropriate for the proposal pool.

EPSP Terms of Reference

Approved by JOIDES Resolution Facility Board: 15 May 2018

Latest Revision: 5 February 2021

(1) General Purpose

The Environmental Protection and Safety Panel (EPSP) provides independent advice to the *JOIDES Resolution* Facility Board (JRFB) and Science Operator (JRSO) (and other entities as requested) with regard to safety and environmental issues that may be associated with general and specific geologic circumstances of the proposed *primary* and *alternate* drill sites. The EPSP provides advice on appropriate drilling technologies for avoidance of drilling hazards and protection of the environment. The panel reports to the JRFB.

The latest version of the **SEP and EPSP Terms of Reference** always can be downloaded from http://iodp.org/boards-and-panels/facility-boards.

(2) Mandate

The EPSP reviews all prospective drilling by the *JOIDES Resolution* (and by other IODP platforms as requested) and advises on safety requirements and appropriate technology needed to meet these requirements.

All drilling operations involve safety and environmental issues. The principal geologic safety issue, and a most significant environmental hazard in ocean drilling, is the possible release of substantial quantities of high-pressure fluids and/or volatiles, including hydrocarbons, from subsurface reservoir strata. Careful planning and appropriate site characterizations reduce or eliminate the risk of hydrocarbon release.

IODP proposal proponents are initially responsible for carefully assessing proposed drill sites in terms of safety and environmental protection. The EPSP independently examines and reviews each proposed *primary* and *alternate* site, including the site characterization data and operational plans, to determine if and how the proposed drilling operations can be conducted to maximize safety and minimize environmental impact.

(3) Decisions

The EPSP may provide recommendations as follows:

1. Site approval as proposed;

- 2. Amendment of a proposed drill site with respect to location and/or allowed depth of penetration;
- **3.** A specific drilling order for an expedition;
- **4.** A specific drilling program (including the nature of the monitoring program);
- **5.** Acquisition of additional data to complete the safety review;
- **6.** Denial of approval.

Approvals will be based on the judgment of the EPSP that a proposed site can be safely drilled in light of the available technology, information, and planning. Recommendations of the EPSP will be based on consensus or voting, as decided on a case-by-case basis by the panel. Votes will be decided by a majority of all members present and eligible to vote. A quorum consists of at least two-thirds of the voting members. Voting records will be kept and reported in the meeting minutes.

(4) Conflict of Interest

The EPSP review process requires a modification to the *JOIDES Resolution* Conflict of Interest Policy and Implementation Guidelines.

Panel members will declare any conflict of interest at the start of the EPSP safety review. Panel members, proponents, and others with a conflict of interest, or apparent conflict of interest, are encouraged to participate in the discussion of the individual *primary* and *alternate* sites. When determining the fate of an individual drilling location, EPSP panel members with a conflict of interest are excluded from voting.

(5) Meetings

The EPSP will convene at least once annually, and additional electronic reviews may be held as appropriate. EPSP will provide the SSO with minutes of the meetings, including detailed voting results, within one month following the meeting.

(6) Membership

Members of the EPSP will be specialists who can provide expert advice on maximizing safety and minimizing environmental impact associated with drilling of proposed sites, including sites in hydrocarbon prone and biologically sensitive areas. Members of the EPSP are primarily selected on the basis of this specific expertise. Candidates for EPSP membership are recommended by the PMOs with the JRFB making the final selection, based on the PMO recommendations and other considerations. EPSP members are initially appointed for a three-year term renewable at the discretion of the EPSP chair, the JRFB, and the relevant national/consortia program.

(7) Chair

The Chair will be nominated by members of EPSP and approved by the JRFB for a term of three years. This term is renewable at the discretion of the JRFB.

(8) Liaisons

The EPSP Chair or alternate will be liaison to the JRFB and the Science Evaluation Panel (SEP). Representatives from specific IODP Science Operators also attend EPSP meetings as appropriate.

JOIDES Resolution Facility Board Advisory Panel Staffing

Approved by JOIDES Resolution Facility Board: 15 May 2018

Latest Revision: 5 February 2021

Below is tabulated the representation of all *JOIDES Resolution* Consortium Partners in the JRFB Advisory Panels.

JOIDES	Annual	SEP		
Resolution Consortium Partner	Partner Contribution (\$M USD)	Science Subgroup	Site Survey Subgroup	EPSP
USA		12	9	7
ECORD	7	5+4* = 9	4+(1)	4+(1)
Brazil	1	1	(1)	(1)
China	3	2	2	2
ANZIC	1.5	1	1	1
India	1	1	(1)	(1)
Korea	1	1	(1)	(1)
Japan	0	5*	2*	1*
TOTAL		32	19-22**	15-19**

The USA participation is fixed at ~40% of the panel sizes, whereby participation of the JR Consortium Partners is based upon the following subscription units:

- 1. Unit of \$3.0M/year = 2 scientist/SEP Subgroup and 2 scientist/EPSP (6 total);
- 2. Unit of \$1.5M/year = 1 scientist/SEP Subgroup and 1 scientist/EPSP (3 total);
- **3.** Unit of \$1.0M/year = 1 scientist/SEP Science Subgroup and 1 scientist on either the SEP Site Survey Subgroup or EPSP (2 total).

^{*} Consideration given for providing a platform to IODP.

^{**} Panel size will depend on which panel is selected by the countries with \$1.0M subscription rates, whereby (1) indicates the potential representation on either SEP or EPSP, but not on both.