



**Terms of Reference for
JOIDES Resolution Facility Advisory Panels**
(Revised: May 2016)

Panel staffing is shown in Appendix A.

Science Evaluation Panel (SEP)

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:

- (i) the themes and initiatives of the IODP Science Plan
- (ii) the completeness of the site characterization data package and its adequacy for achieving the scientific objectives of the proposal.

The SEP is responsible for 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.

Mandate

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

Specifically, the SEP is responsible for:

- Evaluating pre-proposals, identifying pre-proposals to move forward towards a full proposal (path depends on 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.
- Evaluating full proposals, including a review of site survey data packages and verification of the completeness and adequacy of the site survey data submitted by proponents to the IODP Site Survey Data Bank. 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 that have significant data gaps, and those to be sent for external review.
- Selecting the best proposals for forwarding to the appropriate Facility Board for development of 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 external reviews.

The IODP Science Support Office will assist in creating the required proposal package for the appropriate Facility Board.

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 survey data, are placed in a “holding bin.” When the site characterization or technological needs are determined by the SEP to be satisfied, such proposals will be released and included within the pool considered in developing annual and long-range science plans.

- Examining and encouraging opportunities for use of new site survey technologies, and fostering cooperation and coordination for site survey data acquisition.
- Communicating with lead proponents throughout the evaluation process. The SEP will provide a written evaluation addressing both the scientific goals and the completeness and adequacy for the site survey data.

Decisions

The SEP will normally reach decisions by consensus at a meeting or by e-mail. 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.

Conflict of Interest

The SEP will follow the *JOIDES Resolution* Facility Conflict of Interest policy. Actual or perceived conflicts of interest will be declared at the start of each meeting and resolved by the SEP co-chairs, and treatment thereof will be recorded in the meeting minutes. Proponents will not participate in any discussion of their proposal.

Meetings

Robert's Rules of Order will govern all meetings. The SEP will convene biannually, 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 IODP Science Support Office will produce draft minutes of the SEP plenary sessions, including detailed voting results, for approval by the SEP within one month following the meeting.

Membership

The SEP membership is large and must strive to ensure sufficient breadth of expertise not only across all areas of the Science Plan, but also in evaluation of site survey data packages. The JRFB encourages all Program Member Offices (PMOs) to keep providing strong nominations for new SEP members, while striving to increase diversity, including the involvement of early- to mid-career scientists. The SEP co-chairs will work with the JRFB and PMOs to maintain balance of expertise and to ensure regular rotation of 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.

Co-Chairs

The SEP co-chairs will provide leadership in the two areas of evaluation that are the responsibility of SEP, respectively scientific review, and evaluation of the adequacy and completeness of the site survey data. The SEP members will nominate co-chair candidates. For each co-chair position, at least two highly qualified candidates will be forwarded to the JRFB for consideration. The SEP co-chairs will be approved by the JRFB for a term of three years. The role of co-chair requires substantial dedicated time, and they should be provided with appropriate salary and logistical support by the appropriate PMO.

Liaisons

The SEP co-chairs will be liaison to the JRFB. A liaison from the EPSP will attend SEP meetings to assist in evaluation of practical aspects of drilling proposals. Representatives from the Science Operator organizations 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.

Environmental Protection and Safety Panel (EPSP)

General Purpose

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

Mandate

The EPSP reviews all prospective drilling by the *JOIDES Resolution* (and by other 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 significant environmental hazard in ocean drilling, is the possible release of substantial quantities of high-pressure fluids and volatiles including hydrocarbons from subsurface reservoir strata. Careful planning and appropriate site surveys reduce or eliminate the risk of hydrocarbon release. IODP proposal proponents are initially responsible for carefully assessment of proposed drill sites in terms of safety and environmental protection. The EPSP independently examines and reviews each proposed site, including site survey data and operational plans, to determine if and how drilling operations can be conducted to maximize safety and minimize environmental impact.

Decisions

The EPSP recommends among the following options:

- site approval as proposed
- amendment of a proposed site with respect to location and/or depth of penetration
- a specific drilling order for an expedition
- a specific drilling program (including the nature of the monitoring program)
- acquisition of additional data to complete the safety review
- denial of approval.

Approval 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 panel will be based on consensus or voting, as decided on a case-by-case basis. 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.

Conflict of Interest

The nature of the EPSP review process requires a modification to the *JOIDES Resolution* Facility Conflict of Interest policy. Panel members will declare any conflict of interest at the start of the panel's 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 sites. When determining the fate of an individual drilling location, EPSP panel members with a conflict are excluded from voting.

Meetings

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

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.

The JRFB encourages all PMOs to keep providing strong nominations for new EPSP members, while striving to increase diversity, including the involvement of early- to mid-career scientists. 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.

Chair

The EPSP members will nominate EPSP chair candidates. At least two highly qualified candidates will be forwarded to the JRFB for consideration. The EPSP chair will be approved by the JRFB for a term of three years. This term is renewable at the discretion of the JRFB.

Liaisons

The EPSP chair or alternate will be liaison to the JRFB and the Site Evaluation Panel (SEP). Representatives from the Science Operator organizations may also attend EPSP meetings as appropriate.

Appendix A

JOIDES Resolution Facility Advisory Panel Staffing (2016)

Country	Partner Contribution (\$M USD)	Science Evaluation Panel		Environmental Protection & Safety Panel
		Science sub-group	Site survey sub-group	
US		14	7	7
ECORD	7	5+4*=9	4 + (1)	4 + (1)
Japan	0	6*	1*	1*
China	3	2	2	2
ANZIC ^o	1.8	1	1	1
Brazil	1	1	(1)	(1)
India	1	1	(1)	(1)
Korea	1	1	(1)	(1)
TOTAL	14.8	36	15-19**	15-19**

Notes:

US participation fixed at ~ 40% of panel size

Partner participation based up subscription units:

Each unit of \$3.0M = 2 scientists per SEP sub-group and 2 on EPSP (6 total scientists)

Each unit of \$1.5M = 1 scientist per SEP sub-group and 1 on EPSP (3 total scientists)

Each unit of \$1.0M = 1 scientist on SEP sub-group and 1 scientist on either SCP or EPSP (2 total scientists)

KEY

* Consideration given for providing a platform to IODP

^o ANZIC receiving one extra berth in next FY (**2017**) for additional funding over normal quota for a \$1.5M subscription (but no additional advisory panel staffing)

(1) Potential representation on either SEP Site survey sub-group or EPSP, but not both

** Panel size will depend on which panel (SCP or EPSP) is selected by Brazil, India, Korea and ECORD