

The IODP³ Science Evaluation Panel (SEP) is responsible for the peer review of MSP drilling expedition and SPARC proposals submitted by the international scientific ocean drilling research community. This includes evaluation of the quality and appropriateness of site survey data related to planned primary and alternate drill sites.

Science Evaluation Panel

Terms of Reference



**INTERNATIONAL
OCEAN DRILLING
PROGRAMME**

Science Evaluation Panel (SEP) Terms of Reference

1. General Purpose

The Science Evaluation Panel (SEP) will be the entity responsible for scientific peer review and evaluation of MSP and SPARC proposals submitted by the international scientific ocean drilling research community. Assessment of MSP proposals will include an assessment of the viability and relative scientific value of alternative drilling/coring plans, and the appropriateness and quality of site survey data related to planned primary and alternate drill sites. Additionally, site survey data will be evaluated for safety and environmental protection purposes (in liaison with the SEA Group).

2. Mandate

The primary responsibility of the SEP will be to evaluate all MSP and SPARC proposals submitted to IODP³ in terms of scientific excellence and, for MSP proposals, the completeness and quality of the site characterisation data packages.

Specifically, the SEP will be responsible for:

- evaluating MSP pre-proposals to identify those worthies of moving forward towards a full proposal and deactivating those proposals unlikely to succeed. The SEP also provides feedback to proponents regarding potentially successful scientific and drilling/coring strategies, and early guidance about necessary site characterisation data.
- evaluating MSP full proposals, including a review of site characterisation data packages and verification of the completeness and adequacy of the site characterisation data submitted by proponents. The SEP provides feedback to proponents on scientific and drilling/coring strategies, and on the degree of completeness of the site characterisation data package for each drill site. This will result in identification of those proposals needing revision and those having significant data gaps.
- selecting the best MSP full proposals to forward to the MSP-FB 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 characterisation data, and justification for the rating assigned by the SEP. The IODP³-SO will create proposal packages to accompany proposals forwarded to the MSP-FB. Full proposals that the SEP identifies among the scientifically most compelling, but in need of further site characterisation or technological development based on review of the site characterisation data, are placed in a “waiting room”. When those further site characterisation or technological needs are determined by the SEP to be satisfied, such proposals will be released to the MSP-FB by the SEP Co-chairs.
- evaluating site survey data to identify safety and environmental issues in collaboration with the SEA Group and allow re-location of proposed sites early in the review process.
- 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 characterisation data.

- evaluating SPARC proposals against the scheme guidelines and selecting the best proposals to recommend to the MSP-FB for funding and implementation and assisting the MSP-FB in the appointment of the SPARC Co-Chief Scientists.
- examining and encouraging opportunities for use of newly emerging site characterisation technologies and fostering (international) cooperation and coordination for site characterisation data acquisition.

3. Membership

The SEP will consist of two Co-Chairs and a body of scientific members assigned to two sub-panels (SEP-Science and SEP-Site):

3.1. Co-Chairs

The SEP will have two Co-Chairs from the IODP³ Core and/or Associated Members who will provide leadership in the two areas of evaluation that are the responsibility of the SEP: scientific peer review of the proposals (“SEP-Science”), and evaluation of the adequacy and completeness of the site characterisation data (“SEP-Site”). Both SEP Co-Chairs are expected to attend SEP and MSP-FB meetings. The SEP Co-Chairs may be invited to other IODP³ or community meetings and may attend such meetings at their own discretion, subject to the availability of travel funds.

The SEP Co-Chairs will be appointed via a competitive process in response to an open call for applications issued by the IODP³-SO. Candidates will be assessed by the relevant PMOs, who will forward nominations to the MSP-FB for final selection and recommendation for final approval by the ExB.

SEP Co-Chairs will serve a term of three years/six meetings. The process of selecting their successors will begin at the end of their second year in office and will be completed in time to allow incoming Co-Chairs to shadow outgoing Co-Chairs at their final meeting. Replacement of the SEP Co-Chairs shall be offset by at least a 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 compensation and logistical support by the relevant funding agency.

3.2. Members

The SEP membership will consist of approximately 30 scientists drawn from the international scientific ocean drilling communities in IODP³ Core and Associate Members. At least two-thirds of members should come from IODP³ Core Members (with equal participation between Parties), and no more than one-third from Associate Members. The balance between SEP-Science and SEP-Site members should normally be 60%/40%, respectively, but flexibility is allowed in response to changing proposal pressures.

Members will be selected via a competitive call process, with candidates for SEP membership nominated by the PMOs following evaluation of applicants.

SEP members shall normally serve terms of three years. SEP members will be appointed either as SEP-Science or SEP-Site members. SEP-Science members will ensure sufficient breadth of expertise across all areas of the “2050 Science Framework”. SEP-Site members will be appointed to ensure appropriate technical expertise exists to evaluate site characterisation data packages. In

particular, an adequate (> 60%) number of SEP-Site members should have profound expertise in seismic reflection data acquisition and processing.

The SEP Co-Chairs will work with the MSP-FB, the IODP³-SO and the IODP³ PMOs to maintain a balance of expertise and diversity in its broadest terms, and to ensure regular rotation of its membership. The IODP³ Core Members reserve the right to draw upon expertise from non-IODP³ members, as and when required. These experts will be invited in addition to the regular SEP members.

4. Meetings

The SEP will convene twice annually, timed appropriately relative to proposal submission deadlines. One meeting will be held in person, the other virtually. This will allow feedback to be provided to proponents within three months of proposal deadlines. The IODP³ Science Office will produce draft minutes of SEP plenary sessions, including detailed voting results, for approval by the SEP within one month following each meeting.

5. Decisions

The SEP will normally reach decisions by consensus at a meeting, by email or by a defined online collaboration platform. A quorum will consist of at least two-thirds of the panel members. In cases where a consensus is not possible, decisions will be reached by a simple majority of all SEP members present. In such cases, voting records will be reported in the panel minutes.

6. Conflicts of Interest

Actual or perceived conflicts of interest will be declared at the start of each SEP meeting and resolved by the SEP Co-Chairs and/or the MSP-FB Co-Chairs, and treatment thereof will be recorded in meeting minutes. Proposal proponents will not be present during any part of a meeting when their proposal is nurtured, evaluated, or discussed.

7. Liaisons

Representatives from the IODP³ Operators should attend SEP meetings for assessment of technological requirements of proposals under evaluation. Other liaisons (without voting rights) may include:

- the Director/Co-Directors of the IODP³-SO.
- the Co-Chairs of the MSP-FB.
- the Chair of the SEA Group.
- the Chairs of PMOs.
- representatives from other IODP³ Core and Associate Member entities.

Liaisons from other international geoscience initiatives could also be encouraged to attend as appropriate for the proposal pool.