

Guidelines for Reviewing Cruise Proposals

We ask you to provide a written review that will serve as a basis for the decision made by the Review Panel German Research Vessels (Begutachtungspanel Forschungsschiffe, GPF) regarding the attached cruise proposal. Your review will be essential for the function of the GPF, which is a central part of the planning and quality assurance process in marine sciences in Germany. The GPF decides on the cruise proposals for all major and medium-sized German research vessels, the work days at sea, the deployment of heavy equipment (like ROV, AUV), as well as the requested funding (if applied for). After anonymization, all members of the GPF review panel may read the review. The proposers will also receive an anonymized copy together with the letter informing about the decision.

- If you do not feel that you have the expertise required to evaluate the subject matter, please return the cruise proposal as soon as possible. In this case we would very much appreciate if you can suggest other possible reviewers.
- Please examine whether circumstances exist that could be interpreted as a conflict of interest. These include proposals from first-degree relatives, spouses etc., a current or planned close scientific cooperation with one of the authors or such a cooperation within the last 3 years, or a dependent employment or supervisory relationship that ended within the last 6 years. If you are not sure if a certain circumstance would classify as a conflict of interest, please contact the GPF Office. If there is a potential conflict of interest, we will release you from reviewing the proposal.
- Please treat the documentation confidentially and do not make it available to third parties. We ask you not to identify yourself as a reviewer to the applicant or to any third party. The scientific content of the proposal must not be used for personal and/or other scientific purposes. If you have any questions about the proposal, please contact the GPF Office only.
- Please base your assessment of the cruise proposal on the text you have received. You may also refer to the publications cited in the proposal; however, the bibliography of cited works and the manuscripts are not per se the subject of the review. Please note that the applicants may not list more than 10 representative publications in their CV.
- Please use the review questionnaire provided by the GPF Office to structure your review. At the end, please provide a clear recommendation as to whether you believe the cruise should be granted.

In the following, you will find explanations on the individual evaluation criteria, which we would like you to rate unambiguously. Please justify your rating in detail in the respective description field in the questionnaire.

1) Scientific merit of the proposed work

How would you assess the quality of the project, especially with regard to originality and scientific relevance? Is the state-of-the-art adequately presented, and has the scientific case been made clear? Please note: Cruise proposals with reference to coordinated funding programs (e.g. DFG Collaborative Research Centers and Priority Programmes, BMBF joint research projects, HGF program oriented funding, EU and other international programs) must present a discrete scientific question; however,

the relevance for the coordinated program should also be explained. The scientific aims of the coordinated program should be further explained in an appendix to the cruise proposal.

2) Objectives of the cruise

To what extent do the objectives convincingly reflect clear working hypotheses and an appropriately distinct topic? Are the objectives clearly defined and realistically achievable? If the cruise is part of a larger coordinated program, it should also become clear how the objectives of the proposal contribute to the objectives of the overarching program. As noted in the previous section, these should be explained in an appendix to the cruise proposal.

3) Expected gain of knowledge

Please assess whether the gain in knowledge that can be expected from the proposed work is of scientific relevance and corresponds to the objectives and work program of the cruise. If the cruise is part of a larger coordinated program, a long-term monitoring effort, or an institution's overall mission, the expected gain of knowledge needs to be well-defined for every individual cruise.

4) Quality of the work program

The quality of the work program is critical to the success of a cruise proposal. Therefore, it can be expected that the description of the work program has the largest share of the proposal. Please assess whether the work program corresponds to the objectives of the cruise, and comment on the strengths and weaknesses of the planned investigations. The applicants need to justify the choice of the working area and the time period of the cruise, as well as the envisaged stations or transects. The work program must explain which methods and equipment are intended to be used. Please comment also on the suitability of the methods and the appropriateness of the schedule.

5) Adequacy of the required ship time (works days at sea)

Please assess whether the work days at sea requested by the applicants, the required time for the deployment of equipment, and the required time for the application of the planned methods are comprehensible and correspond to the objectives and work program of the cruise. If there are inconsistencies, please make recommendations on cutting or increasing ship time. Please note: "Work days at sea" is the time from the first to the last station of a work program (including in-transits), but excludes steaming time from and to the ports. Contingency days usually cannot be granted.

6) Institutional and personnel resources

How would you assess the work and research environment at the institution where the project is intended to be carried out? Is there sufficient personnel for the analysis of samples and data, and do the applicants have access to the infrastructure and equipment needed? In particular, the applicants should have comprehensibly explained the availability and financing of cruise equipment (especially heavy equipment such as ROV, AUV etc.).

In addition to work days, the required berth are another resource that is to be deployed according to criteria of necessity and economic efficiency. Please check whether tasks corresponding to the work program have been specified for all participants and whether personnel deployment is plausible. If the number of berth requested seems too high, you may vote for reduction. Similarly, the research vessels should be well utilised – if a larger proportion of berth remain unused, this must also be plausible.

7) Qualification and previous work of the applicants

How would you evaluate the soundness of the previous work, the quality of publications and the qualifications of the applicants – both in general and in terms of the proposed project? Are the applicants qualified to independently lead the proposed project and accomplish its objectives? Please note that the applicants may not list more than 10 representative publications in their CV.

8) Integration in international and national programs

Please assess whether and to what extent the proposed work is a contribution to the scientific and/or policy objectives of larger framework programs. Contributions to peer-reviewed and funded coordinated projects (such as DFG Collaborative Research Centers, Priority Programmes, Clusters of Excellence, EU programs, BMBF joined research project, HGF program oriented funding, etc.) should be taken into account (see sections 1 and 2), but also contributions to other framework programs (e.g., IGBP, GEOTRACES, etc.).

9) Data and sample handling

In order to improve the long-term archiving and curation of research data and samples, cruise proposals should seek to achieve an efficient reuse of these data and samples. Therefore, please evaluate if and how cruise-related data and samples will be made available for future reuse by other researchers. Please regard existing standards and data repositories or archives in your discipline where appropriate. Particularly, the length of the moratorium period in which the cruise participants have priority access to data and samples should be assessed. How do the institutions participating in the project contribute to data, sample, and information management? Regarding samples (such as tissues, specimens, rock samples, drill cores etc.), please comment also on the proposed storage of such objects.

10) Relevance to BMBF funding policy objectives (RV SONNE only)

In case the proponents apply for RV SONNE ship time: Please assess whether the explanations given about the relevance of the project with respect to the funding objectives of BMBF (Federal Ministry of Education and Research) in section 2.3 are convincingly argued and correspond to the objectives and work program of the cruise proposal.

Overall rating

Please summarize your evaluation of the general quality of the cruise proposal and provide a clear recommendation as to whether the proposal should be approved. Proposals recommended for major revision (category C) may be resubmitted only once.

Necessity for the deployment of large equipment (such as ROV, AUV etc.)

Please assess whether the deployment of large equipment as requested is necessary to achieve the objectives of the cruise. Is the operation schedule comprehensible and does it correspond to the objectives and work program of the cruise? If there are inconsistencies, please make recommendations on reductions.

Adequacy of the budget plan (RV MARIA S. MERIAN, RV METEOR, and RV SONNE only)

Please comment on whether the requested funds are justified and reasonable in relation to the proposed project, and make recommendations for adjustments to the budget as necessary. In case the proposal requests scientific personnel, please assess whether the work plan for each position is sufficiently detailed and adequate with respect to the qualification level and term of employment.