Guidelines for submitting a scientific proposal for a cruise with the research vessels METEOR, MARIA S. MERIAN, POLARSTERN and SONNE, as well as for the medium-sized vessels

Revision: 19 November 2015

I. General Information

Among the operators of large and medium-sized vessels a procedure has been established that allows the transfer of ship time from one vessel to another. This practice assures comparable standards and optimization of the evaluation for all ships and ship time. The following institutions are responsible for scheduling of the vessels: AWI for POLARSTERN, DFG for METEOR and MARIA S. MERIAN, and PTJ for SONNE. The steering committee for medium-sized research vessels or the respective operators are responsible for POSEIDON, ALKOR and HEINCKE.

The advisory board for a particular ship recommends the granting of ship time based on evaluations of the proposals by voluntary experts, taking into account logistical and research-political constraints. The reviewers judge according to scientific criteria based on the information you submit with your proposal. Thus, it is in your interest to create the conditions conducive to a thorough and objective consideration of your proposal.

In the interest of the reviewers please be brief. The proposal should include no more than 20 pages and should be self-explanatory. Proposals exceeding 20 pages will be returned unprocessed (please, see sect. 9. for maximum enclosures).

Proposals for POLARSTERN, METEOR, MARIA S. MERIAN, SONNE as well as for the medium-sized research vessels should be written in English, with a summary and budget in German.

The deadline for submission of proposals for all large vessels is September 30 of any given year. Resubmission may be handed in by March 31 of any year. Please note the specific lead time for your ship of interest.

RV POLARSTERN: according to the specifications of the AWI, proposals are generally submitted at intervals of 3 to 4 years – please see the website (www.portal-forschungsschiffe.de/fahrtplanung). Proposals for supplemental use on scheduled expeditions may be handed in at the latest by September 30 of any year.

RV SONNE: in general, two years prior to a planned expedition according to BMBF regulations – please see website: (www.portal-forschungsschiffe.de/fahrtplanung).

RV METEOR and RV MARIA S. MERIAN: in general, two years prior to a planned expedition.

Medium-sized research vessels: normally one year prior to a planned expedition.

Please indicate whether proposals are submitted within the scope of a coordinated project (e.g. coordinated DFG projects, BMBF projects, EU projects, etc.). Please refer to the mission plan of your coordinated proposal as presented to the “Senatskommission für Ozeanographie” or to the project funded by BMBF. Also please mention any connections to other national and international programs or projects within the planned expedition.
Please

- draft your proposal according to the rules of good scientific practice,
- do not refer only to the numbers used in the guidelines; repeat the full heading text of each paragraph as well,
- leave out items not relevant to the proposal when applying for POLARSTERN or the medium-sized vessels – especially for expeditions within the scope of educational courses,
- note that on the “Portal Deutsche Forschungsschiffe” (www.portal-forschungsschiffe.de) a cover page for the proposal is generated. The information on the cover page must correspond with that in the proposal and be explained by the proposal,
- submit the proposal in “Arial” font (11 pt., min. 1 line spacing, default page margins, page numbering), A4 format, electronic form, signed and in PDF format to: www.portal-forschungsschiffe.de.
II  Structure of the proposal

1.  General Information

Please indicate which vessel(s) you are applying for (multiple designation is possible) and whether you are the primary or a supplementary user.

Proposals for supplemental use are meant for smaller – especially university – research groups, who want to be part of an already scheduled cruise. An independent scientific program is necessary in order to apply for supplemental use. Supplementary users are mostly groups of up to 3 persons (for RV POLARSTERN up to 20 persons). Supplementary users are not entitled to be chief scientists. Proposals for supplemental use may be submitted to take part in an already approved cruise provided that enough lead time is given (at least one year’s notice for the large vessels). Supplemental use is not envisaged for medium-sized vessels.

1.1  User

Please name first the person who will be responsible for the project with respect to the review panel. The primary users should propose a chief scientist for the cruise. In the case of a team of users the scientific qualifications of the entire team are evaluated. All users are responsible for the content of the proposal and must sign it.

We request the following information for all users:

- given name, surname, academic title
- official position
- date of birth, citizenship
- reference numbers of previous applications for project funding from DFG and BMBF
- institution (full name)
- professional address
- phone
- fax
- e-mail address

1.2  Topic

Please provide a descriptive title for the project. Please also state the ocean region where you want to carry out research.

1.3  Code Name

Please derive the code name from the descriptive title. In correspondence it will serve as an identifying name for the project supplemental to the official reference number (max. 20 characters).

1.4  Discipline and Subject Area

Please give the subject (e.g., physical oceanography, marine geology, geophysics, biogeochemistry, marine biology) and the scientific specialty (e.g., seismic, microbiology) to which the cruise purpose is related.

1.5  Cruise Dates and Large Equipment

- duration of the cruise (number of working and transit days in the research area. This is the time from the start of the first station to the end of the last station)
- year and season in which the cruise can be carried out
• reasons for limitation to certain seasons (see cover sheet)
• location of the working area. Please give the geographical positions of the first and last stations
• preferred ports
• large equipment required, including a short statement of the technical requirements and possible alternative platforms

1.6 German and English Summary

Please describe your planned work including the scientific background in generally comprehensible summaries of not more than 15 lines in both English and German.

2.0 Current State of Research and Preparatory Groundwork

2.1 Current State of Research and Preparatory Groundwork

Please present briefly and clearly the present state of research in the context of the current project, justifying your own work. Please state the most important publications on this topic, including work by other scientists. This description should specify how your own work fits into the complete picture and in which areas you will make your own new and significant contribution.

2.2 Literature Mentioned in 2.1 (please mark your own publications)

2.3 National and International Cooperation

Please indicate all national and international programs and projects with which your research activities are integrated. In this connection it is particularly interesting whether the cruise is part of an ongoing project. Please briefly state present and planned cooperation with national and international partners as well as the research program related to the proposal. If the project is part of a peer-reviewed project, you may briefly refer to this project with respect to the scientific background. It must, however, be clearly stated which specific aspect of the cruise will contribute to the project (with regard to scientific aims and working hypothesis, see 3.1). The proposal should be self-explanatory. Please state whether funds are available through the project.

2.4 Applications RV SONNE

Please explain the relevance of the project with respect to the funding goals of BMBF when applying for RV SONNE.

3.0 Aims and Program of Work

3.1 Aims

Please briefly describe the scientific program and the scientific aims of the proposal. If you expect results beyond expanding scientific knowledge (e.g., scientific-political, economic, technical, social or political aspects) please describe these.

3.2 Work Program

Please provide detailed information about the planned work program on board. The quality of the work program is of utmost importance to the eligibility of the proposal. The program must coherently justify the requirement for each working day of the ship and large equipment.
3.2.1 Working Area Including Maps of Stations and Profiles

Please generate a list stating the approximate coordinates and water depths of the planned cruise as well as the number and position of stations. If the positions are to be defined during the cruise, please indicate the geographical coordinates of the working area. The information given in this paragraph enables the reviewers to understand the necessity of the working days and transit times within one area and between the different working areas. Additionally you may enclose high-resolution maps of the working area and profiles (max. 5 pages) as an appendix.

3.2.2 Working in Foreign Territories – Research Permits

Please state in which Economic Zones (Exclusive Economic Zone - EEZ) you plan to carry out your research. Please recognize that, in general, diplomatic applications for research permits in foreign economic zones (EEZ) must be submitted 6 months prior to the cruise. Please, if possible, suggest alternative working areas for areas known to have troublesome permit procedures, and provide information about cooperation/projects with scientists from the nation in question. Please refrain from planning work in risky areas (piracy, threat of war). See information at:

Leitstelle Deutsche Forschungsschiffe (https://www.ldf.uni-hamburg.de/de.html and leitstelle@ifm.uni-hamburg.de).

3.2.3 Use of Large Equipment

Please justify all equipment use. This is for on-board equipment, e.g., sonic depth finders, CTD/rosette, nets, winches (please specify cable and length), laboratory containers and isotope laboratory containers, as well as external equipment such as ROV, AUV, MeBo, core deployment systems, seismic devices, OBS, OBH, moorings, landers, fishing gear and helicopters. Please verify that the external equipment to be deployed is available. On METEOR, MARIA S. MERIAN and SONNE, deployment costs for equipment (related to the project) may be funded provided that they are explained in the project and have passed the review successfully. Please check whether financing is possible from existing funds. As to financing please see paragraph 4.4.1 (Operation Costs for Large Equipment).

3.2.4 Special Requirements

Please specify special requirements such as ice stations, visits to research bases, appointments with other vessels, etc.

3.2.5 Work Days at Sea

Please list, in tabular form, the kinds of work that are to be conducted during the cruise. In addition to the total time estimated for deployment of equipment, transit between stations, etc., the chronological sequence of the cruise and deployment of equipment on the proposed stations should be coherently described.

3.2.6 Arrival and Departure

Please state the preferred ports of embarkation and destination.

3.2.7 Measures to Conduct Responsible Marine Research

Please state what measures are to be taken with respect to the “Declaration of Responsible Research” (Appendix 1) as well as to the "Code of Conduct for Responsible Marine Research in the Deep Seas and High Seas of the OSPAR Maritime Area" (Appendix 2) issued by OSPAR, the Commission protecting and conserving the North-East Atlantic and its resources.
4. **Requested Funding**

No funds may be applied for here to carry out cruises of the RV POLARSTERN and the medium-sized research vessels. For the analyses of samples and data obtained on cruises with RV SONNE, METEOR and MARIA S. MERIAN only, funding can be applied for (see also pages 10, 11 and 12).

The following summary of the funding scheme must be included:

<table>
<thead>
<tr>
<th>Budget</th>
<th>Total amount</th>
<th>Proposal budget</th>
<th>Proposal budget here requested</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Personnel</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 Student assistance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2 Nonscientific personnel (Technicians)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3 Scientific Staff (SONNE, METEOR and MARIA S. MERIAN only)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2. Travel and transport</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 Expedition: arrival and departure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2 Transport (container transport, air freight, frozen and refrigerated transport)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.3 Conference travel (SONNE only)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3. Consumables and small instrumentation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1 Consumables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.2 Small Instruments up to 410 €</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3 Allocation of Commissions (SONNE only)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4. Scientific instrumentation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1 Large equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.2 Costs for rented equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.3 Investments</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total**
Explanation:

* with task description (the number of staff positions, the salary scale and the number of h/month must be stated)

* funding only in well-justified, exceptional cases; SONNE: consumables additionally itemized by expedition and analysis.

METEOR and MARIA S. MERIAN: funding for initial analyses can only be applied for by university-based scientists and establishments of the Gottfried Wilhelm Leibniz Association e.V.

** No price quote necessary

4.1 Personnel

4.1.1 Student Assistance

Funding of student research assistants for the preparation and post-processing of the expedition, as well as activities on board can be applied for based on scientific need.

4.1.2 Nonscientific Personnel (Technicians)

In well-justified, exceptional cases, funding for external technicians (e.g., service for rented equipment) for preparation or participation in the cruise may be granted.

4.1.3 Scientific Staff (SONNE, METEOR, MARIA S. MERIAN only)

Funding of scientific staff can be requested in accordance with the pay scale classifications. For METEOR and MARIA S. MERIAN, funding for initial analyses can only be applied for by university investigators and establishments of the Gottfried Wilhelm Leibniz Association e.V., for initial analyses\(^1\) and a maximum of 18 month (PhD-positions will not be funded).

4.2 Travel and Transport

4.2.1 Arrival and Departure

Funding can be requested for all travel expenses (arrival and departure, VISA etc.) for German participants on cruises with METEOR, MARIA S. MERIAN and SONNE. Please enclose a preliminary quote for flight and hotel costs. This funding is usually not granted for foreign participants. Travel costs for observers (scientific and diplomatic) can be granted according to an agreement.

4.2.2 Transport

Container transport:

Please add a price quote for the transport of the required containers. The quote can be adjusted after completion of the cruise planning.

Air freight:

Please justify the costs for air freight to and from the ship and provide a price quote. The quote can be adjusted after completion of the cruise planning.

\[^1\] The initial analysis of samples and data accomplishes the preparatory work necessary for writing an independent proposal of scientific analysis. In the cruise proposal the initial analysis needs to be stated with respect to aim and work plan. Personnel and consumables costs applied for here, have to be well justified. When personnel are partly funded, additional details regarding funding and personal details are obligatory (incl. CV in attachment). Furthermore, details concerning number and kind of analyses are expected. The entire proposal for funding of initial analysis is part of the proposal for a cruise. Per proposing institute one page with the justification for funding can be attached to the proposal.
Frozen and refrigerated transport:
Please justify the costs of the frozen and refrigerated transport to and from the ship and provide a quote. Please note that, depending on the port and the kind of material sent, substantial costs might be incurred. Obtain information about the requirements for the shipment of organic materials. The specifications can be adjusted after completion of the cruise planning.

Ground transport:
Here funding can be requested for the transport of expedition material within Germany as well as to the ship. Transport within the ports of arrival and departure are not included here, as these costs are covered by the budgets for the ships.

4.2.3 Conference Travel (SONNE only)
For each sub-project partial grants can be requested for travel to conferences and status seminars.

4.3 Consumables and small instruments

4.3.1 Consumables
In well-justified, exceptional cases, funding for consumables can be requested if these are needed in direct connection with research on board. As a rule, such funding needs to be applied for via project funding.

4.3.2 Small Instruments up to 410 €
In well-justified, exceptional cases, funding of small instruments can be requested if these are needed in direct connection with research on board. As a rule, such funding needs to be applied for via project funding.

4.3.3 Allocation of Commissions (SONNE only)
In principle, the allocation of commissions is possible. However, the overall amount may only be a small fraction of the total budget.

4.4 Scientific Equipment

4.4.1 Operation Costs for Large Equipment
Please add a quote for the total costs arising from the use of heavy equipment. Please justify the use and the required costs at this point. As a rule, such costs should be applied for via project funding (e.g., BMBF, DFG, EU, industry). Please bear in mind the operator’s flat-rate charges (http://www.portal-forschungsschiffe.de/en/equipment). Regarding RV METEOR, MARIA S.MERIAN and SONNE, if heavy equipment is provided by joint research project partners belonging to the Helmholtz Association of German Research Centres, subordinate federal agencies or institutes of the Max Planck Society costs for the heavy equipment are not covered. Regarding RV SONNE this is also valid for the Gottfried Wilhelm Leibniz Association.

4.4.2 Costs for Rental Equipment
Explain the need for hiring equipment, including the costs for maintenance, wear and insurance, and furnish verification from the rental company.

4.4.3 Investments
In well-justified, exceptional cases, funding for the purchase of additional equipment can be requested if it is essential to the success of the expedition. Please furnish proof
that this equipment cannot be rented and explain how the equipment will be maintained after the expedition.

**The following applies ONLY to RV METEOR and RV MARIA S. MERIAN:**

The proposal requests ship time as well as funding for operation of the cruise. If the cruise is part of a joint research project (e.g. FZT, SFB, SPP, BMBF joint initiative, EU project, etc.), in general the entire cost (freight and transport) should be covered by the joint research project. In this case the proposal for the cruise basically covers only the cruise time.

If additional funds are to be requested, the proposal should follow the “Guidelines Research Grants Programme” of the DFG (German Research Foundation). Please use the currently valid version of the document.

**The following applies ONLY to university users of RV METEOR and RV MARIA S. MERIAN:**

Investigators from universities who have no other access to coordinated funding (SPP, SFB, etc.) can apply for additional funding in order to conduct initial analyses of data and samples. If proponents from non-university establishments are involved, the lead proponent must be based at a university. Funding can be requested for consumables (e.g., laboratory work), and to a limited extent for personnel. The latter may include post-doctoral scientists or student helpers but PhD students will not be funded.

---

**Folgendes gilt NUR für FS SONNE:**

Für FS SONNE kann der Fahrtvorschlag Mittel zur Durchführung und Auswertung der Expeditionen enthalten.

Zusätzlich muss unter 3.2.1 Arbeitsplan eine zeitliche Übersicht als Balkenplan für Fahrt und Auswertung vorgelegt werden.

Zusätzlich müssen als Punkt „3.2.8 Verwertungsplan“ Angaben unter Berücksichtigung der folgenden drei Einzelpunkte gemacht werden:

- **Wirtschaftliche Erfolgsaussichten**

Es soll dargestellt werden, welche Erfolgsaussichten im Falle positiver Ergebnisse kurz-, mittel- bzw. längerfristig bestehen (Zeithorizont), insbesondere im Hinblick auf potentielle Märkte (Produkte/Systeme) und andere Nutzungen. Hierzu sind beispielsweise folgende Aspekte einzubeziehen:

  - Verzahnung von Forschungs- und Produktionsstrategien
  - Nutzen für verschiedene Anwendergruppen - Industrien am Standort Deutschland (u.a. Auflistung)
  - Ökonomische Umsetzungs- und Transferchancen
(Ökonomische Umsetzungs- und Transferchancen, Nutzen für Standort Deutschland)

- **Wissenschaftliche und/oder technische Erfolgsaussichten**

  Unabhängig von den wirtschaftlichen Erfolgsaussichten sollen die wissenschaftlichen und/oder technischen Erfolgsaussichten dargestellt werden (mit Zeithorizont) - u.a., wie die geplanten Ergebnisse in anderer Weise (z.B. für öffentliche Aufgaben, Datenbanken, Netzwerke, Transferstellen etc.) genutzt werden können. An dieser Stelle ist auch eine etwaige Zusammenarbeit mit anderen Einrichtungen, Firmen, Netzwerken, Forschungsstellen u.a. einzubeziehen.

  *(Wie können Ergebnisse in anderer Weise (z.B. für öffentliche Aufgaben, Netzwerke) verwendet werden?)*

- **Wissenschaftliche und wirtschaftliche Anschlussfähigkeit**

  Hier ist aufzuzeigen, wer im Falle eines positiven Ergebnisses die nächste Phase bzw. die nächsten innovatorischen Schritte zur erfolgreichen Umsetzung der Vorhabenergebnisse übernimmt/übernehmen soll und wie dieses angegangen werden soll. Beispiele können sein für Ergebnisse der

  - Grundlagenforschung: Kooperationen von Wissenschaft und Wirtschaft,
  - angewandten Forschung: Erschließung branchenübergreifender Nutzung, z.B. verschiedener Produktentwicklungen
  - Entwicklung: Umsetzung am Markt.

  *(Wer übernimmt die nächste Phase bzw. die nächsten innovatorischen Schritte?)*

**Verbindliche Vorgaben für den Finanzierungsplan bei FS SONNE:**

- Max. Laufzeit des Vorhabens: 3 Monate (vor der Fahrt) + Fahrt + 24 Monate (Auswertung), aufgerundet auf ganze Monate.


- Dienstreisen zu Tagungen zur Vorstellung der wissenschaftlichen Ergebnisse: 1 Auslandstagung (bis zu 1800 €) + 1 Inlandstagung (bis zu 500 €) + Reisen zum Statusseminar "Meeresforschung mit FS SONNE" (255 € pro Person). Es muss angegeben werden, welche Tagungen besucht werden sollen. Es werden lediglich festgelegte Zuschüsse bewilligt.

- Bei Verbundprojekten können ggf. Zuschüsse zu Arbeitstreffen (Workshops) beantragt werden.

- Kosten (max. 75 € pro Person) für medizinische Vorsorge (z.B.: Impfungen) werden nur für stud. Hilfskräfte übernommen, die aus Projektmitteln bezahlt werden.
The following applies only to the medium-sized research vessels RV POSEIDON, RV ALKOR and RV HEINCKE:

1. As in the past, the application section “Student Training/Practical” will not be evaluated separately. The supporting documents in the training directory of the educational institute, documentation of the number of students, and the submission of the training reports of past expeditions appended to the cruise proposal will be reviewed by the medium research vessel steering committee, and are sufficient for approval.

2. The target date for applications for short cruises (≤5 working days) and training cruises is November 30.

3. In exceptionally justified cases and special situations the application can be made without regard to the target date.

Applications relating to points 1-3 should be sent (in German or English) electronically and with one copy by post directly to the medium research vessel steering group: http://www.io-warnemuende.de/steuergruppe.html

While awaiting project approval for carrying out cruises, a “blocked approval” status will continue to be applied. The block on a cruise proposal will be removed with submission of the notification of approval for financing the cruise.

5. Participants

Please state the total number of berths requested for your working group. As far as possible please also give: name, task on board, institution and position (scientist, technician, student assistant, or observer) of the participants. Primary users on large ships are requested to enable supplementary users to participate. On board MARIA S. MERIAN, METEOR and SONNE you should generally keep 3 berths available for supplementary users and on POLARSTERN up to 20 berths.

You may only deviate from this requirement if the justification is deemed to be adequate.

6. Backup and Availability of Data and Samples

Data and samples collected during a cruise on a German research vessel must be safely stored and placed at the disposal of the scientific community within a reasonable time frame. The proposal must comprise a data concept (storage, archive, release). The concept must include the expected data/samples that will be obtained, where the data/samples will be stored, and when they will be made available for the scientific community. Data recording and sample storage will be managed by an established data/sample repository and database system that can guarantee long-term storage. Release for use by other persons may be delayed for a moratorium period to protect publication rights of the primary participants. For protection purposes, data may be stored in a database that only shows openly the fact of their existence for the duration of the moratorium period.

The quality of the data concept will be considered in the evaluation.

7. Declarations

The following declarations must be made:
The signees obligate themselves to conduct the planned research activities in accordance with the “Declaration of Responsible Research” (Appendix 1 and 2).

Please state whether you have submitted an application for funding of the project elsewhere or if you intend to do so.

8. **Signature(s)**

The proposal must be signed by all users mentioned in paragraph 1.1 (scanned signatures).

9. **List of Enclosures**

Please list all enclosures to the proposal. CVs of users listed in paragraph 1.1 are to be enclosed. The individual CVs should include a list of the (no more than) 10 most important publications. The CVs of the primary and co-applicant(s) should also comprise a list of all cruises (as chief scientist and proposals) for the past 5 years, as well as planned cruises.

Additionally, high-resolution maps (see paragraph 3.2.1), annotations to the budget (paragraph 4), and applicable quotes may be enclosed. Other enclosures will not be accepted.
Appendix 1

Declaration of Responsible Research

Preliminary Notes

As marine researchers we value and respect the uniqueness and complexity of the marine environment. We are thus especially interested in conserving this habitat, which is precious in terms of ecology, science, culture and economy. Because of their special knowledge and use of specialized equipment (such as research vessels and manned or unmanned submersible vehicles), scientists are the only group that can monitor and evaluate this unique marine environment. Compared to natural occurrences (such as volcanic/tectonic events, landslides, climate variability, etc.) or interference caused by other human activities (e.g., mining, fishing, shipping industry), the impact of scientific work on the research areas is generally considered to be minor. Nevertheless, the risk exists that certain research activities may have unintended negative effects on individual areas or creatures.

A basic understanding of the extremely complex marine system is the best prerequisite for protecting the oceans and for their ecologically sustainable use. This knowledge, however, is only obtainable by scientific marine research. Marine research should thus be an integrated part and a basic requisite of resource management and conservation of the natural biodiversity of the oceans. Research projects must endeavor to find an approach as non-polluting and ecologically compatible as possible. The following principles should be observed for research proposals and expeditions:

Principles for Responsible Marine Research

As members of the international marine research community and in the spirit of responsible research, we call on all scientists to respect the following principles when investigating the oceans, and urge them:

1) to avoid research activities that may affect regional populations or a large proportion of individual marine organisms.

2) to avoid research activities that provoke change or damage to the marine ecosystem (in terms of physical, chemical, biological or geological harm).

3) to take precautions to protect natural resources (especially protected species or habitats) from disturbance or damage – or to only impact to the minimum extent possible when carrying out research activities in ecologically sensitive areas (e.g., for the North Atlantic and Baltic Sea, the habitats of the OSPAR and HELCOM “List of threatened and/or declining species or habitats” – for other regions there are similar regulations). This applies to all national/international marine sanctuaries.

4) to avoid sampling not essential to the research project.

5) to employ the most appropriate and environmentally friendly methods for investigations – as far as these are possible, in a reasonable manner.

6) to ensure that the transfer of biota between different marine regions is avoided, as this may permanently change the habitat or the composition of communities.

7) to avoid activities that influence other scientific experiments and surveys. This requires that scientists make themselves familiar with present and planned research projects in the pertinent area. At the same time, your own research projects or plans should be communicated to the international research community via free accessible databases.
8) to ensure that samples are used as extensively as possible among the scientific communities. Samples that can be archived should be stored for future use by members of the scientific community.

9) to promote the international use of data, samples and results via appropriate databases, in order to avoid needless sampling and pollution/stress, and to promote a global understanding of the marine habitat.

German marine research supports appropriate research projects with the aims of acquisition, research, evaluation, and possible ecological improvement of the effects of research activities to the marine environment.

The German “Senatskommission für Ozeanographie“ and the German Marine Consortium (KDM) unequivocally support all of the statements of the declaration for responsible marine research – also with respect to the responsibility towards future generations. They call upon all scientists to comply with the above-mentioned principles when planning and conducting research projects. The consideration/application of these principles is mandatory for the approval of research proposals.

Appendix 2
OSPAR Code of Conduct for Responsible Marine Research in the Deep Seas and High Seas of the OSPAR Maritime Area
Version: 7-Mar-2008
Background

1. This code of conduct is based on the InterRidge Statement of Commitment to Responsible Research Practices at Deep-Sea Hydrothermal Vents, and an unofficial translation of the German Senatskommission für Ozeanographie / German Marine Consortium KDM, Commitment to Responsible Marine Research. It has been developed within the work program of the OSPAR Biodiversity Committee by an intersessional correspondence group on marine protected areas working in consultation with a number of deep sea scientists and experts. It is currently being circulated to European scientific bodies for further comment.

2. The OSPAR Maritime Area includes large areas of deep and high sea.[1] These are recognized as containing ecosystems that may have a lower resilience than shallower near-shore areas, including several species and habitats that can be vulnerable to human disturbances.

3. The OSPAR Commission has adopted, and keeps under review, an Initial OSPAR List of Threatened and/or Declining Species and Habitats (OSPAR agreement 2004/6) to guide the setting priorities for its further work on the conservation and protection of marine biodiversity. The species and habitats on this list, especially those occurring in high / deep sea areas, are vulnerable to different actual or potential human activities, including marine scientific research.

4. OSPAR acknowledges the provisions and entitlements of United Nations Convention on the Law of the Sea (UNCLOS) and highlights that the General Principles for the Conduct of Marine Scientific Research set out therein require, inter alia, that marine scientific
research shall be conducted in compliance with all relevant regulations adopted in conformity with UNCLOS including those for the protection and preservation of the marine environment.

5. OSPAR recognizes that marine research scientists appreciate the uniqueness and complexity of the marine environment, and are therefore particularly interested in preserving this scientifically, aesthetically, ecologically, and potentially economically valuable environment. Because of the specialized nature of the equipment required to work in the deep-sea, such as manned and unmanned research submersibles, scientists are the primary group of people who have had the opportunity to visit and value these extraordinary habitats. OSPAR also recognizes that scientists have already worked to develop codes of conduct for some deep-sea features, such as hydrothermal vents and cold water corals, and this OSPAR code of conduct has been written to fit harmoniously with those. (Specific provisions concerning the conduct of scientific research in certain deep/high seas habitats will be attached as annexes to this statement as they are developed.)

6. The potential impact of many scientific activities on the marine environment is low in comparison to the potential for disturbance by natural processes (e.g. volcanic/tectonic events, slumps, climate variation, etc.) or other human activities (e.g. mining, fisheries, and shipping). Indeed many areas, especially seamounts and cold coral reefs, have been widely impacted by human activities, like fisheries, long before being scientifically studied. Nonetheless, there remains the possibility that some scientific activities could have unwanted negative side-effects on particular regions or animals if research activities are not carefully planned and executed. In addition, because only a limited number of sites are currently known and scientists from a wide variety of disciplines frequently work at these single locations, there is the potential for conflicting effects among studies, and multiple impacts, particularly at sites where scientific activity is intense.

7. OSPAR recognizes that protection and sustainable use of the oceans is best served by a fundamental understanding of its complex marine ecosystems, and that can only be achieved through marine research. OSPAR further recognizes that the role of scientists is also of primary importance concerning the implementation of the OSPAR network of Marine Protected Areas, and this should be preceded with the best available science.

8. Thus, marine research is a prerequisite and an integral component of an ecosystem based management of marine resources and the effective conservation of biodiversity of the deep and high seas. Most forms of observation and investigation of natural systems involve some disturbance of the systems being studied. In the interest of environmental stewardship, it must be the goal of research scientists to minimize disturbances as much as possible, while still gathering the information necessary both to understand the systems and to form a basis for sustainable use strategies. Therefore, marine scientists should always evaluate their research plans from a conservative standpoint, and choose the most environmentally friendly research approach.

9. When awarding research grants or research cruise time, the research plans should be assessed against conformity with the following principles.

CONDUCT OF RESPONSIBLE MARINE SCIENCE
10. OSPAR requests all scientists working in the deep seas and high seas of the OSPAR maritime area to adhere to the following principles when conducting their work:

a. **Species**: avoid, in the course of scientific research, activities which could lead to long-lasting changes in regional populations or substantially reduce the number of individuals present.

b. **Habitats**: avoid, in the course of scientific research, activities which could lead to substantial physical, chemical, biological or geological changes or damage to marine habitats.

c. **Threatened and/or declining features**: When working in areas of particular ecological vulnerability, including, inter alia, the features listed in the OSPAR “List of Threatened and/or declining Species and Habitats” utmost care should be taken not to disturb or damage the features as far as possible.

d. **Management areas / marine protected areas**: When working in areas of particular ecological importance and/or sensitivity, including, inter alia, OSPAR marine protected areas, care has to be taken not to disturb or damage the protected features, and that activities are in compliance with regulations for the area. Further, scientists are requested to respect the importance of management areas like marine protected areas and are asked to assist in their implementation through the use of the best scientific knowledge.

e. **Notification and research planning**: Avoid activities which could disturb the experiments and observations of other scientists.

This requires that scientists:

a) make themselves familiar with the status of current and planned research in an area; and

b) that they ensure that their own research activities and plans are known to the rest of the international research community via appropriate public domain data bases and web sites.

f. **Methods**: Use the most environmentally-friendly and appropriate study methods which are reasonably available.

g. **Transport of biota**: Ensure that transport of biota between different marine regions, which could lead to changes in the environment or the composition of marine communities, does not occur.

h. **Collections**: Avoid collections that are not essential to the conduct of the scientific research, and reduce the number of samples to the necessary minimum.

i. **Collaboration and cooperation**: Ensure the fullest possible use of all biological, chemical and geological samples through collaborations and cooperation within the global community of scientists. Samples which can be archived should be placed in accessible repositories for future use.

j. **Data-sharing**: Practice international sharing of data, samples and results in order to minimize the amount of unnecessary sampling and to further a global understanding of the marine environment.
11. OSPAR supports the individual points of this commitment unreservedly and requests all scientists to adhere to them when planning and carrying out their research.

12. Their application should be a prerequisite for the granting of research funds and ship time.

[1] For the purposes of this document, deep sea shall follow the FAO definition and mean areas of the sea deeper than 200 meters, and high seas shall mean the water column and / or the seabed in areas beyond national jurisdiction, within the OSPAR Maritime Area.