

Draft (October 2016)
Guidelines for Responsible Science at AWI

Preamble

The Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research (AWI) is obliged to conduct its research independently, in accordance with the best scientific practice and for the benefit of society. In addition to the freedom and feasibility of the research, the AWI also takes into account the risks for constitutionally protected goods and ethical boundaries. In some cases therefore, it must be determined to what extent certain goods are to be protected. This may limit the freedom of research, which is set as a guiding liberal science in the basic law, if it is reasonable.ⁱ

As part of the Helmholtz Association, the AWI also has a role in answering scientific and social questions, which help to secure the people's basis of life in the long term and to create the technological basis for a competitive economy. We want to help society ensure that the human impact on the natural foundations of the Earth system is environmentally friendly and sustainable. In so doing, AWI can and must face controversial topics. It is the goal of AWI, to fulfil its role as a science-based, independent and reliable consultant for a responsible society.

There is a potential for research results to be used by third parties for unintended political, military or economic purposes ("dual use"), carrying risks for humankind, animal welfare and the environment, or raising socially controversial topics. To be able to responsibly deal with these risks, the AWI has developed guidelines for its research and developed measures for dealing with high-risk or controversial research. Every scientist has personal responsibility for their research and these guidelines are intended to provide guidance. These guidelines relate to both wholly or partly publicly-funded research, as well as contract research. The guidelines are valid for all AWI staff and also apply to spin-offs from the AWI where the company's employees or shareholders maintain a working relationship with the AWI.

General Guidelines

The AWI is generally committed to transparency of decisions and processes, disclosure of results, independence of research and usage of research outcomes for the benefit of society. The institute also strives to justify its research in a social context. Therefore,

1) The research must be carried out according to the standards of good scientific practice.ⁱⁱ
(→ *Securing of quality standards*)

2) The research may not harm constitutionally protected goods to an inadmissible degree or violate legal regulations.ⁱⁱⁱ (→ *Compliance*)

3) Scientists should be aware of the potential risks of their research, must carefully consider the risk and minimize that risk as far as possible. High-risk research projects need to be identified and assessed. (→ *Social Responsibility*)

4) The sources of financing for research projects (also in contract research) must be disclosed. (→ *Securing of transparency*)

Guidelines for wholly or partly publicly funded research

All research projects funded by public funds or which are carried out with partial public funding, are subject to additional guidelines, namely:

5) The results shall be made generally available and be supported by scientific publications according to quality criteria. (→ *ensure the quality of the research*)

6) Research projects must be independently conducted and evaluated. (→ *Maintaining the independence of science*)

Guidelines for contract research

In addition to the General guidelines, the following additional criteria to be considered for contract research:

7) The project is embedded in a demonstrably responsible overall project of the customer (E.g. designated by appropriate quality and safety standards, taking account of environmental aspects, transparency to the public, zero harm policy etc.). (→ *Assurance of responsible research*)

8) The instruments to be employed (monitoring tools, period of time, scope of work) should be reasonable and allow for meaningful research of the issue. The AWI will not perform any research contracts with pure 'alibi' to justify economically or otherwise motivated activities. (→ *No misuse of research for other motives*)

9) The results of risk assessments conducted by the AWI will be disclosed, at least in summary form. Ideally, a publication of the results should be made possible. (→ *Transparency*)

Measures

In accordance with the directives of the DFG and Leopoldinaⁱ, AWI establishes a "Risk Assessment Committee" (RAC) to which external members can be consulted if necessary. Research projects with a potential risk must be reported to the Committee by the scientists involved, in consultation with their section head. The RAC will examine such projects for possible breaches of legal regulations, risks of potential abuse (e.g. 'dual use') or risks to the environment, before making its recommendations. The Committee will endeavor to find a balance between risk prevention and safety standards, with due consideration to the social relevance of the research project. It must also be clarified to what extent certain goods are to be protected and whether a limitation of research is necessary and reasonable.

The RAC will establish if a risk-assessed research project may proceed as planned, whether it may proceed with restrictions, or should be rejected entirely. An explanatory memorandum detailing the deliberations and findings of the Committee will be presented to the Board of Directors and will be accessible to the applicant(s) of the project.

In borderline cases, it is up to the Board of Directors to make a decision as to whether a research project meets the criteria of the Guidelines and whether or not the project may be carried out by the AWI.

(These guidelines will be further developed over time. They should be discussed in a broad context with other research institutions which are faced with similar problems, and an agreed Code of Conduct developed where possible.)

ⁱ DFG, Leopoldina (2014), Wissenschaftsfreiheit und Wissenschaftsverantwortung. Empfehlungen zum Umgang mit sicherheitsrelevanter Forschung.

ⁱⁱ DFG (2013), Sicherung guter wissenschaftlicher Praxis.

ⁱⁱⁱ E.g. United Nations Convention (1982), Law of the Sea.