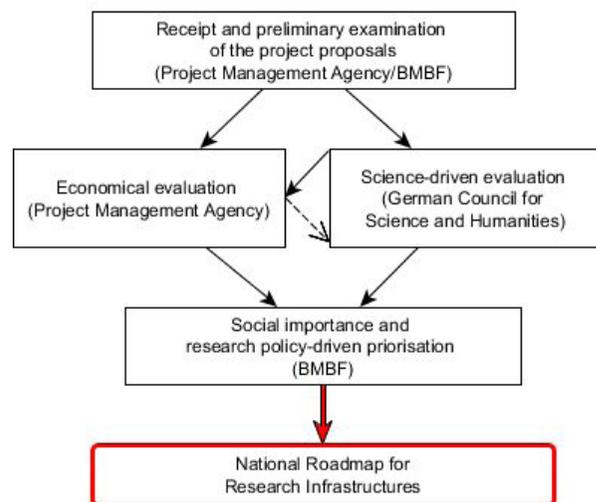


Evaluation Process

In a first step, the mandated committee of the German Council of Science and Humanities generates qualitative reviews of the research infrastructure proposals assigned by external reviewers. Thereby the scientists responsible for the proposals are offered to discuss open questions regarding their proposals with both the reviewers and the committee. In a second step, all proposals undergo a comparative assessment. This assessment will run separately within each dimension for every proposal. The combination of the qualified reviews and the comparative evaluation are the final result of the science-driven evaluation process.

In parallel to the science-driven evaluation carried out by the Council, the project management agency carries out an economic evaluation by estimating the costs of the proposed research infrastructures. Both evaluation parts are interlinked. Based on the results of science-driven review and economic evaluation, and taking into account the social relevance of the research infrastructures, the BMBF will prioritise the proposals and generate the roadmap.



Proposal Submission and Publication

The applicable framework conditions for the process and for the submission of proposals are outlined in detail in the “Guidelines for outlining proposals for the National Roadmap for Research Infrastructures, issued by the German Federal Ministry of Education and Research (BMBF)”:

http://www.wissenschaftsrat.de/download/archiv/FIS_Leitfaden_EN_Veroeffentlichung.pdf

Information on the evaluation of large-scale research infrastructures by the German Council of Science and Humanities (Wissenschaftsrat) can be found at:

http://www.wissenschaftsrat.de/en/fields-of-activity/research_infrastructures.html

The results of the science-driven evaluation will be submitted to the Council as an evaluation-report and launched in August 2017. The roadmap-process shall be completed in spring 2018 with the publication of the roadmap by the BMBF.

Contact Person

Dr. Elke Lütke-meier
German Council of Science and Humanities
Head Office
E-Mail: luetkemeier@wissenschaftsrat.de
Telefon + 49 221 3776-125

For general enquiries please contact:
forschungsinfrastrukturen@wissenschaftsrat.de

WR

WISSENSCHAFTSRAT

Berlin | Cologne

Evaluation of Large-scale Research Infrastructures for Inclusion in a National Roadmap

SPONSORED BY THE



Federal Ministry
of Education
and Research

Background

Following the request by the German Federal Ministry of Education and Research (BMBF), the German Council of Science and Humanities (Wissenschaftsrat) developed a process for carrying out a science-driven evaluation of large-scale research infrastructures for inclusion in a national roadmap and tested this process in a pilot phase between 2011 and 2013. The pilot phase was successfully completed in 2013 with the publication of the “Report on the Science-driven Evaluation of Large Research Infrastructure Projects for the National Roadmap”. Building upon this experience the respective process was further developed. The new national roadmap process for research infrastructures started in August 2015. The BMBF once again requested the Council to carry out the part of the science-driven evaluation of the roadmap process independently

Research Infrastructures

Large-scale research infrastructures are an indispensable requirement for an efficient scientific system, along with researchers and institutions. In many cases, science depends on the employment of such research infrastructures to study complex scientific subjects and to engage in top-level research with high international standards. In current science policy debate, a wider definition is often used, which includes the following types:

- _INSTRUMENTS (“classic” large-scale facilities and distributed research infrastructures)
- _RESSOURCES (information infrastructures such as data bases, archives or collections)
- _SERVICE FACILITIES (e. g. e-infrastructures)
- _SOCIAL RESEARCH INFRASTRUCTURES (e. g. meetings centres or Institutes for Advanced Studies)

National Roadmap-process

The National Roadmap-process in Germany aims to develop research-policy based strategies in the context of the need for and possible investment in research infrastructures. The produced research-policy based strategies and the investment-decisions linked to them serve to prepare governmental budget decisions. With the inclusion in the Roadmap BMBF confirms its fundamental intention to provide funding. Thus, the preparation of a National Roadmap is a central step to establish Germany’s position within Europe and globally.

The decision on such a long-term investment strategy will be based on the results of a comparative science-driven and an economic evaluation of the proposals. Both evaluation-processes are interlinked. The results of both lay the foundation for the subsequent assessment of the societal meaning and the research policy based prioritisation of the political decision maker.

Within the Framework of the National Roadmap, proposals for both new RI as well as for substantial upgrades can be submitted, which meet the following criteria:

- _ national strategic importance
- _ open access (selection according to scientific quality)
- _ utilisation phase of at least 10 years following its construction
- _ planned development costs (German share) of at least € 50 million, a threshold of € 20 million in the fields of humanities and social sciences respectively

Science-driven evaluation

The science-driven evaluation of the submitted proposals is performed by a mandated committee of the German Council of Science and Humanities. This committee consists of members of the Council as well as external experts.

The evaluation of the proposals takes place in two phases: a review and a comparative assessment of the project proposals. Both follow four dimensions of evaluation:

- _ The dimension of SCIENTIFIC POTENTIAL encompasses the importance of the project in initiating new fields of research or developing existing fields of research. Assessing the scientific needs, the projects are considered independently and in relation to competing and complementary research infrastructures.
- _ The dimension of UTILISATION relates to the size and origin of user groups as well as to the regulation of access to the research infrastructure. Data management, quality assurance of the utilisation and standards as well as good scientific practice in dealing with research data and publications are also covered.
- _ The dimension of FEASIBILITY covers both technical requirements for the research infrastructure as well as personnel and institutional requirements for the hosting institution (including the governance concept). It also takes the state of realisation into account.
- _ THE RELEVANCE TO GERMANY AS A LOCATION OF SCIENCE AND RESEARCH and its impact on the visibility and attractiveness of German science will be covered in the fourth dimension.