CoARA Action Plan 2024

Deutsche Forschungsgemeinschaft

German Research Foundation



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About the DFG

The Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) is the central self-governing research funding organisation in Germany. The DFG serves the sciences and humanities and promotes research of the highest quality in all its forms and disciplines at universities and non-university research institutions. The focus is on funding projects developed by the academic community itself in the area of knowledge-driven research.

The DFG funds research projects, creates competitive opportunities and conducts procedures for the review, evaluation, selection and decision of research proposals. It helps shape the overall conditions and standards of academic research. The DFG maintains dialogue with society, politics and business and supports the transfer of knowledge. It advises state institutions and institutions working in the public interest on issues relating to academic research and research policy.

Moreover, the DFG takes particular care to promote international cooperation, early career researchers, gender equality and diversity in science and the humanities.

The DFG has a current annual budget of €3.9 billion, provided primarily by the German federal government (70.4 percent) and the sixteen states (28.7 percent).

DFG and CoARA

The DFG has signed the Agreement on Reforming Research Assessment as one of the first signatories in November 2022 and participated in the Constitutive Assembly of the Coalition for Reforming Research Assessment (CoARA) on 1 December 2022. Currently, representatives of the DFG's Head Office are involved in three of CoARA's Working Groups.

This Action Plan

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In case of questions, please contact:

Dr. Matthias Kiesselbach matthias.kiesselbach@dfg.de, Tel. +49 (228) 885-2404



Phase	Reflection Point	
Starting Point	Reflection on strategy and change approach	The purpose of the DFG, as laid down in its statutes (https://www.dfg.de/de/dfg-profil/ueber-die-dfg/satzung), is to promote research of the highest quality. It does so as a funding agency focusing on knowledge-driven research and working primarily in "response mode": projects are developed and submitted for funding by the research communities; research questions or research areas are typically not prioritized; in the exceptional cases in which they are, the priorities are set by the academic/scientific communities themselves. In this respect, the DFG actualizes the constitutional principle of academic freedom on behalf of the German research community.
		Besides funding research projects, the DFG is also mandated to work towards conditions and standards of academic research in Germany which ensure the flourishing of research in all areas of science and the humanities. Its bylaws commit the DFG to take particular care to promote international cooperation, early career researchers, gender equality and diversity in the research workforce.
		The DFG has welcomed the CoARA-led reform activities from early on, and has done so for two intertwined reasons. Firstly, it regards certain tendencies of global assessment practice as increasingly detrimental to the optimal functioning of the research system. An assessment culture which focuses too heavily on quantitative proxies and which does not adequately reflect their shortcomings incentivizes projects which prioritize the production of such figures over the generation of valuable knowledge. Secondly, and relatedly, the policy decisions of DFG's boards, which have sedimented into DFG's procedural rules, have long aimed at supporting a predominantly qualitative mode of assessment. For that reason, they have been in harmony with CoARA's reform commitments even before CoARA was founded.
		Among the constitutive principles of the DFG are the rules that funding decisions are science-driven, that reviews are text- and argument- rather than grades-based, and that decision-making boards work by discussion and consensus, while voting is only used in programmes for coordinated projects and only after detailed qualitative discussion.
		The last fifteen years saw increased efforts to strengthen the qualitative mode of review in the DFG. For instance, in 2010, a limit of the number of entries in applicant bibliographies accompanying project proposals was introduced in order to prioritize "quality over quantity" in the assessment of an applicant's, or a group of applicants', previous work. At the time, this move was widely regarded as ground-breaking.
		The DFG's Guidelines for Safeguarding Good Research Practice (https://www.dfg.de/en/principles-dfg-funding/basics-and-principles-of-funding/good-scientific-practice), in effect since 2019, include the principle that the assessment of individual researchers must be multi-dimensional, broad-based and qualitative, while "quantitative indicators may be incorporated into the overall assessment only with appropriate differentiation and reflection" (Guideline 5). The DFG's General Guidelines for Reviews (https://www.dfg.de/resource/blob/167398/6b141d2ce56c96f79be1aa2e149197fb/10-20-en-data.pdf) mirror this principle.
		In September 2022, the DFG's Joint Committee introduced yet further changes aimed at ensuring that review and evaluation employs a primarily qualitative mode and draws from a broad set of relevant data. New hybrid CV forms with optional narrative elements and a section for non-classical scientific contributions were introduced. The definition of the term



"publication" was broadened to cover the entire spectrum of scientific output (including research software, compendia, curated data sets or blog posts, amongst others). Rules regarding cited scientific contributions were amended to require applicants to not simply list their previous work in a proposal, but to discuss its relevance to the proposed project.

Concern with the qualitative nature of review and evaluation has also issued in the DFG's support for DORA (San Francisco Declaration on Research Assessment) and guided a white paper, published in September 2022, on scientific publishing, entitled "Academic Publishing as a Foundation and Area of Leverage for Research Assessment" (https://www.dfg.de/en/principles-dfg-funding/developments-within-the-research-system/publishing).

Signing the *Agreement on Reforming Research Assessment* and joining CoARA has, hence, not represented a policy shift for the DFG, but a continuation of longstanding efforts to design review and evaluation procedures in a way that defines research excellence in a qualitative and multidimensional way.

Involvement of institutional community in the change process

As a special feature rooted in its history, the DFG is set up as a self-governing body representing the German research community, with elected, active researchers making up the DFG's review boards ("Fachkollegien") and active researchers appointed by DFG's member institutions – universities and some other research performing organisations – making up the majorities of DFG's principal decision-making boards. The DFG's Executive Board and its Vice Presidents, the Senate as well as the 49 review boards constitute the scientific/academic voice in all of DFG's decisions. By way of a governmentally intended arrangement, representatives of DFG's own funders (the German federal and state-level science ministries) are structurally in the minority in all boards in which they are present. All academic members of DFG's various boards can – and frequently do – also figure as applicants in DFG's funding schemes.

Given these organizational features, it is safe to say that the relevant stakeholders (the "institutional community") are represented within DFG's core structure.

In addition, the DFG frequently organizes round tables on matters of research policy, as well as annual meetings with grantees of selected funding lines (notably the Emmy Noether Programme) and other fora in which members of the DFG's head office staff interact with the academic communities. In these fora, the DFG informs the communities of its activities – including reform activities – and enquires about views and priorities of the communities. A further notable tool to involve members of the research communities is the online portal "Research Integrity" (https://wissenschaftliche-integritaet.de/en/code-of-conduct/) in which the DFG's Guidelines on Safeguarding Good Research Practice are complemented with extensive commentary and case studies and which invites focused community feedback.

In recent months, the DFG has worked with other German CoARA members to set up a CoARA National Chapter for Germany. This National Chapter, which has begun its work in March 2024, not only serves as a forum for CoARA members, but is also open to non-members interested in participating in the discussions on research assessment and its reform.

Finally, the DFG is committed to maximum transparency about its reform endeavors, of which the publication of the present Action Plan is an example.



Key challenges to address

While there is broad and growing support for the aims of research assessment reform within the research community, the reform can only succeed if three key challenges are adequately addressed:

Firstly, a predominantly qualitative mode of evaluation requires time and particular care – resources which, according to many researchers, are becoming scarcer not least because of ever more frequent requests to review manuscripts, assess candidates for academic positions and evaluate research proposals. In order to address this challenge, institutions, authorities and funders ought to provide adequate recognition for review work, and universities and research institutions worldwide are called upon to appreciate and support research assessment duties as part of the professional duties of researchers.

Secondly, in order for assessment reform to succeed, research assessment practices must evolve in harmony with career and investment decisions on the part of researchers and institutions, respectively. Both individual researchers and institutes must be able to develop the confidence that practices which may score "low" according to a primarily metrics-based evaluative mindset but which actually further the scientific project will be adequately recognized in current and future research assessment. Their recognized success in the science system, in turn, can influence the way research evaluation is carried out. To address this challenge, momentum must be built and kept up not least through credible self-commitment on the part of individuals and institutions and through publicity. Researchers who have previously benefited from a metrics-based research culture are asked to recognize that different kinds of contributions to and careers in science can be equally valuable.

Thirdly, identification with the goals of assessment reform may be unevenly developed in different disciplines. While differences in disciplinary culture, including assessment culture, are generally acceptable and often very valuable, this particular variation may pose a problem for certain interdisciplinary projects. Addressing this challenge may demand increased communication between disciplinary communities. In this context, interdisciplinary review panels and fora such as the DFG's Senate and its various scientific sub-committees as well as the *German Science and Humanities Council* (Wissenschaftsrat) will be of high value.

It is important that all stakeholders, including the many thousand reviewers who contribute to DFG's review and evaluation procedures in a given year, recognize that in order to succeed, the reform depends on their many individual contributions.

Operational action-plan for 5-year time frame (with reference to CoARA Commitme nts) Commitment 1: Recognise the diversity of contributions to, and careers in, research in accordance with the needs and nature of the research

As stated above, it has long been the practice of the DFG to encourage a mode of review and evaluation in which ideas and contents take precedence over quantitative proxies. This includes considering various kinds of research output in assessment, both as a measure of the performance of a researcher, and under the heading of preparatory work in the context of a given project proposal.

As a body representing the German research community, the DFG has also called for the adoption of this mode of assessment beyond its own funding programmes. As early as 2004, the DFG's Senate Commission on Clinical Research has argued as that schemes of performance-based allocation of funds within universities ("Leistungsorientierte Mittelvergabe (LOM)") should take a broad and qualitative view of scientific output and performance. In its statement (https://www.dfg.de/resource/blob/169106/ eb4c72d6c6514800b4e2c83cf6e7641b/stellungnahme-klinische-forschung-04-data.pdf), the Senate Commission conceded that quantitative metrics such as Impact Factors may – in the absence of elaborated content-based



evaluation procedures – be useful in the context of LOM for the assessment of departments or groups, but explicitly cautions against using such measures in the evaluation of individual researchers.

In order to help applicants within DFG programmes to convey a full picture of their scientific work and achievements, the DFG has most recently introduced – as part of a "package of measures to support a shift in the culture of research assessment" (https://www.dfg.de/en/news/news-topics/announcements-proposals/2022/info-wissenschaft-22-61) standard CV forms with optional narrative elements and space to elucidate or discuss biographical details as well as non-standard (i.e. non-article) research output.

One current activity aimed at promoting the recognition of diverse outputs is a series of online seminars in which the DFG's newly constituted review boards (whose election took place in 2023 and who will serve until 2027) are prepared for their work in evaluating proposals. These seminars include detailed discussions of responsible ways of scientific review and evaluation.

Commitment 2: Base research assessment primarily on qualitative evaluation for which peer review is central, supported by responsible use of quantitative indicators The DFG General Guidelines for Reviews (https://www.dfg.de/resource/blob/167398/6b141d2ce56c96f79be1aa2e149197fb/10-20-en-data.pdf) state that the "(a)ssessment of the achievement of a researcher must be (....) based on substantive qualitative criteria" and that "details of quantitative metrics such as impact factors and h-indices are not required and are not to be considered as part of the review" (pg. 3).

As stated above, however, the DFG recognizes that the issue of responsible research assessment calls for more than the publication of standards or commitments. It must also be practically addressed. In the context of the DFG Head Office, various of its departments and units are in charge of introducing the relevant commitment in the relevant funding processes.

Commitment 3: Abandon inappropriate uses in research assessment of journal- and publication-based metrics, in particular inappropriate uses of Journal Impact Factor (JIF) and hindex

Apart from the guidelines issued to reviewers and the further measures discussed above, the DFG will continue to encourage reflection among reviewers as well as review and decision board members on what constitutes inappropriate uses of bibliographic or other quantitative metrics in the assessment of individual researchers or their research proposals. One tool which is already in use are surveys on the uptake of measures such as the novel CV forms.

In the future, moderators of all of DFG-organized review sessions (from onsite reviews of co-ordinated projects via regular review board sessions to the sessions of grant committees up to those of the Joint Committee) will be further sensitized to recognizing and avoiding potentially inappropriate mentions of quantitative data in external reviews or review board discussions. They will be asked to probe whether the mention of such data is mere shorthand for statements of scientific performance which could also be given a qualitative formulation (instead "this has appeared in Science and has attracted X citations", perhaps it could be stated as "the applicant's previous work in this field has contributed to the development of a new method with application beyond the immediate question"), or whether there is no relevant qualitative information beyond the quantitative datum itself. They will also be encouraged to probe for non-obvious biases or errors behind the mentions of quantitative data (for instance, illegitimate comparisons of a proxy's values across disciplines, cherry-picked proxies etc.). In drawing attention to these points, the moderators also sensitize the respective reviewers to the issue of responsible research assessment.

Commitment 4: Avoid the use of rankings of research

As the DFG is not engaged in the systematic evaluation of research organisations, this commitment does not apply to DFG.



organisations in research assessment

In contexts in which the overall performance of a higher education or research institute, or the suitability of an institute as a host to a potential project, is addressed as part of the assessment of a research proposal submitted to DFG, quantitative indicators (such as third-party funding or publication performance) can make a valuable contribution in the sense of "informed peer review".

As a service for its member universities which request such data, the DFG regularly publishes a catalog of key figures in its *Funding Atlas* reporting system, which quantifies a very broad spectrum of institutional research activities (https://www.dfg.de/en/news/facts-figures/funding-atlas).

Commitment 5: Commit resources to reforming research assessment as is needed to achieve the organisational changes committed to General matters of assessment reform influence the work of all units of the DFG's administration involved in funding procedures, mainly the divisions within the Scientific Affairs Department and Coordinated Programmes and Infrastructure Department which manage the day to day review and evaluation and liaison with the standing review boards and the decision-making committees. Significant human resources are hence committed to this area.

With respect to CoARA specifically, two members of the DFG's Head Office are the DFG's main points of contact to CoARA, further colleagues are also involved with CoARA related matters, such as active participation in three CoARA Working Groups, monitoring and coordination of assessment matters etc.

Should this become necessary, funds are also available for hosting or traveling to relevant meetings or symposia.

Commitment 6: Review and develop research assessment criteria, tools and processes Apart from regular internal monitoring and internal and external discussion activities as described under the topic "Involvement of institutional community in the change process" (above), the DFG is actively involved in three CoARA Working Groups, including the Working Group "Improving practices in the assessment of research proposals", in which funding bodies discuss potential improvements to their procedures. The DFG's Executive Board is taking an active interest in the developments of this and the other working groups.

The DFG will also continue to seek relevant inputs from its scientific boards, such as the review boards and the Senate, and from other members of the communities, for example in round-table discussions or meetings. In the coming two years, evaluations of the Excellence Strategy (a large funding programme handled by DFG together with the German Science and Humanities Council) and a survey of DFG's applicants across funding programmes will be carried out.

Furthermore, the DFG currently conducts a text-based monitoring and evaluation (including a survey addressed to reviewers) of the CVs which are submitted alongside funding proposals.

Commitment 7: Raise awareness of research assessment reform and provide transparent communication , guidance, and training on assessment criteria and processes as well as their use

The DFG uses many opportunities to raise awareness of the issue of research assessment reform, and to inform and guide external reviewers and members of its boards in matters of review and evaluation.

Before every session of an ad-hoc review panel, for instance, issues of responsible research assessment are discussed in detail. As stated under Commitment 1 (above), the DFG has also included information on CoARA and its commitments into the online sessions and information material used to prepare newly elected review board members for their work.



The DFG also uses short videos which can be found on its YouTube channel "DFG bewegt" and which are linked in DFG's social media activities, to inform applicants and reviewers about its procedures (see, for example, https://www.youtube.com/watch?v=NUIIfyUOOCM
&list=PLq8YHwrfUwKcgzQrDl9spzVLhk-HjFfVa&index=16&pp=iAQB or https://www.youtube.com/watch?v=bm_f1ZakaQk&list=PLq8YHwrfUwKcgzQrDl9spzVLhk-HjFfVa&index=3&pp=iAQB.) One recent video addresses the challenges of implicit biases in review and evaluation, and ways to counter them (https://www.youtube.com/watch?v=8757KgqeSbc).

Finally, surveys among reviewers also serve to raise awareness of the reform.

With its consistent communication efforts in this matter, the DFG aims to make the consideration of responsible research assessment principles into a daily routine among its staff, board members and reviewers.

Commitment 8: Exchange practices and experiences to enable mutual learning within and beyond the Coalition Besides participating in three CoARA Working Groups, one of whose goals is the exchange on practices and experiences, the DFG has also actively pursued the foundation of a CoARA National Chapter for Germany. This Chapter is not only open to CoARA members, but crucially also to non-members in Germany who are interested in the question of research assessment and its reform.

The DFG is also involved in a number of fora outside the CoARA context, for example in associations like *Science Europe* or the *Global Research Council* (internationally) or the *Alliance of Science Organisations* ("Allianz der Wissenschaftsorganisationen") (nationally). The DFG uses such fora, among other things, to discuss questions related to research assessment and its reform. This area has been on the respective agendas of all fora mentioned here.

The same is true for many of the bilateral cooperation schemes with other funding agencies across the globe.

Commitment 9: Communicate progress made on adherence to the Principles and implementation of the Commitments The DFG will report on its progress in the field of research assessment by way of future CoARA Action Plans and Reports, but also in the form of other reports, including the annual reports solicited by the *German Federal Ministry of Research and Education* in the context of the "Pakt für Forschung und Innovation" (PFI, Pact for Research and Innovation), a long-term agreement between German RPOs/RFOs and the federal and state-based science and research ministries, which guarantees budgetary stability in return for furthering certain agreed policy goals such as equality or the inclusion of universities of applied sciences in the research system. Their progress is documented in the PFI monitoring using an annually updated set of key figures.

The DFG will also use its website, press releases and social media channels to inform the research communities of relevant developments in the field.

Commitment 10: Evaluate practices, criteria and tools based on solid evidence and the stateof-the-art in research on research, and make data openly available for evidence The DFG is committed to regularly evaluating its programmes, funding policies and procedures, including changes to the former.

This is done in different ways, depending on what kind of evaluation is the most appropriate in the case at hand.

For evaluations which require a quantitative or otherwise data-intensive approach, the DFG maintains a dedicated "Evaluation and Monitoring" team within the division "Information Management". This unit regularly publishes its evaluation reports. The "Evaluation and Monitoring" team often partners



gathering and research

with external agencies and / or facilitates independent studies conducted by interested members of the scientific community. It maintains close ties with the relevant communities and institutes, for example DZHW (German Centre of Higher Education Research and Science Studies) or RORI (Research on Research Institute).

Two examples of recent evaluation studies overseen or commissioned by the "Evaluation and Monitoring" team are a study on the practice and use of funding acknowledgements (https://www.dfg.de/de/aktuelles/zahlen-fakten/evaluation-studien-monitoring/studien/studien/studien-gakten/evaluation-studien-monitoring/studien/bericht-kfo). The team also conducts annual surveys on the funding of larger scale coordinated projects (https://www.dfg.de/en/news/facts-figures/evaluation-studies-monitoring/surveys).

There is also a "Statistics and Reporting" team responsible for the continuous monitoring of vital aspects of the DFG's research funding, for example on equal opportunities (https://www.dfg.de/en/news/facts-figures/evaluation-studies-monitoring/equal-opportunities).

The "Research Culture" division which oversees the DFG's CoARA membership also analyzes and sometimes gathers data including experience reports to obtain information on trends or novel measures in the context of DFG's evaluation practices. One recent internal study conducted by this division in collaboration with the above-mentioned monitoring-team has looked at DFG's ad-hoc programme for Covid 19 research.

The DFG is also committed to accommodating requests from the relevant scientific communities to share anonymized data on its funding activities wherever possible and appropriate.

