The Review Boards – Members Share Their Opinions of and Experiences with the New DFG Review System

Selected results from a survey of DFG review board members

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In 2003 the DFG completely reformed its review system. Under the new model, elected review board members provide evaluations and quality assurance for the review process, and thereby supply a basis for the DFG's funding decisions. In a survey by the Institute for Research Information and Quality Assurance (iFQ), review board members of the first term (2004 - 2007) have now given their opinions on key aspects of the reform: How do they rate the new system? Has the reform met its objectives? How do individual review boards operate internally? How do they perceive the peer-review system in general? Where do they see room for improvement? The iFQ study gives comprehensive answers to these questions. This newsletter presents some of its findings.

Background, Data Base and Methodology of the Study

By introducing the review board system in 2003, the DFG fundamentally changed the review process as it was practiced until then. Whereas previously elected review committees were responsible for conducting individual peer reviews, the DFG's review boards are now responsible for ensuring the overall quality of the review process. Peer review is generally carried out

outside the review boards (exceptions are possible, particularly in the coordinated programmes). The aim is to clearly separate individual peer review from the overall assessment of the review process (quality assurance)¹.

The Institute for Research Information and Quality Assurance (iFQ) has been funded by the DFG as a central facility since 2005. Its objective, especially in its start-up phase, is to help provide the research community and the general public with better information about the findings of DFG-funded research. Against the backdrop of the reform, the iFQ surveyed review board members who served during the first period (2004 - 2007) in order to "sum up initial experiences with the DFG's reformed review system and identify potential problem areas" (Hornbostel/Olbrecht 2007: 5). The survey, which was conducted online, targeted 577 elected researchers who served in 48 DFG review boards on a volunteer basis. The response rate was 79.2 percent; 71 questionnaires could not be linked to a specific review board because they did not include this information. The interviewees' great interest in the topic of the study was reflected not only in a high response rate, compared to similar studies; 94 percent of participants also requested to be notified by e-mail as soon as the findings are publicised.

The questionnaire was divided into five main topics: "Tasks of Review Board Members", "Organi-

^{1.} Further information on the function and tasks of review boards can be found on the DFG website (/ www.dfg.de/en/dfg_profile/structure/statutory_bodies/review_boards) and in the Framework Rules and Regulations for Review Boards (cf. Deutsche Forschungsgemeinschaft 2008). For the background on the reform cf. Koch 2006.



sation and Procedures of the Review Board", "Anonymity (Importance of Transparency for Reviewing Research Proposals)", "Final Reports" and "Quality Assurance and Evaluation of Review Processes" (cf. Hornbostel/Olbrecht 2007: 13). Giving special consideration to the characteristics of each respective subject culture, the report differentiates most findings by subject area, using the DFG's subject classification system² and its 14 research areas.

This newsletter presents some of the study's key findings under the first three main topics.³. The report itself, as well as a statement by the DFG describing the most important lessons learned from the iFQ study, are available on the internet at www.dfg.de/zahlen_und_fakten/ (in German).

2 Selected Results

2.1 Tasks of Review Board Members

In its Framework Rules and Regulations (Deutsche Forschungsgemeinschaft 2008), the DFG Senate has defined the most important tasks and procedures of the review boards. It does not prescribe a standardised approach across all subject areas; rather, it allows each subject area to operate its review board according to its own unique culture. Figure 1 shows the importance that review board members attribute to various task areas as defined by the iFQ.

Interviewees identified the evaluation of reviews as a central task (47 percent ranked its importance as high, 47 percent as very high). The evaluation of

Question: How do you rank 46.8 45.8 6.8 0.5 Evaluation of individual reviews (n = 395) the importance of your tasks as a review board Evaluation of proposal (n = 393) 44.5 47.3 7.4 0.8 member? Reviewing the draft of the decision proposed 25.2 39.1 30.1 by the Head Office (n = 389) Formulating an evaluation based on 44.4 22.1 5.1 reviewer statements (n = 390) Helping to evaluate proposals under 19.4 43.2 30.6 6.8 coordinated programmes (e.g. SFB) (n = 382) 12.5 33.8 Assessing the reviewer selection process (n = 376) 39.1 Sharing funding-programme experiences 7.8 26.5 48.3 with the DFG's statutory bodies (n = 358) Advising the DFG's statutory bodies 6.3 25.9 47.4 on strategy issues (n = 363) 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% Low Very high High Very low

■ Figure 1: Importance of review board tasks (in percent)

Source: Hornbostel/Olbrecht 2007: 16

^{2.} Cf. www.dfg.de/en/dfg_profile/

^{3.} The main topic "Final Reports" deals primarily with review board members' take on plans to publish the final reports on DFG-funded projects online. The section "Quality Assurance and Evaluation of Review Processes" investigates whether review board members would welcome regular and systematic evaluation of the DFG reviewer system.

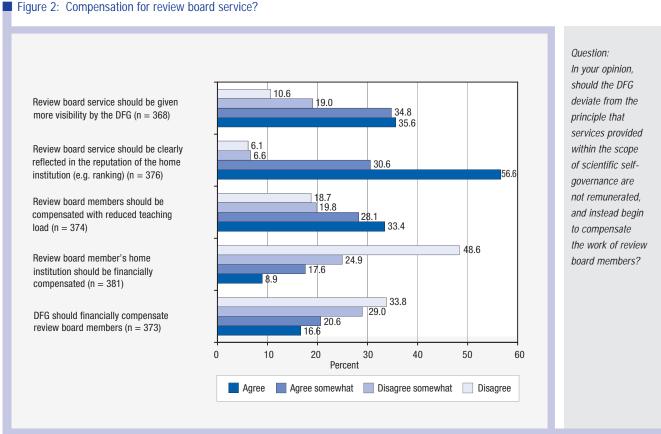
the proposal itself was likewise given high priority (47 percent ranked its importance as high, 45 percent as very high). Great confidence in the work of the Head Office is demonstrated by the fact that only 13 percent of respondents rank reviewing the reviewer selection process as very high in importance (high: 34 percent). This result is closely linked to the finding that "the majority of respondents (73.6%) believes that the Head Office selects reviewers in a responsible manner" (Hornbostel/Olbrecht 2007: 29).

Advising the DFG's statutory bodies on strategy issues ranked relatively low at the time of the survey (26 percent high, 6 percent very high). But these figures will change in the future: As the new review boards assembled at the beginning of 2008, new

measures were introduced to give more weight to the expertise of review board members when the DFG makes strategic funding decisions (cf. Güdler/Königs 2008: 3).

Review board service is time-consuming, and those called upon to provide it tend to be scientists and academics whose expert opinion is sought not only by the DFG but in many other contexts as well. Considering this, the iFQ asked whether and in what way review board members expect to be compensated for their service. Figure 2 shows the results.

The majority of those interviewed believes that financial compensation by the DFG is not a good idea – almost 63 percent of respondents disapprove of it. However, the study shows big differences between



Source: Hornbostel/Olbrecht 2007: 18



research areas: Review board members for biology, physics, medicine and the humanities demonstrate ambivalence, with rejection rates ranging from 42 to 57 percent (cf. Hornbostel/Oelmeier 2007: 18).

In contrast, the majority of the researchers interviewed, regardless of their specialty, agreed with the following statement: "Service on a review board should be clearly reflected in the reputation of the home institution (e.g. in rankings)." This clearly confirms the approach taken by the DFG in the last funding ranking to use the number of DFG reviewers and review board members working at a university as a key indicator of scientific expertise (cf. Deutsche Forschungsgemeinschaft 2006).

2.2 Review Board Organisation and Procedures

By instituting review boards, a new division of labour was introduced, especially regarding the selection of scientists and academics who review DFG funding proposals. Reviewers are selected by DFG officers – research managers who usually hold an advanced degree in one of the subject areas for which they are responsible and typically have several years of active research experience. The overwhelming majority of the review board members interviewed had a positive opinion of how DFG officers select reviewers. When asked, "Do you believe the Head Office selects reviewers in a responsible way?", 74 percent of respondents answered "yes" and another 24 percent "generally yes".

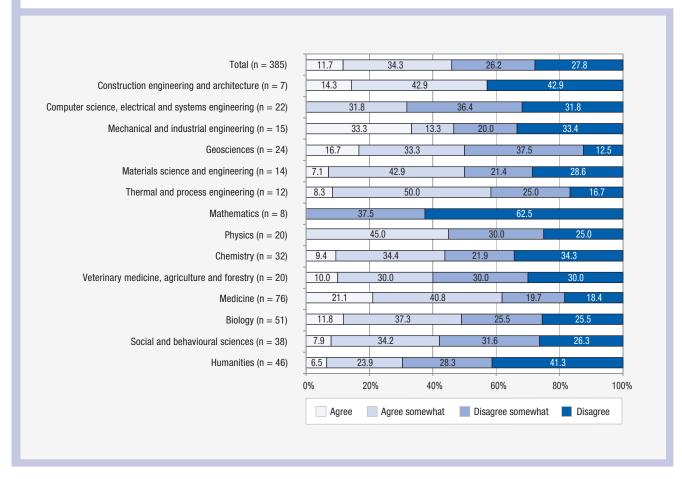
Accordingly, the quality of the reviews themselves was also rated very positively. Answers to the question "In your estimation, what percentage of reviews evaluated by your review board is of adequate quality?" averaged 75 percent. Consequently, when the iFQ presented a number of suggestions regarding possible structural changes in the review process, e.g. through increased standardisation and formalisation, responses tended to be negative: Neither revised guidelines for the review process, nor explicit, subject-specific review regulations, nor standardised review questionnaires met with much

approval. Only the idea to complement written reviews with a grading system was received moderately well: 12 percent of respondents approved of this suggestion, 34 percent approved somewhat, 26 percent disapproved somewhat, and 28 percent disapproved. Broken down by subject, especially review board members for biology, medicine, and thermal and process engineering thought it would be helpful to support reviews with numeric grades, whereas most mathematicians and humanities scholars disagreed with this modification (cf. Figure 3).

2.3 Anonymity and Transparency of the Review System

For the DFG, the anonymity of the review procedure is one of the key principles of its funding activities also and especially from the point of view of the review board members interviewed by the iFQ. When asked, "How important do you think anonymity is in the review process?", 89 percent of respondents answered "important" and another 6 percent "somewhat important". The follow-up question "Do you believe the anonymity of reviewers is ensured?" was also answered affirmatively by most: 60 percent of interviewees responded "yes" and 36 percent "somewhat yes". Broken down by subject area, mathematicians and physicists were especially confident that anonymity is ensured; review board members for veterinary medicine, agriculture and forestry, as well as medicine were a bit more sceptical (cf. Hornbostel/Olbrecht 2007: 52f).

Regarding transparency, the iFQ asked interviewees to give their opinion on the statement "Reviews should be provided to applicants as completely as possible in anonymised versions." 41 percent of respondents agreed fully with this statement, another 21 percent agreed somewhat (cf. Hornbostel/Olbrecht 2007: 55). This demonstrates that the practice introduced by the DFG in 2007 of providing anonymised reviews to applicants in all subject areas meets with widespread approval among review board members.



■ Figure 1: In addition to giving written statements, reviewers should numerically grade important evaluation criteria.

Source: Hornbostel/Olbrecht 2007: 49

3 Conclusion

When asked, "How suitable is the review process as a whole for evaluating the scientific quality of a proposal?", a large majority replied "suitable" (73 percent) and another 24 percent "somewhat suitable". Thus the overall verdict of first-generation DFG review board members is quite positive - which does not preclude that further reforms and modifications of certain details may be needed. A statement on the study, which the DFG has published on the internet (cf. Güdler/Königs 2008), particularly adresses how the involvement of review boards can be increased when decisions on research and funding strategy are made. According to the study, review board members would like to regularly receive statistical data on funding activities

relevant to their respective review board. As the statement announces, this wish will be fulfilled in 2009. In addition, the DFG holds an annual meeting for all review board members. This forum provides an opportunity to actively foster exchanges across subject areas on matters of organisation and funding policy.

Finally, one important service has already been provided by the iFQ report itself: The study delivers, for the first time, a comparative presentation of the attitudes and opinions of the volunteers serving on DFG review boards, thus providing insight especially on the specific practices of the review boards. Review board members past and present, as well as the DFG offices charged with further developing the review board system, are thus provided with a very helpful planning aid.



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EDITORIAL

The DFG infobrief is published by the Information Management section of the Deutsche Forschungsgemeinschaft (DFG), Bonn.

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Design: Designbureau Pi Heinz, Cologne

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