infas

Report

Review Process for Clusters of Excellence in the Excellence Strategy 2018 – Reviewer Survey

Authors: Jonathan Ruiz Marcos, Thomas Weiss

infas Institut für angewandte Sozialwissenschaft GmbH
(infas Institute for Applied Social Sciences)

Friedrich-Wilhelm-Str. 18
53113 Bonn
Germany
Phone +49 (0)228/38 22-0
Fax +49 (0)228/31 00 71
info@infas.de
www.infas.de

infas

Report for

Deutsche Forschungsgemeinschaft e.V. (DFG)
Information Management
Kennedyallee 40
53170 Bonn, Germany

Project

5993
Bonn, November 2018
Rj, Wt

Produced by

infas Institute for Applied
Social Sciences
Friedrich-Wilhelm-Str. 18
53113 Bonn, Germany

Contact

Helmut Schröder
Head of Social Research

Tel. +49 (0)228/38 22-406
Fax +49 (0)228/310071
E-mail h.schroeder@infas.de

Authors

Jonathan Ruiz Marcos, Thomas Weiss

Summary

During the proposal phase for the Excellence Strategy 2017/2018, a total of 88 establishment proposals were reviewed in 32 meetings by 385 reviewers from 31 countries. On the basis of these reviews, the Excellence Commission decided in September 2018 to award funding to 57 Clusters of Excellence.

To evaluate the review process, infas was commissioned to conduct an online survey entitled "Clusters of Excellence Review Process". The online survey was carried out between 04/05/2018 and 03/08/2018. A total of 256 reviewers participated in the online survey. This report describes the methodology used and documents the results of the survey. The key results of the survey show:

- The majority of reviewers regard the process as very suitable (63%) or suitable (32%) as a means of identifying the best projects.
- The quality of the proposals presented to the review panels was judged to be very high (75%) or high (22%).
- The majority of the selected reviewers have very extensive experience in written individual assessments and group reviews, both in their current country of employment and internationally.
- The information provided for the purposes of the review is consistently regarded as very good. However, more than half of the reviewers sought out additional information on the principal investigators (PIs) on their own initiative. This most often related to comprehensive publication lists (62%), information on websites (59%) and performance indicators (55%).
- In terms of the various review criteria, the quality of the research programme and the excellence of the participating researchers are considered to be of much greater importance than the framework in which the research is carried out (the structure and environment of the Cluster of Excellence).
- Four elements of the review process may be identified as particularly important to the forming of the reviewer's opinion: the closed session including discussion and evaluation (98%), the reading of the proposal (97%), the project presentation by the PIs (96%) and the subsequent group discussion with the PIs (94%).
- The reviewers overwhelmingly rated the disciplinary expertise and culture of discussion in the proposal panels as good to very good.
- 99% of respondents were very satisfied or satisfied with the organisation of the process by the DFG Head Office. 98% would be willing to participate in the process as reviewers again.

infas Institute for Applied Social Sciences

Contents

List of Figures

List of Tables

1 Excellence Strategy of the Federal and State Governments

On 16/06/2016, the federal government and the state governments adopted the "Administrative Agreement between the Federal and State Governments in Accordance with Article 91b Paragraph 1 of the Basic Law on the Funding of Top-level Research at Universities – Excellence Strategy", in which they seek to continue and further develop the efforts begun with the Excellence Initiative to strengthen universities. The aim of the Excellence Strategy is to strengthen Germany's position as a place for research in the long term, further enhance its international competitiveness and continue its successful development. The intention is to maintain and expand the dynamism in the German research system achieved since 2006 through the Excellence Initiative and to make longer-term prospects possible. Funding is available for scientific and science-related activities at universities.

Two funding lines are to be established: Clusters of Excellence and Universities of Excellence. Universities in Germany and groups of such universities (consortia) are eligible to submit proposals. There is also the option of involving other cooperation partners such as researchers from other universities, institutions of non-university research, the private sector and other sectors.

The **Clusters of Excellence** funding line is designed to support project-based funding in internationally competitive research fields in universities and university consortia. The DFG has lead responsibility for developing and implementing this funding line. Proposals are reviewed and decided upon in an academically driven, two-stage competitive process (including a draft proposal phase and a full proposal phase). A total of approximately €385 million is available annually for this funding line. Funding will commence on 01/01/2019. Funding decisions for Clusters of Excellence are made on the basis of the academic evaluation of the draft and full proposals. In particular, the general funding criteria are excellence of research, the track record of the participating researchers, and the quality of the university's supporting structures and the environment of the Cluster of Excellence (see annex for list of criteria).

The **Universities of Excellence** funding line is designed to strengthen universities, either as individual institutions or as university consortia, in the long term and to further develop their leading international role in research on the basis of successful Clusters of Excellence. Proposals may therefore be submitted only by universities with at least two funded Clusters of Excellence (or at least three in the case of consortia). The German Council of Science and Humanities is responsible for developing and implementing the Universities of Excellence funding line. A total of approximately €148 million is available annually for up to 11 Universities of Excellence. Reviews will take place in spring 2019 and decisions will be made in July 2019. Funding will commence on 01/11/2019.

1.1 Review and Decision-making Process for the Clusters of Excellence Funding Line in the Excellence Strategy of the Federal and State Governments

The review and decision-making process in the Excellence Strategy is in two stages as stipulated in the administrative agreement between the federal and state governments. It is divided into a draft proposal phase and a full proposal phase. The online survey of reviewers was conducted during the full proposal phase. The draft proposal phase is also briefly described below to help the reader better understand the context of the survey within the selection and decision-making process.

1.1.1 The draft proposal phase

195 draft proposals for Clusters of Excellence were submitted during the draft proposal phase up until 03/04/2017. These were discussed and evaluated between April and July 2017 by 21 draft proposal panels involving 255 reviewers.

The reviewers' task was to evaluate the quality of the draft proposals with regard to the specified criteria (see annex). The number of reviewers in each group varied due to the number of different subject areas that needed to be represented, as did the number of draft proposals assigned to a panel. On average, nine draft proposals were evaluated by an average of 12 reviewers per panel. Two members of the decision-making body also participated in each panel for the purposes of observation and quality assurance (see also following section on the full proposal phase). In September 2017, the review results from the individual panels were brought together and discussed by the Committee of Experts for the Excellence Strategy. The committee then selected 88 draft proposals, the authors of which were invited to submit full proposals. The results were published on 29/09/2017.

1.1.2 The full proposal phase

The 88 full proposals for Clusters of Excellence submitted by 21/02/2018 were grouped by the DFG Head Office into 32 proposal panels according to the subject-area focus of the research programme and the disciplinary background of the participating researchers. 385 reviewers – again mostly from abroad – were recruited for these panels. As in the draft phase, they were selected by staff at the DFG Head Office in agreement with members of the DFG Senate or other DFG bodies with relevant subject-area experience.

The groups were composed such that the expertise of the individual reviewers reflected as closely as possible the subject-area focus of the proposals to be discussed. Consideration was also given to covering the structural aspects of the specified criteria. During the full proposal phase, an average of 13 reviewers per panel dealt with two or a maximum of three proposals. The applicant institutions were notified of the reviewers' names prior to the review process. This enabled the universities to point out any thematic areas of the proposal which were not adequately covered by the reviewers' expertise as well as any potential conflicts of interest on the part of reviewers.

During both the draft and full proposal phases, the review meetings, all of which were held in English, were also attended by two members of the Committee of Experts with a background different from the subject area of the proposal. They participated in an observational and quality assurance role, to ensure that all review standards were adhered to and that discussion was based on the specific review criteria. They also had the task of reviewing and approving the minutes (taken in German), and reporting the results of the meeting to the decision-making body. The review meetings were chaired and the minutes taken by staff from the DFG Head Office. At some meetings, staff members from the head office of the German Council of Science and Humanities also participated as guests.

All review meetings followed a standard schedule. On the day before the meeting, the panel members were provided with detailed information about the aims, conceptual design of the programme, funding criteria, financial framework, programme details, the reviewers' role and the multi-stage review and decision-making process. The purpose of this introduction was to make sure that the reviewers, most of whom came from abroad, were all equally familiar with the funding programme and to answer their questions. An initial discussion of the proposals also provided an opportunity to identify any questions, focal points for discussion or problem areas, and to make an initial qualitative appraisal.

The actual review on the following day included a presentation of the project by the applicants, a discussion between the reviewers and the representatives of the applicant universities, and discussion based on the posters. The reviewers then held a closed session to discuss the proposals and evaluate them in line with the specified criteria. Once each proposal had been discussed and the evaluation had been summarised by the chairperson, there was a secret ballot in which each reviewer awarded a mark for each of the four groups of criteria: Research, Researchers, Supporting Structures, and Environment of the Cluster of Excellence. The awarding of marks took place after the review of each proposal and the results were presented visually in the form of four frequency distributions and four average marks. After the meeting, a set of minutes was prepared by the DFG Head Office. The minutes were checked, modified if necessary, and then confirmed by the two members of the Committee of Experts who participated in a non-specialist reporting role.

The funding decisions were made in September 2018. Firstly, at a two-day meeting of the Committee of Experts, the results of the panel reviews were discussed on a comparative basis, evaluated and ranked in order on the basis of the written minutes and verbal reports. The result of the committee meeting was a recommendation to the Excellence Commission, in which the 88 proposals for Clusters of Excellence were grouped in a qualitative overall view.

The funding decisions were made by the Excellence Commission, which consists of the 39 members of the Committee of Experts and the 17 federal and state ministers responsible for research. In the Excellence Commission, academics therefore have the majority of votes, with a total of 39, compared with the political representatives, who have 32 votes (one vote per federal state and 16 votes for the federal government). The decisions were made on 27/09/2018, and pub-

lished. As of 01/01/2019, a total of 57 Clusters of Excellence will be funded at 34 universities.

1.2 Aims of the Survey

This evaluation of the online survey of reviewers was carried out on behalf of the DFG during the full proposal phase (see 1.1.2). The survey follows on from a larger-scale survey of reviewers carried out in the context of the Excellence Initiative in 2012 by the Institute for Research Information and Quality Assurance (iFQ).[1] The purpose of this new, much smaller survey is to document reviewer feedback, use it to help gauge the suitability and quality of the review process and criteria, and identify possible improvements to the review and decision-making process that will take place regularly every seven years as part of the Excellence Strategy.

[1] Torger Möller, Philipp Antony, Sybille Hinze, Stefan Hornbostel. EXZELLENZ BEGUTACHTET: BEFRAGUNG DER GUTACHTER IN DER EXZELLENZINITIATIVE. iFQ Working Paper No. 11 | September 2012. http://www.forschungsinfo.de/Publikationen/Download/working_paper_11_2012.pdf

2 Design and Methods

2.1 Design of the Study

The study "Clusters of Excellence Review Process" was designed as a cross-sectional survey. The study method used was an online survey (CAWI = computer-assisted web interviewing). The survey was programmed by infas and run on infas servers.

The study population consisted of all reviewers from Germany and abroad who participated in one of the 32 review meetings for the Excellence Strategy between April and June 2018 and agreed to be contacted by infas. The respondents were to be surveyed on their opinion and experiences relating to the review process soon after the review meeting. For this reason, they were contacted in five sections.

The DFG obtained the respondents' consent to their e-mail addresses being shared with infas. The DFG only shared with infas the contact details of individuals who had agreed to be contacted by infas. Within the context of the study, they were then contacted by infas.

All individuals in the sample received an e-mail invitation in English to participate in the survey. Two weeks after the invitations were sent out, those who had not yet participated in or completed the survey were sent a reminder. Reminders were also sent out by e-mail and in English.

This report documents the results of the online survey[2]. The survey included both closed questions and, at various points, the opportunity to provide open responses (see survey documentation in annex). These open responses on the ongoing development of the process will be evaluated by the DFG; this evaluation does not form part of this report.

A summary of the study design is shown in Table 1.

[2] Due to rounding there may be slight deviations in the totals and percentages given.

Table 1 Synopsis of the study

Clusters of Excellence Review Process	
Survey method	**Online survey (CAWI)**
Field period	04/05/2018 to 03/08/2018
Sample	Reviewers from Germany and abroad who participated in one of the 32 review meetings for the Excellence Strategy between April and June 2018 and agreed to be surveyed.
Actual sample used	Total: n=353 addresses Section 1: n=71 Section 2: n=71 Section 3: n=63 Section 4: n=89 Section 5: n=59
Survey instrument	Computer-assisted online questionnaire, English
Contact	Invitation by e-mail (English): n=353 Section 1: 04/05/2018 n=71 Section 2: 18/05/2018 n=71 Section 3: 15/06/2018 n=63 Section 4: 29/06/2018 n=89 Section 5: 06/07/2018 n=59 Reminder by e-mail (English): n=166 Section 1: 18/05/2018 n=29 Section 2: 01/06/2018 n=32 Section 3: 29/06/2018 n=31 Section 4: 13/07/2018 n=50 Section 5: 20/07/2018 n=24
Implemented valid cases	Total: n=256 (72.5%) Section 1: n=53 (74.6%) Section 2: n=53 (74.6%) Section 3: n=45 (71.4%) Section 4: n=63 (70.8%) Section 5: n=42 (71.2%)
Interview duration	Total: Average 9.1 minutes Section 1: Average 9.0 minutes Section 2: Average 8.6 minutes Section 3: Average 9.1 minutes Section 4: Average 9.6 minutes Section 5: Average 8.7 minutes

2.2 Response

The overall response rate for the study was 72.5%. The evaluable net sample was n=256 cases. The response rate for the various sample sections used varies from 70.8% to 74.6%. There were also n=5 aborted surveys and thus incomplete interviews (1.4%).

Table 2 shows an overview of the implementation by section.

Table 2 Implementation by sample section

Base sample	**Total**		**Section 1**		**Section 2**		**Section 3**		**Section 4**		**Section 5**	
Column %	*abs.*	*%*	*abs.*	*%*	*abs.*	*%*	*abs.*	*%*	*abs.*	*%*	*abs.*	*%*
Total	353	100.0	71	100.0	71	100.0	63	100.0	89	100.0	59	100.0
Response												
Complete	256	72.5	53	74.6	53	74.6	45	71.4	63	70.8	42	71.2
Incomplete	5	1.4	1	1.4	-	-	2	3.2	1	1.1	1	1.7
Nonresponse												
No contact	92	26.1	17	23.9	18	25.4	16	25.4	25	28.1	16	27.1

Source: infas Sample Management System (iSMS)

3 Reviewers

Reviewers were selected by the responsible specialist departments at DFG Head Office in consultation with members of DFG bodies with relevant expertise, normally members of the DFG Senate. Subject expertise was chosen to suit the proposals; it was also important to take account of the competence required to assess the structural evaluation criteria. As the Excellence Strategy is a highly competitive funding programme, with many German universities competing against each other simultaneously, the need to avoid potential conflicts of interest created an especially high need for reviewers from abroad. It is also a goal of the Excellence Strategy to further enhance Germany's international competitiveness as a place of research. This made it especially important to recruit internationally respected researchers in relevant fields for the review process.

385 reviewers, including 98 women and 287 men, participated in the reviews of the full proposals, which were held in 32 panels between April and June 2018. 25% of the reviewers were female. Nearly a sixth (13%) of participants had previously served as reviewers in the predecessor programme, the Excellence Initiative (2006 to 2017).

93% of the reviewers were from abroad; see Table 3 below. No data was collected on the nationality of the participants.

Table 3 Origin of reviewers (country of employment) in the full proposal phase of the Excellence Strategy

Origin	abs.	Column %
Total	385	100
Germany	26	7
International	359	93
Of which		
USA	125	32
United Kingdom	55	14
Switzerland	28	7
France	23	6
Netherlands	22	6
Canada	18	5
Other countries	88	23

Source: DFG

The reviewers were recruited from a total of 31 countries (including Germany) on five continents. Over half (55%) of them work in the English-speaking world (USA, UK, Canada, Australia, Ireland, New Zealand). Although reviewers from the USA represented the single largest group, overall the process was dominated by European reviewers, with 57% of participants coming from Europe, around 37% from North America and just under 2% from Asia.

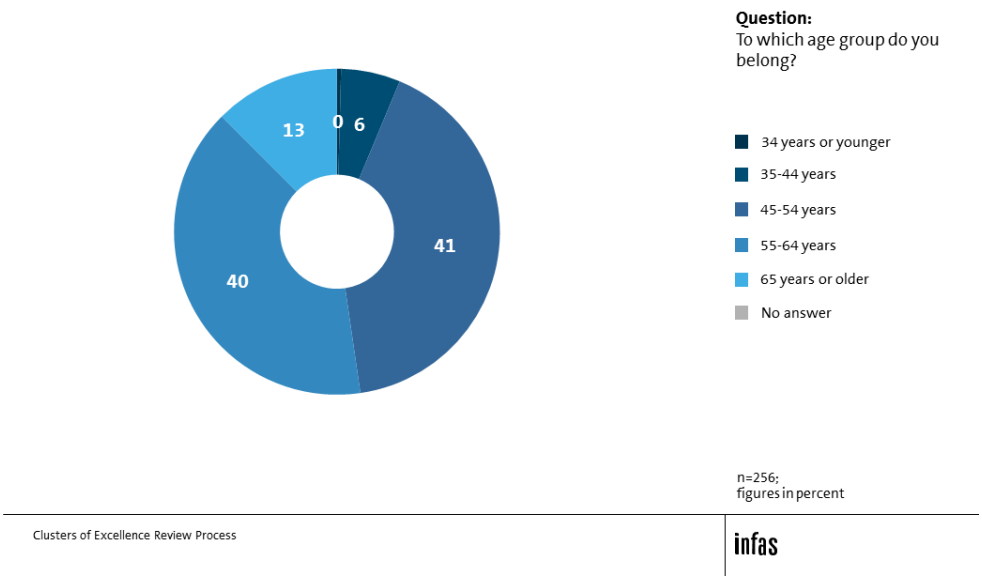
3.1 Sociodemographics of Survey Participants

Of the 385 reviewers, 353 people expressed a willingness to take part in the online survey. The following results are based on the responses given by the 256 reviewers who completed the online questionnaire in full.

At the beginning of the questionnaire respondents were asked about their age, current country of employment and subject area.

The overwhelming majority of the reviewers surveyed were over 45 years old (around 94%). Approximately half (53%) were 55 or older. Only one person indicated that they belonged to the "34 years or younger" age group.

Figure 1 Age of reviewers



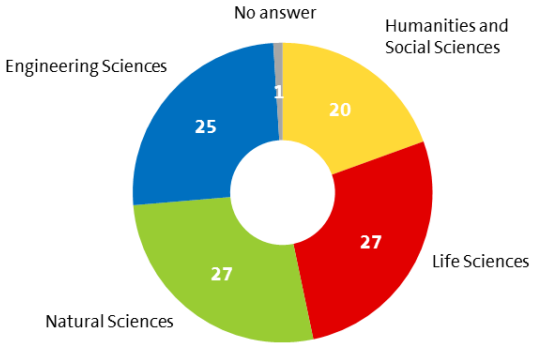
There was no major difference between those reviewers who responded to the survey and those who did not in terms of country of employment. The distribution of countries of employment (see Table 4) corresponds to the structure of all reviewers surveyed, as represented in Table 3 (section 3).

Table 4 Country of Employment of Reviewers

Origin	abs.	Column %
Total	256	100
Germany	15	6
International	241	95
Of which		
– USA	79	31
– United Kingdom	33	13
– Switzerland	15	6
– France	17	7
– Netherlands	13	5
– Canada	11	4
– Other countries	73	29

Figure 2 below shows the categorisation of the reviewers into the four disciplines defined in the DFG subject classification system.[3] Around a quarter of all reviewers in each case represent the life sciences (27%), the natural sciences (27%) and the engineering sciences (25%). The smallest group is the humanities and social sciences with 20%.

Figure 2 Classification of reviewers by discipline



Question:
What is your primary research area? Please select only one.

n=256;
figures in percent

Clusters of Excellence Review Process
infas

[3] In the questionnaire, respondents were asked to specify their subject area from a list of 14 subject groups (see questionnaire in annex). For evaluation purposes, these were grouped into four disciplines in accordance with the DFG subject classification system (see http://www.dfg.de/download/pdf/dfg_im_profil/gremien/fachkollegien/amtsperiode_2016_2019/fachsystematik_2016-2019_de_grafik.pdf).

3.2 Review Experience

The reviewers were asked how much experience they had in national and international review processes. First, they were asked how much experience they had in providing written individual assessments of research projects (see Figure 3). They were then asked about their experience in participating in group reviews (see Figure 4).

Figure 3 Reviewer experience in written individual assessments

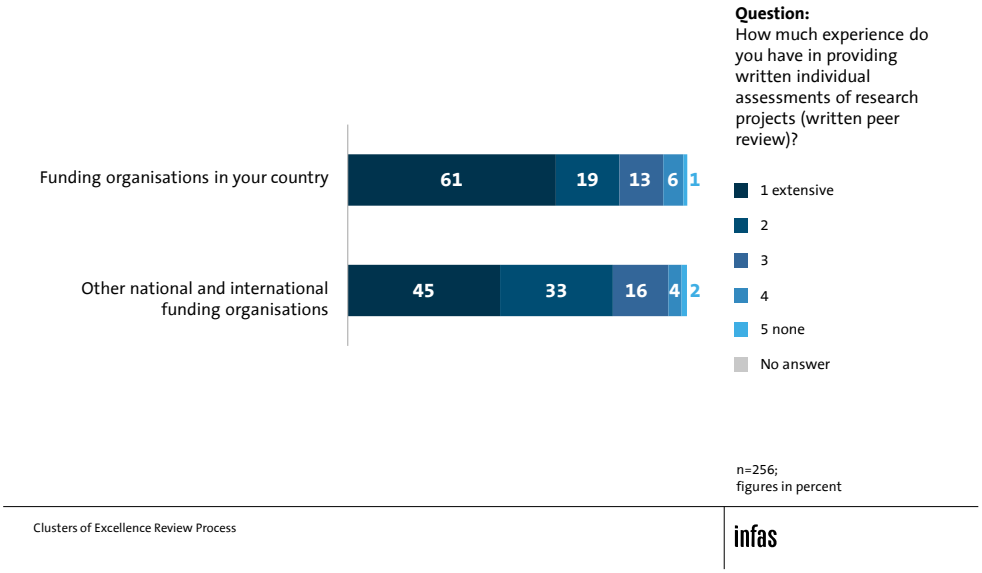
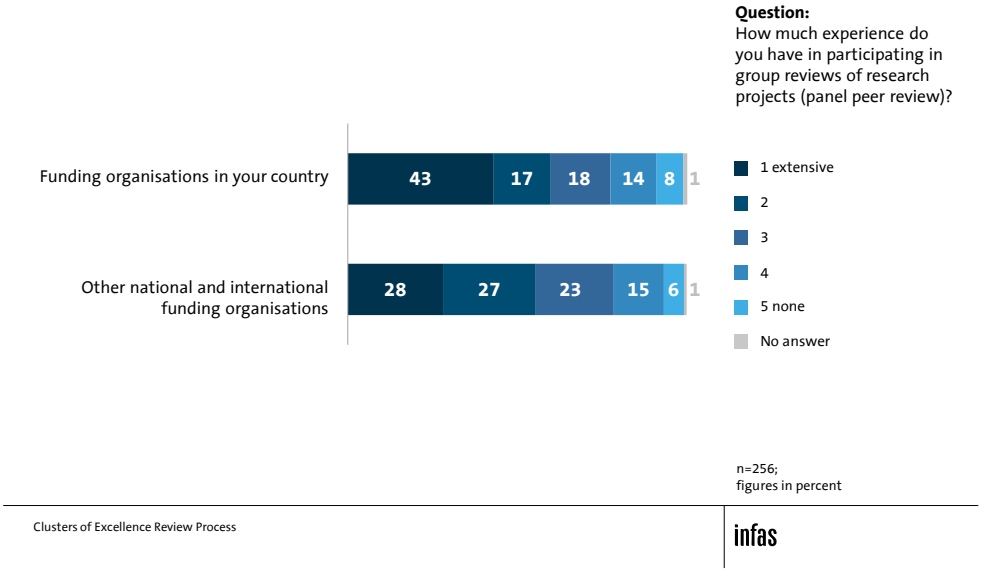


Figure 4 Reviewer experience in group reviews



The majority of respondents reported that they had extensive experience in review processes at both national and international level. The greatest amount of experience was in written individual assessments, but also in group reviews in the current country of employment. Differences can be seen between the level of experience in written assessment processes and group reviews. 80% (nationally) and 78% (internationally) of all reviewers have extensive experience in individual assessments. For group reviews, the proportions of very experienced reviewers are around 20% percentage points lower in each case than for individual assessments (60% nationally and 55% internationally).

Overall, only a very small proportion of the reviewers reported that they had no experience in written reviews in a national or an international context (1% and 2% respectively). The figures are slightly higher for group reviews, with 8% and 6% of respondents respectively reporting that they had no experience in such a process either in the country of employment or internationally. Only one person reported having no experience in any of the four areas.

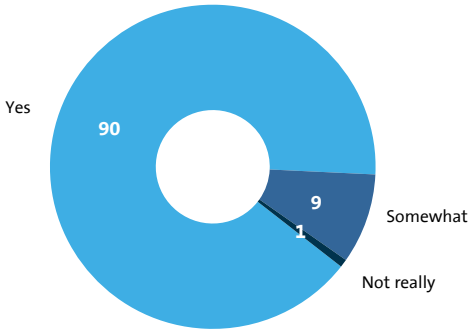
In summary, it can be said that the majority of reviewers selected for the Excellence Strategy are very familiar with different review processes at both national and international level.

4 The Decision-making Basis

4.1 Information Basis

The reviewers expressed an extremely positive view of the information available to them (see Figure 5), with 90% of them reporting that they had sufficient information about the individual projects. Only two people (1%) stated that they did not receive sufficient information to assess the projects.

Figure 5 Assessment of information basis

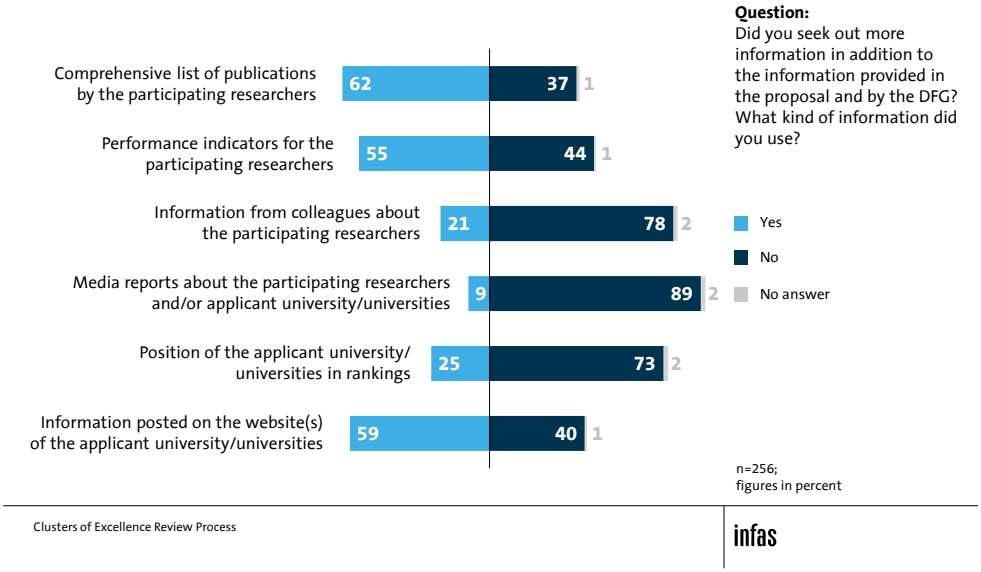


Question:
Did you have sufficient information to assess the projects?

n=256;
figures in percent

Although the information provided was assessed as adequate, the majority of reviewers did independently seek additional information (see Figure 6). More than half reported that they searched for comprehensive publication lists, performance indicators or information on applicants' websites. Less commonly, they searched for the applicant universities in rankings (25%) or asked colleagues for additional information about the participating researchers (21%). Only one in 10 reviewers used media reports to obtain further information.

Figure 6 Type of additional, independently sought information



There are a number of clear differences between the four disciplines in terms of the type of additional information independently sought by reviewers[4]. Reviewers in the engineering sciences were more likely to look for additional performance indicators and university rankings. By contrast, these two indicators appear to play a much less important role for reviewers in the humanities and social sciences. Both types of information were sought with a significantly below-average frequency by researchers in the humanities and social sciences, with the greatest deviation from the overall result being for performance indicators, at 22% compared with 55% (cf. Figures 7 and 8).

[4] In the questionnaire, respondents were asked to specify their subject area from a list of 14 subject groups. For evaluation purposes, these were grouped into four disciplines in accordance with the DFG subject classification system (see 3.1).

Figure 7 Additionally sought information by discipline – Performance indicators

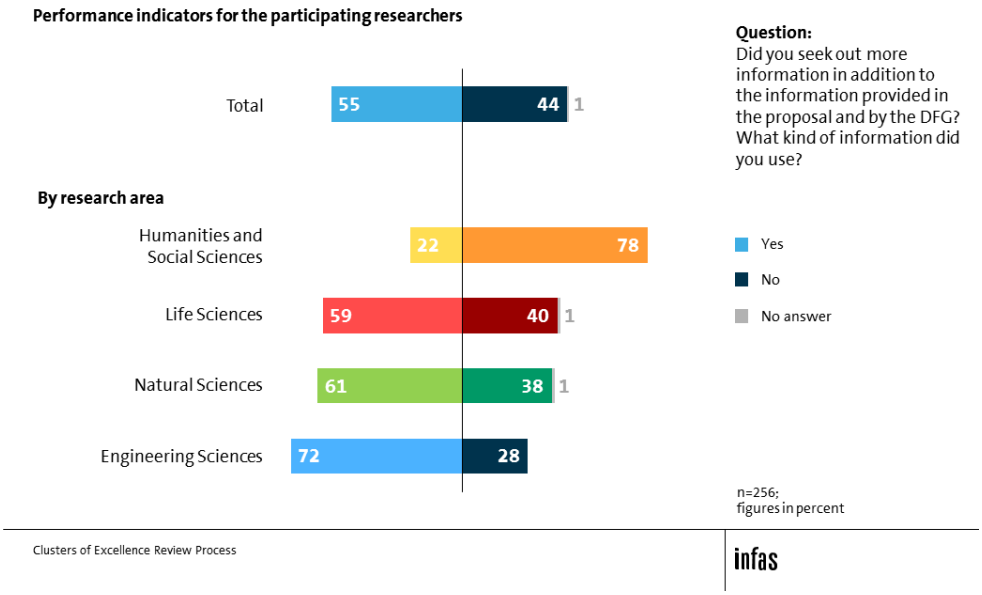
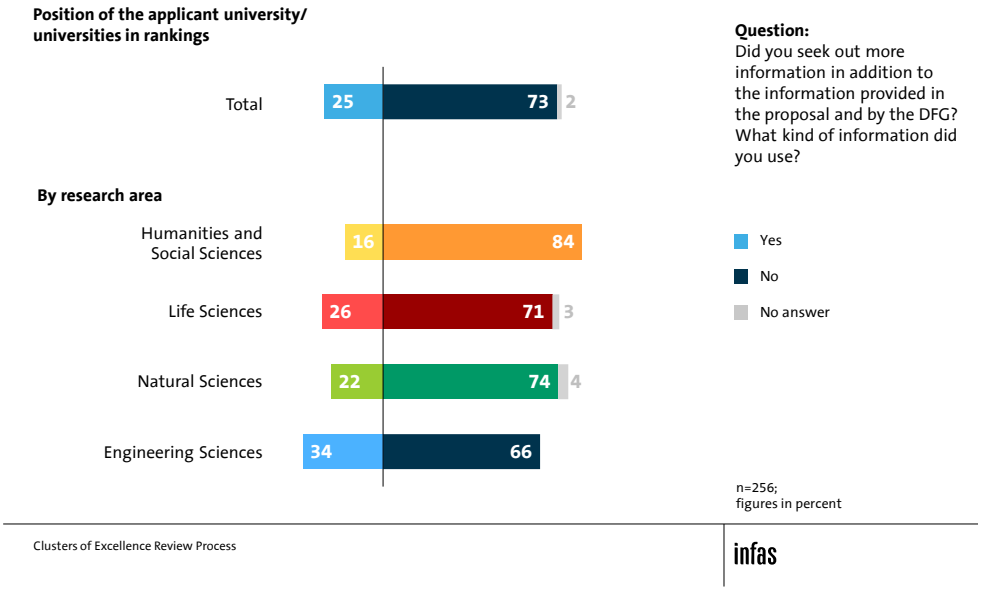
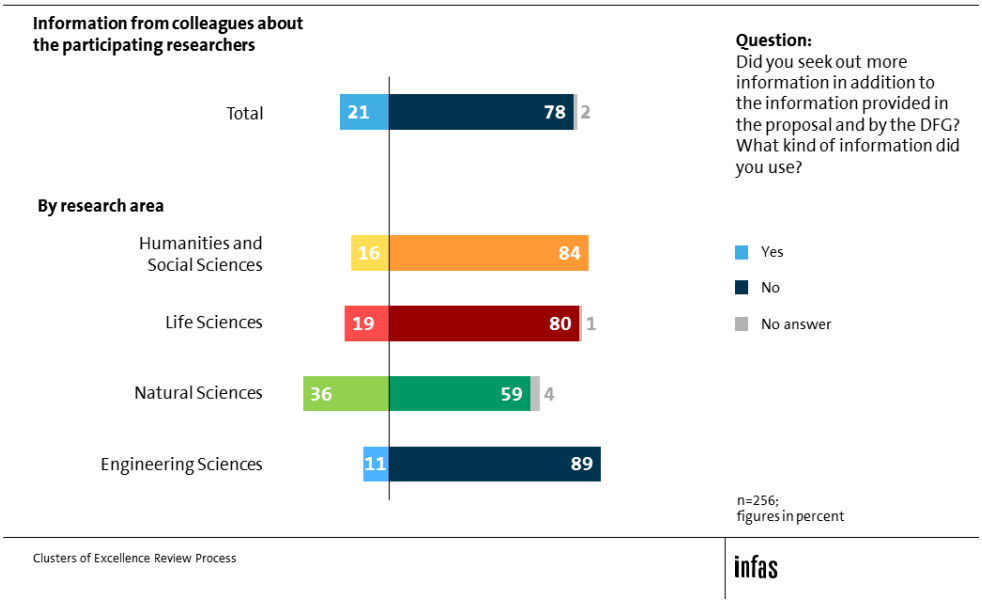


Figure 8 Additionally sought information by discipline – University rankings



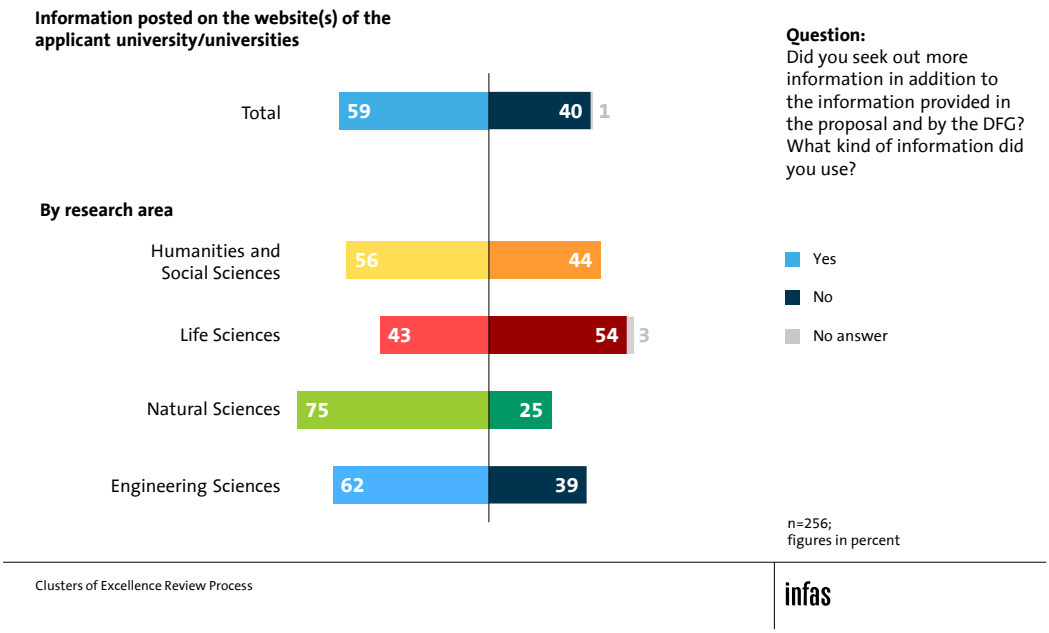
Over a third of reviewers in the natural sciences sought additional information from colleagues, whereas only around 1 in 10 respondents in the engineering sciences did so (see Figure 9).

Figure 9 Additionally sought information by discipline – Information from colleagues



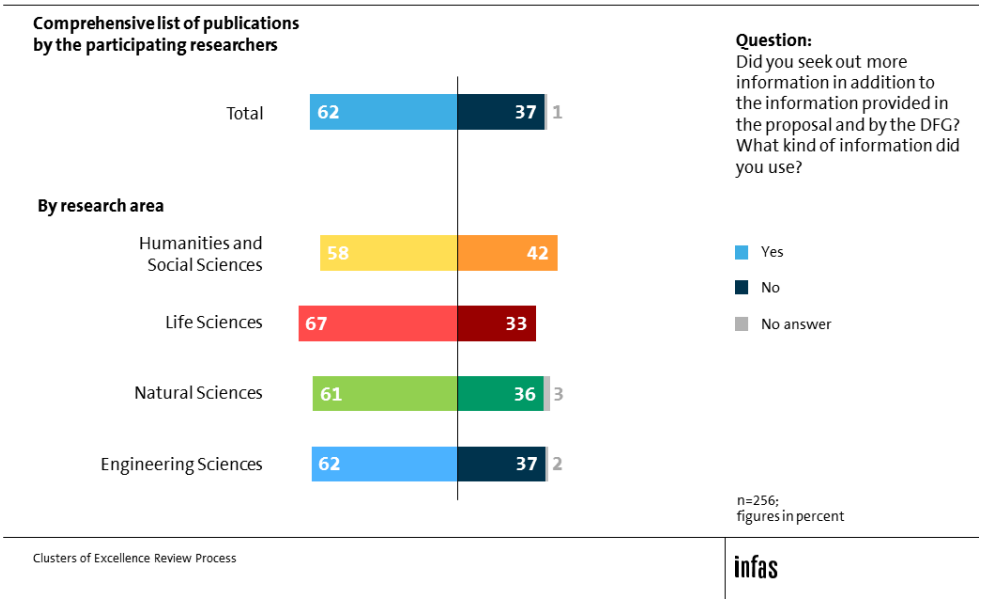
Natural scientists were also more likely to seek information on the websites of the applicant universities (75%), whereas reviewers in the life sciences were least likely to use this option (43%).

Figure 10 Additionally sought information by discipline – Websites



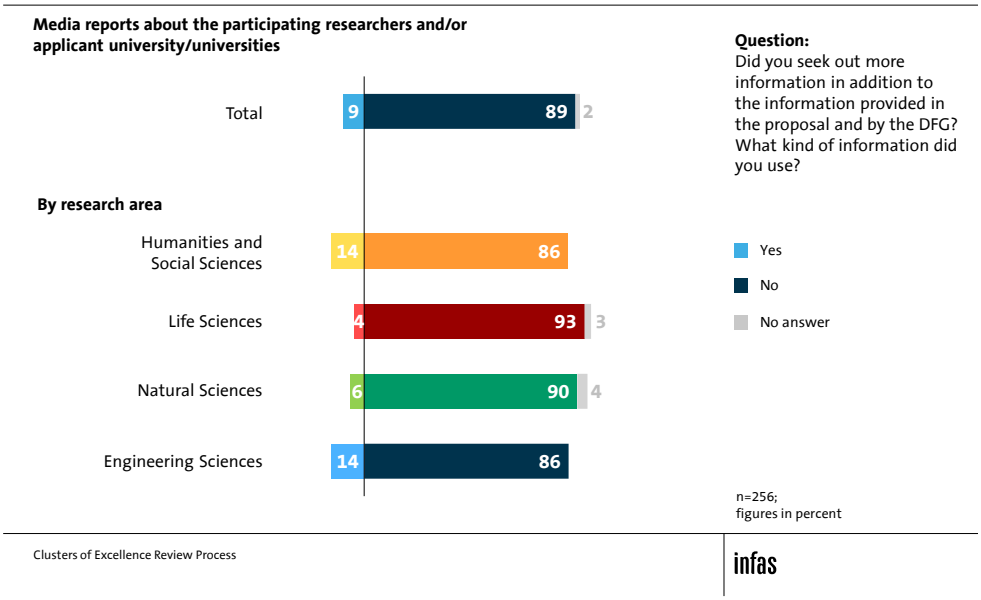
Overall, the most commonly used additional source of information was comprehensive publication lists of the researchers participating in a proposal. In contrast to the other types of additional research asked about, this also showed the smallest differences between reviewers in the different disciplines. This source was used with approximately equal frequency in all four disciplines. Only life scientists reported above-average use of comprehensive publication lists (see Figure 11).

Figure 11 Additionally sought information by discipline – Publication lists



According to the responses to the online survey, media reports play by far the least important role as an information source when seeking additional information. However, here too there were differences between disciplines: while 14% of the reviewers in the humanities and social sciences and the engineering sciences used media reports to find more information, the proportions in the life sciences and the natural sciences were only 4% and 6% respectively (see Figure 12).

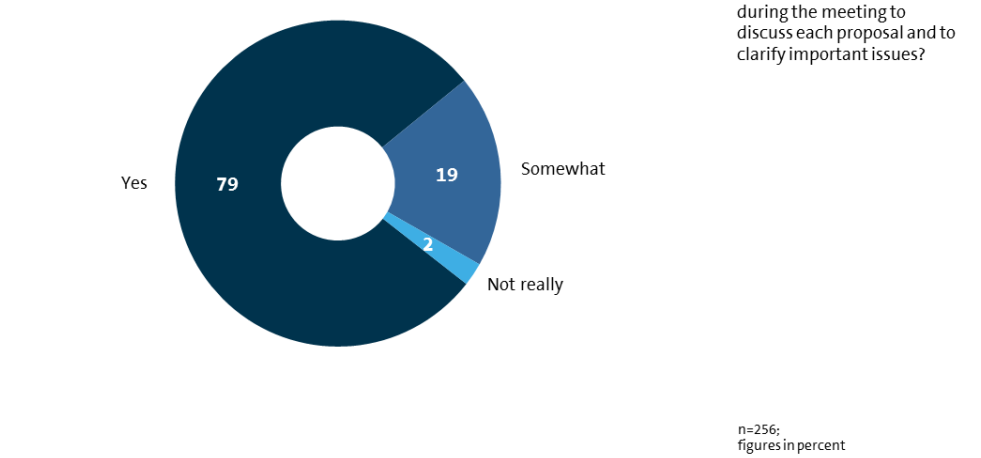
Figure 12 Additionally sought information by discipline – Media reports



4.2 Discussion Time

The time available to discuss each proposal in the review groups was 4.5 hours. 79% of reviewers regarded the time allowed as sufficient to discuss each proposal and clarify important issues (see Figure 13). Only 2% regarded the amount of time as insufficient.

Figure 13 Assessment of time available



5 Review Criteria

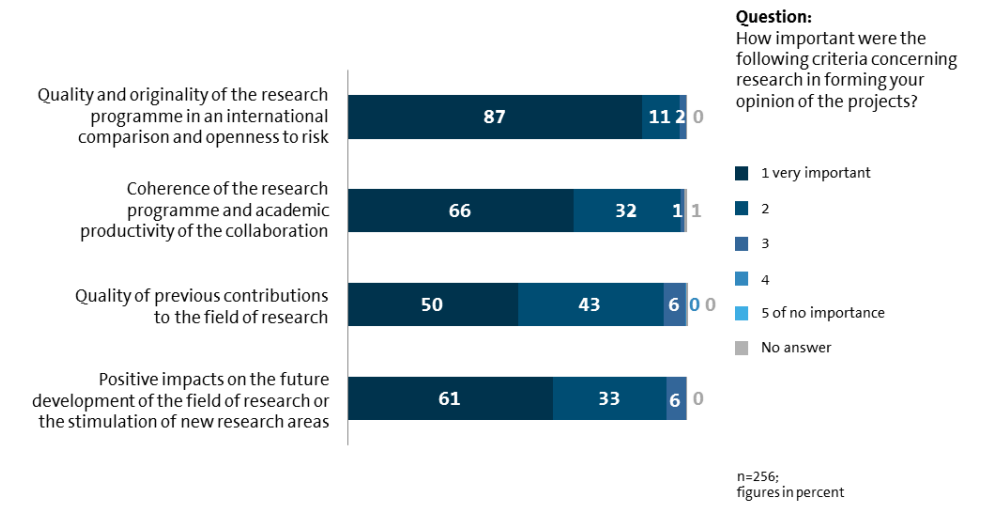
Proposals were reviewed on the basis of various criteria, which were grouped under four headings for the purposes of the review process:

1. Research programme
2. Participating researchers
3. Supporting structures and strategies of the Cluster of Excellence
4. Environment of the Cluster of Excellence

In the survey, the reviewers were asked to what extent the individual review criteria influenced their personal judgement. They were asked to rate the importance of each of the 14 criteria on a five-point scale from "1 *very important*" to "5 *of no importance*".

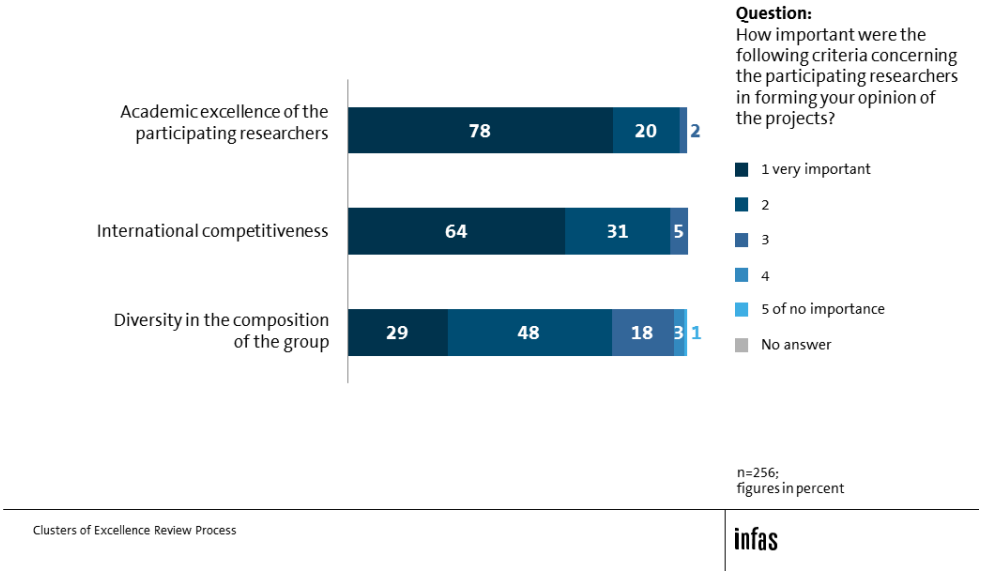
There was clear unanimity among all respondents in relation to the criteria for assessment of the research programme: the criterion of the quality, originality and openness to risk of the research programme in an international comparison carried the greatest importance, receiving the highest rating ("1 *very important*") from 87% of all reviewers, not only out of all four criteria relating to the research programme (see Figure 14), but also compared to the rest of the 14 criteria. The values "1" and "2" assign the criteria the highest importance on the five-point scale. When these are combined, it can be seen that all four criteria relating to the research programme are assigned a very high importance (94% to 98%).

Figure 14 **Importance of review criteria in forming personal opinion – Research programme**



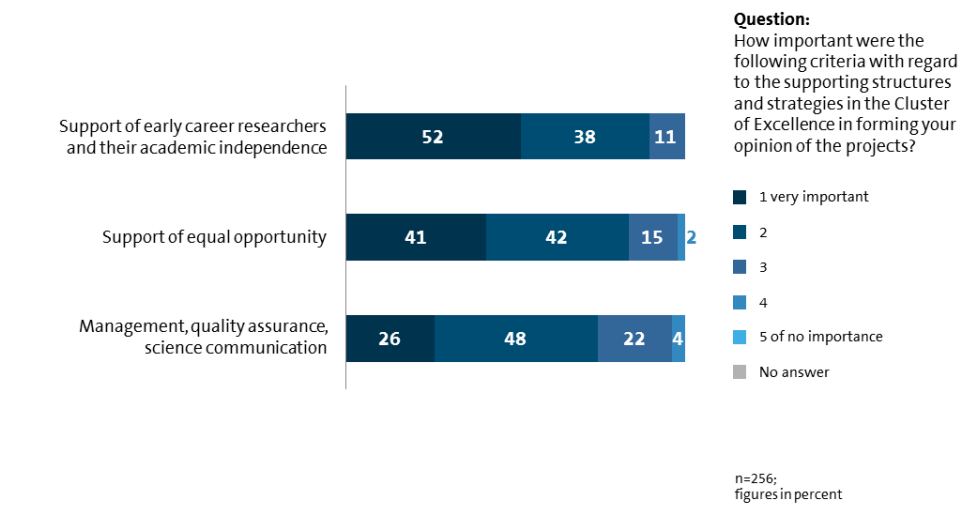
Within the criteria for the assessment of the participating researchers, academic excellence was given the highest importance by all reviewers (with 78% responding "*1 very important*"), as shown in Figure 15. The international competitiveness of the participating researchers clearly also had a marked influence on the reviewers' opinions (with 64% responding "*1 very important*"). More variation can be seen in the importance of diversity in the composition of the group, with only 29% of respondents regarding this criterion as very important and around one fifth considering it as somewhat less important (18%).

Figure 15 Importance of review criteria in forming personal opinion – Participating researchers



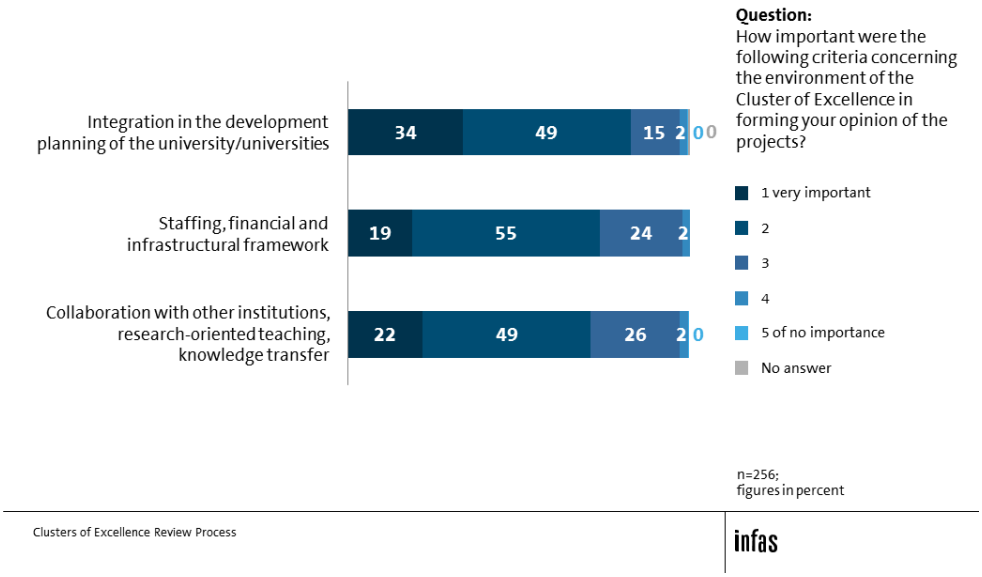
Overall, the criteria concerning supporting structures and strategies in the Cluster of Excellence were described as having a high level of influence on personal opinions. Particularly significant to the reviewers were early career support and the promotion of equal opportunity (see Figure 16). 52% and 41% respectively of all reviewers assigned a very high importance to these two criteria. However, only around a quarter of all reviewers assigned particularly high importance to management, quality assurance and science communication.

Figure 16 **Importance of review criteria in forming personal opinion – Supporting structures and strategies of the Cluster of Excellence**



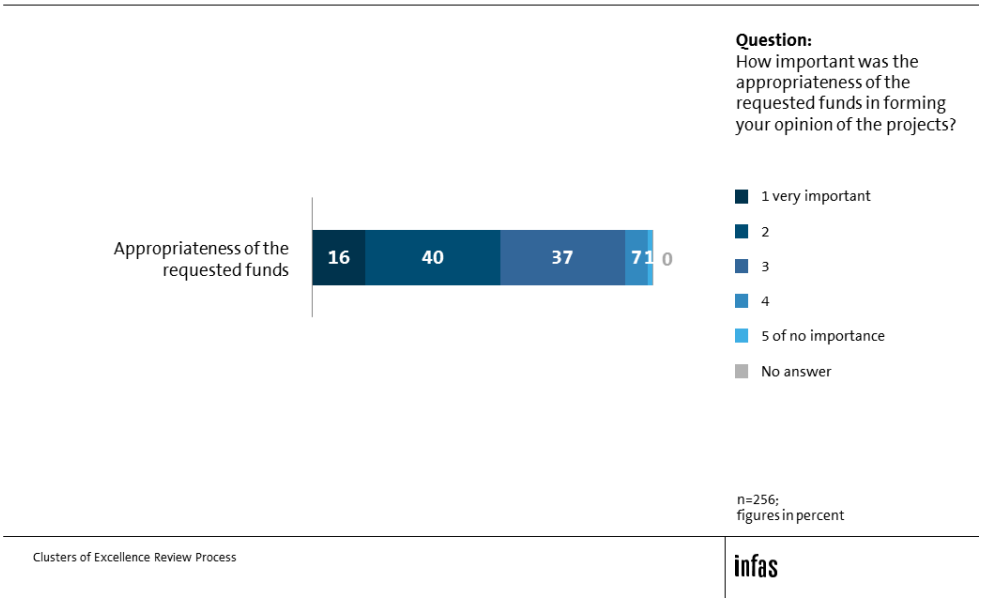
The three criteria concerning the environment of the Cluster of Excellence were much more rarely regarded by reviewers as being very important to the forming of their opinions (see Figure 17). The most important criterion was the embedding of the Cluster of Excellence in the university's development planning (with 34% describing this as "*1 very important*").

Figure 17 Importance of review criteria in forming personal opinion – Environment of the Cluster of Excellence



In addition to the 13 main criteria grouped under the four headings described above, one further criterion concerns the appropriateness of the requested funds (see Figure 18). In the reviewers' judgement, this aspect carries the lowest importance. 45% of respondents assigned this criterion only medium, low or no importance. Only 16% considered this criterion to have a very important role.

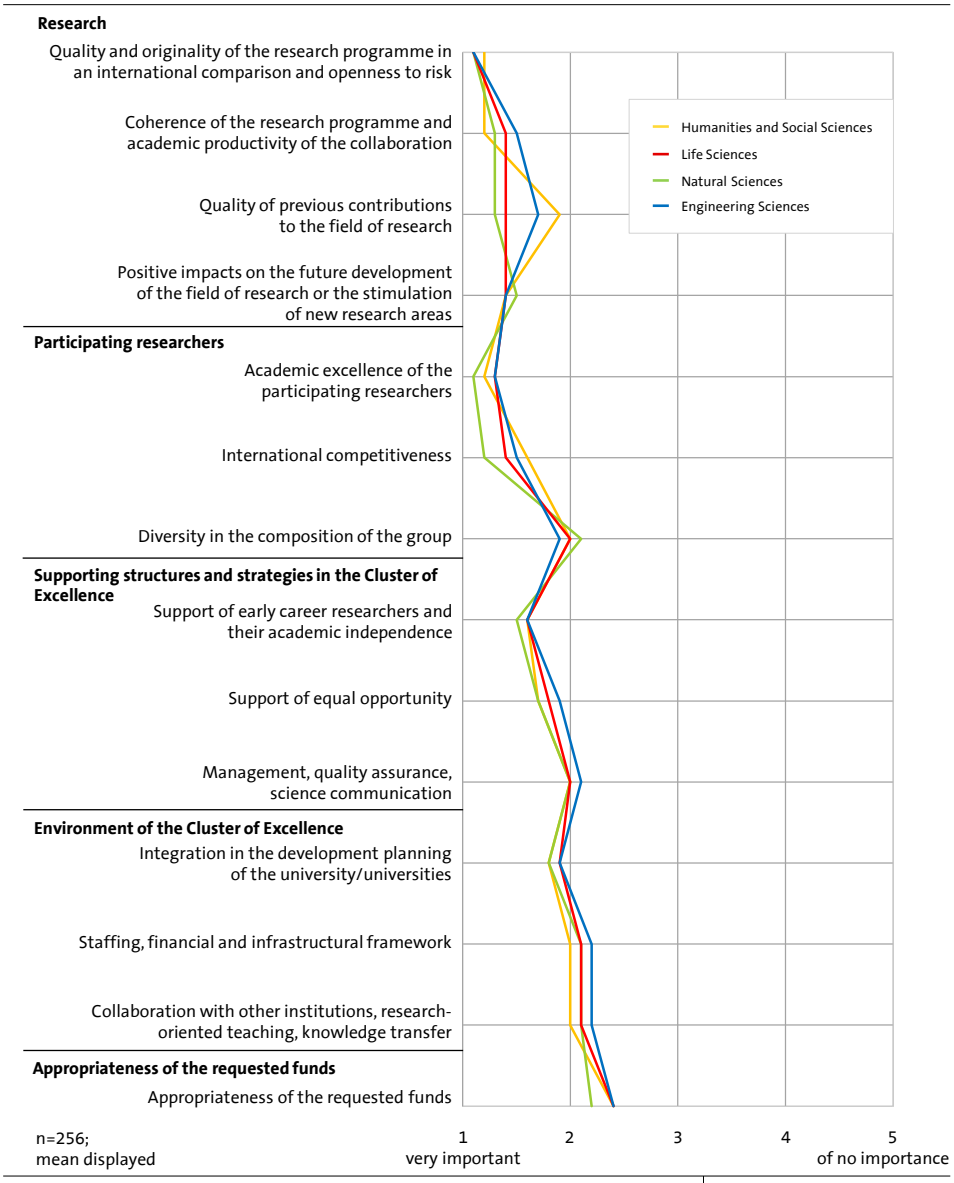
Figure 18 Importance of review criteria in forming personal opinion – Appropriateness of the requested funds



When the averages across the four disciplines are compared[5], a uniform picture emerges: regardless of discipline, the individual criteria have the same importance in the forming of the reviewers' opinions (see Figure 19). The greatest variation, with a difference of 0.6, relates to the quality of previous research contributions and is found between reviewers in the humanities and social sciences (average of 1.9) and those in the natural sciences (average of 1.3). Reviewers in the humanities and social sciences and in the engineering sciences tend to ascribe lower importance to applicants' previous research contributions in the review process than reviewers in the natural and life sciences. Overall, reviewers attach more importance to the quality of the research programme and the excellence of the participating researchers than to the framework in which the research is carried out (structure and environment of the Cluster of Excellence). No review criterion was judged on average as being unimportant. With an average of 2.4, the lowest importance was given to the appropriateness of the requested funds.

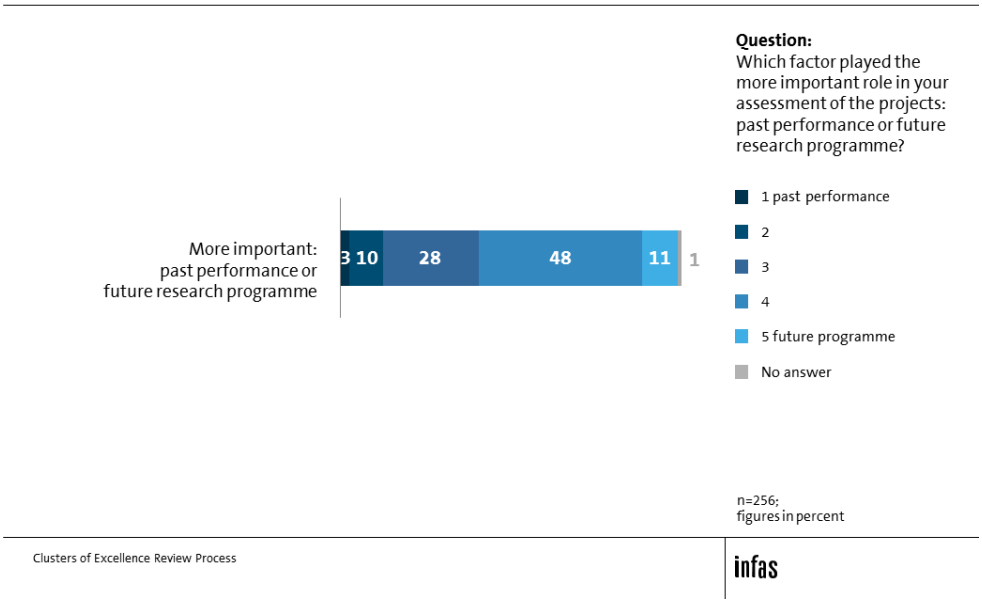
5 In the questionnaire, respondents were asked to specify their subject area from a list of 14 subject groups. For evaluation purposes these were grouped into four disciplines in accordance with the DFG subject classification system (see 3.1).

Figure 19 **Importance of review criteria in forming personal opinion by discipline**



As well as the importance of the individual evaluation criteria in the forming of personal opinions, respondents were asked whether the applicants' past performance or future programmes were more decisive (see Figure 20). 59% of all reviewers attached more importance to the future research programme than to previous performance (13%). Approximately one quarter (28%) attached equal importance to both aspects.

Figure 20 Comparison of key evaluation criteria: past performance vs. future programme



6 The Review Process in the Panel

6.1 Importance of the Review Elements in Forming an Opinion

There are various elements within the review process that contribute to the formation of an opinion. In the survey, reviewers were asked about the importance of individual elements in the forming of their opinion (see Figure 21); four elements emerged as particularly important:[6]

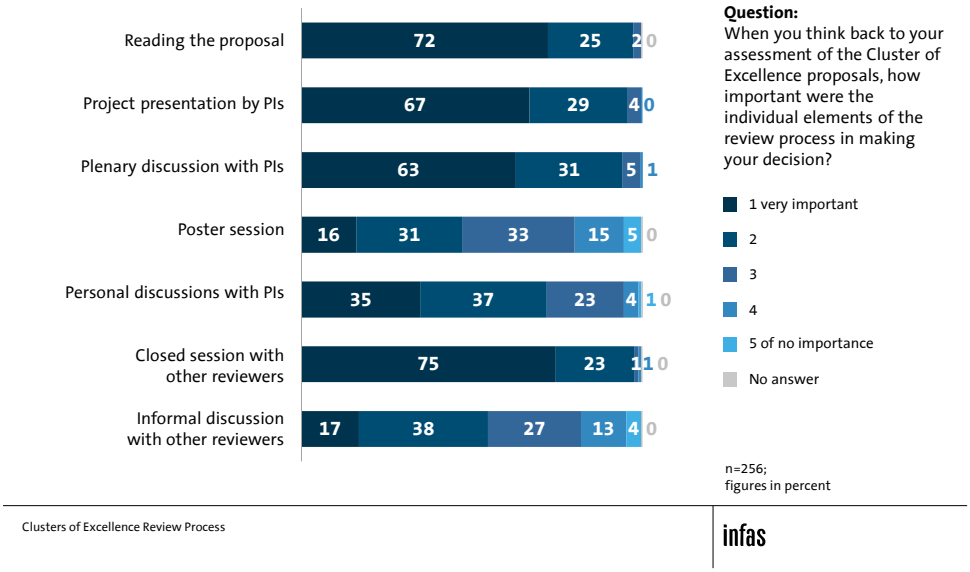
- The final closed session of the reviewers including discussion and evaluation (98%).
- Reading of the proposal (97%).
- Project presentation by the applicants (96%).
- Group discussion with the principal investigators following the presentation (94%).

Both personal discussions with the applicants (72%) and informal discussion with other reviewers (55%) emerged as less important to opinion-forming. The poster session had the lowest influence on personal opinion. Only one in two reviewers attached high importance to this (47%).

It would therefore appear that the informal, possibly exclusive exchange of information with other reviewers or with the applicants is of far less importance to opinion-forming than the elements of the process that provide all reviewers with the same information basis, whether the reading of the proposal or the plenary discussion.

[6] Respondents were asked to rate the importance of the individual review elements using a five-point scale from 1 = "very important" to 5 = "of no importance". The figures below refer to the combined responses with the values "1" and "2", which give the highest importance to the elements on the five-point scale.

Figure 21 Importance of individual review elements in forming an opinion



A comparison of the importance of the individual review elements across the four disciplines reveals the following pattern (see Figures 22 to 25). The shared elements and the reading are generally ascribed the same high importance by reviewers in all four disciplines. If the two highest categories are combined, the reviewers in all four disciplines attach equally high importance to the reading of the proposal, the plenary discussion with the applicants and the closed session. There is also no difference in relation to the importance of the project presentation between the life sciences (98%), the natural sciences (97%) and the engineering sciences (98%). By contrast, only 88% of the reviewers in the humanities and social sciences ascribed high importance to the project presentation.

Figure 22 Importance of review elements by discipline – Reading the proposal

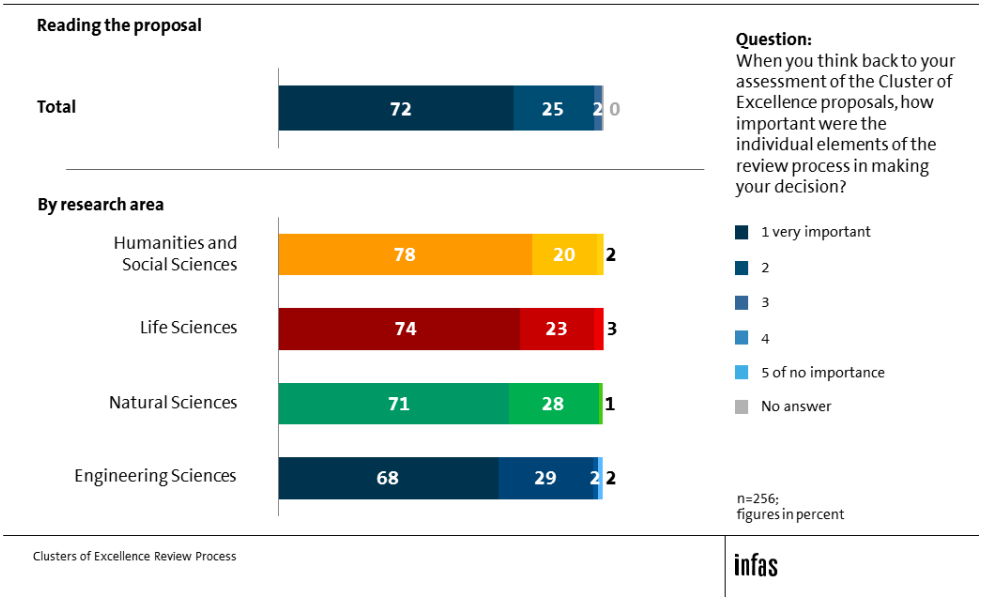


Figure 23 Importance of review elements by discipline – Plenary discussion with PIs

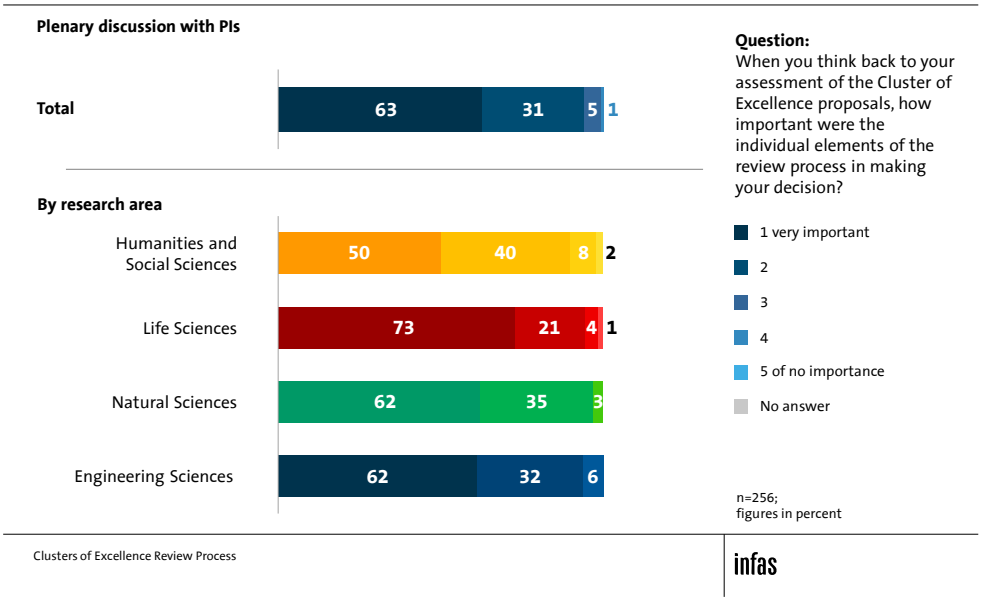


Figure 24 Importance of review elements by discipline – Closed session

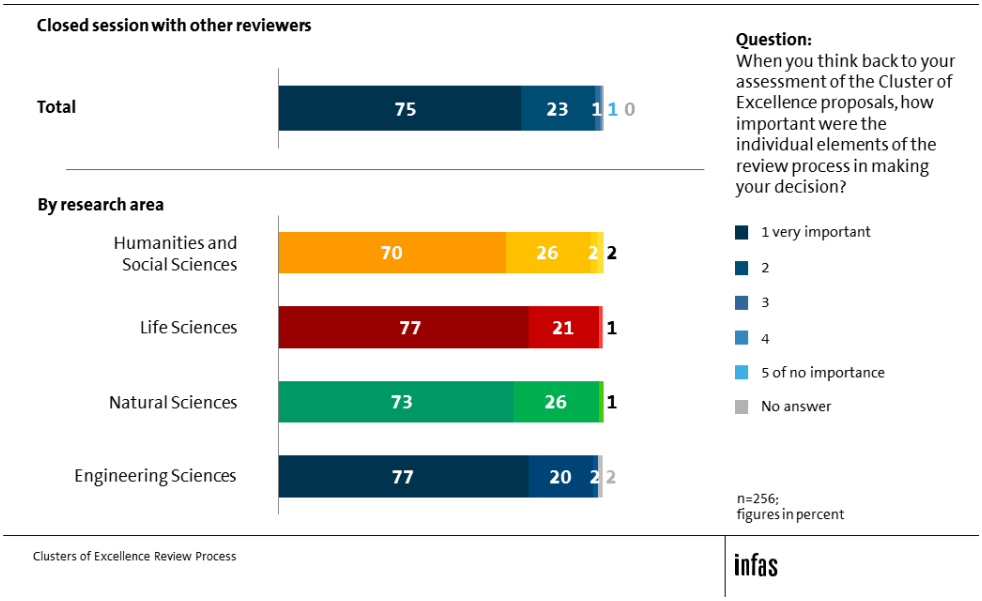
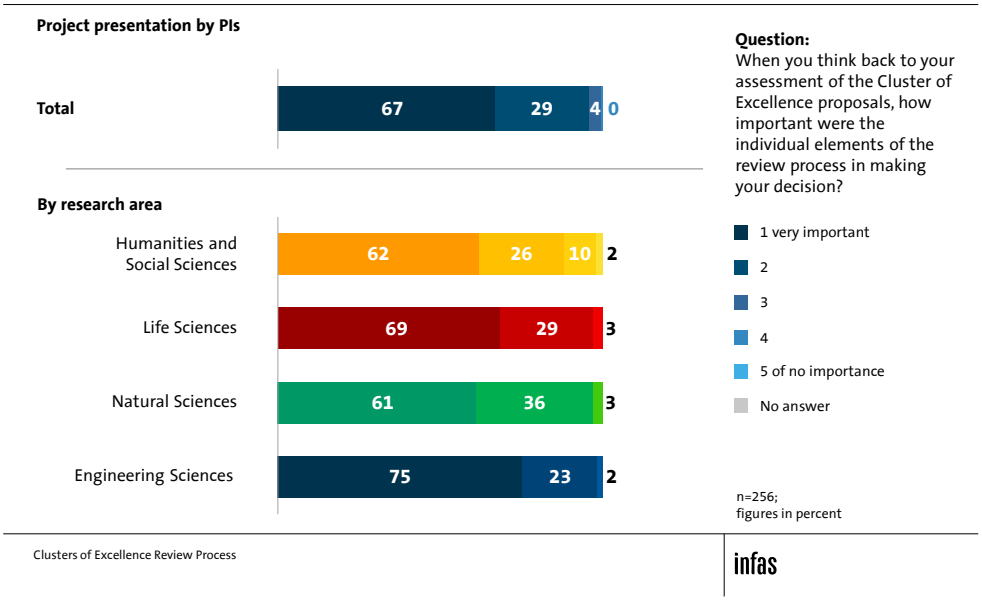


Figure 25 Importance of review elements by discipline – Project presentation



For the comparatively informal elements of the review process, which overall were reported as being less important to opinion-forming, there are also fairly clear differences between the disciplines (see Figures 26 and 27). Reviewers in the humanities and social sciences, in particular, ascribe comparatively low importance to discussion with the applicants and informal discussions.

Figure 26 Importance of review elements by discipline – Personal discussions with PIs

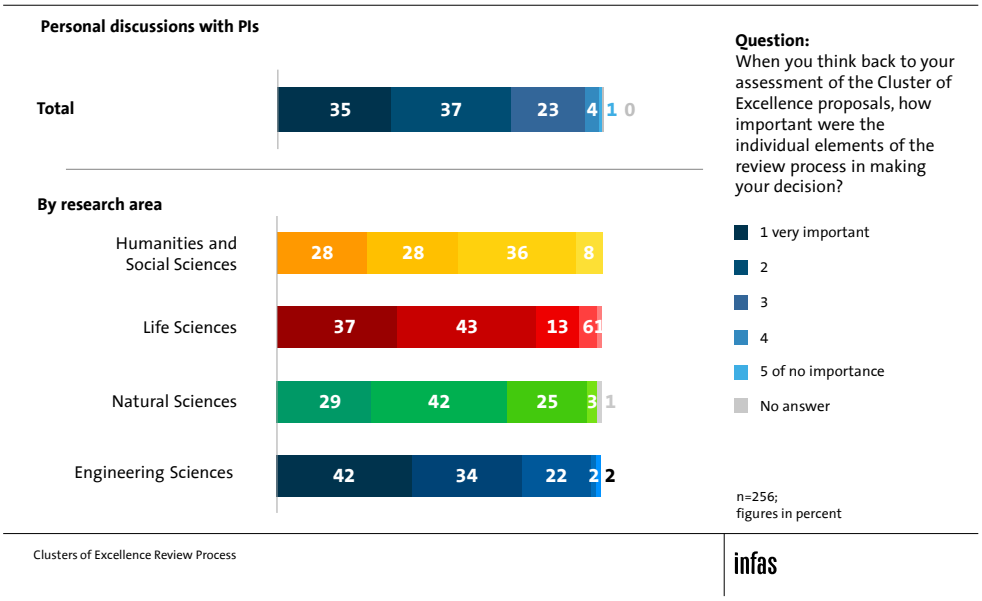
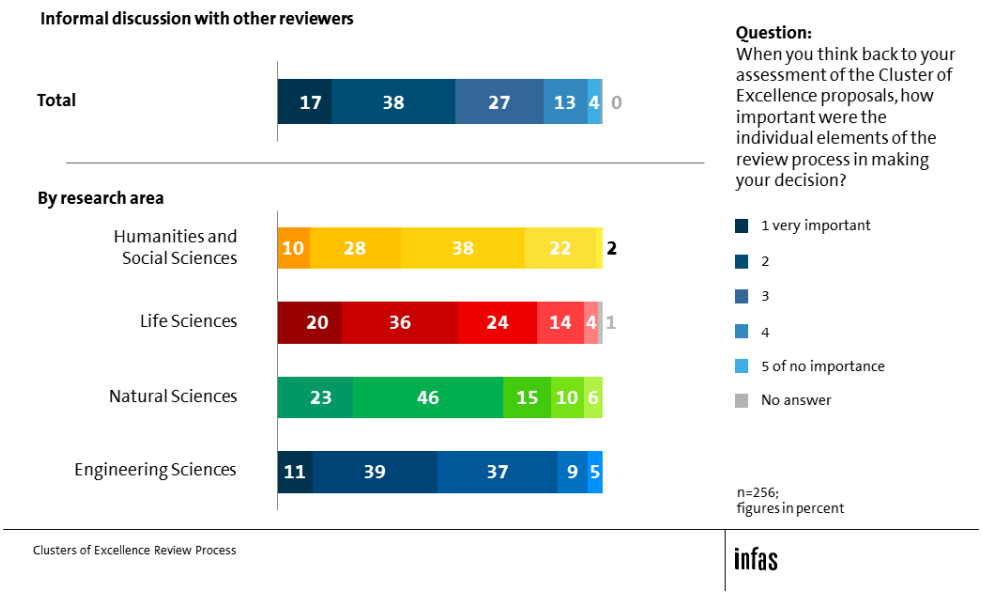
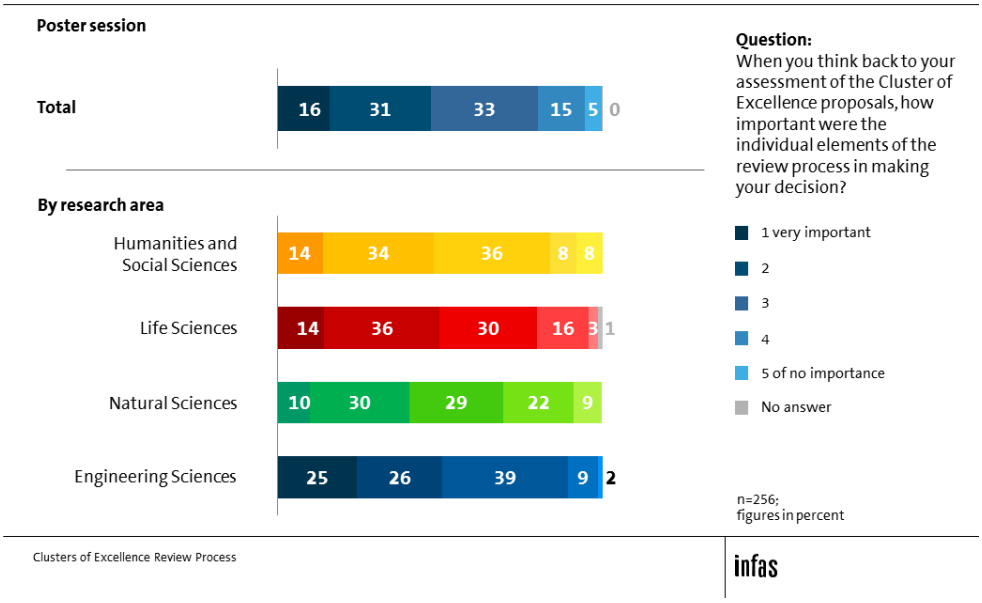


Figure 27 Importance of review elements by discipline – Informal discussion with other reviewers



A look at the individual disciplines reveals that the poster sessions, regarded overall as the least important element, were evaluated in particular by reviewers in the natural sciences as being the least significant to their decision (see Figure 28).

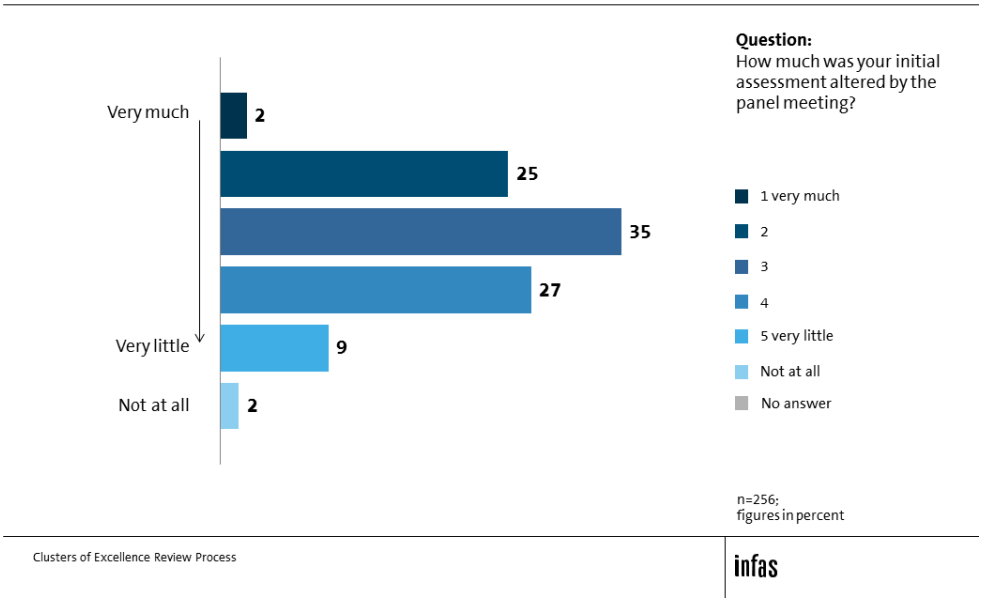
Figure 28 Importance of review elements by discipline – Poster session



6.2 Changes in Reviewers' Initial Assessment

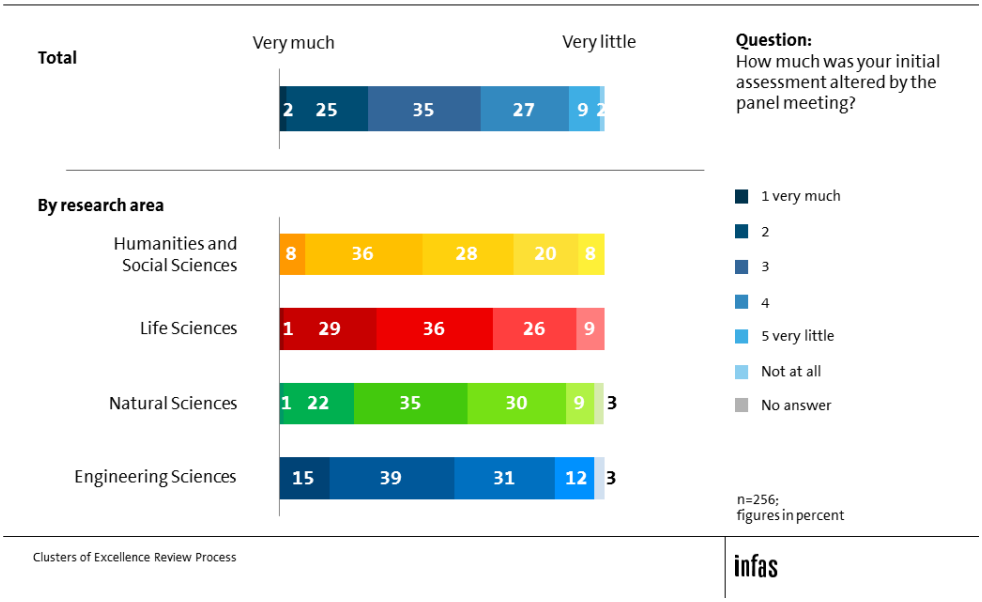
Before the panel meetings, the participating reviewers form an initial assessment based on the reading of the proposals and, where relevant, additional information they have sought out themselves (see 4.1). The reading of the proposal is just one of seven elements involved in forming an opinion in the full proposal phase of the review process (cf. 6.1). In the online survey, only four reviewers (approximately 2%) reported that their original assessment did not alter during the course of the panel meeting (see Figure 29). Overall, 27% of reviewers reported that their assessment was very much or much changed, 35% reported a moderate change and 36% reported little or very little change. However, a change in assessment or lack of it does not provide any information as to the value or quality of the process itself. The results also give no indication as to the direction of the change.

Figure 29 Degree of change in assessment of projects



A differentiation by discipline reveals clear differences: while 44% of reviewers in the humanities and social sciences noted that their assessment changed very much or much as a result of the panel meeting, the same applies to only 15% of reviewers in the engineering sciences (cf. Figure 30). No engineering sciences reviewers indicated that their assessment altered "very much" as a result of the review process (no respondent selected response category "1 very much").

Figure 30 Degree of change in assessment of projects by discipline



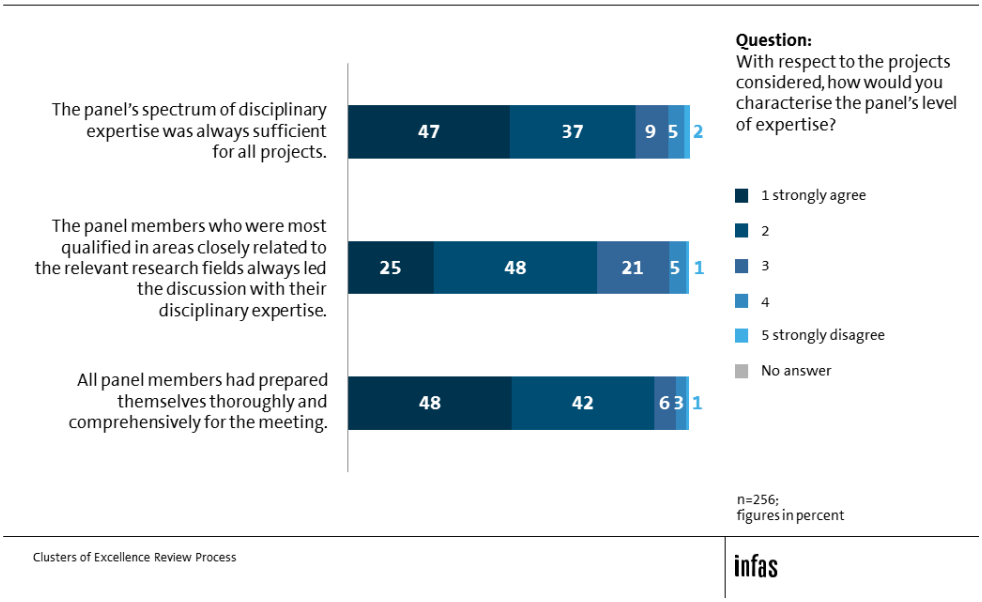
6.3 Disciplinary Expertise and Discussion Culture

The review groups were put together by the DFG Head Office with the aim of reflecting as closely as possible the focal areas of the proposals (see 1). Just under half (47%) of reviewers judged the breadth of disciplinary expertise in the individual panels to be fully sufficient (see Figure 31). Another 37% mostly agreed with this statement.

Overall, 73% of reviewers were fully or mostly of the opinion that the panel members who were most qualified in the relevant research field always led the discussion with their disciplinary expertise.

48% of panel members regarded their fellow reviewers as being thoroughly and comprehensively prepared for the meeting, with another 42% mostly agreeing with this statement.

Figure 31 Disciplinary Expertise and Discussion Culture



A comparison of the responses of reviewers in the different disciplines reveals that reviewers in the life sciences were less likely to regard the breadth of expertise in the panels as fully sufficient (see Figures 32 to 34). However, they were also more likely to report that discussions were led by the most qualified panel members and were more likely to regard the other panel members as having thoroughly and comprehensively prepared for the meeting.

Figure 32 Spectrum of disciplinary expertise by discipline

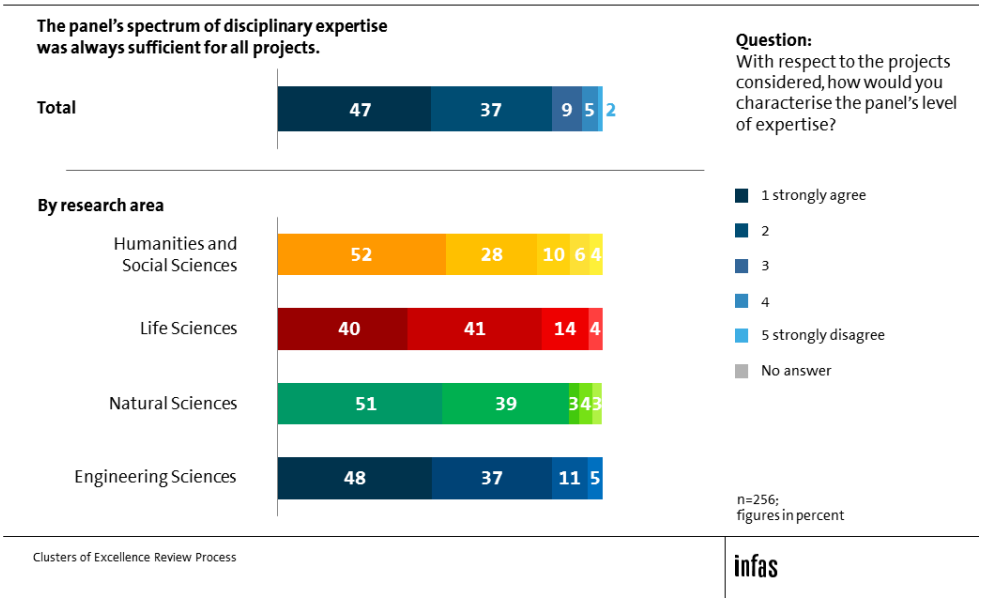


Figure 33 Qualified discussion leadership by discipline

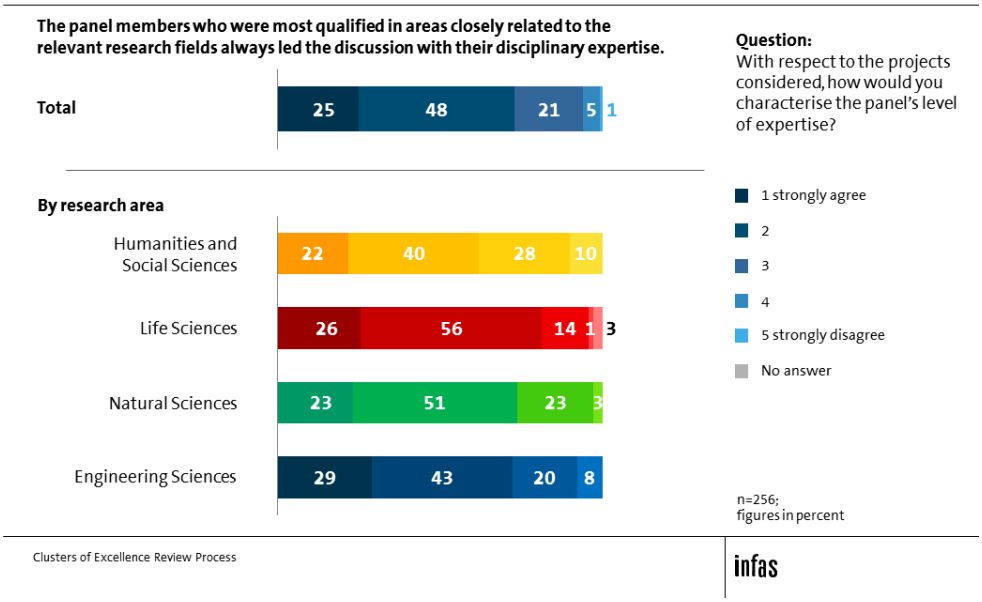
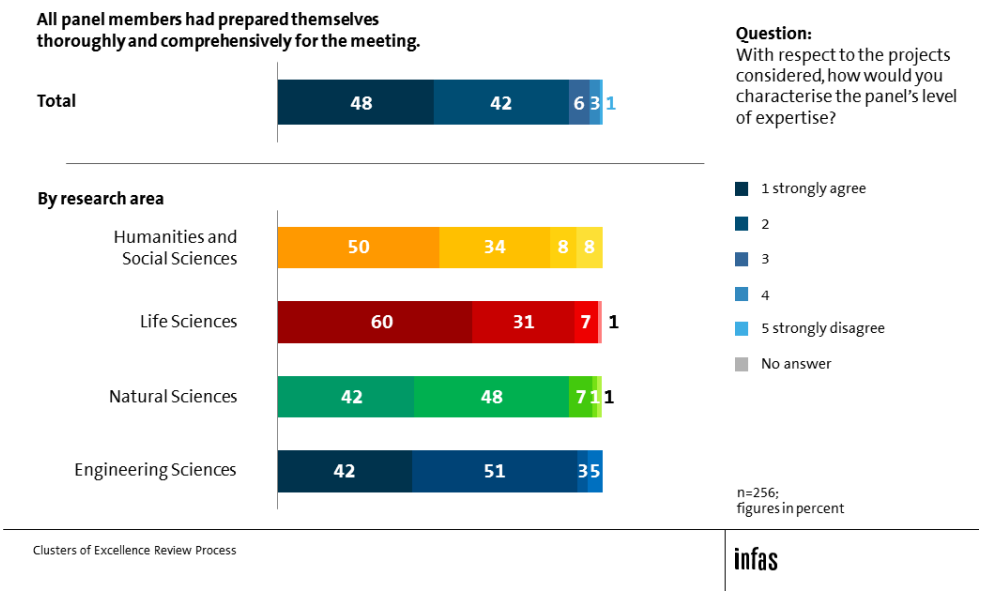


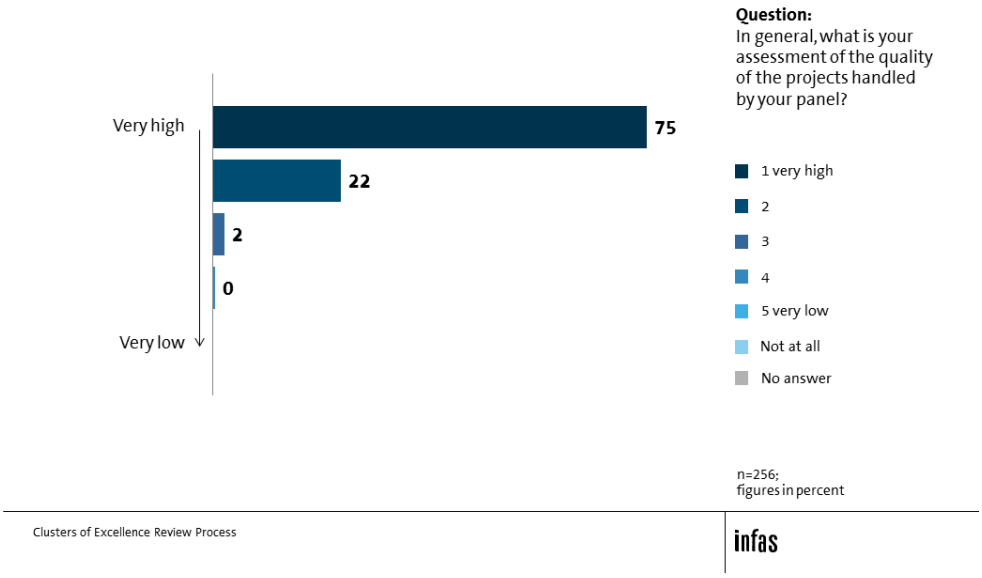
Figure 34 Preparation of panel members by discipline



6.4 Quality of Projects Handled by the Panel

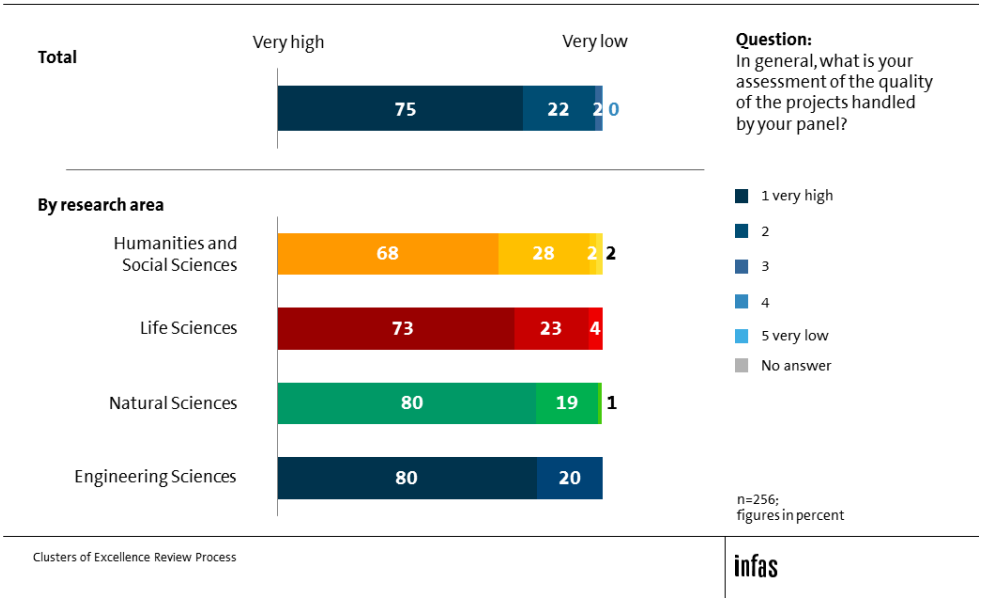
Overall, 97% of reviewers rated the quality of the proposals reviewed by the panel as high or very high (see Figure 35).

Figure 35 Quality of projects



As Figure 36 shows, the reviewers in the natural sciences and engineering sciences gave the highest quality ratings to the reviewed projects (80% in each case). The assessments of the panel members in the humanities and social sciences (68%) and the life sciences (73%) were noticeably lower.

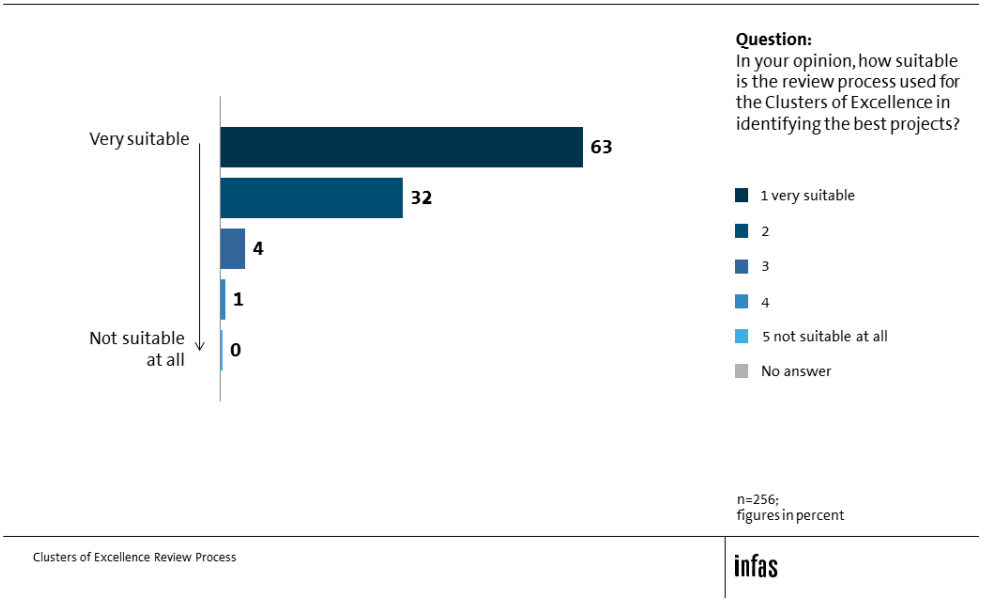
Figure 36 Quality of projects by discipline



7 Assessment of the Process

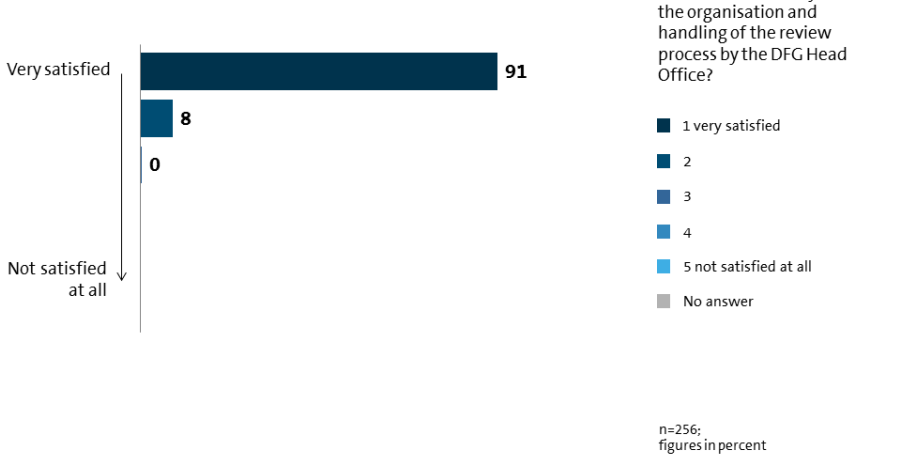
At the end of the survey, the participating reviewers were asked to assess the process (see Figure 37). The majority of respondents reported that the review process was very suitable (63%) or suitable (32%) for identifying the best projects.

Figure 37 Suitability of the review process in identifying the best projects



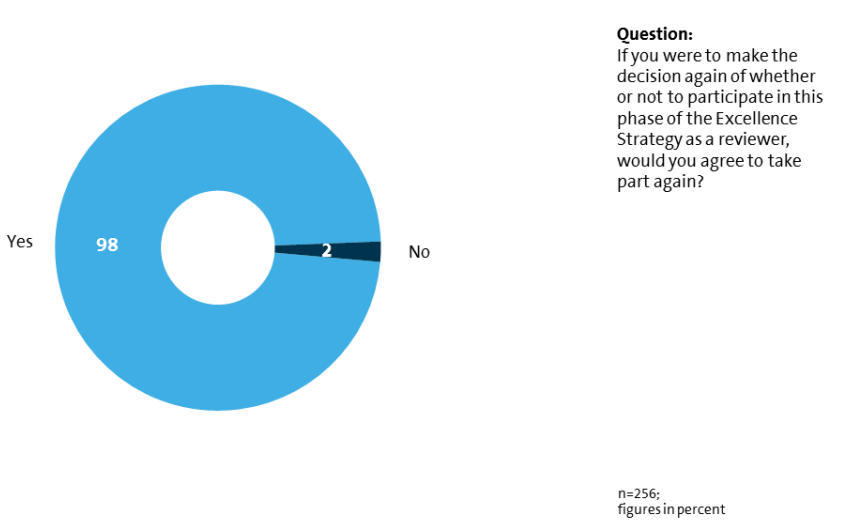
91% of reviewers were very satisfied with the organisation of the review process and another 8% were satisfied (see Figure 38).

Figure 38 Satisfaction with the organisation of the process by the DFG Head Office



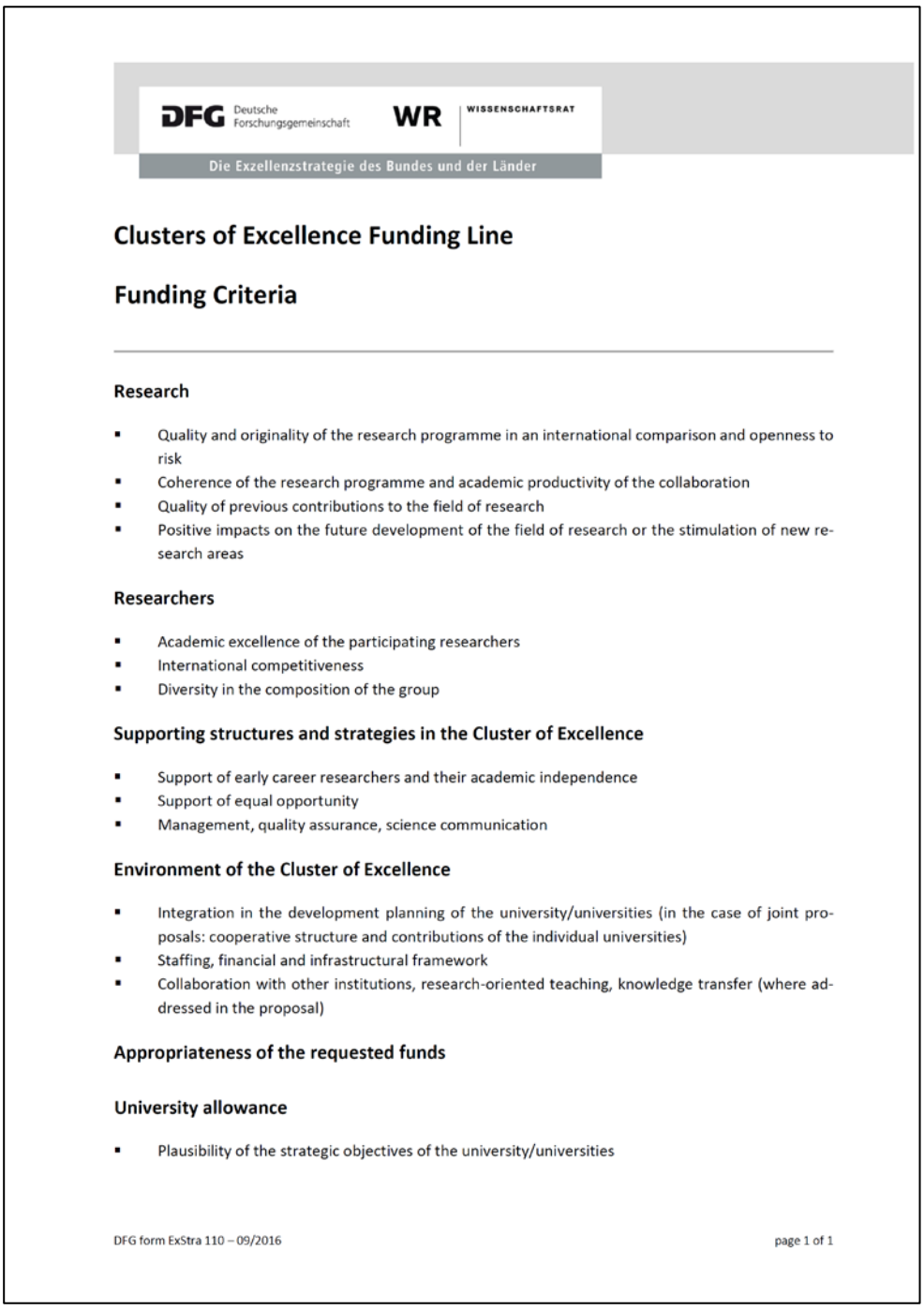
The respondents' positive assessment of the aims of the process and their satisfaction with the arrangements by the DFG Head Office are also reflected in the responses on repeat participation: 98% of respondents would be willing to participate in the process as reviewers again.

Figure 39 Retrospective willingness of reviewers to take part again



Annex

List of Criteria for the Review of Proposals



DFG Deutsche Forschungsgemeinschaft WR WISSENSCHAFTSRAT

Die Exzellenzstrategie des Bundes und der Länder

Clusters of Excellence Funding Line

Funding Criteria

Research

- Quality and originality of the research programme in an international comparison and openness to risk
- Coherence of the research programme and academic productivity of the collaboration
- Quality of previous contributions to the field of research
- Positive impacts on the future development of the field of research or the stimulation of new research areas

Researchers

- Academic excellence of the participating researchers
- International competitiveness
- Diversity in the composition of the group

Supporting structures and strategies in the Cluster of Excellence

- Support of early career researchers and their academic independence
- Support of equal opportunity
- Management, quality assurance, science communication

Environment of the Cluster of Excellence

- Integration in the development planning of the university/universities (in the case of joint proposals: cooperative structure and contributions of the individual universities)
- Staffing, financial and infrastructural framework
- Collaboration with other institutions, research-oriented teaching, knowledge transfer (where addressed in the proposal)

Appropriateness of the requested funds

University allowance

- Plausibility of the strategic objectives of the university/universities

DFG form ExStra 110 – 09/2016 page 1 of 1

Invitation to Participate in the Survey (e-mail)

Clusters of Excellence Review Process – 5993/<lfd> (P-<projid>)

Dear <TITLE> <SURNAME>,

You have recently participated in a review panel for Clusters of Excellence. The DFG (German Research Foundation) would like to draw on your experiences to assess and improve this process.

On behalf of the DFG, infas, an independent social research institute based in Bonn, is conducting a survey on the review process for Clusters of Excellence. The survey will take 5 to 10 minutes to complete.

To start the questionnaire, simply click on the link below:

<HYPCAWI>

The information you provide will be kept strictly confidential and will not be linked to your name.

Participation in the survey is completely voluntary. However, the more people who respond to the survey, the more representative and useful the results will be. Your participation is therefore very important and would be greatly appreciated.

If you have any questions, you can call us at +49 (0)800/73 84 500 or contact us at exstra@infas.de.

Thank you for your support.

Yours sincerely,

Thomas Weiß

Project leader

infas Institute for Applied Social Sciences

Reminder about Survey (e-mail)

Clusters of Excellence Review Process – 5993/<lfd> (P-<projid>)

Dear <TITLE> <SURNAME>,

We recently contacted you to invite you to participate in our survey on the Clusters of Excellence review process. This survey is being conducted by the infas Institute for Applied Social Sciences on behalf of the DFG (German Research Foundation).

There is still time to complete the online survey. If you have responded to the questionnaire in the meantime, thank you very much for your support. If you have not yet had the opportunity, please do consider participating.

To start the questionnaire, simply click on the link below:

<HYPCAWI>

We guarantee that your information will be kept confidential and handled in full compliance with data protection requirements.

If you have any questions, you can call us at +49 (0)800/73 84 500 or contact us at exstra@infas.de.

Thank you for your support.

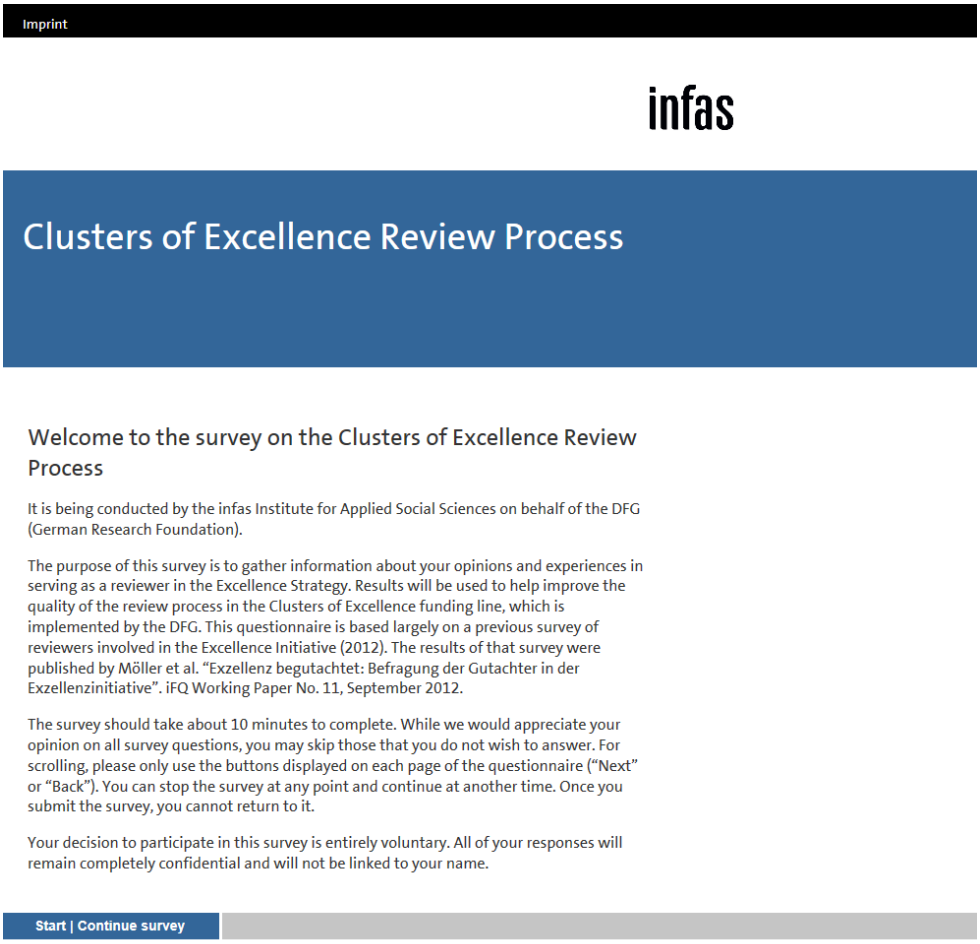
Yours sincerely,

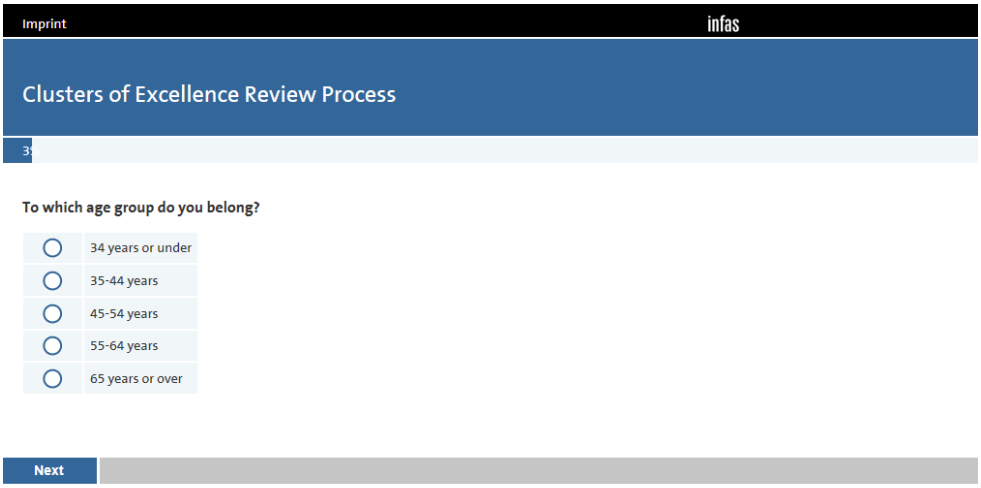
Thomas Weiß

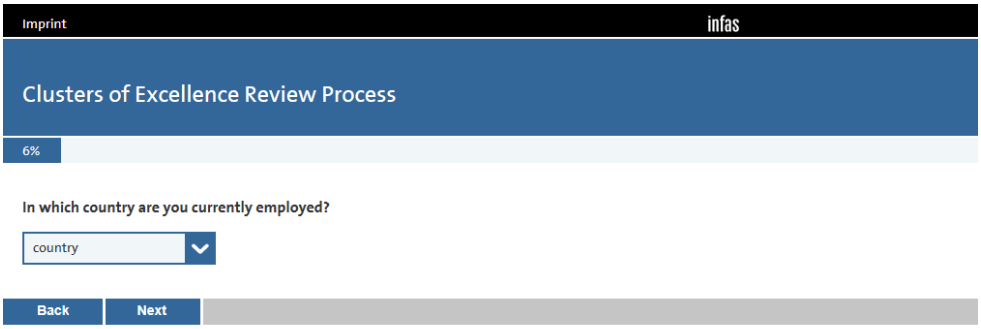
Project leader

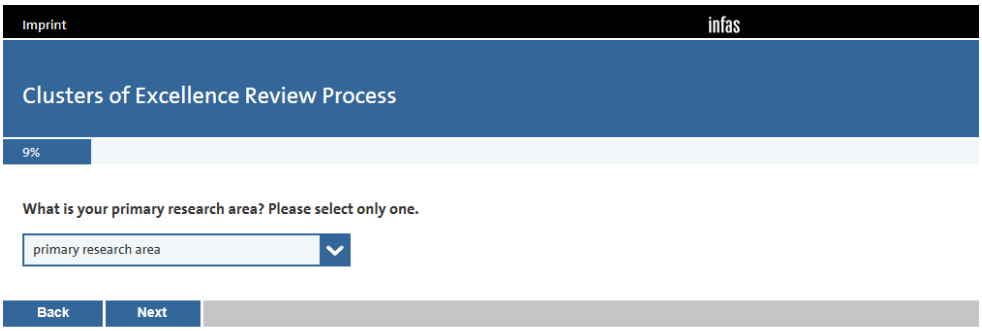
infas Institute for Applied Social Sciences

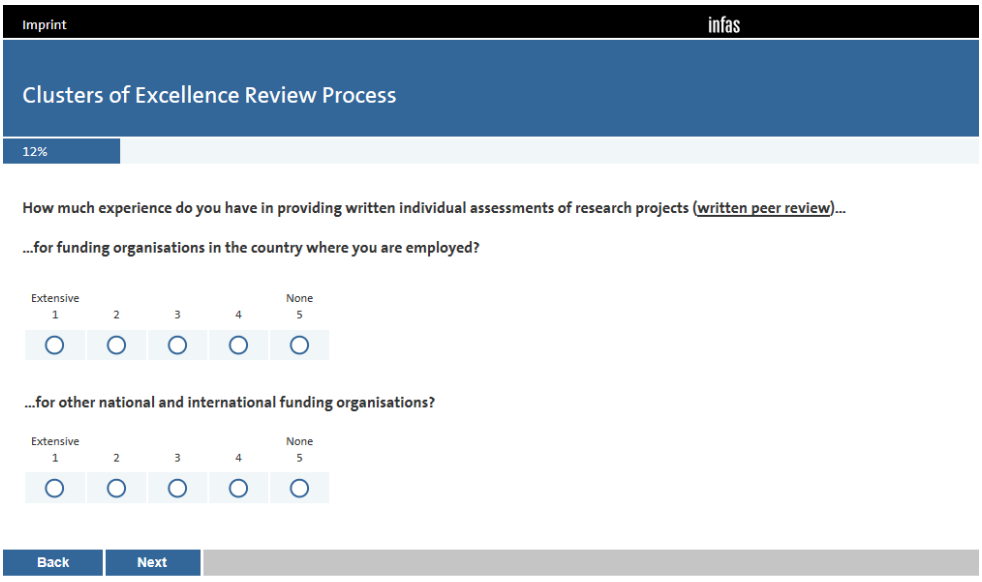
Survey Documentation – Screenshots

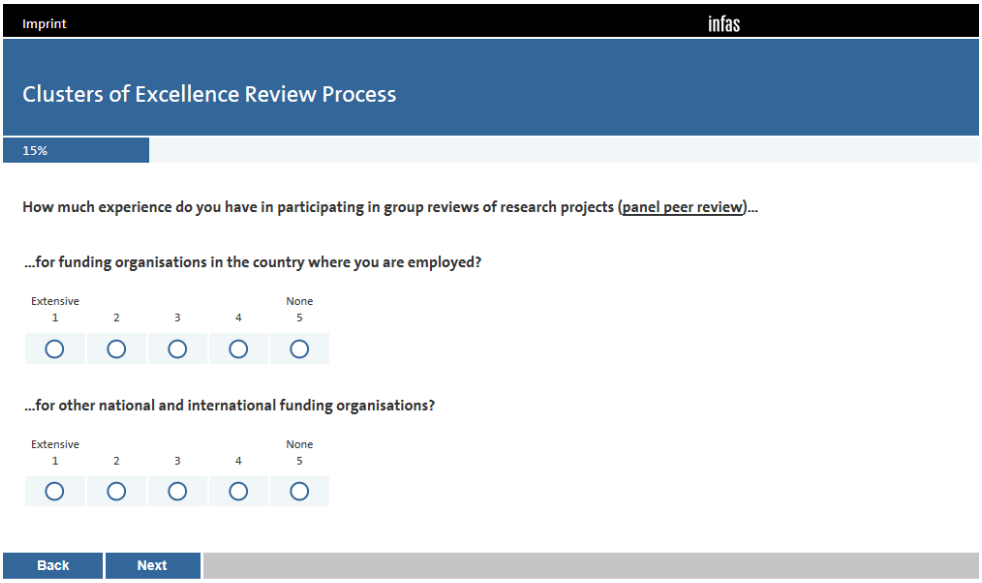


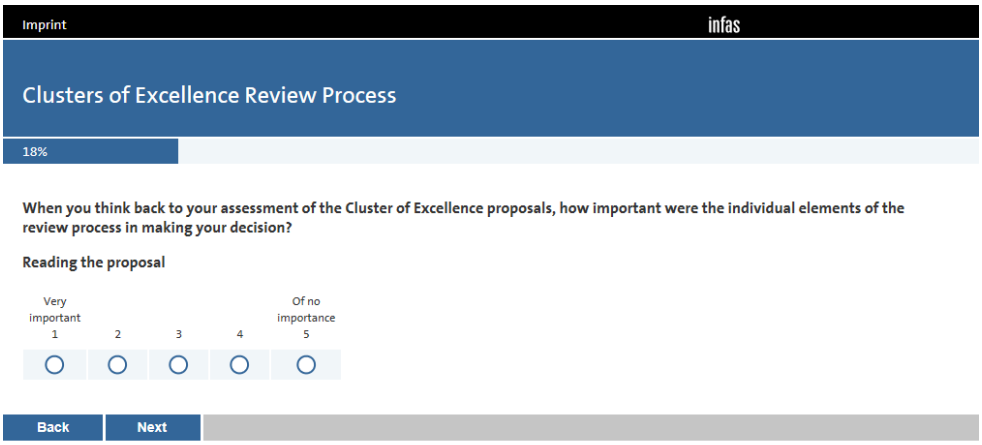


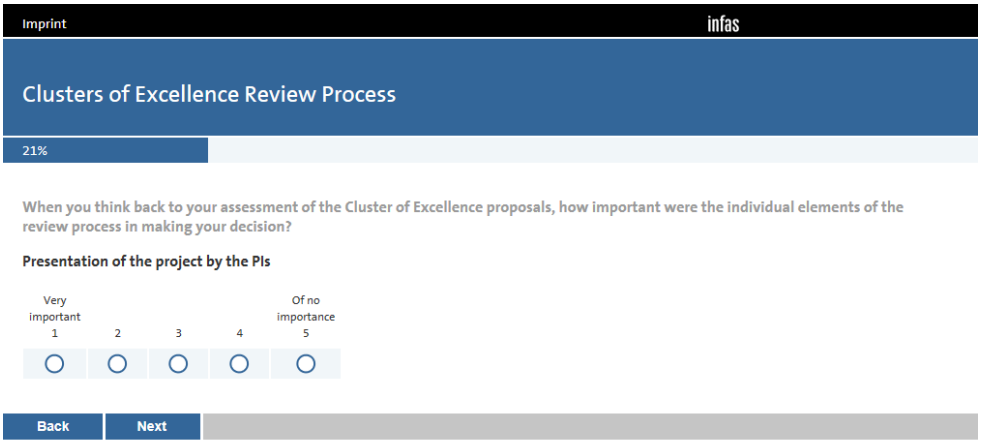

Imprint
infas
Clusters of Excellence Review Process
6%
In which country are you currently employed?
country
Back
Next

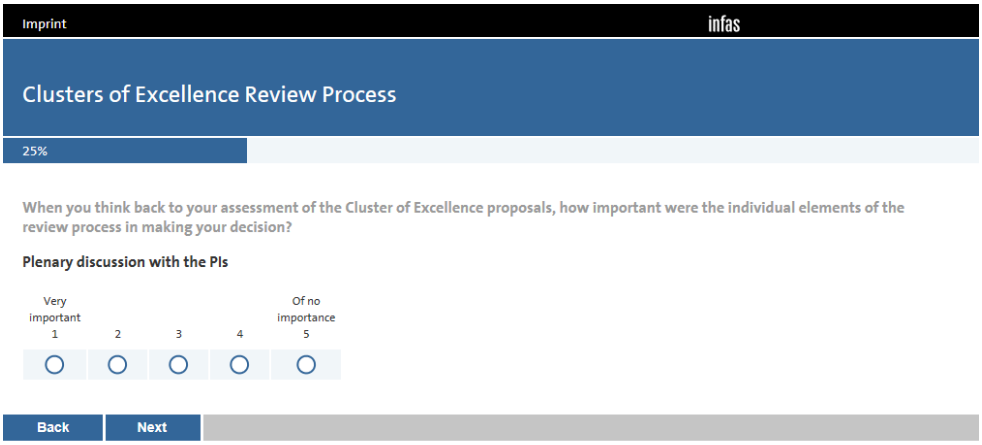

Imprint
infas
Clusters of Excellence Review Process
9%
What is your primary research area? Please select only one.
primary research area
Back
Next

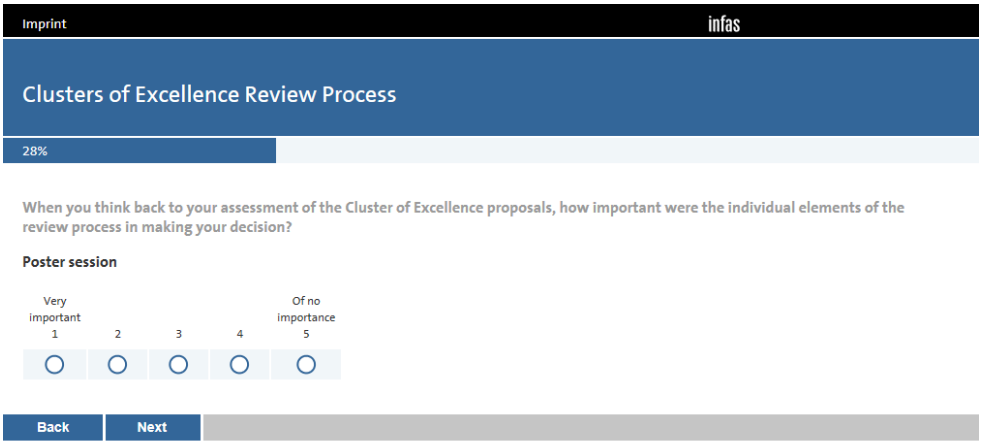

Imprint
infas
Clusters of Excellence Review Process
12%
How much experience do you have in providing written individual assessments of research projects (written peer review)...
...for funding organisations in the country where you are employed?
Extensive
None
1
2
3
4
5
...for other national and international funding organisations?
Extensive
None
1
2
3
4
5
Back
Next

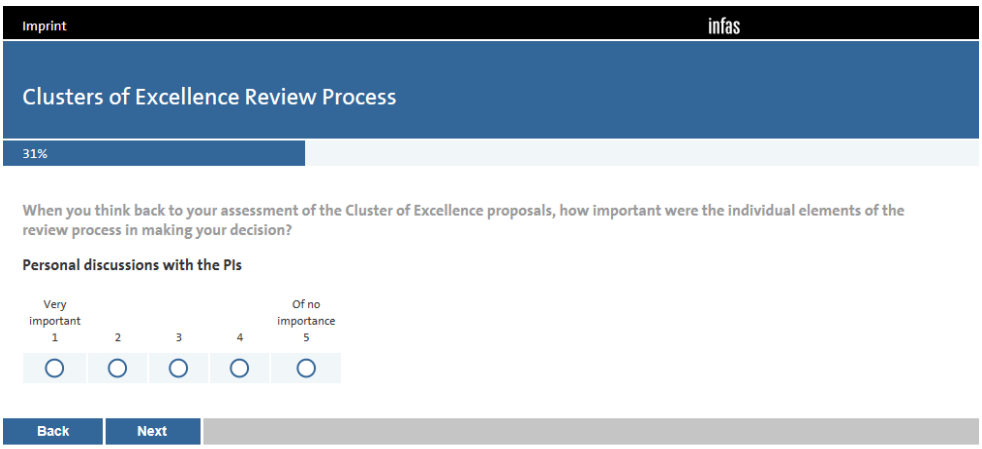

Imprint
infas
Clusters of Excellence Review Process
15%
How much experience do you have in participating in group reviews of research projects (panel peer review)...
...for funding organisations in the country where you are employed?
Extensive
None
1
2
3
4
5
...for other national and international funding organisations?
Extensive
None
1
2
3
4
5
Back
Next

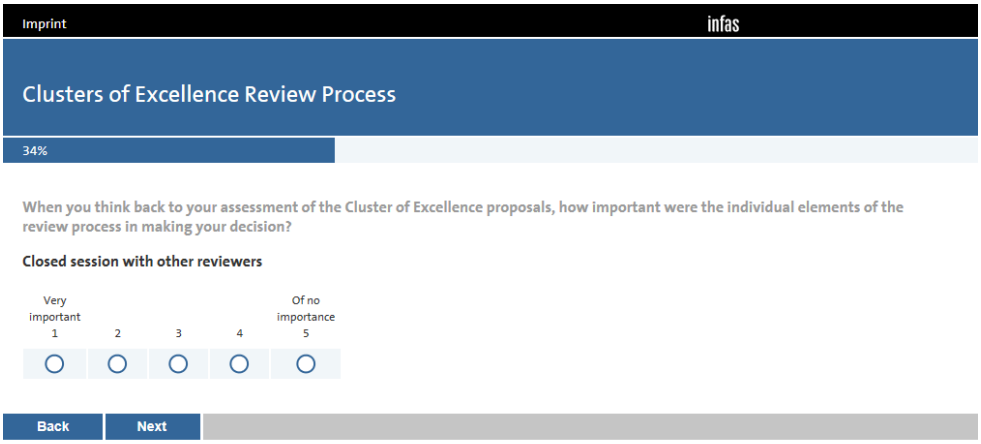

Imprint
infas
Clusters of Excellence Review Process
18%
When you think back to your assessment of the Cluster of Excellence proposals, how important were the individual elements of the review process in making your decision?
Reading the proposal
Very important
Of no importance
1
2
3
4
5
Back
Next

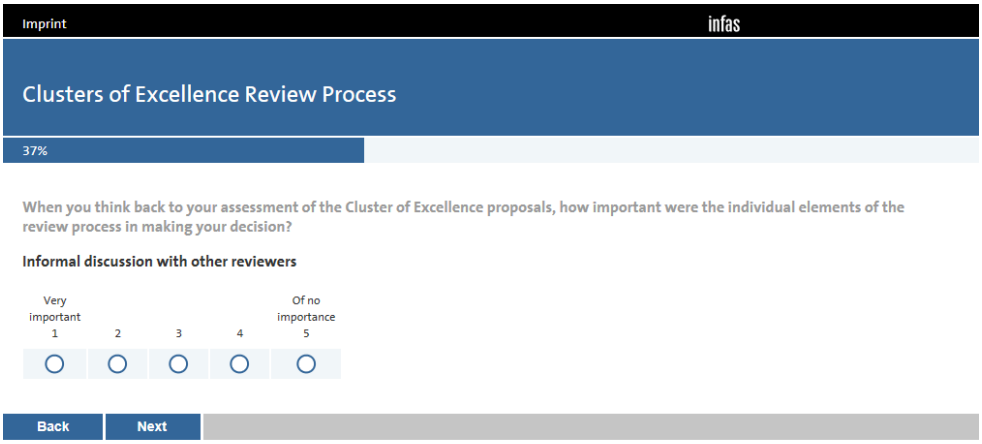

Imprint
infas
Clusters of Excellence Review Process
21%
When you think back to your assessment of the Cluster of Excellence proposals, how important were the individual elements of the review process in making your decision?
Presentation of the project by the PIs
Very important
Of no importance
1
2
3
4
5
Back
Next

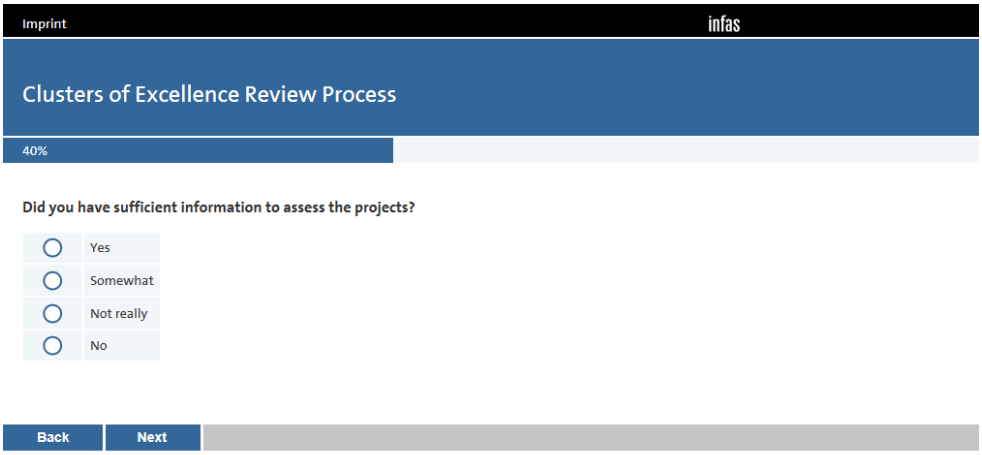

Imprint
infas
Clusters of Excellence Review Process
25%
When you think back to your assessment of the Cluster of Excellence proposals, how important were the individual elements of the review process in making your decision?
Plenary discussion with the PIs
Very important
Of no importance
1
2
3
4
5
Back
Next

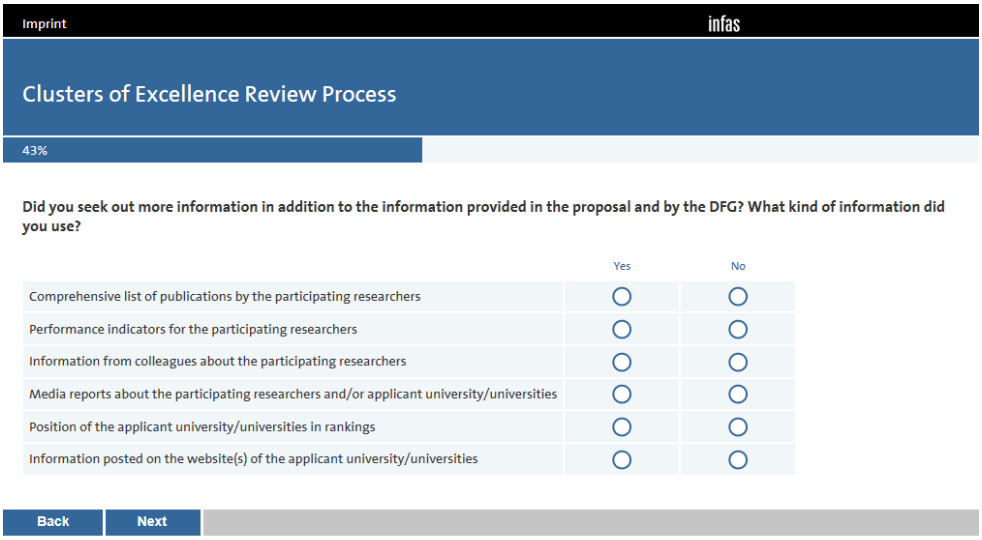

Imprint
infas
Clusters of Excellence Review Process
28%
When you think back to your assessment of the Cluster of Excellence proposals, how important were the individual elements of the review process in making your decision?
Poster session
Very important
Of no importance
1
2
3
4
5
Back
Next


Imprint
infas
Clusters of Excellence Review Process
31%
When you think back to your assessment of the Cluster of Excellence proposals, how important were the individual elements of the review process in making your decision?
Personal discussions with the PIs
Very important
Of no importance
1
2
3
4
5
Back
Next


Imprint
infas
Clusters of Excellence Review Process
34%
When you think back to your assessment of the Cluster of Excellence proposals, how important were the individual elements of the review process in making your decision?
Closed session with other reviewers
Very important
Of no importance
1
2
3
4
5
Back
Next


Imprint
infas
Clusters of Excellence Review Process
37%
When you think back to your assessment of the Cluster of Excellence proposals, how important were the individual elements of the review process in making your decision?
Informal discussion with other reviewers
Very important
Of no importance
1
2
3
4
5
Back
Next


Imprint
infas
Clusters of Excellence Review Process
40%
Did you have sufficient information to assess the projects?
Yes
Somewhat
Not really
No
Back
Next


Imprint infas

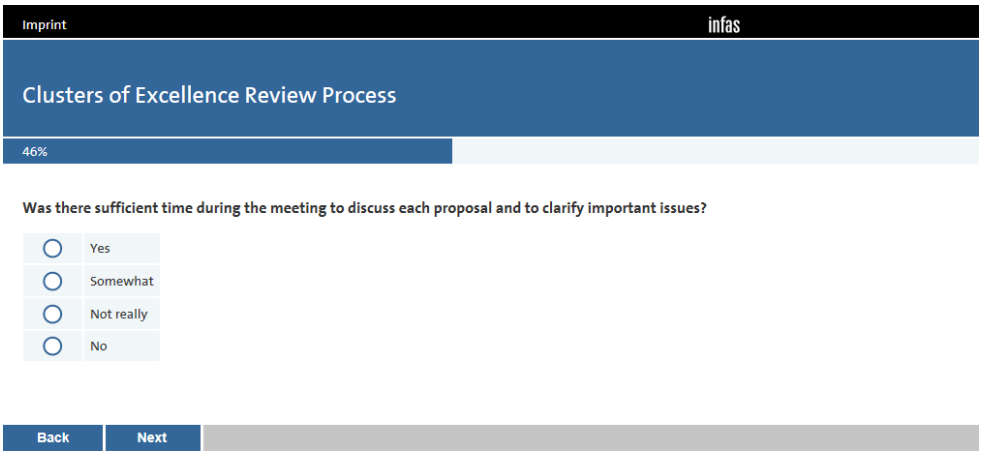
Clusters of Excellence Review Process

43%

Did you seek out more information in addition to the information provided in the proposal and by the DFG? What kind of information did you use?

	Yes	No
Comprehensive list of publications by the participating researchers	○	○
Performance indicators for the participating researchers	○	○
Information from colleagues about the participating researchers	○	○
Media reports about the participating researchers and/or applicant university/universities	○	○
Position of the applicant university/universities in rankings	○	○
Information posted on the website(s) of the applicant university/universities	○	○

Back Next


Imprint infas

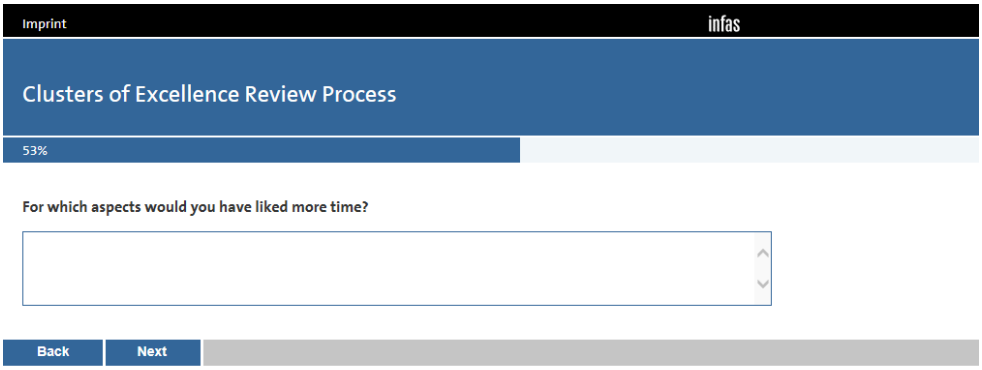
Clusters of Excellence Review Process

46%

Was there sufficient time during the meeting to discuss each proposal and to clarify important issues?

- ○ Yes
- ○ Somewhat
- ○ Not really
- ○ No

Back Next

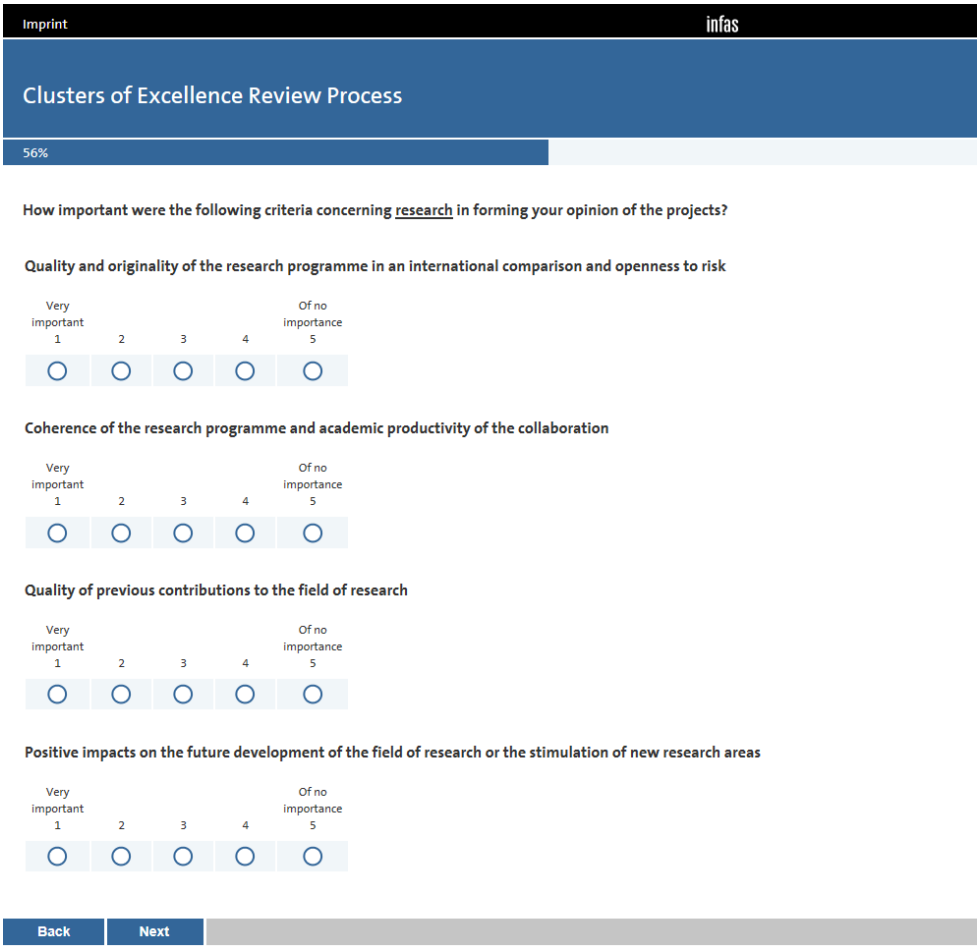

Imprint infas

Clusters of Excellence Review Process

53%

For which aspects would you have liked more time?

Back Next



Imprint infas

Clusters of Excellence Review Process

56%

How important were the following criteria concerning research in forming your opinion of the projects?

Quality and originality of the research programme in an international comparison and openness to risk

Very important 1	2	3	4	Of no importance 5
○	○	○	○	○

Coherence of the research programme and academic productivity of the collaboration

Very important 1	2	3	4	Of no importance 5
○	○	○	○	○

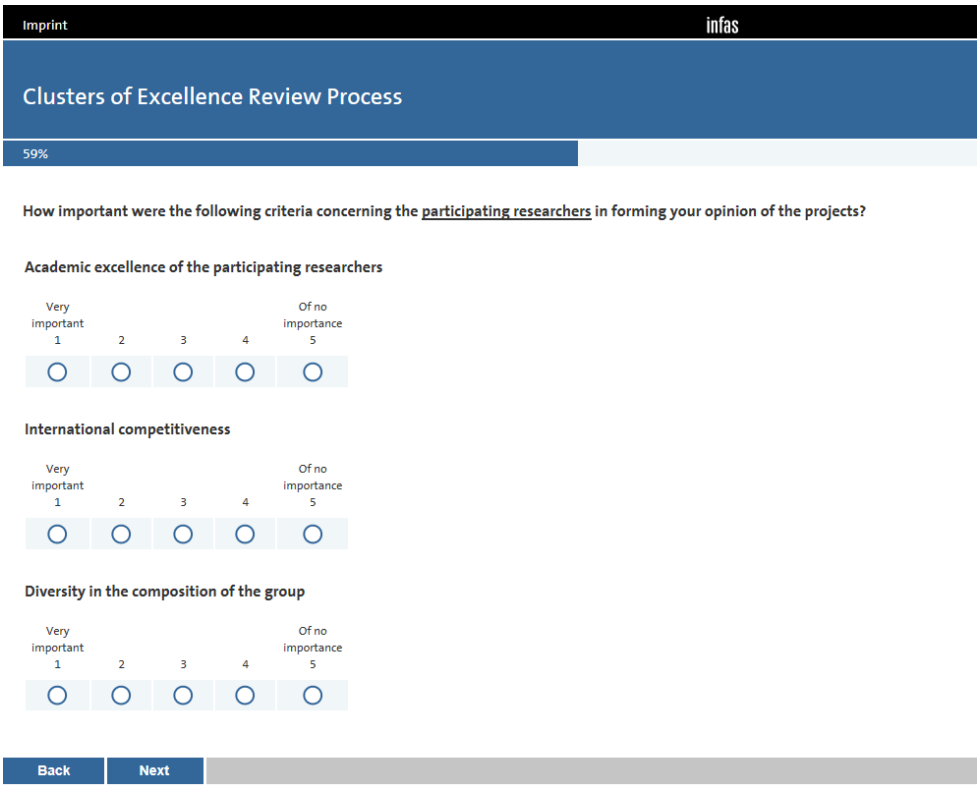
Quality of previous contributions to the field of research

Very important 1	2	3	4	Of no importance 5
○	○	○	○	○

Positive impacts on the future development of the field of research or the stimulation of new research areas

Very important 1	2	3	4	Of no importance 5
○	○	○	○	○

Back Next



Imprint infas

Clusters of Excellence Review Process

59%

How important were the following criteria concerning the participating researchers in forming your opinion of the projects?

Academic excellence of the participating researchers

Very important 1	2	3	4	Of no importance 5
○	○	○	○	○

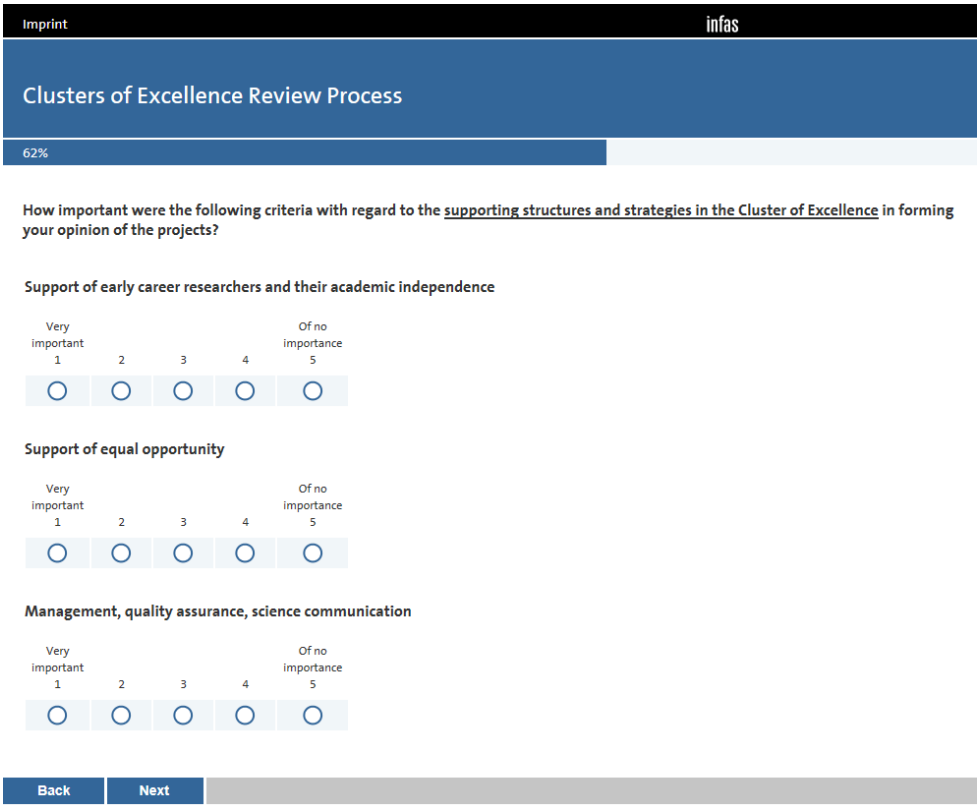
International competitiveness

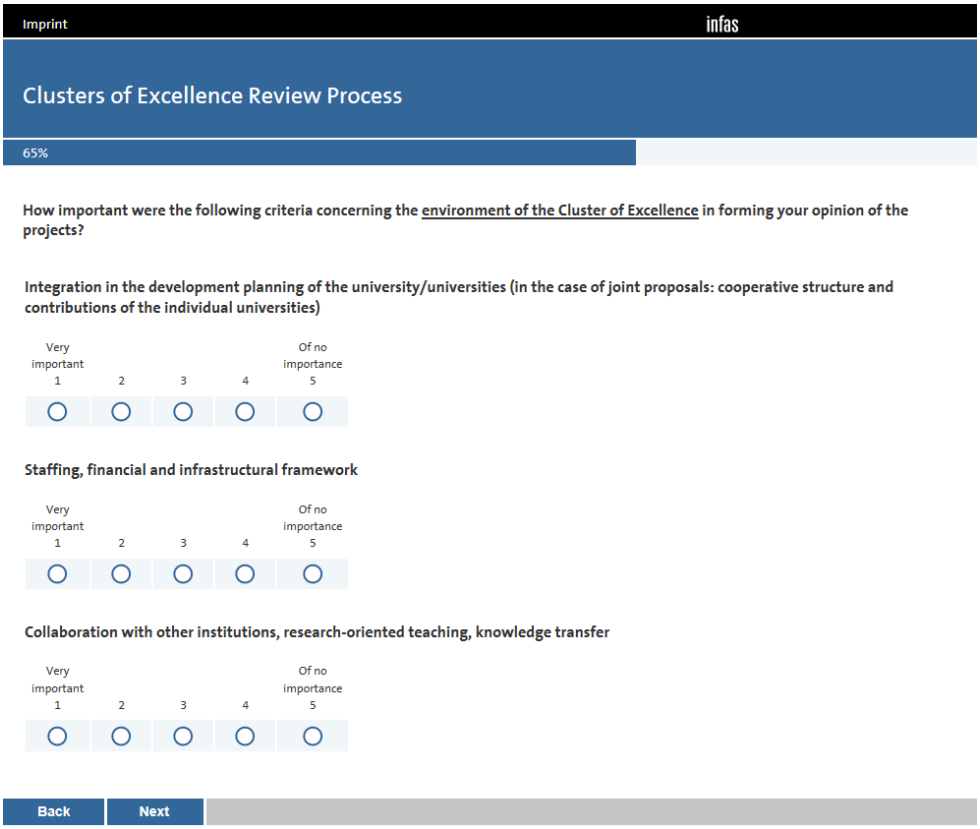
Very important 1	2	3	4	Of no importance 5
○	○	○	○	○

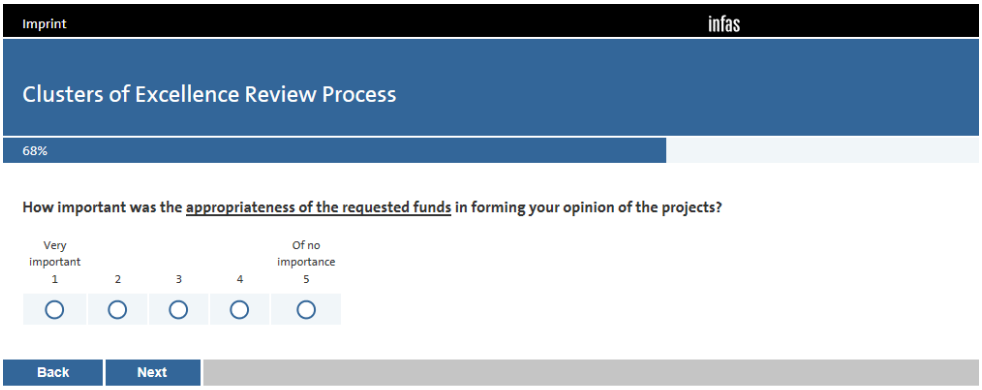
Diversity in the composition of the group

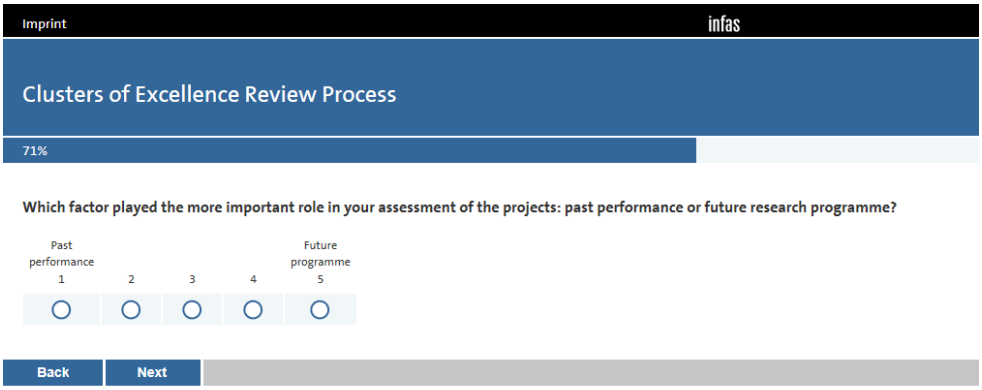
Very important 1	2	3	4	Of no importance 5
○	○	○	○	○

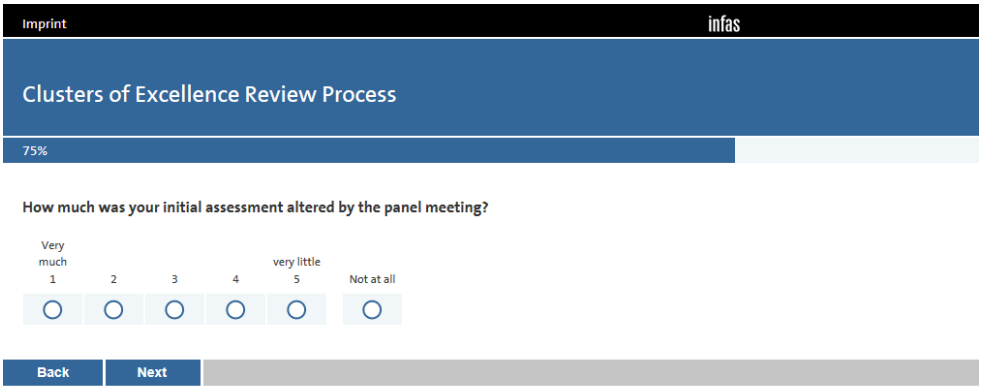
Back Next

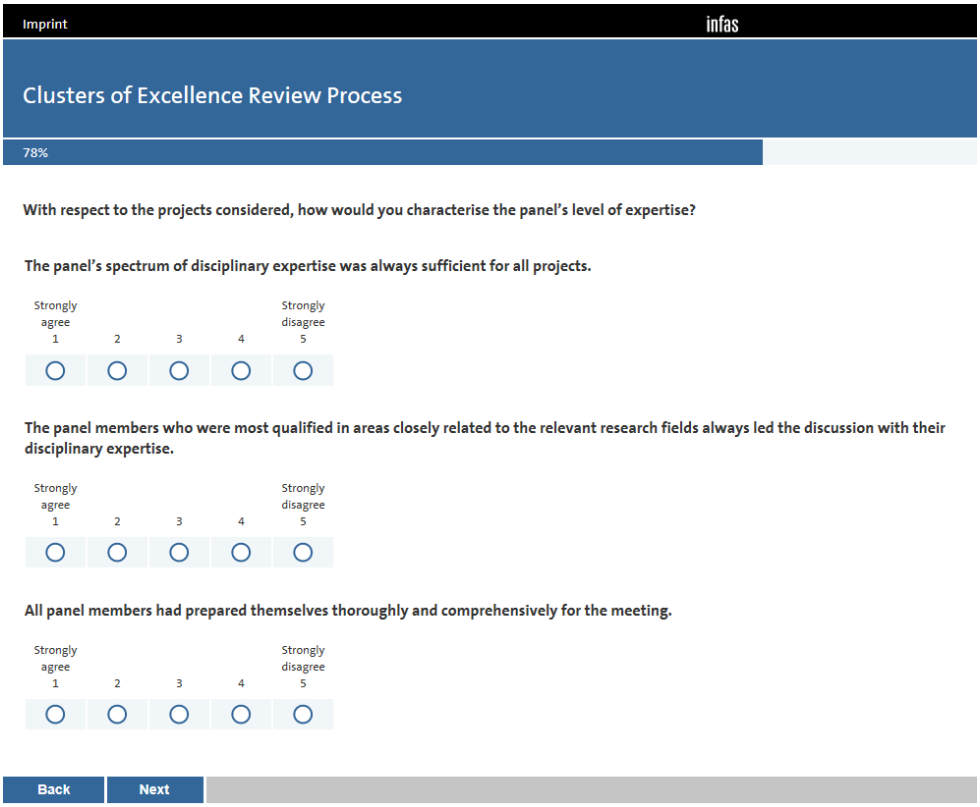

Imprint
infas
Clusters of Excellence Review Process
62%
How important were the following criteria with regard to the supporting structures and strategies in the Cluster of Excellence in forming your opinion of the projects?
Support of early career researchers and their academic independence
Very important
Of no importance
1
2
3
4
5
Support of equal opportunity
Very important
Of no importance
1
2
3
4
5
Management, quality assurance, science communication
Very important
Of no importance
1
2
3
4
5
Back
Next

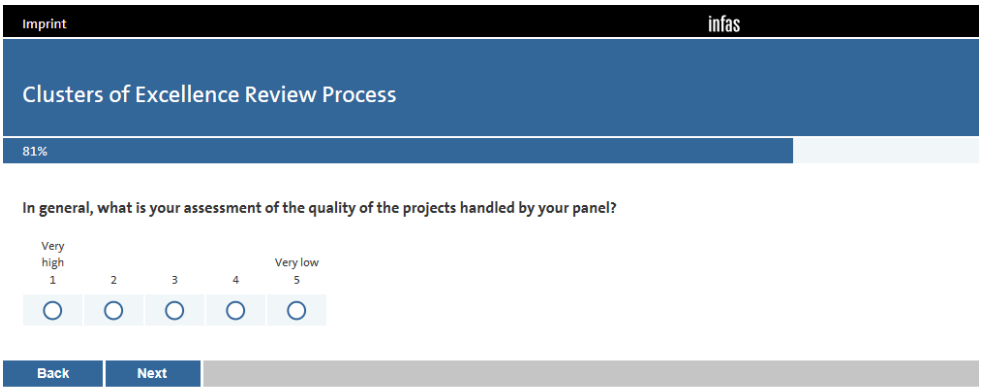

Imprint
infas
Clusters of Excellence Review Process
65%
How important were the following criteria concerning the environment of the Cluster of Excellence in forming your opinion of the projects?
Integration in the development planning of the university/universities (in the case of joint proposals: cooperative structure and contributions of the individual universities)
Very important
Of no importance
1
2
3
4
5
Staffing, financial and infrastructural framework
Very important
Of no importance
1
2
3
4
5
Collaboration with other institutions, research-oriented teaching, knowledge transfer
Very important
Of no importance
1
2
3
4
5
Back
Next

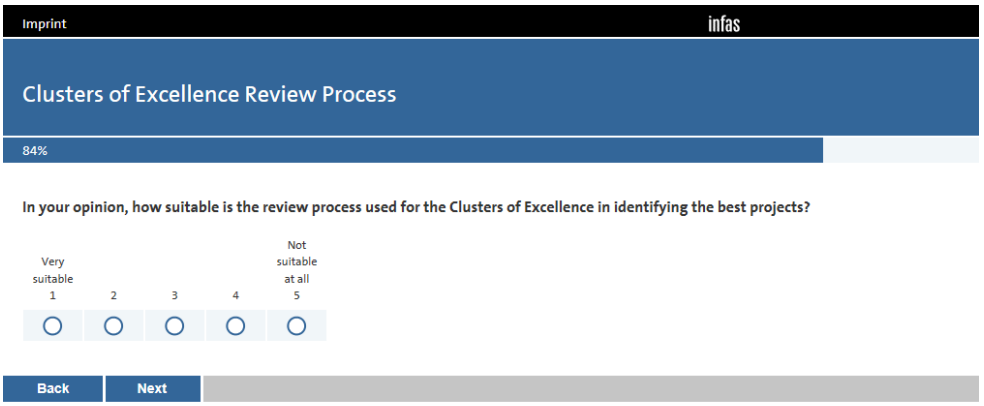

Imprint
infas
Clusters of Excellence Review Process
68%
How important was the appropriateness of the requested funds in forming your opinion of the projects?
Very important
Of no importance
1
2
3
4
5
Back
Next

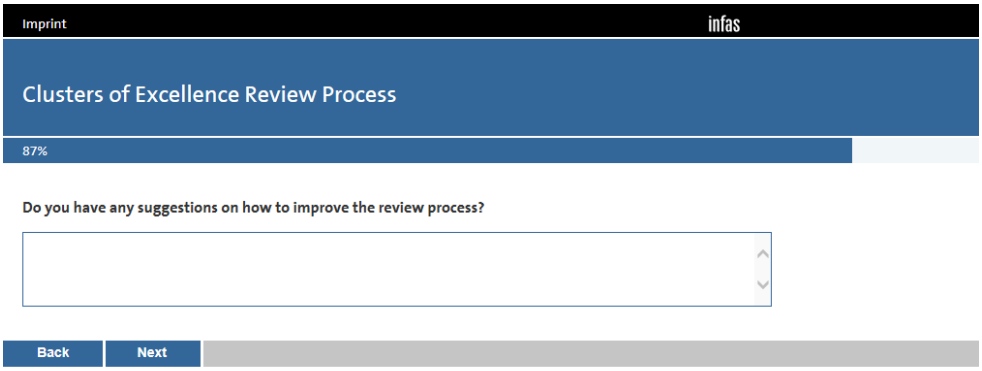

Imprint
infas
Clusters of Excellence Review Process
71%
Which factor played the more important role in your assessment of the projects: past performance or future research programme?
Past performance
Future programme
1
2
3
4
5
Back
Next

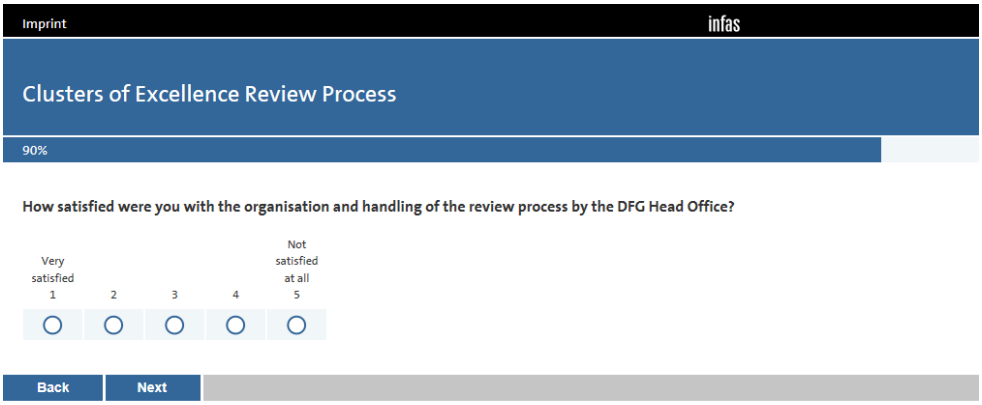

Imprint
infas
Clusters of Excellence Review Process
75%
How much was your initial assessment altered by the panel meeting?
Very much
very little
1
2
3
4
5
Not at all
Back
Next

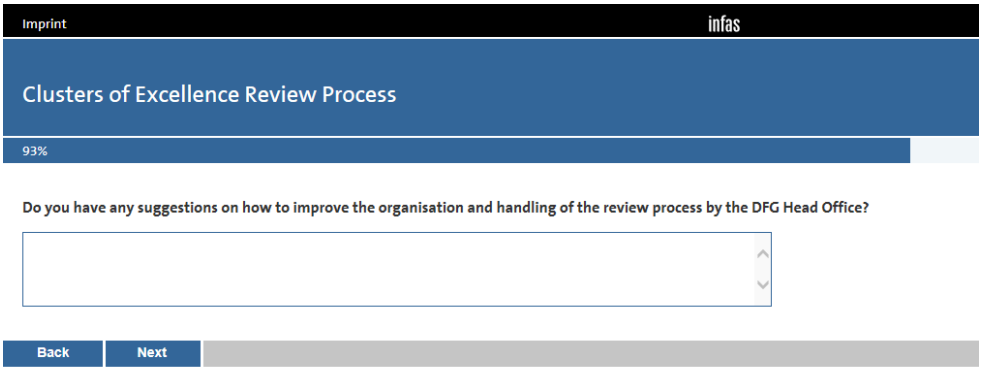

Imprint
infas
Clusters of Excellence Review Process
78%
With respect to the projects considered, how would you characterise the panel's level of expertise?
The panel's spectrum of disciplinary expertise was always sufficient for all projects.
Strongly agree
1
2
3
4
Strongly disagree
5
The panel members who were most qualified in areas closely related to the relevant research fields always led the discussion with their disciplinary expertise.
Strongly agree
1
2
3
4
Strongly disagree
5
All panel members had prepared themselves thoroughly and comprehensively for the meeting.
Strongly agree
1
2
3
4
Strongly disagree
5
Back
Next

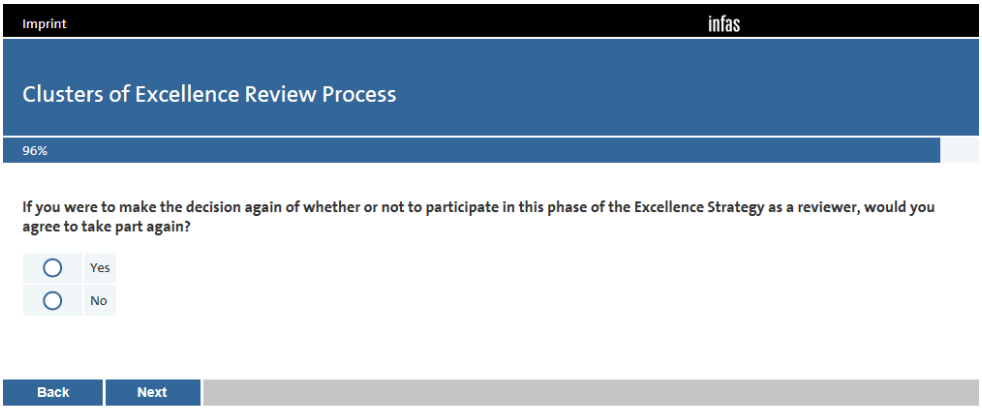

Imprint
infas
Clusters of Excellence Review Process
81%
In general, what is your assessment of the quality of the projects handled by your panel?
Very high
1
2
3
4
Very low
5
Back
Next

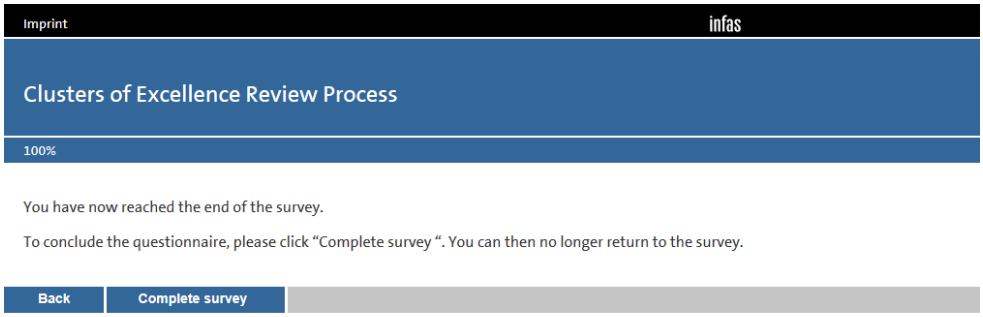

Imprint
infas
Clusters of Excellence Review Process
84%
In your opinion, how suitable is the review process used for the Clusters of Excellence in identifying the best projects?
Very suitable
1
2
3
4
Not suitable at all
5
Back
Next


Imprint
infas
Clusters of Excellence Review Process
87%
Do you have any suggestions on how to improve the review process?
Back
Next


Imprint
infas
Clusters of Excellence Review Process
90%
How satisfied were you with the organisation and handling of the review process by the DFG Head Office?
Very satisfied
1
2
3
4
Not satisfied at all
5
Back
Next


Imprint
infas
Clusters of Excellence Review Process
93%
Do you have any suggestions on how to improve the organisation and handling of the review process by the DFG Head Office?
Back
Next


Imprint
infas
Clusters of Excellence Review Process
96%
If you were to make the decision again of whether or not to participate in this phase of the Excellence Strategy as a reviewer, would you agree to take part again?
Yes
No
Back
Next


Imprint
infas
Clusters of Excellence Review Process
100%
You have now reached the end of the survey.
To conclude the questionnaire, please click “Complete survey “. You can then no longer return to the survey.
Back
Complete survey