

Instructions for reviewing funding applications – scientific quality panels

Strategic Research Council (SRC) 2022 programme calls

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1. Role of experts and the Academy of Finland

The Strategic Research Council (SRC) funds high-quality research that has potential for societal impact. Our funding is based on open competition, independent peer review and responsible science. The research should seek to find concrete solutions to grand challenges that require



multidisciplinary approaches. The SRC requires a multidisciplinary approach that includes collaborations of multiple research organisations. An essential element of such research is active collaboration between those who produce new knowledge and those who use it.

The panel is invited to review the scientific quality of the submitted research applications.

Another independent panel will evaluate the societal relevance and impact of the applications.

After receiving the panel review reports, the SRC will decide which consortia are funded based on both panels' final reviews and at its own discretion.

2. Secrecy and ethics

According to the Finnish Act on the Openness of Government Activities, research and impact plans, abstracts and reviews are secret documents. Application documents should therefore be handled and stored with due care and confidentiality.

The Academy of Finland is committed to following the guidelines of the Finnish Advisory Board on Research Integrity for responsible conduct of research. The guidelines also apply to reviewing funding applications, research programmes and scientific disciplines.

All reviews must be handled confidentially, competently and impartially, based on the criteria set for the review process. Care must be taken to ensure that the review complies with general stipulations about conflicts of interest. Prior notice must be given if a reviewer has economic or other affiliations or significantly different schools of thought in relation to the applicant under review. This is a way to avoid conflicts of interest.

As a reviewer, you are not allowed to disclose any information concerning application documents or reviews to outsiders, nor are you allowed to use this secret information to your own benefit or anyone else's benefit or disadvantage. You may not reveal to outsiders that you are assessing the research and impact plan of a particular researcher. If you are contacted by



anyone, including the applicant, who has questions about the application or reviews, please advise them to contact the Academy of Finland.

Confidentiality must also be maintained after the review process has been completed. Reviews are secret documents, but applicants will have access to the panel review reports on their own application after the funding decisions have been made. An applicant shall not disclose to third parties secret information obtained on the basis of party status and concerning other persons than the party themself. The draft reviews and external draft reviews are also secret documents unless otherwise stated in the applicable legislation or required by court order.

Reviewers are guilty of research misconduct if they misappropriate research ideas from applications. The quality of the review is not a research-ethical issue unless the review has been conducted carelessly, which may give an appearance of a review that deliberately either underrates or overrates the applicants under review.

Disclosing the contents of research and impact plans to third parties or contacting applicants personally without explicit agreement to do so are also regarded as instances of inappropriate behaviour on the part of reviewers.

Once the review has been completed, you are required to destroy all application documents and any copies made of them, or to return them to the Academy.

After the funding decisions have been made, the applicants will see the names of all panel members in the panel review report. If requested, the names of reviewers that have supplied the draft reviews will also be disclosed to the applicant (under the Finnish Act on the Openness of Government Activities). After the funding decisions have been made, the Academy will publish a list of names, current positions and institutions of all individual reviewers and panel members enlisted in the SRC's calls.



3. Conflicts of interest

As a reviewer you are required to declare any personal interests according to the criteria below. You must disqualify yourself if you can in any way benefit from the approval or rejection of the application. You must also disqualify yourself in the following circumstances:

- You have collaborated with the applicant (e.g. you have co-authored and published an
 article or manuscript with the applicant in the past three years, been involved in the
 preparation of the application, or are involved in the publication or application of the
 results).
- You have been a superior, subordinate or instructor of the applicant in the past three years.
- You are applying for the same post as the applicant.
- You are applying for funding from the Academy from the same funding instrument.
- The applicant is a close person to you. A close person is:
 - a) your spouse (also de facto), child, grandchild, sibling, parent, grandparent or a person otherwise close to you (e.g. fiancé/e or a close friend), as well as their spouses (also de facto)
 - b) a sibling of your parent or his/her spouse (also de facto), a child of your sibling, or your previous spouse (also de facto)
 - c) a child, grandchild, sibling, parent or grandparent of your spouse as well as their spouses (also de facto), or a child of a sibling of your spouse
 - d) or a half-relative comparable to the above-mentioned persons.

You are also disqualified if your impartiality may be endangered in any other way, or if you feel that you have a conflict of interest and are therefore disqualified to review the application.

If you identify any conflicts of interest, please notify us as soon as possible.



4. Reviewer's declaration

Please acknowledge that by accepting the task of a reviewer you guarantee not to disclose the information you receive and not to use it for anybody's benefit or disadvantage as stated in section 2 above (Secrecy and ethics). Further, you affirm that you will immediately notify the Academy if you have a conflict of interest in one or more applications.

5. Review and rating

Review criteria

The main criteria in the review are:

- 1. Quality of research
- 2. Competence and expertise
- 3. Impact

Responsible science should be considered throughout the application.

The detailed review criteria and review instructions are presented in Appendix 1. The same instructions can also be found in the Academy's online services.

Reviewing funding applications

Written reviews: Well-made draft reviews will make the panel work more efficient and be of great help for preparing the final reviews at the panel meeting. Evaluative comments are particularly valuable to the SRC's decision making. After the funding decisions have been made, the applicants can access the panel review report on their own application. The review also provides the applicant with important feedback. Reviewers should therefore:

- write evaluative rather than descriptive comments (avoid copying text directly from the application)
- write comments under each sub-item
- write coherent comments in the passive voice, which can be used, if agreed, as such in the panel review report.



Numerical evaluation and scale

The consistency between the numerical rating and the written comments is particularly important. For the draft review an overall grade (1-6) is given. The scale used is explained below. Based on the draft reviews and the discussion, the panel will decide on its final grade for each application.

The review scale for scientific excellence

Grade	Description of grade requirements
6 outstanding	demonstrates exceptional novelty and/or innovation; has potential to substantially advance science at a global level; presents a high-gain plan that may include risks
5 excellent	is very good in international comparison – contains no significant elements to be improved
4 good	is in general sound but contains some elements that should be improved
3 fair	is in general sound but contains important elements that should be improved
2 poor	contains flaws; is in need of substantial modification or improvement
1 insufficient	contains severe flaws that are intrinsic to the proposed project or the application

Responsible researcher evaluation

When reviewing the competence of the applicants, please pay attention to that the Academy of Finland is a signatory of DORA (link takes you to Dora's website), the San Francisco Declaration on Research Assessment, which makes recommendations for improving research assessment practices. The Academy is also committed to following Finland's national recommendation on Good practice in researcher evaluation The Academy adheres to the recommendations in its peer review processes. Applicants are not allowed to include any journal-based metrics in their application nor any other citation metrics.



In particular, you are asked to consider the content and quality of publications, rather than their number or venue of publication, or the impact of the journals in which they were published. We advise you not to use journal-based metrics (e.g. Journal Impact Factors) as a surrogate measure of the quality of individual research articles to assess an individual scientist's contributions. Please note also that other citation metrics used in isolation do not describe the impact, importance or quality of the publication(s) and can potentially be misleading when applied to the peer review. Citation metrics are dependent on the citation practices of different research fields and are therefore not a reliable comparative measure in multidisciplinary panel review.

When assessing researchers' track records and their suitability in delivering the proposed research, you are asked to consider the value and impact of all research outputs. In addition to the attached publication list, applicants are asked to list the ten most relevant publications and ten other key outputs, and to provide appropriate rationalisations. The types of outputs vary between disciplines.

You are also asked to be sensitive to legitimate delays in publication, and personal factors or other types of leave, part-time work and disabilities, which may have affected the applicant's record of outputs. Read more about <u>responsible researcher evaluation</u> on the Academy of Finland's website.

How to review applications in the Academy's online services

Please use the Academy of Finland's online services to review applications. Both draft reviews and panel review reports are completed in the online services. You can find the review instructions and offline versions of all our review forms under <u>Guides for reviewers</u> on our website.



6. Expert panel meeting (Online)

Before the meeting takes place, each application is assigned to at least two panel members who then prepare draft reviews. An additional read-only panel member can be assigned to an application if needed. All draft review reports will be made available to the panel members before the meeting. In some cases, an application may be reviewed by an expert outside the panel to provide additional knowledge pertaining to a particular field through an external draft review.

The panel consists of esteemed international experts in the field. The panel members have been chosen based on their scientific expertise on the research fields pertinent for the programme call at hand.

The panel prepares one joint panel review report on each application based on the discussions amongst all panel members and the draft reviews. Therefore, it is useful for all the panel members to get acquainted with all the applications. Academy staff will assist the panel in preparing the panel review reports. **The panel members have access to all applications assigned to the panel**, barring conflicts of interest.

7. Responsible science

Research ethics

The Academy of Finland requires that the Finnish Advisory Board on Research Integrity guidelines Responsible conduct of research and procedures (link takes you to the Board's website) for handling allegations of misconduct in Finland is followed in all Academy-funded research. We also require that researchers follow ALLEA's (All European Academies) European Code of Conduct for Research Integrity (link takes you to ALLEA's website) when engaging in international collaboration. Read more about research ethics on the Academy's website.

The Academy will not process a funding application if the applicant has been found guilty of research misconduct in the three years preceding the year of the call. If the Academy finds out about the misconduct during the funding period, whatever is left of the funding period will be



added to the three-year limit. If the applicant appeals the decision on the misconduct, and the appeal is successful, the Academy will process the applicant's new applications following normal procedures.

Equality and non-discrimination

The Academy of Finland's research funding promotes equality and non-discrimination as part of responsible science. To secure responsible reviews and decision-making, the Academy is committed to defining the means to support combining work and family life and the research careers of women in all funding opportunities. Therefore, career breaks due to family leaves cannot be evaluated negatively in the evaluation process. Read more about equality and non-discrimination here.

The Academy requires that all Academy-funded research promotes gender equality and non-discrimination. Academy reviews and decision-making emphasise the importance of promoting equality and non-discrimination either in the suggested project or in the wider society. Gender is not part of the information in the applications under review.

In the review of applications, the Academy of Finland asks reviewers to pay attention to the unconscious bias that affects us all. Unconscious bias refers to a positive bias towards our "ingroup" and a negative bias towards our "outgroup". For example, when you are assessing whether the research is ground-breaking and whether the applicant is competent enough to carry out the proposed project, pay special attention to the possible unconscious biases that you might have and that could have an impact on your evaluation. The very act of realising hidden biases makes them less powerful.

In review (especially in panels), it is easier to detect unconscious biases in others than in yourself. We ask you to be prepared to call out bias when you see it.



Open science

The Academy of Finland is committed to promoting the principles and practices of open science to improve the quality, responsibility and social impact of science. The goal is to make all outputs produced and used in research (research publications, data, methods and metadata) widely available for reuse. The principles of open science must be pursued with due attention to good scientific practice and law. The degrees of data openness may justifiably vary, ranging from fully open to strictly confidential. Read more about the Academy of Finland's open science policy on our website.

The Academy is a member of cOAlition S and uses Plan S principles and practices in its funding guidelines. In addition, the Academy applies the National Policy for Open Access to Scholarly Publications. When reviewing publication plans, reviewers are asked to take note of the Academy's open access policy and value the applicants' efforts to publish in OA journals or use other alternatives that secure the immediate open access of articles. All peer-reviewed articles written in Academy-funded projects should be published with immediate open access. Researchers may use OA journals, platforms, repositories or journals that commit to full OA by 2024.

When reviewing applicants' preliminary presentations on data management and open access to research data, reviewers are asked to take note of the Academy of Finland's research data policy and value the applicants' effort to open the research data collected during the research. Reviewers are also asked to support well justified arguments, if the applicant states that no research data is collected or gives understandable reasons for not opening the research data. The funded projects submit a full research data management plan after the positive funding decision has been made.



Sustainable development

Sustainable development is a continuous and guided social transformation process that takes place globally, regionally and locally with the aim of securing opportunities for a good life for present and future generations. Read more about sustainable development.

In 2015, UN member states agreed on global goals and targets for sustainable development in the form of the 2030 Agenda for Sustainable Development, which aims at eradicating extreme poverty and promoting a sustainable development in which the environment, the economy and human beings are taken into account in equal measure. Finland implements the global agenda through, for example, 'Society's Commitment to Sustainable Development', an instrument whereby the public sector and other actors can pledge to promote sustainable development in their work and operations.



Appendix 1 Review form and instructions

Review form: Strategic Research Programme 2022 calls, Full application Review questions for scientific quality