V

Peer review handbook

Research project grant and starting grant Natural and engineering sciences 2023

Content

F	oreword	4
Ir	Itroduction	5
	News for the call 2023	5
	Description of merits	5
	Updated guiding questions	
	Standard amount in the budget for starting grants	
	External assessments	
	Grant types	6
	Research project grant	
	Starting grant	6
	General starting points and principles	
	Peer review	
	Conflict of interest	6
	Gender equality	7
	Sex and gender perspectives	
	Handling of ethical considerations in the application and review	
	Deviations in the application	
	Confidentiality	
	Review work in Prisma	
	Applications from retired researchers or foreign guest professors	8
	Roles in the review process	
	Chair and vice chair	8
	Panel member	8
	Observer	8
	Swedish Research Council personnel	8
	Secretary General	8
1	Call and preparations	
	Creating an account in Prisma	
	Allocation of applications to review panels	
	Reporting any conflict of interest	9
	Reporting level of scientific competence	9
	Allocation of applications to reviewers	9
	Preparation for digital meetings in Zoom	.10
	Call and preparations: Summary of tasks	.10
•		
2	Review	
	Start-up meeting	
	Individual review	
	Irrelevant information	
	Consulting a colleague	
	Good research practice	
	Ethical guidelines	.12

	Relevance concerning sex and gender perspectives	12
	Project budget details	12
	Deductible time	
	Bibliometrics	13
	Evaluation criteria and grading scales	
	Feasibility grade	
	Overall grade	
	Guiding questions	
	Scientific quality of the proposed research (1–7)	
	Novelty and originality (1–7)	
	Merits of the applicant (1–7)	
	Feasibility (1–3).	
	Overall assessment (1–7)	
	Ranking of applications	
	External reviewers	
	Sifting	
	More readers of applications around the threshold for funding	
	Review: Summary of tasks	
	10 · 10 · · · 2 · · · · · · · · · · · · · · ·	
3	Review panel meeting	20
-	Sifted applications	
	Discussion on applications	
	Prioritising	
	Amount awarded	
	Nomination of an awarded grant for research communication	
	Feedback	
	Review panel meeting: Summary of tasks	
	ree te ti parlet meeting. Sammary et ashe	
4	Final statement	23
	The rapporteur writes a final statement	
	The chair reviews all final statements	
	General advice and recommendations on final statements	
	Do's	
	Don'ts	
	Final statement: Summary of tasks	
	1	
5	Decision and follow-up	25
-	Re-distribution	
	Decision	
	Follow-up	
	Complaints and questions	
	Decision and follow-up: Summary of tasks	
	Decision and follow up. Summary of usits	23
6	Checklist	26

Foreword

The review process for applications submitted to the Scientific Council for Natural and Engineering Sciences of the Swedish Research Council is now underway. A prerequisite for achieving the best possible allocation of research funds is access to accurate information regarding all steps of the review process. This review handbook is intended to give you, as a reviewer, the basic support and reference material necessary to carry out your task.

The review handbook is organised according to the main steps of the review process. General guidelines, the fundamental principles of peer review and the policies specific to the Scientific Council for Natural and Engineering Sciences are available through links in the text.

In this context, I want to highlight that the main task of the Swedish Research Council is to support research of excellent quality, pushing the frontiers of knowledge. Thus, the main goal is to gain new scientific insights. In this regard, relevance to societal challenges, for instance, can never compensate for low scientific quality. I also want to emphasise that the Swedish Research Council pays special attention to how conflicts of interest and gender equality are handled. Avoiding irrelevant information during the review process is one important aspect of this. The Swedish Research Council is also concerned about the impact of bibliometric data, and it is the view of the Council that such numbers reflect the size of a scientific area and the popularity of the topic rather than scientific quality. Therefore, you are expected to look beyond quantitative indicators to identify the best science.

The work of reviewing grant applications is the foundation of the Scientific Council activities. Serving as a member of one of the Scientific Council review panels is an important commission of trust. My experience is that such a commission naturally involves a considerable amount of work, but the work is interesting and rewarding since it offers an overview of a broader area of science than we normally encounter in our daily lives as researchers. I hope you will appreciate the work in the review process. Your assessments will have a profound impact on the type and quality of research in natural and engineering sciences being performed in Sweden in the future.

Welcome as a reviewer for the Swedish Research Council!

Mattias Marklund Secretary General Natural and Engineering Sciences Swedish Research Council

Introduction

This review handbook includes instructions for the assessment of applications for the general call for proposals in natural and engineering sciences. The following grants are available in the 2023 call; project grant and starting grant. The purpose of the research project grant is to give researchers the freedom to formulate by themselves the research concept, method and implementation, and to solve a specific research task within a limited period. The aim of the starting grant is to give junior researchers the opportunity to establish themselves as independent researchers in Sweden.

The handbook is designed to reflect the review process step by step. The intention is to make it easier for you as a panel member to find the information you need for tasks to be carried out.



News for the call 2023

Description of merits

As for 2022, a test of a descriptive complement is performed where the applicants for starting grants are asked to describe how their merits (the CV in the application) and publication list relate to the proposed project.

Updated guiding questions

The guiding questions for each evaluation criterion have been updated for both project grants and starting grants.

Standard amount in the budget for starting grants

There is now a standard amount that can be applied for within starting grants of 1 million SEK/year over four years. Hence no budget is stated although the applicants are requested to briefly describe the primary costs they intend to cover within the framework for the grant budget.

External assessments

From this year the assessments from external reviewers do not contain grades, only written assessment for each evaluation criterion.

Grant types

Research project grant

The research project grant (complete call text <u>here</u>) may be used to cover all kinds of project-related costs, such as salaries, premises costs, running costs as well as depreciation costs. The active participation of the applicant in the project is assessed in relation to the proposed project whilst the employment must be at least 20 per cent of a full-time equivalent. Four years represent the standard and maximum grant period. The applicant may apply for a minimum of 400 000 SEK and maximum of 1.3 million SEK per year, resulting in a maximum of 5.2 million SEK over a four-year period.

Starting grant

The starting grant (complete call text <u>here</u>) is available for researchers with a doctoral degree awarded more than 2 years ago and up to 7 years ago. If the doctoral degree was awarded earlier, an applicant may be eligible to apply if special circumstances interrupted the period of active research. The active participation of the applicant in the project, and employment, must be at least 50 per cent of a full-time equivalent. The grant may be used to cover all kinds of project-related costs, such as salaries, premises costs, running costs as well as depreciation costs. The grant period is fixed at four years and the budget is a standard amount of 1 million SEK per year.

General starting points and principles

The following guidelines and principles strictly apply during all steps in the review work.

Peer review

The Swedish Research Council should give support to basic research of the highest scientific quality within all fields of science. The fundamental principle for assessing scientific quality is the peer review of applications carried out by the review panels. In order to provide a basis for the scientific review, the board of the Research Council has formulated guidelines for peer review based on eight principles. Take part of the guidelines for peer review.

Conflict of interest

In order to avoid any situation involving a conflict of interest, the Swedish Research Council has established strict guidelines that you must be acquainted with. Take part of the Swedish Research Council's conflict of interest policy and guidelines for conflict of interest.

Anyone who has a conflict of interest should not participate in the handling, assessment or discussion of the application or the applicant during any part of the process. In order to prevent the occurrence of conflict situations an application should not be reviewed in the review panel:

• if a member of the panels is an applicant or a participating researcher

• if a related party to a member of the panel is an applicant (not participating researcher)

You are obliged to report any conflict of interest in relation to the applications you will be reviewing. In the event of any doubt, please confer with the chair and the Research Council personnel.

Gender equality

One of the operational goals of the Swedish Research Council is to ensure that women and men have the same success rates and receive the same average grant amount, taking into account the nature of the research and the type of grant. Review panels should consider the gender equality goal and calculate the success rates for male and female applicants, respectively, and comment on the outcome if necessary. For both grant types, when ranking applications with no significant difference in terms of quality, applicants from the under-represented gender should be prioritised (based on the gender distribution of applicants to that grant type).

Sex and gender perspectives

As of 2018, the Swedish Research Council's instruction from the government include that we must work to ensure that gender and gender perspectives are included in the research we fund, when applicable. How gender and gender perspectives are handled in research, when relevant, is included in the assessment of the scientific quality of the applications.

Handling of ethical considerations in the application and review

The Swedish Research Council requires that research conducted with our support follows good research practice and that it complies with applicable law in Sweden. When the applicant and the administrating organisation sign the terms for an awarded grant, they confirm their responsibility for this.

Handling of ethics consists of two parts and is included in the assessment of the scientific quality and the feasibility of the applications.

Deviations in the application

If you think that an application deviates from the Swedish Research Council's guidelines in a way that is not clearly covered by the scientific review work, you should notify us of this as soon as possible. This could for example concern ethical issues or deviations from good research practice.

Confidentiality

Throughout the review process, applications and the review of applications should be treated confidentially:

- You must not spread the documents that you have access to in your work as a member
- You must delete the documents after the assignment has been completed.
- Third parties should not be informed of what was discussed at the meeting, or of the views of any other reviewers in the ongoing review process.

• All communications between applicants and the Swedish Research Council concerning the review process or the decisions should be carried out via the Research Council's research officer responsible.

Review work in Prisma

All the review work is carried out in the web-based system Prisma. If you have any questions concerning the system and cannot find the answer in the User Manual, please contact the research officer responsible.

Applications from retired researchers or foreign guest professors

Retired researchers or foreign guest professors who are applying for grants should be assessed on the same basis as other applicants. All applicants must be employed at least 20 per cent of a full-time equivalent by the administrating organisation when the grant period starts. By signing the application, the head of department vouches that the applicant can carry out the research at the employment level required.

Roles in the review process

Chair and vice chair

The chair leads and coordinates the work of the panel. The vice chair's task is to stand in for the chair of the review panel in situations where she or he cannot or should not take part, such as when the chair has a conflict of interest. Normally, the chair does not review any applications, but the recommendation is to read all the applications reviewed by the panel in order to acquire the necessary information.

Panel member

The panel members review, grade and rank the applications and discuss them at the review panel meeting, and give feedback in the form of a final statement to applicants.

Observer

An observer from the scientific council is appointed to the review panel to oversee and uphold the quality of the review process. The observers provide feedback to the Scientific council and the Secretary General after each review period.

Swedish Research Council personnel

The research officer and senior research officer ensure that the rules and procedure established for the process are complied with.

Secretary General

The Secretary General has overall responsibility for the review process and for questions of a scientific nature. The Secretary General is also the person who deals with any complaints following the grant decision.

1 Call and preparations



Creating an account in Prisma

Create an account in Prisma if you do not already have one. Log into Prisma and ensure that the account and personal data is correct. You should also decide whether or not you want to receive remuneration for your review work. Follow the instructions in <u>Prisma's User Manual</u>.

Allocation of applications to review panels

Once the call has closed, the applications are allocated to the review panels. Usually, each application is allocated to the group the applicant has listed as the first choice. However, if the chair considers that an application should be reviewed by another panel, it might be moved.

Reporting any conflict of interest

Once the applications have become available in Prisma, you must report any conflict of interest concerning the project leader and participating researchers. The chair will then allocate applications to individual members. Let the chair and the Swedish Research Council personnel know if any doubts arise, or on issues of conflict of interest or competency to review. Report immediately to the chair and the research officer responsible if you discover a conflict of interest later on in the process.

Reporting level of scientific competence

In order to facilitate the allocation of applications to reviewers, you are asked to report your level of scientific competence for assessing each application at the same time as reporting your conflicts of interest. The scientific competence is reported on a three-grade scale: low, medium or high. Please note that you may be asked to review an application even though you reported a competence level of medium or low.

Allocation of applications to reviewers

Each application is allocated to three reviewers, of which one is given the role of rapporteur. The rapporteur is the reviewer who is responsible for presenting the application for discussion at the review panel meeting, and for summarising the review panel's final statement following the meeting.

Preparation for digital meetings in Zoom

The review panel meeting is held over the digital platform Zoom. Download the Zoom Desktop client to your computer (<u>https://zoom.us/download</u>) before the meeting.

Make sure you have access to a stable network connection, a computer camera, built-in or external, and a microphone. We strongly recommend that you use a headset with a microphone, as this provides the best sound both for yourself and for other participants. If you do not have access to a headset, you may buy one at our expense, at a maximum cost of 50 EUR. We also recommend that you use a large screen in addition to your laptop, if possible.

Call and preparations: Summary of tasks

Task	Completed
□ State account information in Prisma.	Before the deadline
□ Download Zoom and check technical equipment.	Before the first digital meeting
 Report any conflict of interest and state competence level in Prisma. 	Before deadline

2 Review



During the review period, you should

- attend the start-up meeting,
- read the applications allocated to you,
- · write assessments and preliminary statements,
- grade and rank the applications reviewed by you.

At the same time Prisma closes for editing, the system opens for reading other panel members' assessments. Prepare for the discussions at the review panel meeting by reading the assessments by the other reviewers. During this stage, a first sifting of the applications is also carried out.

Start-up meeting

A start-up meeting is held shortly after applications have been allocated and you have received your review tasks. The purpose of the meeting is to be informed about the guidelines and principles that adhere to the review, and to within the panel discuss important aspects regarding the individual review.

Individual review

Each application is reviewed and graded by three members of the review panel; one rapporteur and two reviewers. For the applications where you are the rapporteur, you should write a *preliminary statement*. The preliminary statement consists of a numerical grade and detailed written comments on all evaluation criteria where strengths and weaknesses of the project are pointed out.

In the role as reviewer, you should write an *assessment*. The assessment consists of a numerical grade and written comments, but the comments can be less detailed. The assessment you provide will support the discussion during the review panel meeting. It will also support the rapporteur in writing the joint final statement after the meeting. It is therefore a good practice to point out the strengths and weaknesses your assessment are based on.

Irrelevant information

Base your assessment on the content of the application. Information that is not relevant to the assessment should not be used. An example of irrelevant information is matters you think you know even though it is not written in the application. Other examples are various types of rumours about for example lack of research ethics or assumptions that someone else wrote the application.

Consulting a colleague

Information about the applicant should not be shared outside of the review panel during the review process. Sometimes questions arise as to whether it is acceptable to consult with a colleague during the review work. As long as you do not share the application you may consult colleagues on limited specific topics in parts of the content of a research plan. This must only be practiced exceptionally.

Good research practice

Contact the Swedish Research Council immediately if you suspect any deviation from ethical guidelines or good research practice. Continue with the review task without the impact of this as long as we do not notify otherwise. The Swedish Research Council will ensure that the matter is further investigated.

Ethical guidelines

The applicant should explain what applies to the proposed research, whether it is subject to requirements such as ethical permits or similar, and how to obtain these. If parts of the research will take place elsewhere than in Sweden, the applicant should be able to describe how it affects any requirements for permits and approvals.

The applicant should also reflect and give an account of ethical issues and/or problems that the research may raise. You can find exemplary questions to help the applicant in the call text (project grant and starting grant).

Relevance concerning sex and gender perspectives

It is part of the assessment of the scientific quality to assess how sex and gender perspectives are handled in research, when relevant. The applicant must state whether sex and gender perspectives are relevant in the research or not. The applicant should also describe in what way it will be applied, or justify why he or she chooses not to include it. Sex and gender perspectives in research can concern anything from including and analysing both women and men in the study (sex perspectives) to problematising and reflecting on how gender affiliations are created and understood (gender perspective).

Project budget details

There is no need to scrutinise the project budget details. The Swedish Research Council grants typically only part-finance a project. The applicant awarded a grant will have a large degree of freedom to use the funds in the way that best serves the overall purpose of the project.

Deductible time

During the review process, you must take into account any deductible time that the applicant has reported in their application. The merits of the applicants shall be valued considering the deductible time. In this aspect, a history of illness, parental leave and similar reasons for deductible time must not affect the grades given for feasibility.

Bibliometrics

Bibliometric data included in the application (publication and citation data) shall be used by the experts in the scientific area as part of a wider consideration of scientific merits in coherence with the project proposed. Bibliometrics represent a deceptively simple way to compare merits between applicants, and quantitative indexes such as H-index, must not be used in the assessment. The numbers obtained could tell more about the size of scientific community and popularity of a research field than quality. Hence, the bibliometric data shall never be used as the sole basis for an assessment of the applicant's qualifications and as a reviewer you are expected to see beyond the numbers offered by bibliometrics to judge both the applicants' merits and the quality of the proposed scientific plans.

Evaluation criteria and grading scales

The assessment of the scientific quality of the applications is made based on four basic criteria:

- Scientific quality of the proposed research
- Novelty and originality
- Merits of the applicant
- Feasibility

The purpose of using several criteria is to achieve a multi-faceted assessment. The criteria are evaluated against a seven- or three-point grading scale.

For each criterion, there are guiding questions to support your assessment of the application.

A seven-grade scale is used to evaluate the criteria the scientific quality of the project, novelty and originality and the merits of the applicant:

Grade Definition

7	Outstanding Exceptionally strong application with negligible weaknesses
6	Excellent Very strong application with negligible weaknesses
5	Very good to excellent Very strong application with minor weaknesses
4	Very good Strong application with minor weaknesses
3	Good Some strengths, but also moderate weaknesses
2	Weak A few strengths, but also at least one major weakness or several minor weaknesses

Grade Definition

1 **Poor** Very few strengths, and numerous major weaknesses

Please note that the grading scale is an ordinal scale, where it is not possible to specify distances between the different values.

Feasibility grade

The criterion is evaluated on a three-grade scale:

Grade Definition

3 Feasible

The project is feasible if the applicant receives the grant.

2 Partly feasible

There are uncertainties regarding the feasibility. For example, if the project is dependent on an international infrastructure where the applicant has not yet competed successfully for access. Another example would be if the applicant is dependent on a large contribution, for a central part of the project, from an external party. The project can be funded if a strong research plan and strong merits compensate for the uncertainties.

1 Not feasible

The project is not feasible and should not be funded. For example, if the project requires access to equipment that will not be completed during the grant period.

For all criteria, you can mark "Insufficient", if you consider that the application lacks sufficient information to allow a reasonable evaluation to be made of the criterion.

Figure 1 shows the distribution of grades during previous year according to the seven-grade scale for the three basic criteria (scientific quality of the proposed research, novelty and originality, merits for the applicant) and for the overall assessment. The distribution of grades should, unless the applications reviewed are of exceptionally good or weak nature, not differ significantly from previous years' assessments.

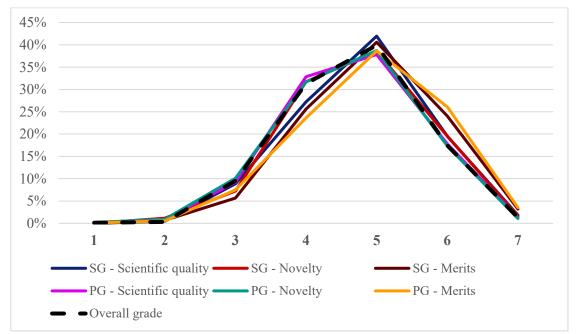


Figure 1. Distribution of grades for the criteria scientific quality, novelty and originality and merits of the applicant for project grants (PG) and starting grants (SG) for applications within natural and engineering sciences 2022. Distribution of the overall grade for all applications for project grants and starting grants is indicated in the black, dashed line.

Overall grade

Weigh together the various subsidiary criteria into an overall grade according to the seven-grade scale above. The overall grade is not the same as an average grade or a summary of the subsidiary evaluations. It should reflect the scientific quality of the application as a whole. In normal cases, however, a strongly positive evaluation of only one criterion cannot outweigh other weaknesses of an application when weighed together.

Guiding questions

Scientific quality of the proposed research (1–7)

An assessment of the quality of the project's research question and methodology, including its potential for future research.

- To what extent does the proposed research address important challenges in relation to existing knowledge and ongoing research worldwide?
- To what extent is the project structured so that it can result in significant progress in addressing these challenges?
- When applicable, how are issues relating to sex and gender perspectives justified and handled in the research plan?

• When applicable, are the ethical considerations for the proposed project properly described and addressed? Does the applicant adequately consider potential suffering of humans and animals, and the balance of risk and value to nature and/or society?

Novelty and originality (1–7)

An assessment of how well new theories, concepts, methods and questions are implemented and developed.

- To what extent are the objectives novel, original and beyond the state of the art?
- To what extent does the research involve development of novel concepts and approaches, or development between or across disciplines?

Merits of the applicant (1–7)

An assessment of the applicant's merits and competence in relation to the proposed project. For project grants, the assessment of the complementary expertise of the participating researchers is only of relevance for the grading of the feasibility of the project.

- How significant is the applicant's scientific productivity, impact and other merits in a national and international perspective, in relation to the research area, and the applicant's career age? Here the emphasis should be on recent (the last 8 years) scientific achievements.
- **Only for starting grants**: To what extent does the applicant provide evidence of creative independent thinking?
- **Only for starting grants**: Has the applicant shown the ability to work in new (international) research environments, for instance during postdoctoral work?

Feasibility (1–3)

An assessment of the feasibility of the proposed project. An application must have a grade 2 or 3 in Feasibility in order to be funded.

- To what extent is the outlined scientific approach feasible considering the degree to which the proposed research is high risk/high gain?
- To what extent are the proposed research methodology and working arrangements (including access to infrastructure, equipment and other resources) appropriate to achieve the goals of the project?
- To what extent does the applicant, and the participating researchers if relevant, have the required scientific expertise and capacity to successfully execute the project?

- To what extent are the proposed timescales, resources and applicant commitment adequate and properly justified?
- Does the applicant adequately consider relevant legal and formal requirements for the proposed research, such as ethical permits and guidelines?
- Only for starting grants: Does the host institution's support letter show that there is need for the applicant's competence and an explicit interest in the suggested research direction in a broader sense? Does the host institution's support letter show that the research environment is adequate for the applicant and for or carrying out the research project? Is there a long-term plan for the applicant and the applicant's field of research at the host institution?

Overall assessment (1–7)

The above subsidiary criteria are weighed together into an overall grade, the overall grade is formed without a pre-determined numerical weighing of the basic criteria. As a guidance, the scientific quality of the proposed research and the merits of the applicant are the two most important criteria whilst novelty and originality should be given lower weight. The feasibility shall be weighed into the overall rating of the application if it deviates from the grade "Feasible".

Ranking of applications

You should also rank each specific application against all the other applications you have reviewed within the same grant type. The ranking should be a supplement to the grading when the review panel's applications are compared with each other. You must rank all the applications you have been allocated both those for which you are the rapporteur, and those for which you are a reviewer. Ahead of the review panel meeting, all individual rankings of all the reviewers are weighed together into a preliminary joint ranking for each application. For more detailed instructions on how to rank the applications, please see <u>Prisma's User Manual</u>.

It is very important to complete the ranking in time for the applications to be sifted before the meeting. At the same time, the ranking should not be carried out too early, as it might happen that you are allocated further applications to review at a later stage (for example if a conflict of interest is discovered late).

External reviewers

The review panel chair should identify applications that require external review, and propose which external reviewers to be used. External review may come into question if the scientific character of an application means that the joint competency of the review panel is not sufficient for a thorough review. Another reason is if the conflict of interest situation within the group makes an application difficult to evaluate. The external reviewers only provide written motivation for each subsidiary criterion, not grades. Usually, the research officer responsible at the Swedish Research Council will contact the external reviewers proposed by the chair.

Sifting

In order to enable more in-depth discussions of applications that have a reasonable chance of being awarded a grant, a sifting process is used. This means that a certain proportion of the applications that receive the lowest grades are not discussed at the panel meeting.

The chair and vice chair, together with the observer and Swedish Research Council personnel, produce a proposal for the applications to be sifted. The proposal should be based on the preliminary joint ranking for each application, summarised from the individual ranking by each reviewer complied from their applications. The chair should identify a break-off point on the list, where the applications below have received such low rankings that it is not reasonable to assume that the application will be awarded funding. Around 50 - 70 per cent of the applications should be discussed at the panel meeting, but the exact percentage may vary depending on the number of applications in the panel.

The chair identifies any application that, despite having a low ranking, should still be discussed at the meeting, for example applications where the ranking or grading differ considerably among the reviewers. The sifting should be carried out with the gender distribution of the applicants in mind, in order to ensure that the process is not applied differentially for women and for men.

The proposed list of applications to be sifted will be made available to all panel members ahead of the meeting. You always have the opportunity to ask for an application to be brought up for discussion at the meeting, even if the chair has proposed that it is sifted.

More readers of applications around the threshold for funding

After the sifting procedure, you may be asked to read a few more applications which in the preliminary ranking end up around the threshold for funding, or where the individual assessments from the reviewers differ significantly. The aim is to increase the quality of assessment for the applications on the threshold of being funded. Additional readers may also be appointed between the days of the panel meeting in order to address specific questions regarding a few applications; for instance, to better define the panel's opinion on scientific quality or novelty when opinions between the initial three reviewers differ significantly.

Review: Summary of tasks

Task		Completed
	Grade and write detailed comments (preliminary statement) on all applications for which you are the rapporteur.	Before deadline
	Grade and write comments (assessment) on all applications for which you are a reviewer.	Before deadline
	Rank all applications allocated to you (as rapporteur and reviewer).	Before deadline
	Prepare for the meeting by reading the other panel members' comments, including any external assessments.	Before the meeting in August/September
	Prepare a short presentation of the strengths and weaknesses of the applications where you are the rapporteur.	Before the meeting in August/September
	Check the list of the sifted applications to determine whether any of the sifted applications should be brought up for discussion at the meeting.	Before the meeting in August/September
	Contact the Swedish Research Council personnel and the chair if you discover a conflict of interest with any of the applications you are to review, or if you discover any problem with an application.	As soon as possible
	Contact the Scientific Research Council immediately if you suspect that there may be deviations from ethical guidelines or good research practice, or if you suspect scientific misconduct.	As soon as possible

3 Review panel meeting



Sifted applications

At the start of the meeting, panel members have the opportunity to bring up applications that have been sifted, so that they are included among those discussed at the meeting.

At the end of the review panel meeting, sifted applications will be given grades for each criterion and a standard final statement. The separate grades will be suggested by the rapporteur, based on the individual reviews, and decided on by the review panel.

Discussion on applications

The applications that are not sifted out are discussed at the review panel meeting. The chair leads the discussion of an application. Usually the rapporteur starts by presenting the strengths and weaknesses of the application, followed by the other reviewers of that application giving their assessments. The chair is responsible for including any assessments from external reviewers in the discussion. For each application discussed at the meeting, the panel should agree on subsidiary grades and an overall grade. The rapporteur for each application makes notes ahead of the task of formulating the panel's joint final statement.

The review panel has equal responsibility for each application reviewed by the panel, and each one should be evaluated based on its own merits. Irrelevant information should not be discussed. At the same time, the panel's applications should compete with each other on equal terms. No application may therefore be given a higher or lower grade because it belongs within a certain subject area. Nor should the panel carry out any quota-based allocation between the scientific disciplines included in the panel.

It is also important that an application/applicant receives a new assessment each time of applying, and that all applications are assessed in the same way. For this reason, the review panel will not have access to any previous applications or assessments.

Be aware that the meeting time is limited, and that many applications have to be discussed within that time. It is therefore important to try to find a balance in the time allocated to each application. The chair and the Swedish Research Council personnel will keep track of the time. If you discover any possible conflict of interest (your own or another's) during the meeting, please bring this up with the chair and the Swedish Research Council personnel in private, and not in front of the entire panel.

Prioritising

Once all applications have been discussed, and the panel has agreed on an overall grade for each application, the panel should carry out a prioritisation of the applications with the highest scientific quality. This prioritisation should conclude with the review panel's proposal for applications to be awarded grants within the panel's budgetary framework. The panel should also draw up a priority list with reserves, covering the applications that fall immediately outside the panel's budgetary framework, i.e. one list for research project grants (6 applications), and one for starting grants (2 applications).

In conjunction with the overall prioritisation, the review panel should consider the success rate of women and men, and if the success rate differs from the distribution of gender among the applicants, applications from applicants of the under-represented gender should be prioritised when there are no significant differences in terms of quality regarding the applications.

Amount awarded

Funding will be discussed after all applications have been reviewed and ranked. The Scientific Council will assign separate budgets for the categories project grants and starting grants to the review panels. Each panel will be given a budget frame per year for the years 2024-2027 and the review panel must not exceed the given budget frame for any year. If the review panel finds the quality of the applications in one category better than the other, the review panel may transfer a small part of the budget to the category where the scientific quality is higher. As a guideline, no more than one grant should be transferred between the two categories. Any re-allocation of the assigned budgets must be discussed with the observer present from the Scientific Council.

The chair, vice chair and Swedish Research Council personnel will make a funding proposal, which will subsequently be discussed by the panel. As a guideline, the highest ranked projects should receive larger grants.

It is common practice for project grants not to be granted the full amount applied for. The Scientific Council has decided that the average grant amount for project grants should be at least 900 000 SEK per year. The average amount awarded may differ slightly between different review panels reflecting the different character of research to be supported. The amount awarded to starting grants is a standard amount of 1 million SEK per year.

Nomination of an awarded grant for research communication

The panel is prompted to nominate one of the awarded grants for research communication efforts. This project should be of general interest to the public and decision-makers, and suitable for communicating the usefulness of researcher-initiated fundamental research.

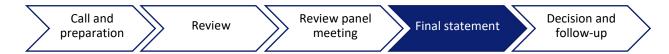
Feedback

In conjunction with the review panel meeting, the panel members are encouraged to provide feedback on the review work carried out. We will ask for comments on various aspects of the process.

Review panel meeting: Summary of tasks

Task	Completed
 Decide on subsidiary grades and an overall grade for sifted applications. 	During the review panel meeting
☐ Agree on subsidiary grades and an overall grade for each application discussed.	During the review panel meeting
□ Agree on a proposal for the applications to be awarded funding within the review panel's budgetary framework.	During the review panel meeting
\Box Agree on a priority list with reserves.	During the review panel meeting
 Nominate one awarded grant for research communication 	During the review panel meeting
□ Contribute with feedback on the review process.	During the review panel meeting

4 Final statement



The rapporteur writes a final statement

The discussion at the review panel meeting forms the basis for the review panel's final statement. It is the end product of the review process. The Scientific Council bases its funding decision on the review panel's final statement in the matter and it is also sent to the applicant when the grant decision is published. It is therefore a central document, and a high-quality final statement is to the benefit of all parties involved in the review.

You are responsible for writing final statements on the applications for which you are the rapporteur. The preliminary statement you have entered into Prisma ahead of the review panel meeting may form the basis for the final statement. You should, however, modify the preliminary statement to reflect the review panel's joint overall evaluation of the application. Check your notes of what was discussed at the meeting, so that the final statement includes the main strengths and weaknesses of the application. The assessments and external assessments will be available to you in Prisma for reference when you write the final statement. You usually have one week in which to submit your final statements following the end of the review panel meeting.

Only those applications that have been the subject of discussion at the meeting receive a full final statement. The applications that were sifted out receive grades for the individual criteria, the overall grade and a standard final statement about the sifting process. These final statements are produced by the Research Council personnel.

The chair reviews all final statements

Once the final statements have been entered into Prisma, the chair and the senior research officer read through them. The chair is responsible for ensuring the final statements on the applications discussed at the review panel meeting reflect the panel's discussion, and that the written justifications correspond to the grades. The chair does not carry out comprehensive editing of the final statement. You may therefore be asked to supplement or adjust it.

General advice and recommendations on final statements

The final statement should reflect the review panel's joint overall evaluation, including any external assessments.

When completing your final statements, you should consider the following:

Do's

- Do focus on describing both the main strengths and weaknesses of the application. Try to emphasise relevant conceptual, structural and/or methodological issues as discussed at the review panel meeting.
- **Do make sure that the written comments correspond to the grades**. Use the definitions of the grading scale in the justifications. For example, if a grade of 4, "Very good", is given, the justification should contain both strengths and minor weaknesses in line with the definition of this grade.
- **Do consider the guiding questions** for the different criteria when you formulate the final statement.
- **Do write concisely but do not be too brief**. The final statement should help the applicant understand the grounds for the assessment.
- Do comment on whether divergence from the general instructions for the application has been weighed into the assessment of the application.
- Do use a language that is constructive and objective.

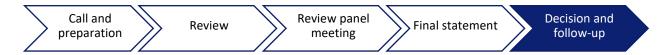
Don'ts

- Do not include a long summary about the applicant or the research described in the application. The focus should be the assessment of the application, not a description of the project.
- Do not state any individual comments such as "I think" or "In my view". The final statement is from the review panel collectively.
- Do not include quantifiable data, such as the exact number of publications, or bibliometric data.
- Do not include personal details, such as gender or age.
- Do not include any recommendation on whether to refuse or grant an application.
- Do not state that an application does not belong to or is unsuitable for the review panel, or for the Swedish Research Council. The review panel is obliged to review all applications in the panel.

Final statement: Summary of tasks

Task		Completed
	Write and submit the review panel's final statement on the applications for which you have been the rapporteur.	One week after the review panel meeting
	As necessary, supplement final statements following review by the chair.	
	Submit receipts for any expenses to the panel's research officer responsible.	

5 Decision and follow-up



Re-distribution

The Scientific Council reserves part of its budget for re-distribution to mediate potential imbalances in the review process. The final statements, grades and ranking lists will serve as the main supporting documentation for the complementary decisions.

Decision

The Scientific Council for Natural and Engineering Sciences will make the formal decision of funding. The decision is based on the priority lists (including reserves) and the review panels' final statements. The decision is then published shortly thereafter on vr.se and in Prisma, and the applicants are also informed of the outcome.

Follow-up

Following each review period, an internal follow-up is carried out of the process and the outcome. An important starting point for this follow-up is the feedback you provide as a panel member. In addition to opinions from the review panel, statistics of various kinds are produced.

Complaints and questions

If you receive any question about the evaluation of an individual application, you must refer this to the Swedish Research Council personnel. All complaints or wishes about clarification should be registered and then handled by the Secretary General responsible in consultation with the chair and senior research officer of the review panel. You might be contacted by the chair in the event of any questions.

Decision and follow-up: Summary of tasks

- □ Refer any questions about the evaluation of individual applications to the Swedish Research Council's personnel.
- □ Be prepared to assist the chair and the Secretary General responsible in the event of any questions.

6 Checklist

Below is a summary of the various tasks you have during the different stages of the process.

Step in the process	Та	sks
		State account information in Prisma.
Call and preparation		Assess your conditions to participate in a digital panel meeting.
		Report any conflict of interest and state competence level in Prisma.
		Grade and write detailed comments (preliminary statement) on all applications for which you are the rapporteur.
		Grade and write comments (assessment) on all applications for which you are a reviewer.
		Rank all applications allocated to you (as rapporteur or reviewer).
		Prepare for the meeting by reading the other panel members' comments, including any external assessments
Review		Prepare a short presentation of the strengths and weaknesses of the applications where you are the rapporteur.
		Check the list of the sifted applications to determine whether any of the sifted applications should be brought up for discussion at the meeting.
		Contact the Swedish Research Council personnel and the chair if you discover a conflict of interest with any of the applications you are to review, or if you discover any problem with an application.
		Contact the Swedish Research Council immediately if you suspect that there may be deviations from ethical guidelines or good research practice, or if you suspect scientific misconduct.
Review panel meeting		Decide on subsidiary grades and an overall grade for sifted applications.
		Agree on subsidiary grades and an overall grade for each application discussed.
		Agree on a proposal for the applications to be awarded funding within the review panel's budgetary framework.
		Agree on a priority list with reserves.
		Nominate one awarded grant for research communication.
		Contribute with feedback on the review process.

Step in the process	Tasks
Final statement	□ Write the review panel's final statement on the applications for which you have been the rapporteur. The final statement should be entered into Prisma no later than one week after the review panel meeting (see Prisma for the exact date).
Final statement	□ As necessary, supplement final statements following review by the chair.
	Submit receipts for any expenses to the panel's research officer responsible.
Decision and	Refer any questions about the evaluation of individual applications to the Swedish Research Council's personnel.
follow-up	Be prepared to assist the chair and the Secretary General responsible in the event of any questions.