

Personaalse uurimistoetuse otsingutoetuse ja starditoetuse taotluste hindamisjuhend

Guidelines for evaluating exploratory research grants and start-up research grants for personal research funding applications

I Introduction

Exploratory research grants and start-up research grants for personal research funding awarded by the Estonian Research Council are made on the basis of this single set of core terms and conditions.

II Relevant terms

- 1) **Personal research funding** is a contribution to the costs of high-level research and development (R & D) activities carried out by researchers or small research groups who are employed by a research and development institution. Personal research funding comprises three categories of grants: exploratory research grants, start-up research grants, and postdoctoral research grants.
 - An **exploratory research grant** is a grant to support innovative, ground-breaking, or high-risk research projects at a high international level.
 - A **start-up research grant** is a grant to support promising young researchers to develop an independent research career, establish their own research team, and start conducting independent research.
 - A **post-doctoral research grant** (regulated by the Annex No 3 to the Decree No 1-1.4/15/40 from March 25, 2015 of the Management Board of Estonian Research Council).
- 2) **A research project is** a description of a study with a clearly defined and justified research problem/topic and the methodology to address the problem/topic.
- 3) **A Principal Investigator** is a researcher who can apply for an exploratory research grant or a start-up research grant for a personal research project upon receiving consent from a host institution. The consent must also include confirmation that the host institution will enter into a contract of employment with the Principal Investigator if such a contractual relationship does not already exist at the time of submitting the application.

III Criteria for applying

Principal Investigator of an exploratory research grant:

A Principal Investigator of an exploratory research grant is a person who:

- 1) has been awarded a doctorate in Estonia or who has foreign qualifications equal thereto; and
- 2) at the time of implementing the research project, is employed full-time at the host R & D institution.

A Principal Investigator who is employed only part-time at an R & D institution can be considered eligible

by the evaluation committee if this does not jeopardize the successful realization of the research project.

Principal Investigator of a start-up research grant:

A Principal Investigator of a start-up research grant is a person who:

- 1) has been awarded their first doctorate in Estonia or an equivalent foreign qualification no less than 2 and no more than 7 years prior to the closing date of the call. The date of awarding the doctorate or equivalent foreign qualification is the date indicated in the respective document issued by the awarding institution. The evaluation committee may, where justified, consider eligible a person who has been awarded their first doctorate in Estonia or equivalent foreign qualification more than 7 years prior to the closing date of the call. In that case, the maximum effective time elapsed since the award of the first PhD can be reduced, but only in certain properly documented circumstances, e.g., maternity or paternity leave, long-term illness, national service;
- 2) has completed post-doctoral studies (preferably outside of Estonia) after receiving their doctorate in Estonia or equivalent foreign qualification. The evaluation committee may, where justified, consider eligible a person who has not completed post-doctoral studies as the principal investigator of a start-up grant;
- 3) is fully employed at the host institution during the realization of the project.

Application

The application for funding for a research project (hereinafter *application*) shall include the following:

- 1) the Principal Investigator and other research staff;
- 2) the title of the research project;
- 3) a project summary;
- 4) the requested project period;
- 5) the general theoretical background to the planned research project and its link to previous research carried out by the Principal Investigator or other research staff;
- 6) the main objectives of the research project, hypotheses, description of methods, and the annual research plans;
- 7) information on considerations how ethical issues involved in the proposed research will be followed. The applicants are required to consider the ethical risk of any procedure within a research project which involves human participation or personal data, including a description of how the principles of voluntary participation, informed consent, confidentiality and anonymity of subjects will be followed, and a statement on how the data will be stored and protected. Use of research methods that require review or approval from a human ethics or a bioethics research committee, should be also clearly indicated in the application. If the corresponding approvals are available by the application deadline, please attach them to the application.
- 8) expected results and their potential applicability, as well as possible future research directions;
- 9) a description of previous research and development activities in the last 10 years and the track record of the Principal Investigator;
- 10) information on Estonian and international joint projects in which the Principal Investigator has been involved in the last 10 years;
- 11) a description of the infrastructure and research environment at the host institution and

12) the budget for the research project.

Justification of the research project should be described in max. 15000 characters (including the general theoretical background of the planned research project and its link to previous research; the main objectives of the research project, hypotheses, description of methods, and the annual research plans; consideration of ethical issues involved in the proposed research; expected results and their potential impact, possible future research directions, description of the previous research and development activities and the track record of the Principal Investigator).

IV Criteria for evaluation and rating scales

The purpose of exploratory research grants and start-up research grants for personal research funding is to ensure the financing of high-level research and development projects. Personal research funding applications shall be evaluated by the evaluation committee of the Estonian Research Council based on the opinions of the individual reviewers and expert panels. The following evaluation criteria will be considered:

- 1) justification for the research project and description of expected results, taking into account the specifics of the research field and their applicability;
- 2) the qualifications and track record of the Principal Investigator;
- 3) the quality of the infrastructure and research environment available for carrying out the research project at the host institution and
- 4) justification for the proposed budget (including the share of subcontracting).

When evaluating applications, reviewers should take into account the following guidelines.

V Evaluation criteria to be used for reviewing exploratory research grants and start-up research grants for personal research funding applications

Please make comments for all criteria.

1. Justification for the project, taking into account the specifics of the research field and applicability

- 1.1. Is the application characterized by a conceptually innovative approach?
- 1.2. Is the application well justified and clearly outlined and does it contain well-defined hypotheses and research questions?
- 1.3. Is the research plan clear and appropriate for its stated purpose and the elaboration of tasks justified and appropriate?
- 1.4. Are the proposed methods adequate, up-to-date and/or innovative?
- 1.5. Are there any ethical issues involved in the proposed research and if so, have they been adequately considered and addressed in the application?

Other comments on Section 1.

Overall quality of justification.

2. Track record of the Principal Investigator

In the case of exploratory research grant applications:

2.1. Is the Principal Investigator an internationally recognised researcher who has had their research from the last 10 years widely acknowledged (in terms of the quality of publications, number of citations, etc.) and do the competencies of the Principal Investigator support the achievement of the proposed objectives?

2.2. Has the Principal Investigator been successful in obtaining additional funding (grants, sponsored research, etc.) in the last 10 years?

2.3. What is the Principal Investigator's experience in the management of (international) research projects and grants and in participation in international collaborative projects in the last 10 years?

In the case of start-up grant applications:

2.1. Is the Principal Investigator at a good international level in their respective field (in terms of the quality and number of publications, etc.) and do the competencies of the Principal Investigator support the achievement of the proposed objectives?

2.2. Has the Principal Investigator been a post-doctoral fellow or has gained similar experience?

2.3. What is the Principal Investigator's experience in participation in international collaborative projects?

Other comments on Section 2.

Overall competence and expertise of the Principal Investigator.

3. Quality of the infrastructure and research environment

This section will be evaluated only by the expert panel and the Evaluation Committee not by external reviewers.

Based on this information, the expert panel and the Evaluation Committee should provide answers and comments to the following question:

3.1. Is the infrastructure and research environment at the host institution appropriate for the proposed research?

Other comments on Section 3.

Overall assessment of the quality of research environment.

4. Justification of the budget

This section will be evaluated only by the Evaluation Committee, and not scored.

The evaluators should answer and comment on the following:

4.1. Is the budget appropriate for the planned research?

4.2. Is the share of subcontracting justified?

Other comments on Section 4.

Overall assessment of the application

This section will be filled in by the expert panel and the Evaluation Committee.

Overall comments on the application.

VI Rating scales to be used in the review

In evaluating applications, please take into account the following guidelines.

A five-point rating scale is used in evaluating sections 1 and 2 of the application (outstanding, very good, good, satisfactory, or unsatisfactory). A three-point rating scale (fully meets the needs, partially meets the needs, does not meet the needs) is used in evaluating section 3 of the application.

Research projects which receive less than three points for sections 1 or 2 and less than two points for section 3 do not qualify for funding.

The values for the criteria in the drop-down menu for evaluating sections 1 and 2 are as follows:

- Outstanding (5);
- Very good (4);
- Good (3);
- Satisfactory (2);
- Unsatisfactory (1).

and for evaluating section 3 are as follows:

- Fully meets the needs (3);
- Partially meets the needs (2);
- Does not meet the needs (1).

The final score can range from 3 to 13 points.

The rating scales correspond to the following assessments.

1. Justification for the project, taking into account the specifics of the research field and its applicability

Unsatisfactory

The proposed topic has been exhaustively studied. Limited likelihood of new knowledge generation.

A poorly defined research topic, lack of clear hypotheses and research questions.

The research plan and elaboration of tasks need profound revision.

The methods are inadequate for achieving the overall goal, not up-to-date nor innovative.

Ethical issues are not adequately considered.

Satisfactory

Somewhat original and innovative at the national level.

The application addresses a research question or knowledge gap with some added value. Justification needs additional clarifications and adjustments. The hypotheses and research questions need major additional elaboration.

The research plan needs some revision. Certain, but not all, tasks can be implemented.

A methodologically sound study but some areas require revision. The methods are somewhat articulated and justified, not very up-to-date and/or innovative.

Ethical issues are adequately considered.

Good

Original and innovative at the national level. Partially internationally competitive. The research ideas are of interest to science, and/or have a potential impact on the development of the economy and society.

The application addresses a worthwhile research question or knowledge gap. The task/topic is well presented. The hypotheses and research questions need some additional elaboration.

The research plan needs some clarification. The tasks can be implemented but certain improvements and adjustments are necessary.

A methodologically sound study. The methods are articulated and justified, up-to-date and/or innovative to some extent.

Ethical issues are well considered.

Very good

The research ideas are original and innovative, internationally competitive and cutting-edge nationally.

The application addresses an important research question or knowledge gap. The goals are clearly articulated and justified. The hypotheses and research questions need little additional elaboration.

The research plan is clearly described and relevant for achieving the goals. The tasks are clearly justified and appropriate.

The application includes novel methodology and design. The methods are clearly described, up-to-date, well articulated and relevant for achieving the goals.

Ethical issues are very well considered.

Outstanding

The research ideas are highly original and innovative. A top international research project.

The application addresses crucial/cutting-edge research questions or knowledge gap. The goals are very clearly articulated and justified. The hypotheses and research questions are very well elaborated.

The research plan is profoundly described and relevant for achieving the goals. The tasks are very well justified and most appropriate.

The application includes original methodology and/or design. The methods are very clearly described, up-to-date, very well articulated and highly relevant for achieving the goals.

Ethical issues are fully considered.

2. Track record of the Principal Investigator

In the case of exploratory research grant applications:

Unsatisfactory

The applicant's research and publishing record are weak. The impact of the applicant (number of citations; the level of the journals where articles are published) is poor. There is insufficient potential for successfully implementing the proposed research plan. The competencies of the Principal Investigator do not support the achievement of the proposed objectives.

The applicant has not been successful in obtaining additional funding (grants, sponsored research, etc.).

The applicant has almost no experience in the management of (international) research projects and grants and has not participated in any international collaborative projects.

Satisfactory

Appropriate leadership (there is scope to strengthen the team, research environment, and collaborators). The applicant is not well known. Articles are published in journals and proceedings which are not indexed in the leading databases in the field. No monographs have been published. The impact of the applicant (number of citations; the level of the journals where articles are published) does not reach an international level.

The applicant has obtained very little additional funding (grants, sponsored research, etc.).

The applicant has very limited experience in the management of (international) research projects and grants and has little experience in participation in international collaborative projects.

Good

Good leadership (track record, research environment, and collaborators). The applicant is known in their field. Articles are published in peer-reviewed journals or international proceedings. Monographs are published by acknowledged publishers. The impact of the applicant (number of citations; the level of the journals where articles are published) is at a good international level in the respective field.

The applicant has obtained some additional funding (grants, sponsored research, etc.) in the past.

The applicant has some experience in the management of (international) research projects and grants and in participation in international collaborative projects.

Very good

Strong leadership (track record, research environment, and collaborators). The applicant is at the top of their field. Publications and/or monographs are at a good international level. Articles are published in respectable peer-reviewed journals or proceedings indexed in the leading databases of the field. Monographs are published by internationally acknowledged publishers. The impact of the applicant (number of citations; impact factor of the journals where articles are published) is at a very good international level in the respective field.

The applicant has been successful in obtaining additional funding (grants, sponsored research, etc.).

The applicant has good experience in the management of (international) research projects and grants and in participation in international collaborative projects.

Outstanding

Excellent leadership (track record, research environment, and collaborators). The applicant is among the leaders in their field. Publications and/or monographs are at an outstanding international level. Articles are published in the best peer-reviewed journals or proceedings indexed in the leading

databases in the field. Monographs are published by internationally acknowledged publishers. The impact of the applicant (number of citations; impact factor of the journals where articles are published) is at an outstanding international level in the respective field.

The applicant has been very successful in obtaining additional funding (grants, sponsored research, etc.).

The applicant has a lot of experience in the management of (international) research projects and grants and very good experience in participation in international collaborative projects.

In the case of start-up grant applications:

Unsatisfactory

Poor or no leadership. There is insufficient potential for successfully implementing the proposed research plan. The applicant's research and publishing record are very weak. The impact of the applicant (number of citations; the level of the journals where articles are published) is poor. The competencies of the Principal Investigator do not support the achievement of the established objectives.

The applicant has neither been a post-doctoral fellow nor has had any experience in international collaboration.

The applicant has not participated in any international collaborative projects.

Satisfactory

Low leadership (there is scope to strengthen the team, research environment, and collaborators). There is low potential for successfully implementing the proposed research plan. The applicant is not well known. Articles are published in journals and proceedings which are not indexed in the leading databases in the field. No monographs have been published. The impact of the applicant (number of citations; the level of the journals where articles are published) does not reach an international level.

The applicant has not been a post-doctoral fellow. The applicant has very limited experience in international collaboration.

The applicant has little experience in participation in international collaborative projects.

Good

Average leadership (track record, research environment, and collaborators). There is good potential for successfully implementing the proposed research plan. The applicant is somewhat known in their field. Some articles are published in peer-reviewed journals or international proceedings. Monographs are published by local publishers. The impact of the applicant (number of citations; the level of the journals where articles are published) is at a low international level in the respective field.

The applicant has not been a post-doctoral fellow but has good experience in international collaboration.

The applicant has some experience in participation in international collaborative projects.

Very good

Good leadership (track record, research environment, and collaborators). There is very good potential for successfully implementing the proposed research plan. The applicant is known in their field. Articles are published in peer-reviewed journals or international proceedings. Monographs are published by

acknowledged publishers. The impact of the applicant (number of citations; the level of the journals where articles are published) is at a satisfactory international level in the respective field.

The applicant has been a post-doctoral fellow and has some additional experience in international collaboration.

The applicant has good experience in participation in international collaborative projects.

Outstanding

Strong leadership (track record, research environment, and collaborators). There is excellent potential for successfully implementing the proposed research plan. The applicant is at the top of their field. Publications and/or monographs are at a good international level. Articles are published in respectable peer-reviewed journals or proceedings indexed in the leading databases of the field. Monographs are published by internationally acknowledged publishers. The impact of the applicant (number of citations; impact factor of the journals where articles are published) is at a good international level in the respective field.

The applicant has been a post-doctoral fellow and also has good experience in international collaboration.

The applicant has very good experience in participation in international collaborative projects.

3. Quality of the infrastructure and research environment

Does not meet the needs

The physical infrastructure and research environment are poor and do not support the achievement of the established objectives.

Partially meets the needs

The physical infrastructure and research environment only partially meet the research needs. There is a need for some improvement.

Fully meets the needs

The physical infrastructure and research environment fully meet the research requirements.