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**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 level internationally.
* A **start-up research grant** isa 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 1 to the Degree No 1-1.4/13/96 from July 30, 2013 of the Management Board of Estonian Research Council).

1. **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.
2. **A Principal Investigator** is a researcher who can apply for an exploratory research grant or 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 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. is no more than 40 years old in the year of applying for the grant;
2. 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 year of applying for the grant. *The evaluation committee may, where justified, consider a person who has been awarded their first doctorate in Estonia or equivalent foreign qualification more than 7 years prior to the year of applying for the grant as having met the criteria. In that case, the maximum time elapsed since the award of the first PhD can be extended, but only in certain properly documented circumstances, e.g., maternity leave or leave for national service, etc.*;
3. 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 a person who has not completed post-doctoral studies as the principal investigator of a start-up grant;
4. 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 period to be financed;
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 (including an explanation of how ethics requirements will be adhered to in the case of animal and/or human experiments);
7. expected results and their potential applicability, as well as possible future research directions;
8. a description of previous research and development activities and the track record of the Principal Investigator;
9. information on Estonian and international joint projects in which the Principal Investigator has been involved;
10. a description of the infrastructure and research environment at the host institution; and
11. the budget for the research project.

**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 well justified and clearly outlined and does it contain well-defined hypotheses and research questions?

1.2. Is the application characterized by a conceptually and/or methodologically innovative approach?

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 and up-to-date?

1.5. Have the ethical requirements for human and animal studies been met, if applicable?

1.6. Does the proposed research topic have high potential for the achievement of a breakthrough at the international level?

Other comments on Section 1.

Overall quality of justification for the application.

**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 and number of publications, number of citations, h-index, as the top-cited researcher in the corresponding research field, etc.)?

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

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 case of start-up grant applications:**

2.1. Is the Principal Investigator at a good level internationally in their respective field (in terms of the quality and number of publications)?

2.2. Has the Principal Investigator been a post-doctoral fellow?

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 and other research staff.

**3. Quality of the infrastructure and research environment**

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

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

3.1. Are 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 justification for accommodating other R & D resources in the budget.

**Overall assessment of the application**

*This section will be filled in by the Evaluation Committee.*

Overall comments on the application.

Overall assessment of the application:

## among the top 10%;

## among the top 25%;.

outside the top 25%.

**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 topics 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 evaluating sections 1 and 2 are as follows:

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

and 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**

Poorly defined research topic, lack of clear research questions, likely to be of poor empirical value.

Methodologically weak or deficient.

The research plan needs profound revision. There are major doubts about the feasibility of the application.

Limited likelihood of new knowledge generation.

The proposed topic has been exhaustively studied.

Ethical issues are not adequately considered.

**Satisfactory**

The application addresses a worthwhile research question with potentially useful outcomes.

Somewhat original and innovative at the national level. A methodologically sound study but some areas require revision.

Likelihood of successful delivery, but additional clarifications and adjustments are required. It is not clear whether the proposed approach supports the achievement of the overall goal.

Certain, but not all, tasks can be implemented. There are some doubts about the feasibility of the application. The research plan needs some revision.

Ethical issues are adequately considered.

**Good. Partially internationally competitive**

The application addresses a worthwhile research question or knowledge gap.

Original and innovative at the national level; a methodologically sound study.

The task/topic is well presented. The overall goals can be achieved but certain improvements and adjustments are necessary. The research plan needs some clarification.

The research ideas are of interest to science, and/or have a potential impact on the development of the economy and society.

Ethical issues are well considered.

**Very good. Internationally competitive and cutting-edge nationally**

The research ideas are original and innovative at the international level; includes a novel methodology and design.

The methods are clearly described and relevant to achieving the goals; the application includes a novel methodology and design.

The prospective results will make a considerable contribution to the development of science, technology, and/or society and have potential for high socioeconomic impact.

Ethical issues are very well considered.

**Outstanding. Top international research project**

The application addresses crucial/cutting-edge research questions or knowledge gap.

The research ideas are highly original and innovative at the international level; includes a novel methodology and design.

The reasearch plan is very clearly described and relevant to achieving the goals. The goals are very clearly articulated and justified.

The prospective results will make a substantial contribution to the development of science, technology, and/or society, and have potential for broad socioeconomic impact.

Ethical issues are fully considered.

*2. Track record of the Principal Investigator*

**In the case of exploratory research grant applications:**

**Poor**

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 running 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 and the research team are 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 successful in obtaining additional funding (grants, sponsored research, etc.).

The applicant has very limited experience in the management of (international) research projects and grants and has not participated in international collaborative projects.

**Good**

Strong 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 satisfactory level internationally 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 has participated in one or two international collaborative projects

**Very good**

Very good leadership (track record, research environment, and collaborators).

The applicant is at the top of their field. Publications and/or monographs are at a good level internationally. 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 level internationally 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 has participated in several 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 level internationally. 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 level internationally 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 has participated in many international collaborative projects.

**In the case of start-up grant applications:**

**Poor**

Poor or no leadership.

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.

There is insufficient potential for successfully running the proposed research plan. The competencies of the Principal Investigator do not support the achievement of the established objectives.

The applicant has not participated in any international collaborative projects.

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

**Satisfactory**

Low leadership (there is scope to strengthen the team, research environment, and collaborators).

The applicant and the research team are 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 participated in international collaborative projects.

The applicant has not been a post-doctoral fellow after completing their doctoral studies but has some experience in international collaboration.

**Good**

Average leadership (track record, research environment, and collaborators).

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 level internationally in the respective field.

The applicant has participated in one or two international collaborative projects

The applicant has not been a post-doctoral fellow after completing their doctoral studies but has some experience in international collaboration.

**Very good**

Strong 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 satisfactory level internationally in the respective field.

The applicant has participated in several international collaborative projects.

The applicant has been a post-doctoral fellow after completing their doctoral studies and has some other experience in international collaboration.

**Outstanding**

Very good leadership (track record, research environment, and collaborators).

The applicant is at the top of their field. Publications and/or monographs are at a good level internationally. 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 level internationally in the respective field.

The applicant has participated in many international collaborative projects.

The applicant has been a post-doctoral fellow after completing their doctoral studies and also has significant experience in international collaboration.

*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 partly meet the research needs. There is a need for substantial improvement.

**Fully meets the needs**

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