

## **Personaalse uurimistoetuse stardigrandi taotluste hindamisjuhend**

### **Guidelines for evaluating personal research funding applications for start-up grants**

#### **I Introduction**

The award of personal research funding for start-up grants has been stipulated in the „Conditions of and Procedure for Application for Start-Up Grant“.

These „Guidelines for evaluating personal research funding applications for start-up grants“ (guidelines) is a document which specifies the evaluation criteria set forth in the „Conditions of and Procedure for Application for Start-Up Grant“.

#### **II Relevant terms**

- 1) **Personal research funding** means funding allocated for a high level research and development project of a person or a research group working in a research and development (R&D) institution, incl. the research scholarship of Master's students and Doctoral candidates (as specified in the Organisation of Research and Development Act). Personal research funding comprises three categories of grants corresponding to different levels of research career: postdoctoral grants, start-up grants and team grants:
  - A postdoctoral research grant is a grant to support launching a research career of persons with a doctoral degree or equivalent qualification at strong research and development institutions or high level research groups either in Estonia or abroad.
  - A **start-up research grant** is a grant to support the researchers with initial research experience to launch independent research career at an Estonian R&D institution, to set up their research group and to contribute to training the next generation of researchers (incl. PhD students).
  - A team grant is a grant to support researchers in continuing their research career at an Estonian R&D institution, ensuring high level research, leading a strong research group and training the next generation of researchers (incl. PhD students).
- 2) **A research project** is a description of research activities with a clearly defined and justified research problem/topic and the methodology to address the problem/topic.
- 3) **A Principal Investigator (PI)** is a researcher who applies for a team grant, start-up grant or a postdoctoral grant and has received consent from a host institution.

### **III Criteria for applying**

#### **1. Principal Investigator of a start-up grant**

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

- 1) has been awarded his/her first doctorate or an equivalent qualification no less than 2 and no more than 7 years prior to the closing date of the call. The Evaluation Committee may, where justified, consider eligible a person who has been awarded his/her first doctorate or equivalent 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 doctorate can be reduced, but only in certain properly documented circumstances, e.g., parental leave, national service;
- 2) has acquired research experience (preferably in a foreign country) after receiving his/her doctorate or equivalent qualification, e.g. has completed postdoctoral studies (preferably outside of Estonia).
- 3) is fully employed at the host institution during the realization of the project.

#### **3. Application**

The application for a start-up grant (hereinafter *application*) shall include the following:

- 1) the Principal Investigator and other research staff;
- 2) the title of the research project;
- 3) a short summary of the project;
- 4) the applied project period;
- 5) the general theoretical background to the research project;
- 6) the main objectives of the research project, hypotheses and/or research questions, description of methods, and the work plan, incl. tentative annual work plans and the availability of research infrastructure for achieving the objectives of the project. In case other research staff are involved, their roles and distribution of tasks;
- 7) the expected results and their potential applicability, importance for Estonian science, economy and society as well as possible future research directions;
- 8) the use of research methods that require review or approval from a human ethics or a bioethics research committee (If the corresponding approvals are obtained by the application deadline, applicants are asked to attach them to the application).
- 9) a confirmation that research ethics principles will be followed (including as they are stipulated by the host institution) and an explanation how project data will be managed;
- 10) the grant type applied for according to the set grant volumes and its justification, incl. the distribution of direct costs;
- 11) a description of previous research and development activities and the track record of the PI in particular, indicating the PI's personal contribution to the publications linked to the application (or of a selection from thereof);

12) information on Estonian and international cooperation (incl. research projects) in which the PI has participated, indicating the PI's personal contribution to the projects linked to the application (or of a selection from thereof);

The research project should be described in max. 20,000 characters (incl. the general theoretical background, justification, the main objectives of the research project; hypotheses, description of methods, and the work plan; 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 PI).

#### **IV Evaluation**

Grant applications shall be evaluated by the Evaluation Committee of the Estonian Research Council based on the well-reasoned opinions of the individual reviewers and expert panels. The following evaluation criteria will be considered:

- 1) justification for the research project, incl. clarity and ambitiousness of objectives, potential applicability of the expected results, taking into account the specifics of the research field;
- 2) feasibility of the project (research plan), incl. methods, resources, infrastructure;
- 3) the competence, expertise and potential of the PI to carry out the proposed research project;
- 4) importance for Estonian science, society and economy;
- 5) ethical considerations and data management issues;
- 6) justification for the applied grant type.

#### **V Rating scales to be used in the review**

##### **Rating scales**

A five-point rating scale is used in evaluating sections 1–4 of the application (outstanding, very good, good, satisfactory, or unsatisfactory). The evaluation is provided to a level of precision of 0.5 points, i.e. intermediate values like very good–outstanding, good–very good, etc. can be used.

An undifferentiated rating scale (appropriate, not appropriate) is used in evaluating section 5 and 6 of the application.

The numeric for evaluating sections 1–4 values in the drop-down menu are as follows:

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

The marks for evaluating section 5 and 6 are as follows:

- Appropriate;
- Not appropriate.

The final score can range from 4 to 20 points.

## **Threshold**

**Research projects which receive less than three points for section 1, 2, 3 or 4, and/or are assessed as 'not appropriate' in section 5 and/or in section 6 do not qualify for funding.**

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

## **VI Evaluation criteria to be used for reviewing start-up grants**

Please make comments for all criteria.

**1. Justification for the research project, incl. originality and relevance of the idea, its potential contribution to the development of the research field; clarity and ambitiousness of objectives; potential applicability of the expected results, taking into account the specifics of the research field**

### **Guiding questions**

How significant is the project scientifically? To what is the research idea original and relevant to the research field? To what extent are the objectives ambitious?

Are the objectives, hypotheses and/or research questions appropriately considered and presented?

Other comments on Section 1.

### **Rating scale for Section 1:**

#### **Outstanding**

The research ideas are highly original.

The application addresses crucial/cutting-edge research questions or knowledge gap, and/or has a significant impact on the development of the economy and society. The objectives are very clearly articulated and justified. The hypotheses and research questions are very well elaborated. Potential scientific or methodological problem areas are very well addressed.

An internationally competitive research project.

#### **Very good**

The project addresses an important research question or knowledge gap, and/or has a considerable impact on the development of the economy and society. The objectives are clearly articulated and justified. The hypotheses and research questions are mostly well elaborated. Potential scientific or methodological problem areas are well addressed.

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

An internationally competitive research project.

### **Good**

The application addresses a worthwhile research question or knowledge gap, and/or has a potential impact on the development of the economy and society. The proposed research is scientifically motivated, the hypotheses and research objectives need some additional elaboration. Potential scientific or methodological problem areas are addressed to some extent.

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

### **Satisfactory**

The application addresses a research question or knowledge gap, and/or societal impact with some added value. Justification needs additional clarifications and adjustments. The hypotheses and research questions need major additional elaboration. Potential scientific or methodological problem areas need better addressing.

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

### **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. Potential scientific or methodological problem areas are weakly addressed.

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

## **2. Feasibility of the project (research plan), incl. methods, resources, infrastructure**

### **Guiding questions**

Is the research plan clear and appropriate for its stated purpose and the elaboration of tasks justified and appropriate?

Are the research methods appropriate? How well the PI acknowledges potential scientific or methodological problem areas?

Does the research environment, incl. research infrastructures support achieving the objectives of the proposed research project?

Other comments on Section 2.

### **Rating scale for Section 2:**

#### **Outstanding**

The research plan is impressive. The tasks are very well justified, clearly described and 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 objectives.

The research environment and infrastructures are optimal for achieving the objectives of the proposed research project.

### **Very good**

The research plan is clearly described and relevant for achieving the objectives. The working hypotheses, methods and the work plan are clearly articulated and justified. The tasks are well justified and appropriate. The methods are up-to-date and relevant for achieving the objectives.

The research environment and infrastructures are appropriate for achieving the objectives of the proposed research project.

### **Good**

The working hypotheses and methods are articulated and justified. 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 in general up-to-date and relevant for achieving the objectives.

The research environment and research infrastructure are appropriate for achieving the objectives of the proposed research project.

### **Satisfactory**

The working hypotheses and methods are somewhat articulated and justified. The research plan needs major improvements. Certain, but not all, tasks can be implemented.

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

The research environment and research infrastructure are appropriate for achieving the objectives of the proposed research project.

### **Unsatisfactory**

The working hypotheses and methods are weakly outlined. The research plan needs profound revision.

The research environment and available research infrastructure do not fully support achieving the objectives of the proposed research project.

## **3. Competence, expertise and potential of the PI**

### **Guiding questions**

What are the merits and scientific expertise of the PI? Are the competencies of the PI appropriate and sufficient for the proposed project?

Does the PI show the potential for research independence and evidence of maturity?

Is the PI's experience in participating in national and/or international projects sufficient for carrying out the planned research successfully?

Other comments on Section 3.

### **Rating scale for Section 3:**

#### **Outstanding**

The PI has excellent potential for successfully implementing the proposed research plan. The PI is well-known in his/her field. The PI provides very good evidence of creative independent thinking. *(Publications and/or monographs are at a very good international level. Articles are published in respectable peer-reviewed journals or proceedings indexed in the leading databases of the field. The impact of the PI (where appropriate, bibliometric data such as number of citations; impact factor of the journals where articles are published) is at a high international level in the respective field.*

The PI demonstrates experience in working with research teams and has been very active in (international) projects or cooperation.

#### **Very good**

The PI has very good potential for successfully implementing the proposed research plan. The PI is known in his/her field. The PI provides very good evidence of creative independent thinking. *(Articles are published in peer-reviewed journals or international proceedings. The impact of the PI (number of citations; the level of the journals where articles are published) is at a good international level in the respective field.)*

The PI demonstrates experience in working with research teams and has been active in (international) projects.

#### **Good**

The PI has good potential for successfully implementing the proposed research plan. The PI is to some extent known in his/her field. The PI provides good evidence of creative independent thinking. *(Some articles are published in peer-reviewed journals or international proceedings. The impact of the PI (number of citations; the level of the journals where articles are published) is at a low international level in the respective field.)*

The PI demonstrates experience in working with research teams and has participated in some (international) projects.

#### **Satisfactory**

There is low potential for successfully implementing the proposed research plan. The PI is not known in his/her field. The PI provides some evidence of creative independent thinking. *(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 PI (number of citations; the level of the journals where articles are published) does not reach an international level.)

The PI shows some experience in working with research teams.

### **Unsatisfactory**

There is insufficient potential for successfully implementing the proposed research plan. The PI's research and publishing record are very weak. (*The impact of the PI (number of citations; the level of the journals where articles are published) is poor.*)

The competencies of the PI do not support the achievement of the established objectives.

The PI does not have experience in working with research teams and has not participated in any (international) projects.

## **4. Importance for Estonian science, society and economy**

***NB! Only the expert panel and the Evaluation Committee will evaluate this section.***

### **Guiding questions**

Does the project have potential impact on the development of Estonian science, society, and economy?

*In writing your assessment of this section please pay attention to the following issues: how relevant are the project results/knowledge obtained for Estonian science, (specific) research area, economy and sustainability of Estonian science, culture and environment. What is the added value (in addition to the personal development and experience of the PI/research team)? The relevance may entail contributing to a new, fast developing research area, further elaborating a research method or developing a novel method, widening the existing or adding new competences at the host institution (Estonian R&D institution), extending the International and/or interdisciplinary cooperation to increase the competitiveness of Estonian science, etc.*

Other comments on Section 4.

### **Rating scale for Section 4:**

#### **Outstanding**

The project has a significant impact on the development of Estonian science, society, and economy.

#### **Very good**

The project has a considerable impact on the development of the Estonian science, society, and economy.

#### **Good**

The project has a potential impact on the development of Estonian science, society, and economy.

#### **Satisfactory**

The project has a modest impact on the development of Estonian science, society, and economy.

### **Unsatisfactory**

The project has no impact on the development of Estonian science, society, and economy.

## **5. Ethical considerations and data management issues**

### ***Explanation***

*The applicants are required to consider the ethical risk of any procedure within a research project which involves human participation or personal data, incl. a description of how the principles of voluntary participation, informed consent, confidentiality and anonymity of subjects will be followed, and a statement on how such 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 (the need for such approvals will be checked by the expert panel). The applicants are also expected to consider issues related to secure storage of data either generated or used during the project period and making them available based on the open data principle (if not restricted due to data protection requirements).*

### **5.1. Ethical issues**

#### **Guiding question**

Are there any ethical issues involved and, if so, have they been adequately considered and addressed?

**Please choose one of the following answers:**

**Not applicable**

**Appropriate** - ethical issues are adequately addressed (please comment)

**Not appropriate** - crucial ethical issues are not adequately addressed (comment is obligatory).

### **5.2. Data management issues**

Are the data management issues, incl. data protection worked out in a sufficient way (if appropriate)?

Please choose one of the following answers:

**Not applicable**

**Appropriate** – data management issues are adequately addressed (please comment)

**Not appropriate** - crucial data management issues, incl. data protection are not adequately addressed (comment is obligatory).

***NB! Breaching ethical principles and insufficient considerations of data management issues may exclude the applicant from receiving the grant. This decision will be made by the Evaluation Committee taking into account the opinions of the reviewers.***

Other comments on Section 5.

#### **6. Justification of the applied grant type**

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

The Evaluation Committee has to comment on the following:

- 6.1. Is the applied grant type clearly and well justified?
- 6.2. Is the applied grant type appropriate for the planned research?

Other comments on Section 6.

#### **Rating scale for Section 6:**

##### **Appropriate**

The grant type (amount and volume of direct costs) is well thought out, clear and justified. The roles and tasks of other grant staff are clearly specified. The grant type applied for is appropriate for implementing the project and achieving the set objectives.

##### **Not appropriate**

The grant type (amount and volume of direct costs) is unclear and/or insufficiently justified. The roles and tasks of other grant staff are not clearly specified or unclear from the point of view of project implementation. The grant type applied for is not appropriate for implementing the project and achieving the set objectives.

#### **Overall assessment and the final score of the application**

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

***The final score of the application is a sum of justified assessment scores for sections 1-4 by the Evaluation Committee..***

***Main arguments underlying the scores as well as main strengths and weaknesses have to be pointed out here.***

Overall comments on the application.