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Personaalse uurimistoetuse rühmagrandi taotluste hindamisjuhend Guidelines for Evaluating Personal Research Funding Applications for Team Grants

I Introduction

The award of personal research funding for team grants has been stipulated in the "Conditions of and Procedure for Personal Research Funding Application for Team Grants".

"Guidelines for Evaluating Personal Research Funding Applications for Team Grants" is a document which specifies the evaluation criteria set forth in the "Conditions of and Procedure for Personal Research Funding Applications for Team Grant".

II Relevant terms

- 1) Personal research funding means funding allocated for a high-quality research and development (R&D) project carried out by a person or a research group working at an R&D institution, incl. the research scholarships for students (as specified in the Organisation of Research and Development Act). Personal research funding comprises three categories of grants corresponding to different levels of a 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. There are two types of postdoctoral grants:
 - a grant for a postdoctoral researcher coming to Estonia;
 - a grant for a postdoctoral researcher going abroad.
 - A start-up research grant is a grant aimed at supporting researchers with initial research
 experience to launch their independent research career at an Estonian R&D institution,
 to set up their research group, and to contribute to educating the next generation of
 researchers (incl. doctoral students).
 - A **team grant** is a grant aimed at supporting researchers in continuing their research career at an Estonian R&D institution, ensuring high-quality research, leading a strong research group, and educating the next generation of researchers (incl. doctoral

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 this problem/topic.
- 3) A **Principal Investigator** (PI) is a researcher who applies for a team grant, start-up grant, or postdoctoral grant and has received consent from the host institution.

III Criteria for applying

1. Principal Investigator of a team grant

A Principal Investigator of a team grant is a person who:

- 1) has been awarded a doctoral degree or has equal qualifications; and
- 2) is employed full-time at an Estonian R&D institution at the time of implementing the research project.

A Principal Investigator who is employed only part-time at an Estonian R&D institution (e.g., a healthcare practitioner) can be considered eligible by the Evaluation Committee if this does not jeopardise the successful realisation of the research project.

2. Application

The application for a team 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 period of the project;
- 5) the scientific background to the 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. If other members of the research staff are involved, their roles and distribution of tasks should be described;
- 7) the expected results and their potential applicability, importance for Estonian research, culture, society, and economy as well as possible directions for future research;
- 8) a comment on whether the research project requires a review or approval from a human ethics or bioethics research committee (if the corresponding approvals have been obtained by the application deadline, applicants are asked to attach them to the application) and whether the project necessitates compliance with the Nagoya Protocol, resulting in the

- need for the due diligence declaration;
- 9) a confirmation that the principles of research ethics will be adhered to (incl. as they have been stipulated by the institution with which the PI has a contractual relationship) and an explanation about how the data of the project 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 R&D activities in the last 10 years 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 in the last 10 years, indicating the PI's personal contribution to the projects linked to the application (or of a selection from thereof);
- 13) the previous team leadership and supervision experience of the PI;
- 14) the role and task division of the senior research staff involved in the project.

NB! Please keep in mind that the applicants have a limited number of characters they can use to describe each part of their project.

IV Evaluation

Grant applications will be evaluated by the Evaluation Committee of the Council based on the well-reasoned opinions of individual reviewers and the Expert Panel. The following evaluation criteria will be considered:

- 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 the specifics of the research field into account;
- 2) feasibility of the project (research plan), incl. methods, resources, and infrastructure;
- 3) the competence, expertise, and potential of the PI and the research team to carry out the proposed research project;
- 4) the potential impact of the project (interdisciplinary and multidisciplinary issues, collaboration, supervision of younger researchers, societal challenges, etc.);
- 5) ethical issues and data management;
- 6) importance for Estonian culture, society, and economy;
- 7) justification for the grant type (small or large, experimental or non-experimental).

V Rating scales to be used in the review

Rating scales

A five-point rating scale is used for evaluating sections 1–4 and 6 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.

Where applicable, an undifferentiated rating scale (appropriate, not appropriate) is used for evaluating sections 5 and 7 of the application.

The numeric values for evaluating sections 1–4 and 6 in the drop-down menu are as follows:

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

The marks for evaluating sections 5 and 7 are as follows:

- Appropriate;
- Not appropriate.

The final score can range from 5 to 25 points.

Threshold

Research projects which receive less than three points for sections 1, 2, 3, 4, or 6, and/or are assessed as "not appropriate" in section 5 and/or in section 7 do not qualify for funding.

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

VI Evaluation criteria to be used for reviewing team grants

Please comment on 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 the specifics of the research field into account

Guiding questions

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

Have the objectives, hypotheses and/or research questions been carefully considered and presented?

Are the expected results of the project potentially applicable?

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 a knowledge gap, and/or has a significant impact on the development of the research field or interdisciplinary research. The objectives have been very clearly articulated and justified. The hypotheses and research questions have been very well elaborated. The expected results have clear potential applicability.

An internationally competitive research project.

Very good

The project addresses an important research question or a knowledge gap, and/or has a considerable impact on the development of the research field or interdisciplinary research. The objectives have been clearly articulated and justified. The hypotheses and research questions have mostly been quite well elaborated. The expected results have potential applicability.

An internationally competitive research project.

<u>Good</u>

The application addresses a worthwhile research question or a knowledge gap, and/or has a potential impact on the development of the research field or interdisciplinary research. The proposed research project is scientifically motivated, but the hypotheses and research objectives need some additional elaboration. The expected results have some potential applicability.

Satisfactory

The application addresses a research question or knowledge gap, and/or has a scientific impact with some added value. The justification for the project needs additional clarifications and adjustments. The hypotheses and research questions need major additional elaboration. The expected results have limited potential applicability.

<u>Unsatisfactory</u>

The proposed topic has been studied exhaustively. The likelihood of generating new knowledge is limited.

The research topic has been poorly defined and there is a lack of clear hypotheses and research questions. The expected results have no potential applicability.

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

Guiding questions

Is the research plan clear and appropriate for its stated purpose and the elaboration on 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 have been very well justified, clearly described, and are appropriate.

The application includes original (if appropriate) methodology and/or design. The methods have been very clearly described, are up-to-date, and highly relevant for achieving the objectives. Potential scientific or methodological problem areas have been very well addressed.

The research environment and infrastructures fully support achieving the objectives of the proposed research project.

Very good

The research plan has been clearly described and is relevant for achieving the objectives. The working hypotheses, methods, and the work plan have been clearly articulated and are justified. The division of subtasks/subtopics is clear and justified and supports the achievement of the overall goal.

The application includes original (if appropriate) methodology and/or design. The methods are up-to-date and relevant for achieving the objectives. Potential scientific or methodological problem areas have been well addressed.

The research environment and infrastructures support achieving the objectives of the proposed research project.

<u>Good</u>

The working hypotheses and methods have generally been articulated and are justified. The research plan needs some clarification.

The division of subtasks/subtopics has been presented well and the overall goals can be achieved, but certain improvements and adjustments are still necessary.

A methodologically sound study. The methods are up-to-date and relevant for achieving the objectives. Potential scientific or methodological problem areas have been addressed to some extent.

The research environment and infrastructures generally support achieving the objectives of the proposed research project.

Satisfactory

The working hypotheses and methods have been somewhat articulated and seem justified. The research plan needs major improvements.

The division of subtasks/subtopics is satisfactory, but additional clarifications and adjustments are inevitable. It is not clear whether the proposed approach supports the achievement of the overall goal.

A methodologically sound study, but some issues require revision. The methods are not very up-to-date and/or innovative. Potential scientific or methodological problem areas need to be better addressed.

The research environment and infrastructures support achieving the objectives of the proposed research project only partially.

Unsatisfactory

The working hypotheses and methods have been weakly outlined. The research plan needs profound revision. The division of subtasks/subtopics is poor and hardly supports the achievement of the overall goal.

The methods are inadequate for achieving the overall goal and are neither up-to-date nor innovative. Potential scientific or methodological problem areas have been weakly addressed.

The research environment and infrastructures do not support achieving the objectives of the proposed research project.

3. Competence, expertise, and potential of the Principal Investigator and the research team

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?

Is the size and composition of the research team justified and optimal to achieve the objectives and to guarantee the sustainability of the research topic?

Is the Pl's experience in leading research team(s), supervising young researchers, and participating in national and/or international projects sufficient for carrying out the proposed research project successfully? What about the members of the research team?

Other comments on Section 3.

Rating scale for Section 3:

Outstanding

The PI is an eminent researcher whose previous research results have been internationally widely acknowledged over the last 10 years. The publications and/or monographs are at an outstanding international level. The articles have been published in the best peer-reviewed journals or in proceedings indexed in the leading databases in the field. The impact of the PI (where appropriate, bibliometric data such as the number of citations and the impact factor of the journals where the articles have been published) is at a high international level in the respective field.

The PI demonstrates impressive leadership abilities and skills. He/she has a lot of experience in the management of (international) research projects and grants, and is highly experienced in participating in international collaborative projects.

The PI and the senior members of the research staff are actively involved in supervising doctoral students and postdoctoral research, which will guarantee the sustainability of the research team.

The size and composition of the research team is justified and optimal for achieving the objectives.

The roles and responsibilities of the team members have been optimally explained and clarified very well.

Very good

The PI is an internationally recognised researcher whose previous research results have been well acknowledged over the last 10 years. The publications and/or monographs are at a very good international level. The articles have been published in respectable peer-reviewed journals

or in proceedings indexed in the leading databases in the field. The impact of the PI is at a very good international level in the respective field.

The PI demonstrates very good leadership abilities and skills. He/she has considerable experience in the management of (international) research projects, grants, and in participating in international collaborative projects.

The PI and the senior members of the research staff are involved in supervising doctoral students and postdoctoral research, which will guarantee the sustainability of the research team.

The size and composition of the research team is justified and appropriate for achieving the objectives.

The roles and responsibilities of the team members have been clarified and outlined very well.

Good

The PI is a researcher whose previous research results have been well acknowledged over the last 10 years. The publications and/or monographs are at a good international level. The articles have been published in peer-reviewed journals or in international proceedings. The impact of the PI is at a good international level in the respective field.

The PI shows leadership abilities and skills. He/she has some experience in the management of (international) research projects, grants, and in participating in international collaborative projects.

The PI has experience in supervising doctoral students and postdoctoral research, but the sustainability of the research topic may be questionable due to the limited involvement of young researchers and/or doctoral students.

The size and composition of the research team is justified and suitable for achieving the objectives.

The roles and responsibilities of the team members need some clarification.

<u>Satisfactory</u>

The PI is a researcher whose previous research results have been somewhat acknowledged over the last 10 years. The articles have been published in journals and in proceedings that have not been indexed in the leading databases in the field. No monographs have been published. The impact of the PI does not reach the international level.

The PI has limited experience in the management of (international) research projects and grants, and/or in participating in international collaborative projects.

The PI has some experience in supervising doctoral students.

The size and composition of the research team are on satisfactory level, but in the long run the research team may not be sustainable.

The roles and responsibilities of the team members remain somewhat vague.

<u>Unsatisfactory</u>

The PI is not an internationally recognised researcher, although his/her previous research results have been somewhat acknowledged over the last 10 years. *The research and publishing records are weak. The impact of the PI is poor.*

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

The PI has no or very limited experience in supervising doctoral students.

The size and composition of the research team are at an inadequate level for achieving the proposed objectives.

The role and responsibilities of the team members remain vague. In the long run, the research team does not seem to be sustainable.

4. The potential impact of the project (interdisciplinary and multidisciplinary issues, collaboration, supervision of young researchers, societal challenges, etc.)

Guiding questions

To what extent does the research project address important social and cultural issues, nationally and/or internationally?

To what extent does the project promote interdisciplinary and/or multidisciplinary research?

To what extent does the project support young researchers' training?

Other comments on Section 4.

Rating scale for Section 4

Outstanding

The expected impact of the proposed research project on the specific research field, society, and culture is high.

The expected results would substantially increase the knowledge base in the specific research field.

The possible future developments of the proposed project have been very clearly outlined, and if appropriate, are highly relevant for societal problems and culture.

The project clearly promotes interdisciplinary and/or multidisciplinary research (if appropriate).

The ample and justified involvement of young researchers and doctoral students supports the sustainability of the research field very well.

Very good

The expected impact of the proposed research project on the specific research field, society, and/or culture is high.

The expected results would definitely increase the knowledge base in the specific research field.

The possible future developments of the proposed project have been clearly outlined, and if appropriate, are relevant for societal problems and culture.

The project promotes interdisciplinary and/or multidisciplinary research (if appropriate).

The involvement of young researchers and doctoral students supports the sustainability of the research field.

Good

The expected impact of the proposed research project on the specific research field, society, and culture has not been very clearly outlined.

The expected results could somewhat increase the knowledge base in the specific research field.

The possible future developments of the proposed project have not been very clearly indicated, but if appropriate, are somewhat relevant for societal problems and culture.

The project promotes interdisciplinary and/or multidisciplinary research to some extent (if appropriate).

The involvement of young researchers and doctoral students is modest.

Satisfactory

The expected impact of the proposed research project on the specific research field, society, and culture as well as the possible future developments have been vaguely outlined.

The expected results could somewhat ensure national and international competitiveness and high quality of the research.

The topic of the project is too narrow and overlooks the possibilities for interdisciplinary or multidisciplinary research.

The involvement of young researchers and doctoral students is very modest.

Unsatisfactory

The expected impact of the proposed research project on the specific research field, society, and culture has been vaguely outlined.

The possible future developments of the project are questionable. The expected results do not ensure national or international acceptability, competitiveness, or high quality of the research.

The project would have benefitted from interdisciplinary or multidisciplinary research ideas, but they are missing.

The involvement of young researchers and doctoral students is too modest for supporting the sustainability of the research field.

5. Ethical issues and data management

Explanation

The applicants are required to consider the potential risks related to ethical issues of any procedure in the research projects involving human participation or personal data. The applicants are asked to describe how the principles of voluntary participation, informed consent, confidentiality, and anonymity of the subjects will be followed as well as how such data will be stored and protected. The use of research methods that require a review or approval from a human ethics or bioethics research committee should also be clearly indicated in the application (the need for such approvals will be checked by the Expert Panel). If the project necessitates compliance with the Nagoya Protocol, the applicant has to be aware of the fact that he/she has to obtain the due diligence declaration. The applicants are also expected to consider the issues related to the secure storage of data either obtained or used during the period of the project and make them available based on the open data principles (if not restricted due to data protection requirements).

5.1. Ethical issues

Guiding question

Are there any potential risks related to ethical issues involved and, if so, have they been carefully considered and sufficiently addressed?

Please choose one of the following answers:

Not applicable

Appropriate – potential risks related to ethical issues have been sufficiently addressed (please add a comment)

Not appropriate – potential risks related to crucial ethical issues have not been sufficiently addressed (adding a comment is obligatory).

5.2. Data management issues

Guiding question

Have data management issues, incl. data protection, been sufficiently addressed (if appropriate)?

Please choose one of the following answers:

Not applicable

Appropriate – data management issues have been sufficiently addressed (please add a comment)

Not appropriate – crucial data management issues, incl. data protection, have not been sufficiently addressed (adding a comment is obligatory).

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

Other comments on Section 5.

6. Importance for Estonian culture, society, and economy

NB! This section will be evaluated only by the Expert Panel and the Evaluation Committee.

Guiding questions

Has the PI analysed and described the importance of the project for Estonia?

Will the project increase the visibility of Estonian research?

Is the project relevant for the development of Estonian culture and/or society and/or economy?

Extra value will be added if

• the topic is significant in the Estonian context (e.g., the topic has not previously been studied, but it is very important; the topic is related to a new and rapidly evolving research field; the topic is of immediate relevance owing to its relation to current events);

- the project encourages cooperation between R&D institutions and/or government authorities and/or enterprises in Estonia;
- the project will increase the sustainability of Estonian culture, integrity of Estonian society, and competitiveness of Estonian economy.

NB! When evaluating the application, please use the guiding questions to clearly explain and justify the rating.

Other comments on Section 6.

Rating scale for Section 6:

Outstanding

The PI has analysed and described the importance of the project for Estonia in sufficient detail. The project will significantly increase the visibility of Estonian research.

The project is extremely relevant for the development of Estonian culture and/or society and/or economy.

Very good

The PI has carefully analysed and clearly described the importance of the project for Estonia.

The project will considerably increase the visibility of Estonian research.

The project is relevant for the development of Estonian culture and/or society and/or economy.

Good

The PI has analysed and described the importance of the project for Estonia, but not very thoroughly.

The project could increase the visibility of Estonian research.

The project is somewhat relevant for the development of Estonian culture and/or society and/or economy.

Satisfactory

The PI has analysed and described the importance of the project for Estonia only in passing.

The project is not likely to increase the visibility of Estonian research.

The project is not necessarily relevant for the development of Estonian culture and/or society and/or economy.

Unsatisfactory

The PI has neither analysed nor described the importance of the project for Estonia.

The project will not increase the visibility of Estonian research.

The project is not relevant for the development of Estonian culture, society, and economy.

7. Justification for the grant type (small or large, experimental)

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

The Evaluation Committee has to comment on the following:

- 7.1. Has the grant type been clarified and is it justified?
- 7.2. Is the grant type appropriate for the proposed research project?

Other comments on Section 7.

Rating scale for Section 7:

Apprporiate

The grant type (amount and volume of direct costs) has been well thought out, clarified, and is justified. The roles and tasks of the other members of the staff have been clearly specified. The grant type the applicant has applied for is appripriate for implementing the project and for achieving the stated objectives.

Not appropriate

The grant type (amount and volume of direct costs) is unclear and/or insufficietly justified. The roles and tasks of the other members of the staff have not been clearly specified or remain unclear in relation to the implementation of the project. The grant type the applicant has applied for is not appropriate for implementing the project and for achieving the stated objectives.

Overall assessment and the final score for the application

NB! This section will be filled in by the Evaluation Committee.

The final score for the application is a sum of justified assessment scores for sections 1-4 and 6 by the Evaluation Committee.

The main arguments underlying the scores as well as the main strengths and weaknesses must be pointed out here.

Overall comments on the application.