

Arendusgrandi taotluste hindamisjuhend

Guidelines for Evaluating Proof-of-Concept Grant Applications

1. Introduction

“Guidelines for Evaluating Proof-of-Concept Grant Applications” is a document which specifies the evaluation criteria set forth in the “Conditions of and Procedure for Proof-of-Concept Grant Applications”.

2. Relevant terms

A **Proof-of-Concept grant** (hereinafter also *grant*) is aimed at enhancing technology transfer, the application of research outcomes in entrepreneurship as well as in the society at large, and increase the societal and economic impact of research through supporting experimental development projects.

A **Proof-of-Concept project** is a description of research and experimental development activities with a clearly defined and justified research problem/topic and the methodology to address this problem/topic.

A **Principal Investigator (PI)** is a researcher who applies for a proof-of-concept grant and has received consent from the host institution.

3. Criteria for applying

3.1. A **Principal Investigator of a proof-of-concept project** is a person who:

3.1.1. has been awarded a doctoral degree or has equal qualifications;

3.1.2. is employed at an Estonian R&D institution and has a place of work in Estonia at the time of implementing the project.

4. Evaluation process

4.1. The evaluation process for proof-of-concept grant applications follows a **two-stage evaluation scheme**.

4.2. For the first stage of the evaluation process, the applicants submit a **preliminary application** which will be evaluated by the Expert Panel and by the Evaluation Committee.

4.3. The applicants who pass the first stage of the evaluation process will be invited to submit their **full applications** for the second stage of the evaluation process. The full applications will be evaluated by at

least two independent reviewers. The full application must be consistent with the preliminary application and may not differ substantially.

5. First stage of the evaluation process

5.1. Preliminary application

The application for a proof-of-concept grant (hereinafter *application*) shall include the following:

- 5.1.1. the applicant (Principal Investigator);
- 5.1.2. the title of the project in Estonian and in English;
- 5.1.3. a summary of the project in a popular science format in Estonian and in English;
- 5.1.4. a short description of the idea for the project, incl. the expected results across the entire value chain, their estimated technology readiness level (hereinafter *TRL*) by the end of the project in accordance with the guidelines provided by the Council, and possible directions for future developments;
- 5.1.5. research outcomes on which the idea for the project is based on, incl. the identification of their TRL. The preliminary applications in which the TRL lower than 4 are not eligible for the second stage of the evaluation;
- 5.1.6. potential impact, incl. the expected effect or benefits of the outcomes of the project for Estonian economy, society, public policy and/or services; a suitable outline of how the commercialisation or the generation of the listed benefits will be achieved.
- 5.1.7. the requested amount and period of the grant, incl. possible co-funding instruments.

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

5.2. Criteria and rating scale for the first stage of the evaluation process

The preliminary applications will be evaluated by the Evaluation Committee based on the well-reasoned opinions of the Expert Panel. In the first stage of the evaluation process, an undifferentiated rating scale (eligible–not eligible) is used.

| Criterion | Guiding questions |
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| 1. Excellence in innovation potential , incl. the proposed proof-of-concept activity that would greatly help to move the output of the project towards the initial steps of a process leading to commercial or social innovation; the analysis on whether the expected outcomes of the project are innovative and/or distinctive compared to existing solutions ; the innovation potential of the idea on which the proof-of-concept project is based on, incl. a clear description of how the proof-of-concept | 1.1. Has the innovation potential of the idea been outlined clearly? |
| | 1.2. Is the indication to the earlier project from which the idea is substantially drawn from coherent? |
| | 1.3. Is the described initial TRL adequate and meets the requirements for proof-of-concept grant applications (at least TRL 4)? |
| | 1.4. Are the expected outcomes of the project innovative and/or distinctive compared to existing solutions regarding the entire value chain? |

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| activities will lead to commercial or social innovation | 1.5. Is the proposed final TRL sufficiently ambitious and realistic? |
| | Other comments on criterion 1. |
| 2. Potential impact , incl. the expected effect or benefits of the outcomes of the project for Estonian economy, society, public policy, and/or services; a suitable outline of how the commercialisation or the generation of the listed benefits will be achieved | 2.1. Has the economic and/or societal impact expected from the project been outlined clearly? |
| | 2.2. Do the outcomes of the project have an effect on or benefits for Estonian economy, society, public policy and/or services? |
| | 2.3. Does the applicant describe how such benefits will be achieved? |
| | 2.4. Does the applicant consider the possibilities of further commercialisation of the outcomes of the project? |
| | Other comments on criterion 2. |

5.3. Threshold

Each guiding question for criteria 1 and 2 will be marked with “yes” or “no”. The application which receives “yes” marks for at least 4 guiding questions in criterion 1 and at least 3 guiding questions in criterion 2 will be considered as “eligible” for the second stage of the evaluation process. The application which receives the mark “no” for guiding question 1.3. in criterion 1 and for guiding question 2.2. in criterion 2 will be automatically considered as “not eligible” and will not proceed to the second stage of the evaluation process.

6. Second stage of the evaluation process

6.1. Full application

The full applications shall include the following:

- 6.1.1. the applicant;
- 6.1.2. the title of the project in Estonian and in English;
- 6.1.3. a summary of the project in a popular science format in Estonian and in English;
- 6.1.4. the requested grant period;
- 6.1.5. the scientific background of the project, incl. the results of the research on which the idea for the project is based on, incl. the identification of the TRL of these results in accordance with the guidelines provided by the Council;
- 6.1.6. the main objectives of the project, methods, and the work plan, possible risks, and the methods for achievement assessment and risk reduction;
- 6.1.7. the expected results of the project, incl. the expected results across the entire value chain as well as the estimated TRL of the outcomes; a suitable outline of how the commercialisation or the generation of the listed benefits will be achieved;

- 6.1.8. potential impact, incl. the expected effect or benefits of the outcomes of the project for Estonian economy, society, public policy and/or services;
- 6.1.9. an explanation about how the results of the project will be disseminated to the public;
- 6.1.10. an explanation about how the compliance with ethical issues will be secured during the implementation of the project and a comment on whether the project requires a licence from a specific ethics committee or the licence has already been obtained, and if the project necessitates compliance with the Nagoya Protocol, an explanation about which genetic resources will be used and whether the project requires the due diligence declaration or the due diligence declaration has already been submitted;
- 6.1.11. an explanation about which data will be generated during the implementation of the project and how the data will be managed;
- 6.1.12. an explanation about whether the participants of the project have agreed on the issues related to intellectual property rights and obligations;
- 6.1.13. the requested grant amount, incl. the distribution of direct costs and co-funding instruments (if present);
- 6.1.14. national and/or international cooperation envisaged to achieve the objectives of the project, incl. the involvement of (business) partners and experts, and the availability of the infrastructure necessary for achieving the objectives of the project;
- 6.1.15. the member(s) of the research staff, incl. their role and the distribution of their tasks;
- 6.1.16. if necessary, additional documents, incl. a confirmation letter detailing that the host institution and/or the Estonian R&D institution will enter into an employment contract with the applicant and/or the member(s) of the research staff for implementing the project if such a contractual relationship does not already exist at the time of submitting the application;
- 6.1.17. a confirmation that the principles of research ethics and good research practice will be adhered to during the conception and implementation of the project.

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

6.2. Criteria and rating scale for the second stage of the evaluation process

The full applications will be evaluated by the Evaluation Committee based on the well-reasoned opinions of the Expert Panel and two independent reviewers. In the second stage of the evaluation process, a differentiated rating scale (unsatisfactory (1); satisfactory (2); good (3); very good (4); outstanding (5)) for criteria 1, 2, 3, and 6, and an undifferentiated rating scale (inappropriate (0), appropriate (1)) for criteria 4 and 5 is used.

| Criterion | Guiding questions |
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| <p>1. Excellence in innovation potential, incl. the proposed proof-of-concept activity that would greatly help to move the output of the project towards the initial steps of a process leading to commercial or social innovation; the analysis on whether the expected outcomes of the project are innovative and/or distinctive compared to existing solutions ; a clear description of how the proof-of-concept activities will lead to commercial or social innovation</p> | 1.1. Has the research idea been outlined clearly? |
| | 1.2. Is the proof-of-concept idea original (compared to already existing solutions)? |
| | 1.3. Is the proof-of-concept idea relevant? |
| | 1.4. Have the objectives and hypotheses been carefully considered and presented? |
| | 1.5. Does the initial TRL support the achievement of the planned outcomes? |
| | 1.6. Is the indication to the earlier project from which the idea is substantially drawn from coherent? |
| | 1.7. Have the existing solutions and expected solutions been outlined clearly? |
| | 1.8. Are the expected outcomes of the project innovative and/or distinctive compared to existing solutions regarding the entire value chain? |
| | 1.9. Does the proposed proof-of-concept project greatly help to move the output of the project towards commercial or social innovation (e.g., is the planned final TRL sufficiently ambitious and realistic)? |
| | Other comments on criterion 1. |
| <p>2. Potential impact, incl. the expected effect or benefits of the outcomes of the project for economy, society, public policy, and/or services; a suitable outline of how the commercialisation or the generation of the listed benefits will be achieved</p> | 2.1. Has the economic and/or societal impact expected from the project been outlined clearly? |
| | 2.2. Are the expected results of the project potentially applicable? |
| | 2.3. Do the outcomes of the project have an effect on or benefits for the economy, society, public policy and/or services? |
| | 2.4. Does the applicant describe how such benefits will be achieved? |
| | 2.5. Have the potential customer and societal benefits been identified sufficiently in the application? |
| | 2.6. Have the initial steps of the analysis of the advantages of the outcomes of the project over existing products, policies, or processes been described sufficiently in the application? |
| | 2.7. Has the applicant described possible follow-up activities for further product/process development towards commercialisation of the outcomes of the project? |
| | 2.8. Are the planned dissemination activities sufficient for emphasising the importance of knowledge transfer? |

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| | 2.9. Are the expected outcomes of the project realistic and do they correspond to the proposed TRL? |
| | Other comments on criterion 2. |
| 3. Quality and efficiency of the implementation , incl. a reasonable and acceptable plan of activities against clearly identified objectives and towards establishing the feasibility of the project; demonstration that the activities will be conducted by people well qualified for the purpose | 3.1. Is the plan of the activities proposed for establishing the feasibility of the project reasonable and plausible against clearly identified objectives? |
| | 3.2. Are the activities for validating results under a representative set of expected conditions and environments planned appropriately? |
| | 3.3. Is the expected TRL by the end of the project realistic? |
| | 3.4. Does the research environment, incl. infrastructures, support achieving the objectives of the proposed project? |
| | 3.5. Is estimation of the project costs realistic against the objectives? |
| | 3.6. Is the team composition and their experience in relation to the approach of the project? |
| | 3.7. Is the assessment on the effectiveness of the project and risk management thorough and realistic? |
| | 3.8. Are the intellectual/industrial property issues considered? |
| | Other comments on criterion 3. |
| 4. Ethical issues | |
| <p>The applicants are required to consider the potential risks related to ethical issues of any procedure in the research projects. The applicants are asked to describe how the principles of voluntary participation, informed consent, confidentiality, and anonymity of the subjects will be followed. The use of research methods that require a review or approval from a specific ethics 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.</p> | <p>4.1 Has the applicant carefully considered and sufficiently addressed potential ethical issues?</p> <p>Other comment on criterion 4.</p> |
| 5. Data management | |

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| <p>The applicants are expected to describe which data will be created, managed, collected, and protected; which methods and standards will be applied; will the data be shared or made public and in which way; how the data will be stored during the period of the project and preserved after the end of the project. The applicants are 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).</p> | <p>5.1. Have data management issues, incl. data protection, been sufficiently addressed?</p> <p>Other comment on criterion 5.</p> |
| <p>6. Importance for Estonian economy, society, public policy, and/or services</p> <p><i>This criterion will be evaluated only by the Expert Panel and the Evaluation Committee</i></p> | <p>6.1. Has the applicant analysed and described the importance of the project for Estonia?</p> <p>6.2. Will the project increase the visibility of Estonian research?</p> <p>6.3. Do the planned outcomes of the project enhance cultural enrichment, quality of life, health and/or well-being?</p> <p>6.4. Could the project potentially contribute to evidence-based policy-making and influence public policies and legislation in Estonia?</p> <p>6.5. Does the project help to improve social welfare, social cohesion and/or national security?</p> <p>6.6. Does the project contribute to environmental sustainability, protection, and impact reduction?</p> <p>6.7. Does the project enhance the efficiency, performance, and sustainability of businesses/organisations, incl. public services?</p> <p>6.8. Do the objectives of the project correspond to any Estonian strategic documents (e.g., the R&D&I strategy, smart specialisation, etc.)?</p> <p>6.9. Does the project include cooperation between R&D institutions and/or government authorities and/or enterprises in Estonia?</p> <p>Other comments on criterion 6.</p> |

6.3. Rating procedure

6.3.1. Each guiding question for criteria 1, 2, 3, 4, 5, and 6 will be marked with “yes” (positive) or “no” (negative).

6.3.2. A five-point rating scale is used for evaluating criteria 1, 2, 3, and 6 of the application. 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. The score for criteria 1, 2, 3, and 6 can range from 1 to 5 points.

For criteria 4 and 5, the maximum that can be obtained is 1 point (*appropriate*).

6.3.3. Rating scale for criteria 1, 2, 3, 4, 5, and 6

| Number of positively marked guiding questions /grades (points) | Positive marks in criterion 1 | Positive marks in criterion 2 | Positive marks in criterion 3 | Positive marks in criterion 4 | Positive marks in criterion 5 | Positive marks in criterion 6 |
|--|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Outstanding (5) | 9 | 9 | 8 | * | * | 9 |
| Very good-outstanding (4,5) | 8 | 8 | 7 | * | * | 8 |
| Very good (4) | 7 | 7 | 6 | * | * | 7 |
| Good-very good (3,5) | 6 | 6 | 5 | * | * | 6 |
| Good (3) | 5 | 5 | 4 | * | * | 5 |
| Satisfactory-good (2,5) | 4 | 4 | 3 | * | * | 4 |
| Satisfactory (2) | 3 | 3 | 2 | * | * | 3 |
| Unsatisfactory-satisfactory (1,5) | 2 | 2 | 1 | * | * | 2 |
| Unsatisfactory (1) | 0-1 | 0-1 | 0 | * | * | 1 |
| Appropriate (1) | * | * | * | 1 | 1 | * |
| Inappropriate (0) | * | * | * | 0 | 0 | * |

6.4. Threshold

The final score can range from 4 to 22 points. If an application receives less than 3 points at least in one of criteria 1, 2, 3, or 6 or receives the mark “no” for guiding questions 1.5., 2.3., 4.1., and 5.1., it does not qualify for funding.

7. Overall assessment and the final score for the application

This section will be filled in by the Evaluation Committee

7.1. The final score for the application is a sum of justified assessment scores for all criteria (1-6) by the Evaluation Committee. The main arguments underlying the scores as well as the main strengths and weaknesses will be pointed out here.

7.2. If the budget is too small for funding all the projects which qualify for funding, then the procedure shall be proceeded as follows:

- 7.2.1. based on the final evaluation and scores, the Evaluation Committee will compile a ranking list for all applications;

- 7.2.2. the applications of equal standing will be ranked according to the scores received during the evaluation process in the very order of the evaluation criteria (i.e., as it appears above);
 - 7.2.3. the applications which sustain the equal standing will be prioritised according to the underrepresented gender among the applicants to be funded;
 - 7.2.4. the applications of equal standing for all aforementioned criteria will be prioritised in order to provide more diversity of the R&D fields.
- 7.2. The projects will be funded in the order they appear in the ranking list.