Final report of the PSG and PRG projects

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# **General information**

## General information

|  |  |
| --- | --- |
| Project title in Estonian | Preprinted according to the project’s data |
| Project title in English | Preprinted according to the project’s data |
| Principal Investigator | Preprinted according to the project’s data |
| Institution | Preprinted according to the project’s data |
| Project start | Preprinted according to the project’s data |
| Project end | Preprinted according to the project’s data |
| Total project budget | Preprinted according to the project’s data |
| Research type | Preprinted according to the project’s data |
| Field of research and speciality | Preprinted according to the project’s data |
| Keywords | The maximum length is 500 characters (incl. spaces). |
| TRL achieved at the end of the project |  |
| Comments on TRL | Please insert the TRL achieved at the end of the project and justify your assessment. Social sciences and humanities: https://www.etag.ee/wp-content/uploads/2019/03/Technology-readiness-levels-in-HU-and-SO-fields.pdf Other fields: https://www.etag.ee/wp-content/uploads/2019/01/Technology-readiness-levels.pdf The maximum length is 2000 characters (incl. spaces). |

## Scientific summaries of the research project

**The information provided in this section will be made public. This section must be of suitable quality to enable direct publication.**

|  |  |
| --- | --- |
| Project annotation in Estonian (from the application) | Preprinted according to the project’s data |
| Summary of the project results in Estonian | A concise summary of the main outcomes of the project in Estonian in a popular science format for non-professional target groups: a) please provide a brief description of the most significant findings; b) assess why, to whom, and for what are the outcomes of the project relevant; c) explain the estimated applicability and/or impact of the outcomes; d) highlight the project-related achievements you as the PI are especially proud of. NB! Please base your description on the summary provided in the application. *(The maximum length is 2000 characters (incl. spaces).)* |
| Project annotation in English (from the application) | Preprinted according to the project’s data |
| Summary of the project results in English | A concise summary of the main outcomes of the project in English in a popular science format for non-professional target groups: a) please provide a brief description of the most significant findings; b) assess why, to whom, and for what are the outcomes of the project relevant; c) explain the estimated applicability and/or impact of the outcomes; d) highlight the project-related achievements you as the PI are especially proud of (NB! Please base your description on the summary provided in the application). *(The maximum length is 2000 characters (incl. spaces).)* |

# **Main outcomes**

## Scientific impact of the project

The maximum length is 10 000 characters (incl. spaces) across all fields.

|  |  |
| --- | --- |
| **Objectives/Hypotheses of the project (in accordance with the application)** |  |
| **Importance and impact of the outcomes of the project** | \* Please describe in a clear and concise manner: a) if the objectives set in the application were achieved; b) which objectives were not achieved and for what reasons; c) why are the outcomes of the project scientifically relevant; d) what can be learned from the failures and negative outcomes (if there were any); e) what is the (potential) scientific impact of the outcomes of the project (e.g., the outcomes are essential for further studies or experiments, etc.). |
| **Importance of the project outside academia** | \* Please describe in a clear and concise manner: a) what is the importance and (potential) impact of the outcomes of the project outside academia, incl. for the development of (Estonian) culture, society and/or economy; b) if and how could the outcomes of the project be used outside academia (if applicable), e.g., which outcomes could be put into use in a specific field, which outcomes have commercial potential, etc. |
| **Introducing the research to the public** | \*If and how has the general public been informed about the research (at which non-professional conferences and other major events have the outcomes of the project been presented; interviews, other public presentations, popular science articles; project-related acknowledgements and prizes, etc.). Please provide links to relevant webpages. It is also possible to add PDF files, photos, etc. about these activities under the tab "Additional information". |

## Meeting the conditions set upon allocating the grant

|  |  |
| --- | --- |
| Meeting the conditions set upon allocating the grant | If the Estonian Research Council has set any conditions in the funding decision of the application, in the evaluation of the interim report, or in the grant contract, please describe the fulfilment of these conditions.. *(The maximum length is 3000 characters (incl. spaces).)* |

# **Outcomes**

## Summary of publications by ETIS categories

Please add only the publications directly related to the project. The publications have to contain a reference to the grant.

## Scientific publications published as the result of the research project

You can browse publications from ETIS. When you add your publication to ETIS, please include the information about the project in „Additional information“ at once. Then all these publications having connection with your project will automatically present in the final report.

|  |  |  |
| --- | --- | --- |
| Publication | PDF file | Public/ restricted (PDF file) |
|  |  |  |

|  |  |
| --- | --- |
| **Comments on the publications** | Explain which of these publications you consider to be the most important ones in the context of the objectives and/or outcomes of the project. Among the publications listed above, which are the ones you are most proud of and why? *(The maximum length is 3000 characters (incl. spaces).)* |

## Master and PhD theses defended under the supervision of the PI, member(s) of the senior research staff, and PhD students and related to the research project

Please add only the Master and PhD theses directly related to the project which have been supervised by the PI, the senior research staff during the period of the project. You can browse from ETIS.

|  |  |
| --- | --- |
| **Comments on the Master and PhD theses defended under the supervision of the PI, members of the senior research staff, and PhD students that are related to the research project** | *(The maximum length is 3000 characters (incl. spaces).)* |

## Related industrial property items

Please add only the industrial property items directly related to the project. You can browse from ETIS.

|  |  |
| --- | --- |
| **Comments on industrial property items obtained as the outcome of the research project** | *(The maximum length is 3000 characters (incl. spaces).)* |

## Related projects

The projects that have (at least partially) taken place during the period of this project and were relevant for the implementation of this project. You can browse from ETIS.

|  |  |
| --- | --- |
| **Comments on related projects** | *(The maximum length is 3000 characters (incl. spaces).)* |

# **Staff**

## Principal Investigator and senior research staff

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Person | Degree | Position in Estonian institution | Period | Change |
| 1 |  |  |  | **□** |
| 2 |  |  |  | **□** |

## Other research staff

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Person | Degree | Position in Estonian institution | Graduate Student | Period | Change |
| 1 |  |  |  |  | **□** |
| 2 |  |  |  |  | **□** |

|  |  |
| --- | --- |
| Comments on the composition of the research team, incl. the tasks of the team members and changes that ocurred among the members of the (senior) research staff (if there were any) | \* Give your assessment on the functioning of the research team and explain: a) whether the composition of the team (senior research staff and other research staff, incl. students) was sufficient for successfully reaching the goals of the project; b) the changes that ocurred among the members of the (senior) research staff (if there were any); c) if and how the project supported the research career of the members of the research team; d) the future plans of the research team. The maximum length is 3000 characters (incl. spaces). |

## R&D cooperation

Please add only international and national cooperation directly related to the project and explain why this cooperation has been important for implementing the project.

|  |  |
| --- | --- |
| **Comments on cooperation** | Please add information about the cooperation which was necessary for the implementation of this project. *(The maximum length is 3000 characters (incl. spaces).)* |

# **Financial report**

Please add only the final amounts which you have received from the accountant of your institution. Please comment on only the final year of the project or add general comments if there are significant changes compared to the budget applied for between the budget lines or between different years.

## Financial report across years

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Costs** | **2018** | **2019** | **2020** | **2021** | **Sum (EUR)** | **Comments** |
| Staff costs |  |  |  |  |  | *The maximum length is 2000 characters (incl. spaces).* |
| Research costs |  |  |  |  |  | *The maximum length is 2000 characters (incl. spaces).* |
| Total direct costs |  |  |  |  |  |  |
| Overhead |  |  |  |  |  |  |
| Total budget with overhead |  |  |  |  |  |  |

# **Additional information**

Other information you as the Principal Investigator deem relevant, including suggestions to the Estonian Research Council, may be added here.

|  |  |
| --- | --- |
| **Additional files** | PDF files only, max 15 MB. |
| **Other important Information related to the research project** | It is possible to add important information related to the project, excl. publications and manuscripts. *(The maximum length is 2000 characters (incl. spaces).)* |

# **Outreach „Teadusrikas Eesti“**

Teadusrikas Eesti (“The Real Wealth of Estonia Lies in Its Research” in Estonian, a loose paraphrase)

This section has to be filled in in Estonian! Please contact an Estonian-speaking colleague and kindly ask him/her to help you. “Teadusrikas Eesti” is a compendium consisting of the overviews of the research projects which have recently ended and have been funded by the Estonian Research Council. You are asked to provide the following information:

- a sentence describing the problem and/or questions that you tried to solve and/or find answers to during the project

- overview of the objectives of the project

- a definition of up to three research terms

- up to four most significant outcomes and an explanation specifying the importance of these outcomes

- two photos: a photo of youself, the PI of the project, and a photo illustrating some aspect of the project

Please make sure that the name of the person who photographed you as well as the name of the author of the illustrative photo will be added. The number of characters that can be used is limited. Please have a look at the compendium from last year:

https://etag.ee/wp-content/uploads/2022/12/ETAG-teaduspostrid-kogumik-2021.pdf

NB! The compendium “Teadusrikas Eesti” is aimed at non-professional readers and therefore it is necessary to use clear and easily understandable language.

Please fill in this section in Estonian. The maximum length is 2000 characters (incl. spaces).

|  |  |
| --- | --- |
| Problem | In Estonian, please add a sentence describing the problem and/or questions that you tried to solve and/or find answers to during the project |
| Projekti eesmärk | In Estonian, please describe in a clear and concise manner what were the main objectives of the project (NB! Please base your description on the application).. |
| Teadusmõistete seletus | Please add up to 3 research terms/concepts together with explanations which would enable non-professional readers to understand the project. |
| Projekti olulisemad tulemused | Please add up to 4 most significant outcomes deriving directly from this project (Please do not describe the research that has been conducted). |
| Miks on need tulemused olulised? | Please add up to 4 explanations detailing why the outcomes of this project are important. |
| Foto projekti juhist | Please keep in mind that the poster design requires high-quality images (a PDF file, 300 dpi, minimum width 600px). Please add the name of the author of the photo to the comments section. If you do not wish to disclose your photo, then please add a photo depicting the research team, research environment, or some other aspect of the project. |
| Projekti tutvustav illustratiivne materjal | Please add an image illustrating some aspect of the project (a PDF file, in case of photos 300 dpi and minimum width 2000px). |
| Kommentaarid illustratiivse materjali kohta | Please add 1) the name of the author of the photo of the PI; 2) the title of the illustrative material and the name of the author; 3) links to the project-related popular science articles or videos in Estonian (e.g., an article in Novaator, Sirp). |