

Academy of Finland's guidelines for scientific reporting

The scientific report concerns the project that the researcher has described in the original funding application and research plan, and for which the Academy of Finland has granted funding.

The structure of the report form is as follows: first describe issues related to project implementation (incl. research resources), then the outputs from the research (e.g. degrees, publications and data) and finally the results and impact of the research.

A good guiding principle to keep in mind when selecting and delineating the data (personnel, visits, degrees, publications, results) requested on the form is that the Academy's funding has been essential in producing the outputs or results in question. Example: The fact that a publication is linked to the same (broader) topic that has been researched also with funding from the Academy is not a sufficient criterion for reporting the publication for the project in question. The publication is clearly linked to the project in question if, for example, an author of the publication has received salary from funding granted by the Academy while writing the publication or conducting the research related to the publication.

1. Personal data/CV

The personal data of the principal investigator are retrieved from the system. The details may be updated as necessary.

2. Project details

The basic data on the project are retrieved from the Academy's funding decision. The keywords and research fields may be updated where necessary. Enter the research fields in order of priority.

3. Funding

The funding data are entered on the report form to give the reader a good overall picture of the project and its implementation. The official report on the use of funding is made up of payment requests submitted to the Academy.

The data on actual funding are retrieved from the Academy's information systems. You do not need to check or correct the data. Please note that it may take several weeks before a payment request submitted from your organisation is included in the data shown on this report.

Other than Academy funding: A research project funded by the Academy is often part of a larger research entity that has also received other, non-Academy funding. This section asks details on such funders and on the funding they have provided. Only report funding that has been granted after the start of the project being reported.

If the funder and funding was not mentioned in the original application the case may involve

- a new or more extensive research problem
- a target of further study
- a different approach to the original research question.

Such funding can therefore on reasonable grounds be seen (as required by the Finnish Act on Discretionary Government Transfers) as separate from the Academy-funded project.

For your own organisation, only report funding that has been granted for research on top of the overheads percentage of the Academy-funded project.

4. Personnel

The information on persons who have worked on the project are included in the report to give the reader a good overall picture of the project and its implementation. The official report on the use of funding is made up of payment requests submitted to the Academy.

In this section, enter details also on visitors and thesis workers who are affiliated with the project but who have not been paid salary from Academy funding. This information will also be used in items 8 (Research visits) and 12 (Degrees).

The pre-filled information on Academy-funded project personnel are retrieved automatically from the financial reports. The information is based on details reported to the Academy by the site of research. You do not need to check or correct the pre-filled person-months. Rows concerning the same person should be combined, for example, if the person appears more than once in the same research career stage (e.g. due to spelling mistakes).

Under Funding from outside this project, enter information on visitors and thesis workers who are affiliated with the project but who have not been paid salary from Academy funding. This information will also be used in items 8 (Research visits) and 12 (Degrees). Do not report other persons (e.g. research support staff funded with the self-financing of the site of research; they do not show up in the financial reports).

The research career stages follow the four-tiered classification of the Finnish Ministry of Education, Science and Culture, supplemented by "support staff/other". Persons who have not completed a graduate university degree (i.e. students) are entered as support staff, regardless of their job title at the site of research. For visitors or non-academic experts (e.g. research coordinators and equivalent experts), for instance, the classification may be interpreted in relation to the person's position in the project.

Place of work at the time of reporting: if known, enter information on the person's place of work at the time of reporting. This information is collected to monitor research careers and researcher mobility and primarily for statistical purposes.

Research field and ORCID identifier are not obligatory information. For more information about the ORCID identifier, please visit <https://researcheridentifier.fi>.

Information about the research career stage classification:

<https://confluence.csc.fi/pages/viewpage.action?pageId=62049891#YO3.1.Yliopistojenhenkilöstötiedonkeruu-3.1.1.17Tutkijanuravaihetaitiopettajuus> (in Finnish).

5. Use of infrastructures

Indicate what kinds of equipment, resources or data reserves provided by national or international research infrastructures the project has used. The menu includes infrastructures included in Finland's and/or ESFRI's infrastructure roadmap. Other possible infrastructures are entered in the free-text field.

As for other research infrastructures, only report infrastructures that are used also by other researchers than those working at the host organisation of the site of research.

6. Project implementation

Describe the implementation of the research project, using the research plan appended to the application as a baseline. The Finnish Act on Discretionary Government Transfers obliges the Academy of Finland to monitor that the funding is used for the purpose originally applied for.

Examples of what to describe: How were the goals of the project achieved? What changes were made to the research plan (remember to justify them) during the project, what problems were met and how were the problems solved? In other words, the focus in this section is on issues related to implementation. Please note that research results and outputs (degrees, publications, etc.) are reported separately under items 11–14.

7. Research collaboration

In the case of research collaboration, a partner or collaborator typically conducts research around the same topic. The partner must not however receive funding from the Academy-funded project concerned (i.e. the partner is not a party of the same research consortium). New partner refers to a partner with whom collaboration has started during the project. Such a partner may have been mentioned in the research plan.

The nature of the cooperation may be clarified with an open-ended answer. Other than research-cooperation-related interaction is reported under item 10, Interaction.

8. Research visits

The following information is entered in this section:

- 1) visits (in Finland or abroad) by project staff during the project (must be related to the research work)
- 2) visits (to site of research, from Finland or abroad) by experts and researchers other than those who worked on the project (must be related to implementation).

Short-term visits are visits with a total duration of at least five working days but less than one month. Long-term visits are visits with a total duration of at least one month.

Details on the persons must be entered under item 4, Personnel.

- Only visits that include research work count as visits. For example, participation in a conference does not count as a visit.
- Report both visits included in the mobility plan and other project-related visits. The implementation of the mobility plan is separately described under item 9.
- Also report internal visits of the Academy-funded research consortium.
- NB! Long-term Academy-funded work at the project's site of research (e.g. foreign postdoc) must not be reported as a visit.

9. Implementation of mobility plan

Provide a free-form description of how the planned mobility has been realised. All visits, that is, both visits mentioned in the research plan and other visits, are reported separately under item 8, Research visits.

If the planned mobility has not taken place, or if it did not go as planned, explain how it was carried out, why the plans changed and how the changes possibly affected the attainment of goals related to the research and the promotion of research careers.

10. Interaction

Report the various parties with whom you have interacted in connection with the project without actual research cooperation (incl. communication to non-scientific audience). You can clarify your answer in the free-text field by, for instance, naming the actor/actors or by describing the contents of the interaction.

Interaction refers to activity to exchange information and views about, for instance, research topics, research questions or (preliminary) research results and their utilisation. Typically, the other party is a stakeholder who is interested in the contents of the research but who does not hold an interest in or possess the knowledge or resources required to carry out the research. Interaction often also includes activity that can be categorised as communications. The increasing ubiquity of social media has blurred the boundaries between communications and interaction.

11. Publications

Report publications that have been produced from the research within the project.

The publications that have been produced from the research within the project are a key research output. The publication data to be monitored include, for example, the number of publications (by type of publication). The data are also utilised in assessing the scientific impact of the research by analysing citation counts with bibliometrics.

You can access the VIRTAservice of the Finnish Ministry of Education, Science and Culture via the Academy's online service. From VIRTAservice, you can import project-related publications to the report. If the publication in question is not available in the VIRTAservice, you must enter its details manually. Publication data are also read by machines, so it is important that the (manually entered) data are in the requested format.

Only publications that meet the criteria set by the Ministry of Education, Science and Culture are accepted as publications for the report. The Ministry's guidelines are available (in Finnish) at <http://tiedonkeruu.fi> > Tiedonkeruun käsikirjat > Julkaisutiedonkeruun tutkijaohjeistukset.

Only report publications that have appeared (been published) at the time of reporting. Unpublished (e.g. accepted for publication, or in press) articles, works or other publications related to the project's results can be entered under item 17, Results.

12. Degrees

Enter details on degrees completed within and in connection with the project. The research field and keywords for the degrees may differ from the project's keywords. The persons who have obtained a degree are retrieved from item 4, Personnel.

13. IPRs

Enter annual information (by year of registration) on the project's patents, patent applications, invention disclosures to the employer, literary or artistic works, design rights and equivalent IPRs to be registered.

14. Other outputs

Other project outputs include:

- events (e.g. seminars) targeted at a non-scientific audience
- Current Care guidelines
- research data and databases
- methods, tools and software
- other equivalent, openly or commercially available and documented outputs.

If the outputs include publications, the unique details on the publications are reported under item 10 (Publications) in accordance with the classification of the Finnish Ministry of Education, Science and Culture.

15. Data management

Indicate how the data used and produced in the project have been stored and protected, how they have been made available for subsequent use, how they have been made available to other researchers, and how the rights of ownership and usage to the data have been distributed. If the data are not openly available, please justify why this is so.

Also include a link to the place of storage for the openly available data.

16. Continuation of research

Indicate whether research into the same topic, research question or problem will continue after this project has ended.

17. Results

Name and describe no more than three of the most important results of the project and provide relevant justifications. Results are often answers to a research problem or research question.

You can assess the significance of a result (Why is the result significant?), for example, from the perspective of scientific novelty, societal impact and/or relevance, or the further use and applicability of the data/methods. The effects and impact of the results are described in more detail under item 19, Impact beyond academia.

Scientific and other publications, IPRs and other outcomes related to the results are reported separately under the corresponding tabs. In this section, it is enough to refer to reported outputs.

If the manuscript concerning the result is underway, has been sent for review or has been approved for publication, but is still unpublished, indicate it only here.

18. Popular description of the project and its results

Write a nontechnical description of the project's goals, implementation, key results and conclusions in English and in Finnish or Swedish. Do not duplicate the project description provided in the application.

The nontechnical description will be posted on the Academy's website as it stands, and the Academy may use it in its communications.

19. Impact beyond academia

Describe the project's impact beyond academia by assessing how and where the broader impact of the research is or can be seen.

Effects can possibly be identified during the project or immediately after project completion. The effects may refer to the utilisation of knowledge and/or expertise generated from the research, or to the research work (activity) itself. The broader impact of research often appears after a longer time and through complex chains of events.

Please assess the impacts from five perspectives based on the possible directions of impact. There is also a separate heading for impact that manifests itself through other ways. Guidelines concerning impact and impact-related perspectives can be found at <http://www.aka.fi/reporting>.