

23 February 2021

Application review form: The FIRI 2021 call for non-roadmap research infrastructures (FIRI2021 Non-Roadmap)

The objective the call is to promote the quality, renewal and competitiveness of research, to strengthen the versatile impact of research environments and to increase national and international cooperation. The Academy of Finland provides funding for the acquisition, establishment, strengthening and upgrading of nationally significant research infrastructures that promote scientific research. By funding research infrastructures, the Academy and other relevant actors also support researcher training and help generate and utilise scientific knowledge and know-how.

The present call is aimed at advancing the strategic objectives outlined in the Strategy for National Research Infrastructures in Finland 2020–2030.

The terms ‘research infrastructure’ and ‘national research infrastructure’ are defined in the call text.

Please provide both written feedback and numerical ratings to each of the following items.

The numerical evaluation of the sub-items and final rating is made with a rating scale ranging from 6 (outstanding) to 1 (insufficient). We encourage using the entire scale.

- [Blue text with bulleting refers to technical instructions on online services \(SARA\)](#)



Rating	Definition
6 (outstanding)	Demonstrates extremely high novelty and/or innovation; has potential to substantially advance science at global level; presents high-gain plan that may include risks
5 (excellent)	Is very good in international comparison – contains no significant elements to be improved
4 (good)	Is in general sound but contains some elements that should be improved
3 (fair)	Is in general sound but contains important elements that should be improved
2 (poor)	Contains flaws; is in need of substantial modification or improvement
1 (insufficient)	Contains severe flaws that are intrinsic to the proposed project or the application

In addition to a numerical rating, please give a written review under each of the questions below.

1 Description of research infrastructure and project

1.1 Are the descriptions of the research infrastructure and its lifecycle stage concrete and clear? Please explain.

- See item **1 Description of research infrastructure and project** in the action plan

1.2 Is the description of the project and its aims clear? Is the project relevant for building or updating the RI? Please explain.

- See item **1 Description of research infrastructure and project** in the action plan

1.3 Is the description of the membership and its added value concrete and clear (only if relevant)? Please explain.

- See item **1 Description of research infrastructure and project** in the action plan



2 Scientific and educational significance

2.1 Does the research infrastructure facilitate excellent science and promote scientific achievements and renewal nationally and internationally? Please explain.

- See item **2 Scientific and educational significance** in the action plan

2.2 Does the project promote the scientific and educational significance of the research infrastructure? Please explain.

- See item **2 Scientific and educational significance** in the action plan

2.3 If relevant; Does membership promote the scientific and educational significance of the research infrastructure?

- See item **2 Scientific and educational significance** in the action plan

The research infrastructure must have scientific and educational significance and the proposed project must contribute to this.

3 Wide and versatile impact

3.1 Does the research infrastructure generate added value for society at large (e.g. added value for public sector, innovation activities, business and the economy)?

- See item **3 Wide and versatile impact** in the action plan

3.2 Does the project generate added value for society at large (e.g. added value for public sector, innovation activities, business and the economy)?

- See item **3 Wide and versatile impact** in the action plan

3.3 Will the membership contribute the wide and versatile impact of the research infrastructure (only if relevant)? Please, describe how.

- See item **3 Wide and versatile impact** in the action plan



The research infrastructure must have wide and versatile impact for the research community and society at large and the proposed project must contribute to this.

4 Ownership, know-how and organisational structure

4.1 Are the project management, resources, and division of labour for maintenance, services and user support in the research infrastructure appropriate and well-planned? Are the merits and scientific expertise of the principal director of the infrastructure (coordinator) and other key persons appropriate and sufficient?

- See item **4 Ownership, know-how and organisational structure**

4.2 Do the merits and competence of the director and other key persons suffice for managing the proposed project? Does the research infrastructure take into account, how the project might require changes in staff competence and the division of work?

- See item **4 Ownership, know-how and organisational structure**

4.3 Have the potential effects of the membership on the division of work and skills needs been clearly described, and can they be implemented (only if relevant)?

- See item **4 Ownership, know-how and organisational structure**

The research infrastructure staff must have sufficient expertise for successfully running the research infrastructure and for successfully executing the proposed project.

5 Services and users

5.1 Are the services of the research infrastructure well planned and provided?

Does the research infrastructure provide open access to users (access may require approval of a research plan and reasonable user fees)?

Do you see that the research infrastructure informs of access possibilities openly enough?



What do you think of the user profile and utilisation rate of the research infrastructure?

- See item **5 Services and users** in the action plan

5.2. Are the potential effects of the project on the research infrastructure's access policy, service models or user base clearly described and in line with the characteristics of a project of a national research infrastructure (see call text for full list of characteristics)?

- See item **5 Services and users** in the action plan

5.3 Are the effects of the membership on the research infrastructure's access policy, service models or user base clearly described?

- See item **5 Services and users** in the action plan

The research infrastructure must have a clear access policy and offer its service portfolio openly. The project must abide to the same principles. The research infrastructure should be known to and used by a significant proportion of potential users.

6 Digital platforms and data

6.1 Does the research infrastructure offer feasible guidelines, practices or incentives/demands for researchers in order to support open research data? Are the management, storage, use and rights of ownership of the research data planned and described well enough? (For this information, see the 'Data management policy' appendix of the application.)

- See item **6 Digital platforms and data** in the action plan

6.2 Does the research infrastructure and its project take into account, the necessary measures brought about by increasing digitalisation and data intensity (digital shift)? Are the described measures realistic and clearly described?

- See item **6 Digital platforms and data** in the action plan



The research infrastructure must offer feasible guidelines, practices or incentives/demands for researchers in order to support open research data. The research infrastructure must also take the necessary changes brought about by the growth in digitalisation and data intensity into account.

7 Responsible science

Has the applicant considered the following aspects of responsible science properly in the application? Please provide further comments if responsible science aspects have not been properly considered.

7.1 Good scientific practise and governance

- Yes
- No, please comment
 - See item **7 Responsible science** in the action plan

7.2 Promotion of equality and non-discrimination within the project or in society at large

- Yes
- No, please comment
 - See item **7 Responsible science** in the action plan

7.3 Sustainable development

Have the relevant sustainable development goals been addressed sufficiently?

- See item **7 Responsible science** in the action plan

7.4 Green transition

7.4.1 How well does the research infrastructure and project contribute to the production of data supporting the green transition?



- See item **7 Responsible science** in the action plan

7.4.2 How well does the research infrastructure and project take into account the necessary steps for the transition towards carbon neutrality in the construction and/or operation of the research infrastructure?

- See item **7 Responsible science** in the action plan

In its activities, the research infrastructure must take into account research ethics, equality and non-discrimination, the principles of open science and the sustainable development goals. The project must follow these same principles.

The Academy of Finland is committed to promoting research integrity, responsible conduct of research and the principles and practices of equality and nondiscrimination, and open science. See 'Instructions for reviewing' for further information.

8 Budget and funding

8.1 Do you think that plans for the research infrastructure's funding base are sustainable and realistic? Is the project funding plan realistic and clear?

- See item **8 Research infrastructure budget and funding** in the action plan

8.2 Is the membership fee component of the budget justified and clearly presented (only if relevant)?

- See item **8 Budget and funding** in the action plan

The research infrastructure must have a long-term funding plan for maintenance and development of services. The funding base of the research infrastructure must be stable. The applied project funding must be justified.



9 Risk management

Does the research infrastructure have a sufficiently detailed risk management plan?

Are the potential risks and problem areas in the project identified and considered? Please explain

- See item **9 Risk management plan** in the action plan

The research infrastructure should have a risk management plan. The proposed project must also have identified potential risks and have a feasible risk management plan.

10 Overall assessment

Main strengths and weaknesses of the research infrastructure and its project, additional comments, and suggestions (no numerical rating)

Strengths:

Weaknesses:

Comments:

Please give an overall assessment for the application, including lists of strengths and weaknesses as well as any additional comments. It is important to comment on both the strengths and the weaknesses of the application.

11 Overall rating

(1-6)

The application should not be penalised if it has a slight weakness in one evaluation item that is later strengthened in another item (e.g. lack of some expertise in a local team but compensated through national collaboration).



ACADEMY OF FINLAND

Ranking based on discussion in the panel meeting

Your application was ranked [ordinal number] of all [number] [Funding instrument name] applications reviewed in this panel.

