20 January 2023

# Application review form: FIRI2023: Roadmap 2021-2024 research infrastructures and international research infrastructure memberships

The Academy of Finland provides funding for the acquisition, establishment, strengthening and upgrading of nationally significant research infrastructures that promote scientific research. The objective the FIRI 2023 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.

Please provide written feedback for each of the below sub-items (numbered 1-6). Please also provide a written summary and a numerical evaluation of the three main evaluation criteria (Expected contribution of the project to the scientific significance of research infrastructure, expected contribution of the project to the wide and versatile impact of the research infrastructure, expected contribution of the project to the operation of the research infrastructure, sub-items numbered 7-9). Additionally, please also give a final overall rating.

The numerical evaluation of the main three evaluation criteria and the final rating is made with a rating scale ranging from 1 (poor) to 6 (outstanding). We encourage using the entire scale.

Please consider the maturity level (life-cycle phase) of the research infrastructure in your assessment.

#### • Blue text with bulleting refers to technical instructions in the online services (SARA).

Rating	Definition
6 (outstanding)	Demonstrates high novelty and/or innovation; has potential to
	substantially advance science at international level; is a high-gain
	plan that may include risks.
5 (excellent)	Is excellent in international comparison – 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 (very poor)	Severe flaws that are intrinsic to the proposed project or the application.

### 1 Description of the research infrastructure

- 1.1 Does the research infrastructure have scientific and educational significance? Is the description of the research infrastructure and its lifecycle phase clear? Is the ownership, know-how and organisational structure of the research infrastructure appropriate? Are the services and service modes clearly described? Does the research infrastructure have a clearly defined user community and a plan for how to widen it? Please explain.
  - See item 1 Description of the research infrastructure in the action plan. The
    scientific purpose, ownership, structure and services of the research infrastructure
    have to be sufficiently described.

#### 2 Wide and versatile impact

- 2.1 Does the research infrastructure have added value for society at large and does the project contribute to this (e.g. added value for economy, public sector, employment or innovation activities)? Please explain.
  - See item 2 Wide and versatile impact in the action plan.
     The proposed project must give added value to the wide and versatile impact of the research infrastructure for the research community and society at large.



#### 3 Description of project

- 3.1 Is the description of the project and its aims clear? Is the project relevant for building or updating the RI? Are the relevant aspects for executing the project taken into account? Please elaborate why.
  - See item 3 Description of the project in the action plan (the feasibility of applied project funding is evaluated in sub-item 6 of the review form).

The research infrastructure staff must have sufficient expertise for the successful execution of the proposed project. The proposed project must have identified potential risks and have a feasible risk management plan. The proposed project must support and be in line with the service portfolio of the research infrastructure. The proposed project must contribute to the scientific and educational significance of the research infrastructure.

#### 4 Digitalisation and data

- 4.1 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 well enough? Please explain.
  - See Data Management Policy (DMPol) -appendix.
- 4.2 How does the research infrastructure and its project take into account the measures that are necessary to take due to the increase in digitalisation and data intensity (digital shift)? Are the described measures realistic and clearly described? Please explain.
  - See item **Increasing digitalisation and data intensity** 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 into account the necessary changes brought about by the growth in digitalisation and data intensity.

### 5 Responsible science

5.1 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.
5.1.1 Green transition in the operation of the research infrastructure
□ Yes
□ No, please comment
• See item <b>5.1 The green transition</b> in the action plan.
5.1.2 Good scientific practise and governance, promotion of equality and non-discrimination within the project or in society at large, relevant sustainable development goals (other than the green transition)
□ Yes
□ No, please comment
• See item <b>5.2 Research ethics, equality and nondiscrimination, sustainable</b>
development 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 non-discrimination, and open science. See 'Instructions for reviewing' for further information.

## 6 Sustainable funding plan

- 6.1 Are the plans for the research infrastructure's long-term funding base sustainable and realistic in general? Please explain.
  - See item 6 Long-term financial planning 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.
- 6.2 Is the project funding plan realistic and feasible? Please elaborate why.
  - See the Funding for the project part in the application form. The applied project funding must be justified.

# 7. Expected contribution of the project to the scientific significance of research infrastructure (1-6)

7.1 Summarise the expected contribution of the project to the scientific significance of the research infrastructure. This may include strengths and weaknesses, additional comments and suggestions.

# 8. Expected contribution of the project to the wide and versatile impact of the research infrastructure (1-6)

8.1 Summarise the expected contribution of the project to the wide and versatile impact of the research infrastructure. This may include strengths and weaknesses, additional comments and suggestions.



- 9. Expected contribution of the project to the operation of the research infrastructure (entails organisation, service provision, user base, digitalisation and data, responsible science, financial sustainability)(1-6)
- 9.1 Summarise the expected contribution of the project to the operation of the research infrastructure. This may include strengths and weaknesses, additional comments and suggestions.

10. Overall rating (1-6)

Please also give an overall rating for the entire application.

Please note that the final rating should not be a mathematical average of the sub-ratings. For example, 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).

Ranking based on the panel discussion (the ranking is made during the panel meeting)

Your application was ranked [ordinal number] of [number] applications submitted to the

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infrastructure memberships. Only applications with a final rating of 5 or 6 were ranked. The

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membership applications addressed to the Research Infrastructure Committee were reviewed in
one panel.