Academy of Finland – FIRI 2019 Call 2 review report

Date
Review panel
Experts
Application number
Call
Applicant
Project title

Reminder to reviewer

**Definition:** Research infrastructures constitute a reserve of research facilities, equipment, materials and services facilitating research and development at different stages of innovation, supporting organised research, researcher training and teaching at universities, and maintaining and developing research and innovation capacity.

Research infrastructures must:

- provide potential for world-class research and scientific breakthroughs
- be of broad national interest and enhance international impact
- have a long-term plan for scientific goals, maintenance, financing and utilisation
- be used by several research groups/users for high-quality research
- be open and easily accessible to researchers, industry and other actors
- have a plan for access to and preservation of collected data and/or materials
- be extensive enough so that individual groups cannot manage them on their own
- introduce new cutting-edge technology (if relevant).

Please rate the applications using the scale below. We encourage using the entire scale.

6 Outstanding: exceptional novelty and innovativeness, enables renewal of science at a global level
5 Excellent: extremely good in international comparison – no significant elements to be improved
4 Very good: contains some elements that could be improved
3 Good: contains elements that could be improved
2 Unsatisfactory: in need of substantial modification or improvement
1 Weak: severe flaws intrinsic to the proposed infrastructure project or the plan

In addition to a numerical rating, please give a written assessment under each of the questions below.
1 Relevance of research infrastructure Rating (1–6)

1.1 How does/will the research infrastructure facilitate scientific excellence in terms of scientific results, breakthroughs and scientific progress and renewal?

1.2 How is the research infrastructure/will the research infrastructure be positioned in the national and international research environment?

1.3 Does the infrastructure fill a certain gap in the national or international research infrastructure landscape?

1.4 How is the research infrastructure engaged in national or international collaborations that can significantly contribute to the success of the project?

1.5 What is/will be the added value of the research infrastructure for science and education at a national and international level?

1.6 Can the research infrastructure be used by user communities from different research fields?

1.7 How do/will host organisations support the research infrastructure? How well is it aligned with the research strategies of the organisations?

2 Feasibility of research infrastructure Rating (1–6)

2.1 How is the life cycle of the research infrastructure described? Does it have an exit plan?

2.2 Is the project plan clearly presented and realistic in relation to the life cycle of the research infrastructure? Are the potential risks and problem areas acknowledged, and how are alternative approaches being considered?

2.3 Does the project plan show the maturity of the concept in order for the infrastructure to develop into a national or international research infrastructure?

2.4 What is the user profile? Is the research infrastructure continuously used by excellent researchers and research groups?

2.5 Good research practices. Are there ethical issues concerning the structure and methods of work at the infrastructure or in its usage guidelines?

2.6 Does the infrastructure offer feasible guidelines, practices or incentives/demands for researchers in order to support open access and open research data? How does it provide open access to users (access may require approval of a research plan and reasonable user fees)? How does it inform of access possibilities? How are the management, storage, use and rights of ownership of the research data planned? (For this information, see “Data management plan” as an appendix of the application).

3 Feasibility of finances Rating (1–6)
3.1 Are the overall expenses appropriate and well planned?

3.2 How will the research infrastructure be sustained after the project period?

### 4 Management and competence of personnel Rating (1–6)

4.1 Are the project management, resources and division of labour for maintenance, services and user support 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 for the infrastructure? What are the merits of the principal director and other key persons in terms of managing the research infrastructure? Does the personnel have adequate expertise for maintenance, service provision and user support? How is the training and development of the personnel taken care of or planned to be taken care of?

### 5 Impact of research infrastructure Rating (1–6)

5.1 What kind of added value does the research infrastructure generate for society at large or for innovation activities, business and the economy? Can it produce new innovations, business activities or other societal benefits?

5.2 How does the research infrastructure support education and researcher training? Does it enhance mobility?

### 6 Overall assessment Final rating (1–6)

6.1 Assess the main strengths and weaknesses of the research infrastructure project. You may also provide additional comments and suggestions.