

Application review form: Research infrastructures as collaborative platforms

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.

When making decisions on research infrastructure funding, the Academy of Finland takes into account its general funding principles as well as the following factors concerning the research infrastructure:

- national and international scientific and educational significance and added value
- wide and versatile impact as well as cooperation with business and industry, innovation ecosystems and society at large
- ownership, knowledge and know-how, and organisational structure
- maturity, long-term perspective and responsibility of activities
- digital platforms and technological advancement.

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 1 (poor) to 6 (outstanding). We encourage using the entire scale.

Rating	Science (Q1, 3-5)	Relevance (Q2 and 6.)
6 (outstanding)	Demonstrates exceptional novelty and innovation; has potential to substantially advance science at global level; is a high-gain project that may include risks	Research of crucial relevance to users, i.e. such novelty or timeliness and promise that an extremely significant contribution to policy or practice is likely; demonstrates exceptional novelty and innovation to address a solution to an important problem or a critical barrier
5 (excellent)	Is extremely good in international comparison – contains no significant elements to be improved	Research of very high relevance to users, i.e. such novelty or timeliness and promise that a very significant contribution to policy or practice is likely; high potential to address a solution to an important problem or a critical barrier



4 (very good)	Is in general sound but contains a few elements that could be improved	Research of very high relevance to users, i.e. such novelty or timeliness and promise that a very significant contribution to policy or practice is likely; high potential to address a solution to an important problem or a critical barrier
3 (good)	Is in general sound but contains important elements that should be improved	Research of relevance to users, i.e. such novelty or timeliness and promise that a moderate contribution to policy or practice is likely
2 (fair)	Contains flaws; is in need of substantial modification or improvement	Research that will add to understanding but that might not be of sufficient relevance or urgency to influence policy or practice
1 (poor)	Contains severe flaws that are intrinsic to the proposed project or the application	Research not considered relevant; proposal is in need of substantial modification or improvement

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

1 National and international relevance of research infrastructure to quality, renewal and competitiveness of science and education **Sub-rating (1–6)**

1.1 Science

How well does the research infrastructure facilitate scientific excellence in terms of scientific results, breakthroughs and scientific progress and renewal nationally and internationally? How does the research infrastructure facilitate the national and international collaboration in terms of research and education?

2 Established wide and versatile impact of research infrastructure

Sub-rating (1–6)

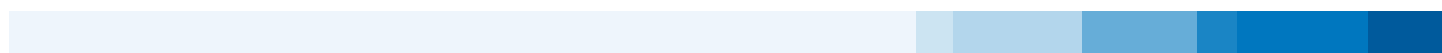
2.1 For business, innovation and society at large

What kind of added value has the research infrastructure generated for society at large or for innovation activities, business and the economy? Has the research infrastructure produced innovations, business activities or other societal benefits? What has been the impact of the research infrastructure on know-how and innovation ecosystems?

3 Ownership, funding, know-how and organisational structure

Sub-rating (1–6)

3.1 Ownership





Is the ownership of the research infrastructure clearly described? How well will the host organisations support the research infrastructure? How well is the project aligned with the research strategies of the organisations? Do you see that the support is on a sustainable basis?

3.2 Funding base

Do you think that plans for the research infrastructure's funding base are sustainable and realistic in general?

3.3 Know-how

Are the merits and competence of the director and other key persons sufficient for managing the research infrastructure? Does the personnel have the competence for maintenance, service provision and user support?

3.4 Organisational structure

Describe whether the leadership, resources and division of labour for maintenance, services and user support are appropriate and well planned? How viable are the operations?

4 Research infrastructure operation

Sub-rating (1-6)

4.1 Responsibility and sustainable development

Have the ethical issues, for example concerning the structure and methods of work at the infrastructure, or guidelines for using the infrastructure, been considered? Has the research infrastructure considered sustainable development issues, such as the United Nation's Sustainable Development Goals (SDGs), sufficiently?

4.2 General operation, openness and utilisation of research infrastructure

- **Services and users:** Are the services well planned? What do you think of the user profile and utilisation rate of the research infrastructure? Is the research infrastructure continuously used by excellent researchers and research groups? Does the infrastructure seem relevant for innovation ecosystems and business communities in Finland?
- **Open access:** 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?

5 Digital platforms and data

Sub-rating (1-6)

5.1 Data management policy

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? (For this information, see the 'Data management policy' appendix of the application.)



5.2 Does the research infrastructure take into account the necessary changes brought about by increasing digitalisation and data intensity? Please explain.

6 Feasibility of project plan and impact beyond academia

Sub-rating (1–6)

6.1 Is the project plan clearly presented and realistic? Are the potential risks and problem areas acknowledged, and how are alternative approaches being considered?

6.2 Will the project achieve new cooperation between the scientific and higher education community and the business sector so that all parties benefit from it? How credible and significant is this cooperation?

6.3 Is the plan for increasing the wide and versatile usability of the research infrastructure credible? Please describe how.

7 Overall assessment and rating

7.1 Scientific relevance (no numerical rating)

Scientific and educational relevance of the research infrastructure

7.2 Wide and versatile impact (no numerical rating)

Impact of research infrastructure for attainment of objectives

7.3 Expected impact in support of economic growth and/or innovation ecosystem(s) (no numerical rating)

Expected impact in support of economic growth and/or innovation ecosystem(s) of the research infrastructure project

7.4 Main strengths and weaknesses (no numerical rating)

Please list major strengths and weaknesses of the application.

- Please give an overall assessment for the application including lists of strengths and weaknesses.

8 Overall rating

Rating (1–6)

- 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 international collaboration).

**Ranking**

Your application was ranked [ordinal number] of all [number] [Funding instrument name] applications reviewed in this panel. Only applications with the final rating of 5 or 6 were ranked.

Strengths:

Weaknesses:

Comments:

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 international collaboration).

