

Academy of Finland Evaluation report - Flagship Programme: Research

Please rate the applications using the scale below. You are encouraged to use the entire scale.

6 = Outstanding: Demonstrates exceptional novelty and innovation. Potential to substantially advance science at global level. High gain research that can include risks.

5 = Excellent: Extremely good in international comparison – no significant elements to be improved.

4 = Very good: In general sound, but contains a few elements that could be improved.

3 = Good: In general sound, but contains important elements that should be improved

2 = Fair: Contains flaws. In need of substantial modification or improvement

1 = Poor: Severe flaws that are intrinsic to the proposed plan.

In addition to the numerical rating, please give a written evaluation of each of the specific questions. A few sentences is typically sufficient.

Reminder to the reviewer: The aim of the Academy of Finland's flagship programme is to pool together expertise from different fields in Finland to form high-level research and impact clusters that will further contribute to increasing the quality and impact of Finnish research.

A flagship is an effective mix of cutting-edge research, impact in support of economic growth and/or society, close connections to the business sector and society at large, adaptability, and a strong commitment from host organisations. Flagships are high-quality, high-impact competence clusters that work in flexible ways, simultaneously running several projects and other activities. During the flagship term, the clusters will make significant progress and make good use of the flagship funding to systematically improve and expand their activities.

1. Scientific quality of past research and competence of key researchers

Sub-rating:

Guiding questions:

- Assess the quality and significance of the research and research outputs produced during the years 2014-2017 in international comparison.
- Assess the merits, scientific expertise and leadership skills of the key researchers. Are they appropriate and sufficient for a flagship project?

2. Scientific quality and implementation of the research plan

Sub-rating:

2.1. Scientific quality

Guiding questions:

- Are the scientific objectives ambitious and well-presented with appropriate performance indicators?
- Is the proposed research expected to produce significant scientific impact and outputs with breakthrough potential, and advance the state-of-the-art in the field(s)?

2.2. Feasibility of the research plan

Guiding questions:

- Have relevant approaches, methods, and materials been identified and appropriately incorporated into the research plan?
- Is the proposed schedule appropriate and well-planned?
- Have potential scientific or methodological problem areas been identified with appropriate mitigation measures?
- Is the research plan realistic overall?

2.3. Ethical aspects and open science

Guiding questions:

- Are there any ethical issues involved and, if so, how well are they taken into account?
- How the principles of open science (open publications, open data, open methods and openness to/with society) are planned, including the data management plan, to enhance the quality and impact of research?

3. Ecosystem, governance and host commitment

Sub-rating:

Guiding questions:

- How do the proposed activities link to the host organization's strategic choices and provide synergy?
- Is the commitment of the host organization in terms of allocated resources (personnel, financial and other material resources together with research and/or technology infrastructures) and their evolution appropriate for the implementation of the proposed activities?
- How convincing and coherent are the management structures and procedures to support proposed activities, including risk management, and are the roles of different actors clear?
- Have proper and complementary collaborators, who can contribute to the success of the flagship, been identified and are their roles clear?
- Are the proposed activities for enhancing the attractiveness of the research environment towards for instance talented researchers appropriate and well-planned?

4. Overall assessment

Overall rating:

Guiding questions:

- Added value of the flagship. Will the added value of implementing the plan materialize in the form of high-quality research with significant scientific impact?
- What are the main strengths and weaknesses of the plan?
- Are there any additional comments or recommendations?