



## Application review form

### Special funding for EuroHPC, quantum computing and high-performance computing 2021

Panel/Name of reviewer:  
Name of applicant:  
Title of proposed project:

Application number:

#### Application review form: Special funding for EuroHPC, quantum computing and high-performance computing 2021

The aim is to develop a diverse future computing ecosystem and to support related competence development also in new fields of research. The funding supports research related to EuroHPC, high-performance computing or the introduction of quantum computers and the application of high-performance computing in different fields of research. The funding for EuroHPC, quantum computing and high-performance computing is designed to promote the diversity, renewal and quality of research, scientific impact and impact beyond academia.

**Please provide both written feedback and numerical ratings to each of the following items. Write evaluative rather than descriptive comments.**

- [Blue bullet text refers to technical instructions for the online services \(SARA\).](#)

Rating scale for pre-review (before the panel meeting) and final review (in the panel meeting).

The consistency between the numerical rating and the written comments is particularly important.

Draft rate	Description	Final rate
6 (outstanding)	Demonstrates extremely high novelty and/or innovation; has potential to substantially advance science at global level; presents a high-gain plan that may include risks	6 (outstanding)
5 (excellent)	Is very good in international comparison – contains no significant elements to be improved	5 (excellent)



4 (good)	Is in general sound but contains some elements that should be improved	4 (good)
3 (fair)	Is in general sound but contains important elements that should be improved	1–3 (fair to insufficient)
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	

## 1 Project's relevance and societal impact

### 1.1 Project's relevance to call

**Sub-rating (1–6)**

Promotion of the diversity, renewal and quality of research; how the research relates to EuroHPC, high-performance computing or the introduction of quantum computers or the application of high-performance computing in different fields of research.

Plausibility of the arguments of the project's contributions towards achieving the objectives of the call; significance and relevance of project in supporting development of a diverse future computing ecosystem in Finland; depth and breadth of competence development.

- See all items of the research plan, and especially item **1.4 Special objective of call**.
- The cross-cutting theme in the proposal is competence development.

### 1.2 Societal impact

**Sub-rating (1–6)**

Significance and relevance of indicated potential societal impacts; ambitiousness of planned actions for promoting impact.

- See all items of the research plan, and especially item **5.1 Effects and impact beyond academia**.



## 2 Quality of research described in plan

### 2.1 Scientific quality, novelty and innovativeness of research

**Sub-rating (1–6)**

Significance of project; objectives and hypotheses; ambitiousness and state of the art of objectives; possible novel concepts and approaches or development across disciplines; relevance and depth of multidisciplinary in achieving project objectives; scientific impact of research; potential for breakthroughs or exceptionally significant outcomes; etc.

- See item **1 Aim and objectives** in the research plan.

### 2.2 Implementation of research plan

**Sub-rating (1–6)**

Feasibility of project (bearing in mind extent to which proposed research may include high risks); materials, research data and methods; human resources and management of research tasks; research environment including research infrastructures; identified potential scientific or methodological problem areas and mitigation plan; etc.

- See item **2 Implementation** in the research plan.

#### 2.2.1 If applicable: Research consortium

**(no numerical rating)**

Significance and added value of consortium for attainment of research objectives

- See item **2.4 Added value of consortium** in the research plan.
- A consortium is a fixed-term body of subprojects under a joint research plan that it implements together with a view to achieving more extensive added value than through normal cooperation. Each consortium subproject applies for funding to implement the plan as part of the joint consortium application, but a consortium application is reviewed as a single research plan.



### 3 Competence of applicant(s), quality of research collaboration

#### 3.1 Competence of applicant(s) and complementary expertise of applicant's research team (project personnel)

**Sub-rating (1-6)**

Merits and scientific expertise of applicant (in case of consortium: applicants) in terms of project implementation; complementary expertise of applicant's research team (i.e. project personnel directly working/funded for the project); competence of applicant(s) in terms of supervising PhD candidates or postdoctoral researchers; support for researcher training within project; etc.

- See item **3.1 Project personnel and their project-relevant key merits** in the research plan.
- See **most relevant publications and other key outputs** in the application form.
- See **CV(s)** of the applicant(s) in the application form.
- See complete **list(s) of publications**.
- See item **1.4 Project's relevance to call**

Please note that we also welcome applicants who are new in the field of high-performance computing but who have a strong background in their own field of research (as per the objectives of the call).

If you are reviewing consortium applications, you should review the competence of all principal investigators.

#### 3.2 Significance of research collaboration and researcher mobility

**Sub-rating (1-6)**

Significance of national and/or international research collaboration (i.e. collaborators engaged in the project with their own funding) including complementary expertise and research environment of collaborators in terms of project implementation; significance of planned mobility for implementation of research plan and researcher training; etc.

- See item **3.2 Collaborators and their project-relevant key merits** in the research plan.
- See **mobility** in the application form.
- See attached **Letter(s) of collaboration**.
- See item **1.4 Project's relevance to call**.



## 4 Responsible science

**4.1 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.**

- See item **4 Responsible science** in the research plan.
- The Academy of Finland is committed to promoting research integrity, responsible conduct of research and the principles and practice of equality and nondiscrimination and open science. See ‘Instructions for reviewing’ for further information.

### 4.1.1 Research ethics

- Yes (no comment needed)
- No, please comment

### 4.1.2 Promotion of equality and nondiscrimination within project or in society at large

- Yes (no comment needed)
- No, please comment

### 4.1.3 Open access to research publications

- Yes (no comment needed)
- No, please comment

### 4.1.4 Data management and open access to data

- Yes (no comment needed)
- No, please comment

## 4.2 Comment on principles of sustainable development

You are encouraged to comment on the principles of sustainable development (see item 4.4 in the research plan).



- Please note that comments on principles of sustainable development should not affect the scientific review/rating or ranking of the application. Instead, they will be considered as an additional factor when the funding decisions are made.

## 5 Overall assessment and rating

### 5.1 Main strengths and weaknesses of project (no numerical rating)

Please list major strengths and weaknesses of the application and provide additional comments.

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

Strengths:

Weaknesses:

Comments:

## 6 Overall rating

**Draft 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 based on panel discussion (ranking is made during panel meeting)

Your application was ranked [ordinal number] of all [number] [Funding instrument name] applications reviewed in this panel. Only the strongest applications were ranked. The [Funding instrument name] applications addressed to the Academy's General Subcommittee were reviewed in a total of [number] panels.