Instructions for interim evaluation of the Flagships

Finnish Flagship Programme

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Appendix 1: Review form for Finnish Flagship Programme interim evaluation

1 Role of experts and the Academy of Finland

The Academy of Finland funds cutting-edge and innovative research aiming at significant scientific breakthroughs. Our funding is based on open competition, independent peer review and responsible science. Experts are invited to review the scientific excellence and impact of the submitted funding applications. Panel reviews are finalised in expert panel meetings.

After receiving the review reports the decision-making bodies (research councils or subcommittees) will make the final funding decisions. The decisions are based on a peer review of scientific quality and impact, but factors related to science policy may also influence the decisions.

2 Flagship programme and interim evaluation

The Academy of Finland's Flagship Programme is an instrument that supports high-quality research and increases the societal impact emerging from the research. The Finnish Flagships



represent an effective mix of close cooperation with business and society, adaptability and a strong commitment from host organisations.

The interim evaluation targets the host organisations of the six Flagships selected in the first and second Flagship Programme calls. The Flagships are:

- 6G Flagship: 6G-Enabled Wireless Smart Society & Ecosystem
- FinnCERES: Competence Centre for the Materials Bioeconomy
- FCAI: Finnish Centre for Artificial Intelligence
- iCAN: Digital Precision Cancer Medicine Flagship
- INVEST: Inequalities, Interventions and New Welfare State
- PREIN: Flagship on Photonics Research and Innovation.

The Academy of Finland mainly uses foreign experts as reviewers. The interim evaluation will be carried out by a panel of experts.

The panel carrying out the interim evaluation of the Flagships will assess the applications assigned to the panel and interview Flagship representatives. The review material will also include progress reports provided to the Academy by the Flagships and results of a stakeholder survey which the Academy will organise in spring/summer 2021. Considering all of the above, the panel will prepare a written review report on each application.

The review reports by the panel will be forwarded to the host organisation representatives, and the director and vice director of the Flagship, after the panel review and before the possible interview by the Subcommittee that will make the funding decisions.

Based on the outcome of the interim evaluation, the funding for the second four-year term of the Flagship may increase, decrease, remain at the same level or cease entirely.

The applications will be reviewed paying close attention to the Flagship Programme's objectives concerning internationally top-level research, impact in support of economic growth and/or society, and the role and participation of collaborators. Support provided by the Flagship for the



building of internationally competitive competence centres and ecosystems in Finland, together with the principles of responsible science, will also play a role in the review.

3 Secrecy and ethics

According to the Finnish Act on the Openness of Government Activities, research plans, abstracts, progress reports and reviews are documents subject to professional secrecy. Application documents should therefore be handled and stored with due care and confidentiality.

The Academy of Finland is committed to following the guidelines of the Finnish Advisory Board on Research Integrity for responsible conduct of research. The guidelines also apply to reviewing funding applications, research programmes and scientific disciplines.

All reviews must be handled confidentially, competently and impartially, based on the criteria set for the review process. Care must be taken to ensure that the review complies with general stipulations about conflicts of interest. Prior notice must be given if a reviewer has economic or other affiliations or significantly different schools of thought in relation to the applicant under review. This is a way to avoid conflicts of interest.

As a reviewer, you are not allowed to disclose any information concerning application documents or reviews to outsiders, nor are you allowed to use this secret information to your own benefit or anyone else's benefit or disadvantage. You may not reveal to outsiders that you are assessing the research plan of a particular researcher. If you are contacted by anyone, including the applicant, who has questions about the application or reviews, please advise them to contact the Academy of Finland.

Confidentiality must also be maintained after the review process has been completed. Reviews are documents subject to professional secrecy, but applicants will have access to the panel review reports on their own application after the funding decisions have been made. An applicant shall not disclose to third parties secret information obtained on the basis of party status and concerning other persons than the party himself or herself. The draft reviews and



external draft reviews are also documents subject to professional secrecy unless otherwise stated in the applicable legislation or required by court order.

Reviewers are guilty of research misconduct if they misappropriate research ideas from applications. The quality of the review is not a research-ethical issue unless the review has been conducted carelessly, which may give an appearance of a review that deliberately either underrates or overrates the applicants under review.

Disclosing the contents of research plans to third parties or contacting applicants personally without explicit agreement to do so are also regarded as instances of inappropriate behaviour on the part of reviewers.

Once the review has been completed, you are required to destroy all application documents and any copies made of them.

After the funding decisions have been made, the Academy will publish a list of names, current positions and institutions of all individual reviewers and panel members used in the call. In addition, the applicants will see the names of all panel members in the panel review report. If requested, the names of reviewers that have supplied the draft reviews will also be disclosed to the applicant (under the Finnish Act on the Openness of Government Activities)

4 Conflicts of interest

As a reviewer you are required to declare any personal interests according to the criteria below. You must disqualify yourself if you can in any way benefit from the approval or rejection of the application. You must also disqualify yourself in the following circumstances:

- You have collaborated with the applicant (e.g. you have co-authored and published an
 article or manuscript with the applicant in the past three years, been involved in the
 preparation of the application, or are involved in the publication or application of the
 results).
- You have been a superior, subordinate or instructor of the applicant in the past three years.



- You are applying for the same post as the applicant.
- You are applying for funding from the Academy from the same funding instrument.
- The applicant is a close person to you. A close person is:
 - a) your spouse (also de facto), child, grandchild, sibling, parent, grandparent or a person otherwise close to you (e.g. fiancé/e or a close friend), as well as their spouses (also de facto)
 - b) a sibling of your parent or his/her spouse (also de facto), a child of your sibling, or your previous spouse (also de facto)
 - c) a child, grandchild, sibling, parent or grandparent of your spouse as well as their spouses (also de facto), or a child of a sibling of your spouse
 - d) or a half-relative comparable to the above-mentioned persons.

You are also disqualified if your impartiality may be endangered in any other way, or if you feel that you have a conflict of interest and are therefore disqualified to review the application.

If you identify any conflicts of interest, please notify us as soon as possible.

5 Reviewer's declaration

Please acknowledge that by accepting the task of a reviewer you guarantee not to disclose the information you receive and not to use it for anybody's benefit or disadvantage as stated in section 3 above (Secrecy and ethics). Further, you affirm that you will immediately notify the Academy if you have a conflict of interest in one or more applications.

6 Expert panel meeting (remote panel)

The panel of experts consists of esteemed, mostly international experts. At the meeting, the panel will review applications taking into account other available review material as well (progress reports and stakeholder survey). The panel prepares one joint panel review report on each evaluated Flagship in the Academy's online services. Academy staff will assist the panel in preparing the panel review reports.



7 Review material, scale and criteria

The panel carrying out the interim evaluation of the Flagships will assess the applications assigned to the panel and interview Flagship representatives. The review material will also include progress reports provided to the Academy by the Flagships and results of a stakeholder survey that the Academy will organise in spring/summer 2021. Considering all of the above, the panel will prepare a written review report on each application.

Numerical evaluation: The consistency between the numerical rating and the written comments is particularly important. The numerical evaluation of the sub-items and final rating is made with a rating scale ranging from 6 (outstanding) to 1 (poor). Where relevant, please consider both scientific excellence and impact in support of economic growth and/or society when assigning a grade.

6 (outstanding)	Demonstrates exceptional novelty, innovation as well as impact with crucial
	relevance; has potential to substantially advance science at global level; has
	such novelty or timeliness and promise that extremely significant support to
	economic growth and/or innovation ecosystem(s) and society is likely
5 (excellent)	Demonstrates novelty, innovation and impact with very high relevance –
	contains no significant elements to be improved; has such novelty or
	timeliness and promise that very significant support to economic growth
	and/or innovation ecosystem(s) and society is likely
4 (very good)	Is in general sound but contains a few elements that could be improved; has
	impact with high relevance, i.e. such novelty or timeliness and promise that
	significant support to economic growth and/or innovation ecosystem(s) and
	society is likely
3 (good)	Is in general sound but contains important elements that should be
	improved; has impact with relevance, i.e. such novelty or timeliness and
	promise that some support to economic growth and/or innovation
	ecosystem(s) and society is likely



2 (fair)	Contains flaws; is in need of substantial modification or improvement; has
	low potential for impact in support of economic growth and/or innovation
	ecosystem(s) and society
1 (poor)	Contains severe flaws that are intrinsic to the proposed project or the application

Review criteria

The main criteria in the review are:

- Demonstrated scientific excellence and impact in support of economic growth and/or society during the first two years of Flagship operation
- 2) Plan for promoting scientific excellence and impact in support of economic growth and/or society for the remaining four-year funding period and beyond
- 3) Evolution of the ecosystem and organisation of the Flagship.

More specific review criteria are presented in Appendix 1.

The Academy of Finland is a signatory of DORA (the San Francisco Declaration on Research Assessment), which makes recommendations for improving research assessment practices. The Academy is also committed to following Finland's national recommendation <u>Good practice in researcher evaluation</u>. The Academy adheres to the recommendations in its peer review processes. In particular, you are asked to consider the content and quality of publications, rather than their number or venue of publication, or the impact of the journals in which they were published.

8 Responsible science

Research ethics

The Academy of Finland requires that the Finnish Advisory Board on Research Integrity's guidelines Responsible conduct of research and procedures for handling allegations of misconduct in Finland (link takes you to the Board's website) are followed in all Academy-



funded research. We also require that researchers follow ALLEA's (All European Academies) <u>European Code of Conduct for Research Integrity</u> (link takes you to ALLEA's website) when engaging in international collaboration.

The Academy will not process a funding application if the applicant has been found guilty of research misconduct in the three years preceding the year of the call. If the Academy finds out about the misconduct during the funding period, whatever is left of the funding period will be added to the three-year limit. If the applicant appeals the decision on the misconduct, and the appeal is successful, the Academy will process the applicant's new applications following normal procedures. Read more about <u>research ethics</u> on the Academy's website.

Equality and nondiscrimination

The Academy of Finland's research funding promotes equality and nondiscrimination as part of responsible science. To secure responsible reviews and decision-making, the Academy is, in accordance with its <u>Equality and nondiscrimination plan 2019–2020</u>, committed to defining the means to support combining work and family life and the research careers of women in all funding opportunities. Therefore, career breaks due to family leaves cannot be evaluated negatively in the review process.

The Academy requires that all Academy-funded research promotes gender equality and nondiscrimination. Academy reviews and decision-making emphasise the importance of promoting equality and nondiscrimination either in the suggested project or in the wider society. Gender is not part of the information in the applications under review.

In the review of applications, the Academy asks reviewers to pay attention to the unconscious bias that affects us all. Unconscious bias refers to a positive bias towards our "ingroup" and a negative bias towards our "outgroup". For example, when you are assessing whether the research is groundbreaking and whether the applicant is competent enough to carry out the proposed project, pay special attention to the possible unconscious biases that you might have and that could have an impact on your evaluation. The very act of realising hidden biases makes them less powerful.



In review (especially in panels), it is easier to detect unconscious biases in others than in yourself. We ask you to be prepared to call out bias when you see it.

Open science

The Academy of Finland is committed to promoting the principles and practices of open science to improve the quality, responsibility and social impact of science. The goal is to make all outputs produced and used in research (research publications, data, methods and metadata) widely available for reuse. The principles of open science must be pursued with due attention to good scientific practice and law. The degrees of data openness may justifiably vary, ranging from fully open to strictly confidential. Read more about the Academy of Finland's open science policy on our website.

The Academy of Finland is a member of cOAlition S and uses Plan S principles and practices in its funding guidelines. In addition, the Academy applies the National Policy for Open Access to Scholarly Publications. When reviewing publication plans, reviewers are asked to take note of the Academy's open access policy and value the applicants' efforts to publish in OA journals or use other alternatives that secure the immediate open access of articles. All peer-reviewed articles written in Academy-funded projects should be published with immediate open access. Researchers may use OA journals, platforms, repositories or journals that commit to full OA by 2024.

When reviewing applicants' preliminary presentations on data management and open access to research data, reviewers are asked to take note of the Academy's research data policy and value the applicants' effort to open the research data collected during the research. Reviewers are also asked to support well justified arguments if the applicant states that no research data is collected or gives understandable reasons for not opening the research data. The funded projects submit a full research data management plan after the positive funding decision has been made.



Appendix 1

1) Review form for Finnish Flagship Programme interim evaluation