

FIRI2023 funding calls for national research infrastructures call info 13.3.2023



Why have FIRI* calls?

According to the National Roadmap for RDI, research and networks must be grouped into larger competence centres and ecosystems

One of the aims of the FIRI Committee** is to advance a sufficiently strong, long-term basis for the development and provision of high-quality research infrastructure services

FIRI calls provide funding for acquisition, establishment or upgrading of nationally significant research infrastructures

***FIRI** = Finnish Research Infrastructure

****The Finnish Research Infrastructure Committee** (FIRI Committee) at the Academy of Finland monitors and develops Finnish and international research infrastructure activity, provides funding to infrastructure projects and monitors funded projects. The Committee also takes care of other infrastructure tasks as assigned to it by the Academy Board

Strategic overview of the calls

Strategy for national research infrastructures:

-The vision is that high-class research infrastructure services increase the impact and international attraction of the Finnish research, education and innovation system

Finland's RDI Roadmap

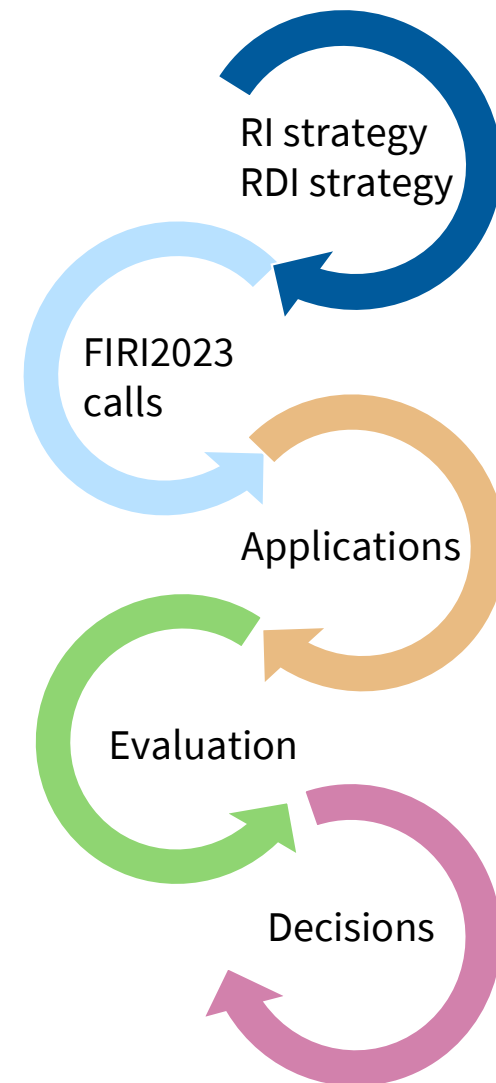
- the building blocks of Finland's competitiveness and wellbeing are strong competence, research and innovation
- The basic idea: research and the networks around it should be grouped into larger **competence centers and ecosystems**

FIRI2023 calls are opened based on both strategies

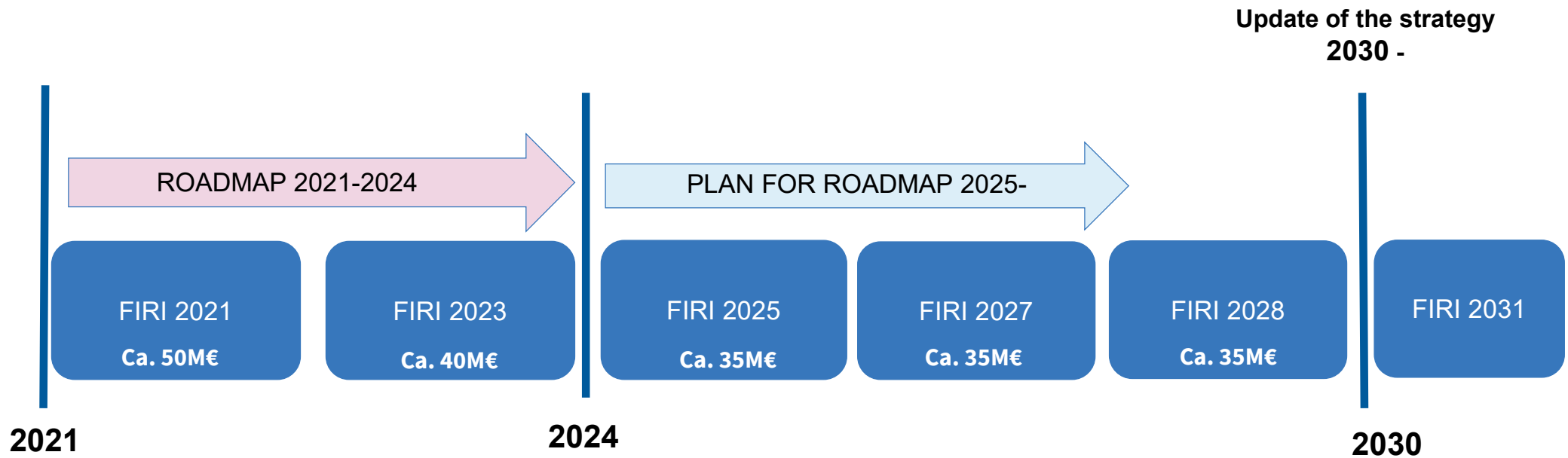
The focus of the call is to promote the quality, renewal and competitiveness of research, to strengthen the versatile impact of research environments and to increase national and international cooperation.

The evaluation is based on the criteria and focus of the call

The FIRI Committee makes the decisions based on peer-review, prioritisation, AoF council comments and national research infrastructure policy dimensions



Planned schedule of the FIRI roadmap and funding calls



FIRI2023: funding calls

Two funding calls:

1) **Projects related to research infrastructures on the national roadmap 2021–2024 and international memberships***

Funding period max. 5 yrs (1.1.2024-31.12.2028)

2) **Projects related to national non-roadmap research infrastructures**

Funding period max. 3 yrs (1.1.2024-31.12.2026)

* A separate invited call for membership fees in the spring of 2023



[Roadmap for Finnish Research Infrastructures 2021–2024 \(aka.fi\)](https://aka.fi)

Applicant and funding

The applicant is an individual research organisation or a consortium of research organisations

Funding available 40 M euros*

- funding for the **acquisition, establishment, strengthening and upgrading** of nationally significant research infrastructures that advance scientific research
- intended to cover **investment costs in the construction phase of the research infrastructure**, such as the acquisition of equipment and systems and the formation of services or
- significantly **upgrading an existing national research infrastructure**
- Recommended minimum per single application 200,000 euros
- Recommended minimum per consortium application 100,000 euros / 600,000 euros

**Academy funding for research activities, cannot be used for economic activity

A national research infrastructure: characteristics (1-3/8)

Scientific and educational significance

The research infrastructure must advance high-quality science and education.

Wide and versatile impact

The research infrastructure must have wide and versatile impact in the scientific community and in society at large

Services and users

The research infrastructure offers services and has a distinct user base. It has identified a need for the services and determined a potential user base.

Characteristics of national research infrastructure

(2-4/8)

Ownership, organisational structure, and competence and know-how

The staff of the research infrastructure must have sufficient expertise for the successful implementation of the infrastructure.

Digitalisation and data

The research infrastructure must offer feasible guidelines, practices or incentives/demands for researchers in order to support open access to research data. Also, the research infrastructure must take into account the necessary changes brought about by the growth in digitalisation and data intensity.

Responsible science

In its activities, the research infrastructure must take into account research ethics, equality and nondiscrimination, open science and sustainable development, including the green transition. The project must follow these same principles.

Characteristics of national research infrastructure (7-8/8)

Budget and funding

The research infrastructure must have a long-term funding plan for maintenance and development of services. The funding base of the research infrastructure must be stable.

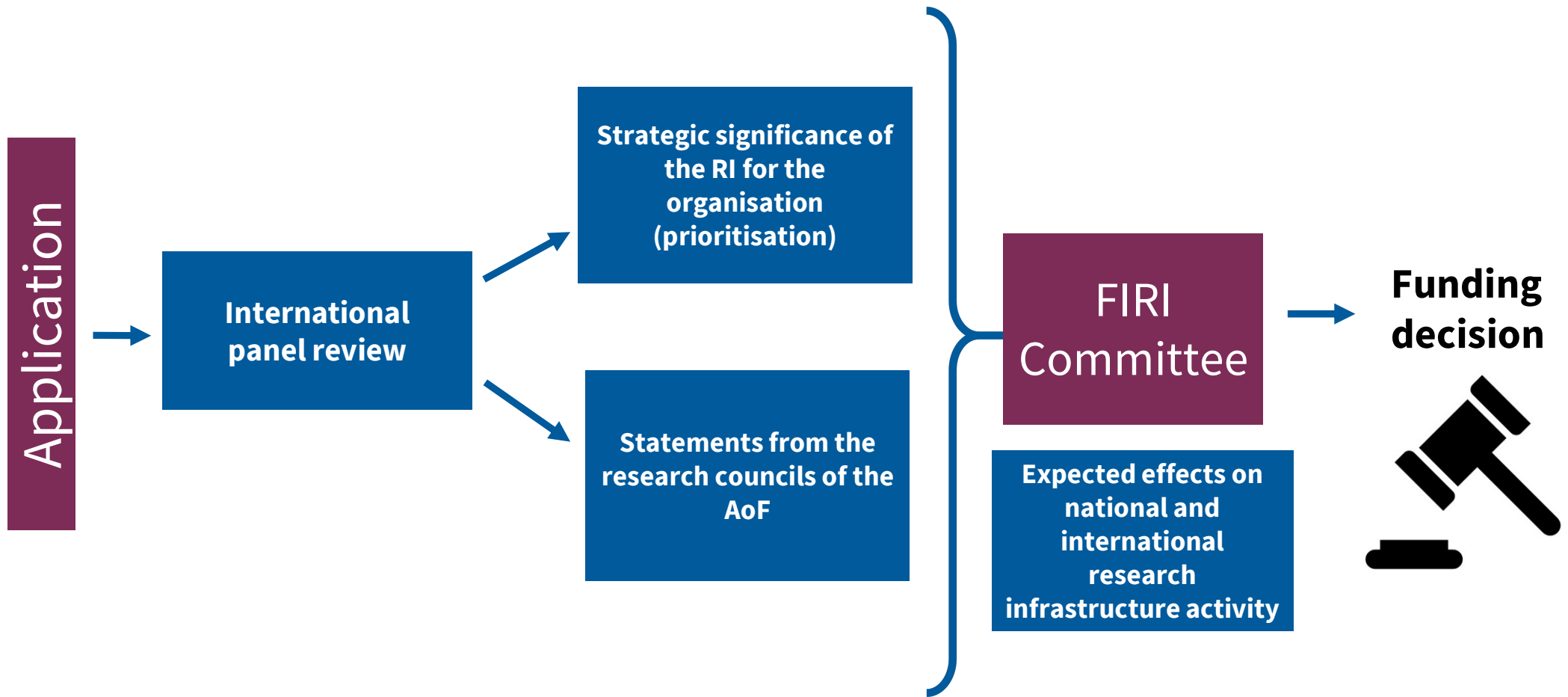
Risk management

The research infrastructure must have a risk management plan.

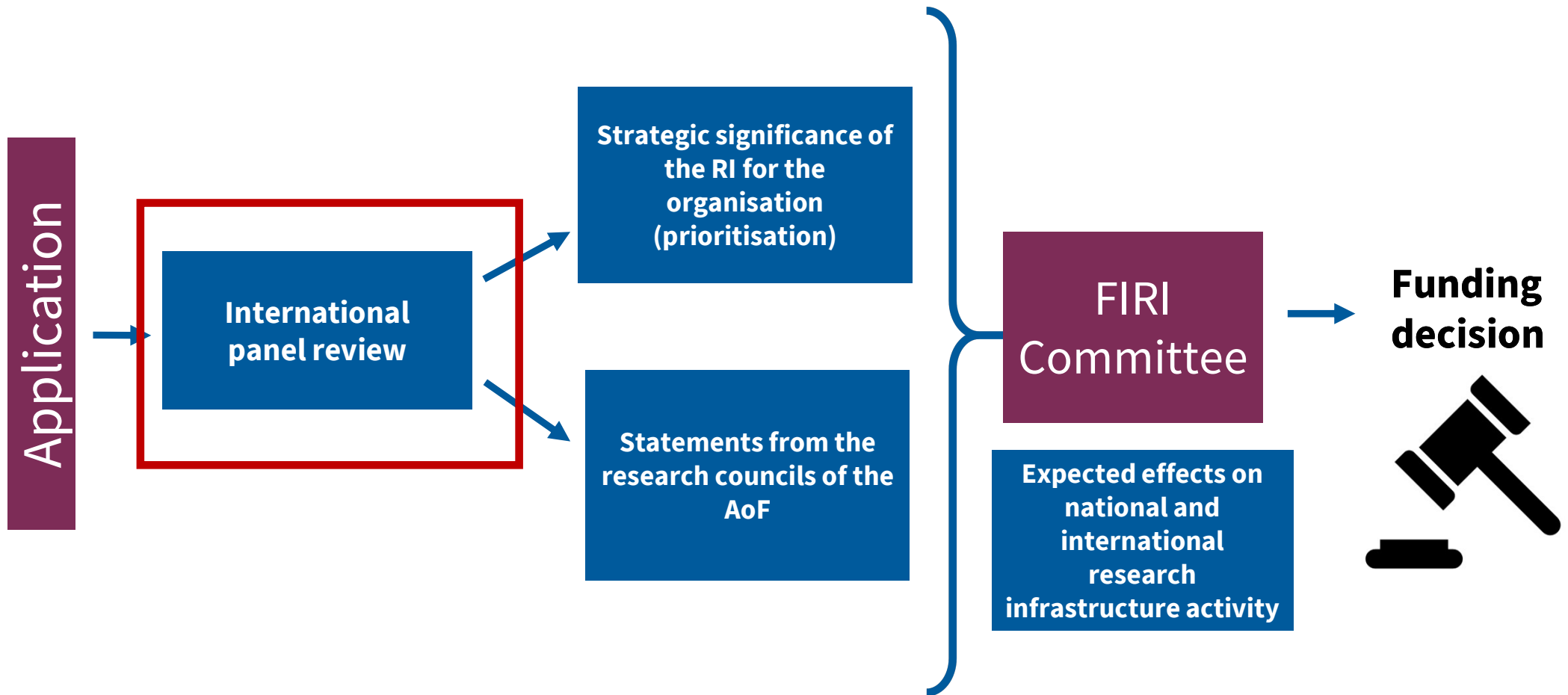
Project

A FIRI project refers to a time-limited action that contributes to the development of the research infrastructure and to the services, the expansion of the user base and the impact of the infrastructure.

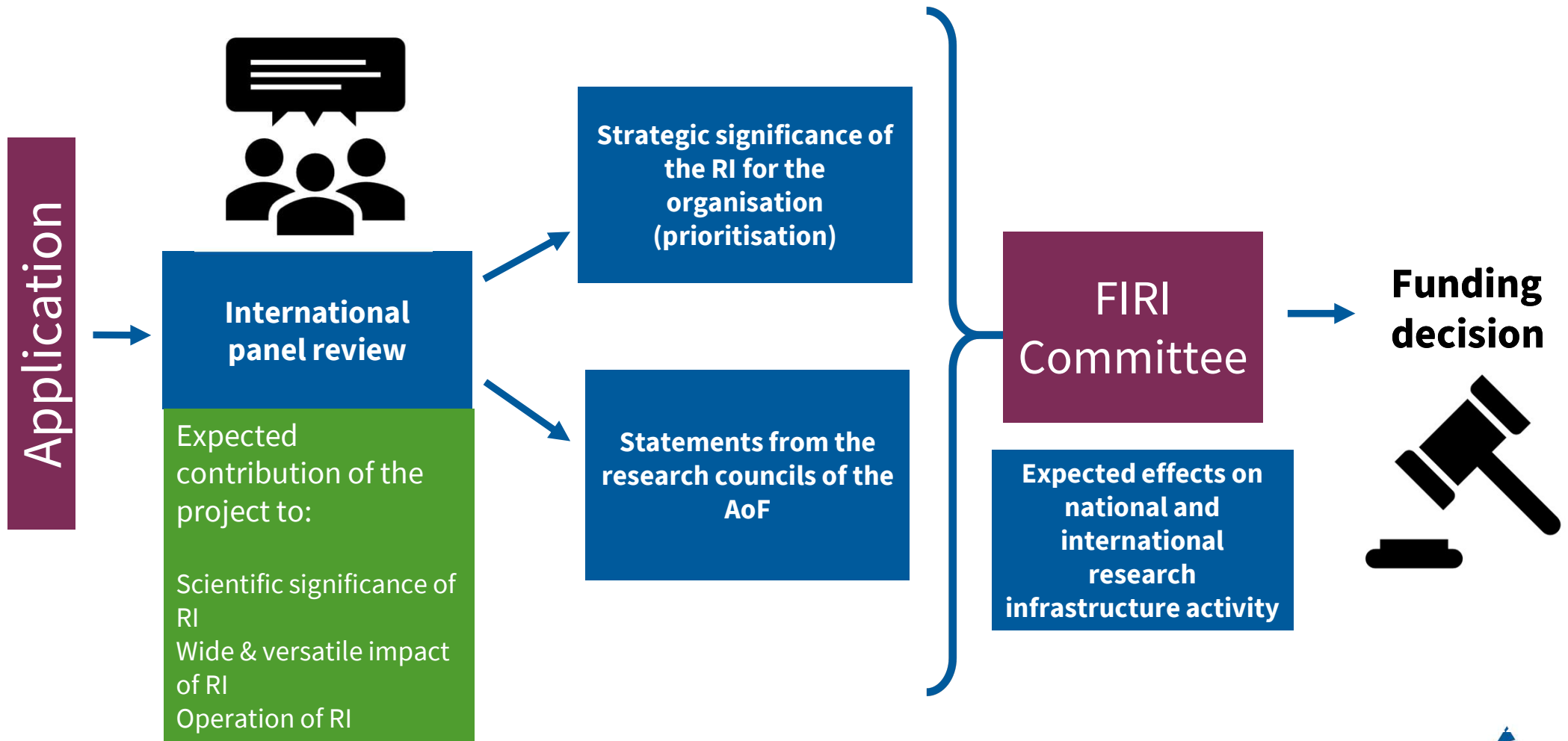
Factors influencing the funding decision



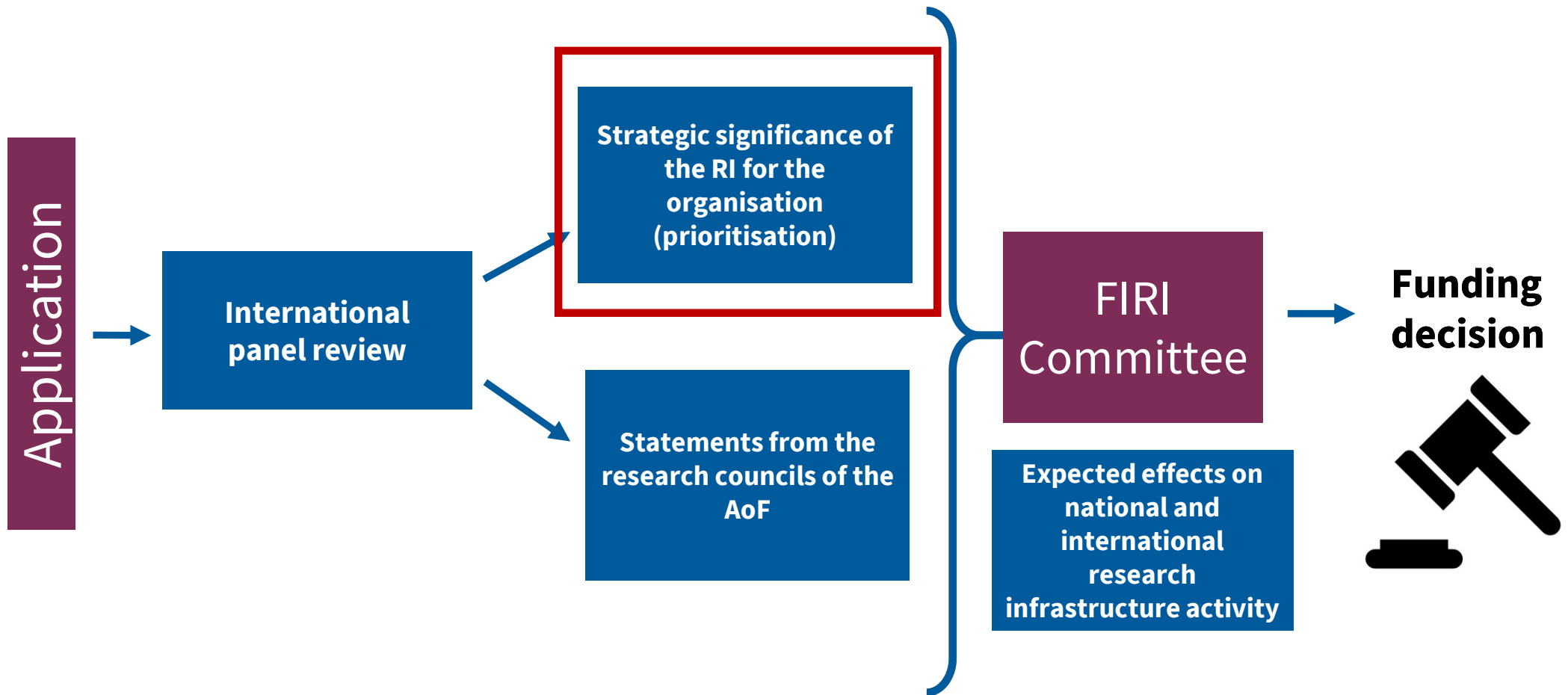
Factors influencing the funding decision



Factors influencing the funding decision



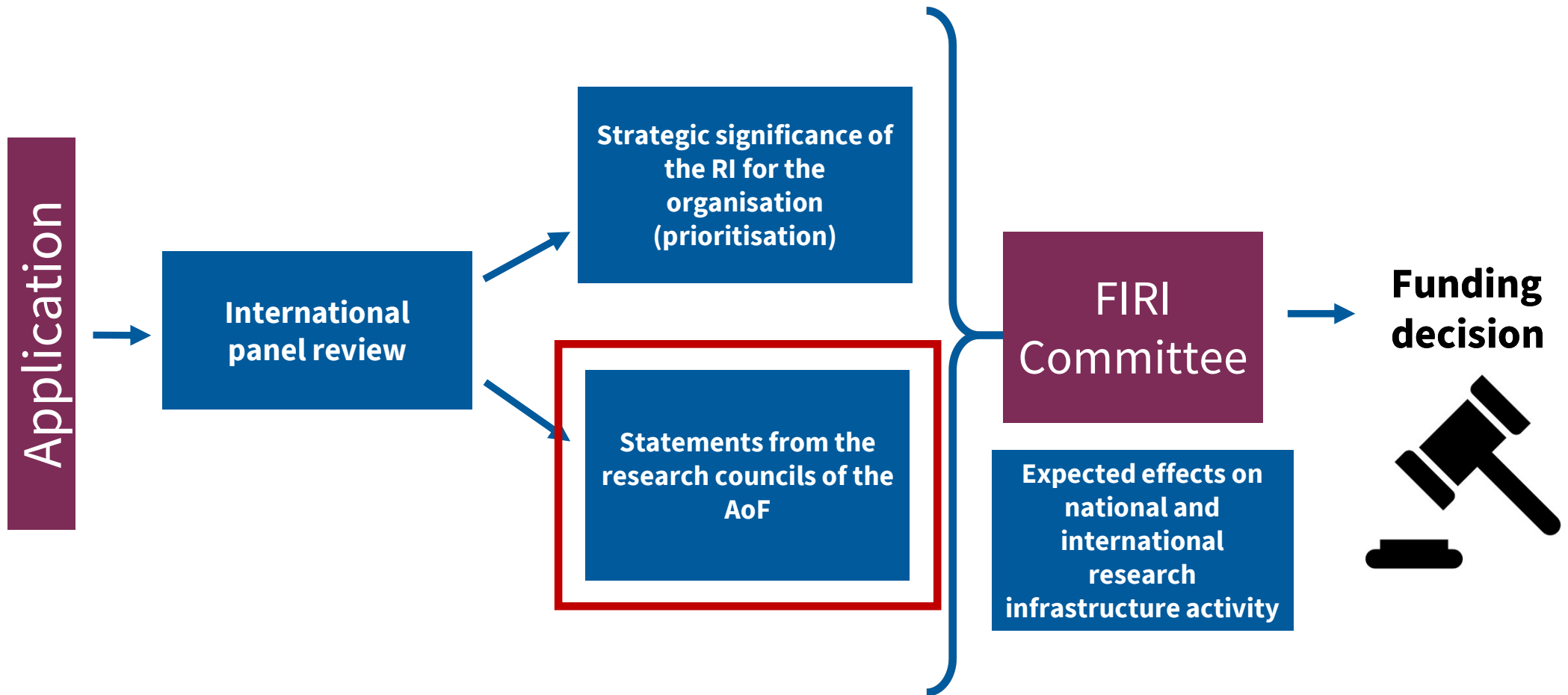
Factors influencing the funding decision



List of strategically central RIs (prioritisation)

- Organisations choose (prioritise) the strategically most central RIs from the applications that were given a final mark of 5 or 6.
- The AoF will send a list of the applications to select from after the review panel has completed the final reports (Sept. 15 latest).
- Organisations can list 50% of the applications as strategically central (at least one application may be listed).
- The deadline for submitting prioritisation lists is Oct. 3rd 2023.

Factors influencing the funding decision



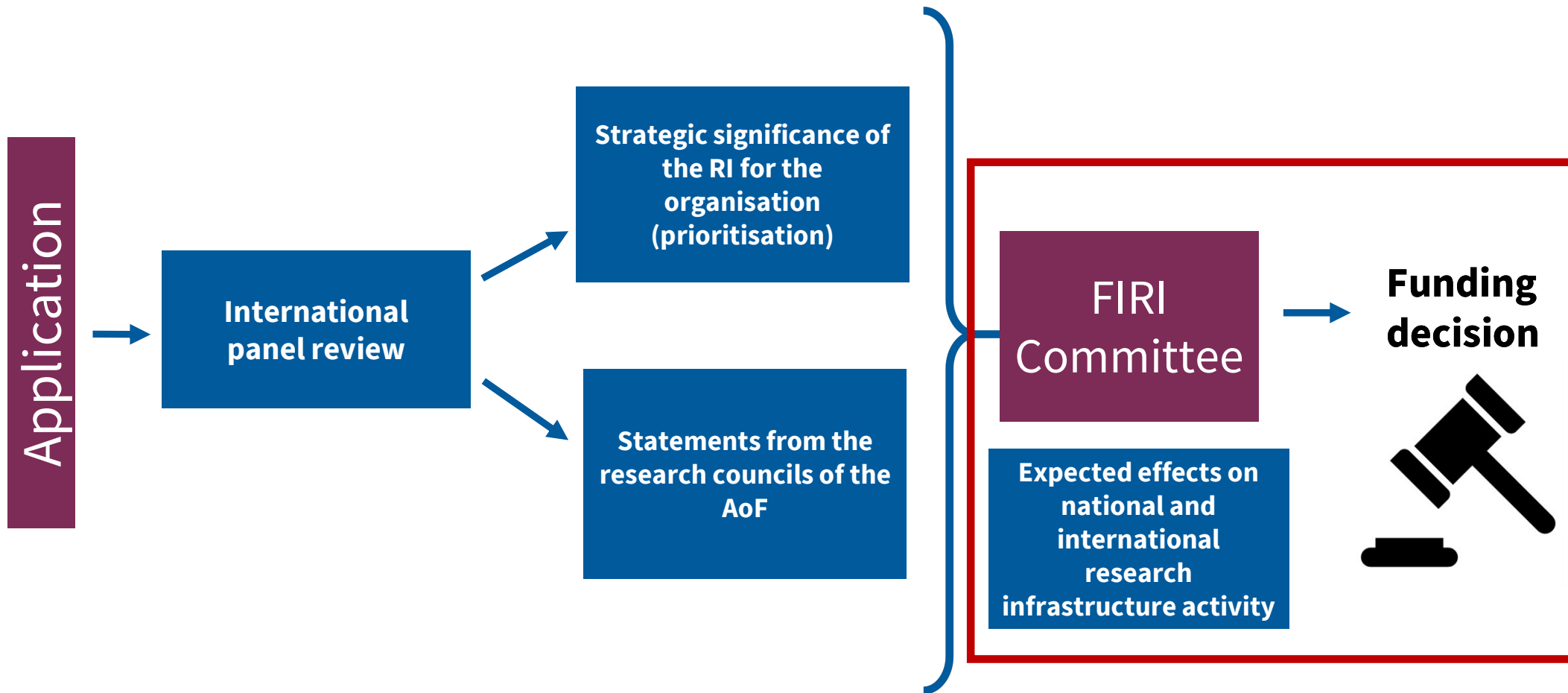
Comments from the research councils of the AoF

- Applications with an overall mark of 5 or 6 given to the research councils of the Academy for commenting (Research Council for Biosciences, Health and Environment; Culture and Society; Natural Sciences and Engineering)

Statements to comment (A-C; agree – partly agree – disagree for each statement)

- The research infrastructure is an important enabler of high-quality science in its field at the moment and in the future.
- A sufficiently large proportion of potential users utilise the research infrastructure.
- The research infrastructure advances national and also international collaboration.

Factors influencing the funding decision





FIRI ACTION PLANS

Action plans

Action plan for projects related to roadmap RIs & intl RI memberships

- Max. 20 pages (18 + 2)

Action plan for projects related to non-roadmap RIs

- Max. 22 pages (20 + 2)
- Possible to apply for funding for costs stemming from planning of a new research infrastructure

Strategic development areas covered in action plan questions

Responsibility
and sustainable
development

Long-term
perspective and
dynamism

Ownership and
know-how

Digital platforms
and data

Open access
and collaboration

Wide and
versatile impact

Review of action plans examines three aspects of the project

- Expected contribution of the project to the **scientific significance** of research infrastructure
 - Expected contribution of the project to the **wide and versatile impact** of the research infrastructure
 - Expected contribution of the project to the **operation** of the research infrastructure (entails organisation, service provision, user base, digitalisation and data, responsible science, financial sustainability)
-
- In addition to the overall mark (1-6), a submark (1-6) will be given for each of the above aspects. In order to be outstanding an application should be strong in all three.

1. Description of research infrastructure

Action plan

- Describe the research infrastructure for which funding is applied.
- What research does the infrastructure serve, and what is its scientific and educational significance?
- At what stage of its lifecycle is the research infrastructure (construction or implementation, when operations will start)?
- Briefly describe the organisational structure of the research infrastructure in Finland (e.g. owner organisations, administrative structure, organisation of tasks).
- Which services does or will the research infrastructure offer?
- Describe the user base of the research infrastructure and how it will be expanded.

+ NON-ROADMAP call

- Present a risk management plan for the research infrastructure.

Review form

1.1 Does the research infrastructure have scientific and educational significance? Is the description of the research infrastructure and its lifecycle phase clear? Is the ownership, know-how and organisational structure of the research infrastructure appropriate? Are the services and service modes clearly described? Does the research infrastructure have a clearly defined user community and a plan for how to widen it?

Is the risk management plan of the research infrastructure sufficient? Please explain.

1. Description of research infrastructure

Action plan

- Describe the research infrastructure for which funding is applied.
- What research does the infrastructure serve, and what is its scientific and educational significance?
- At what stage of its lifecycle is the research infrastructure (construction or implementation, when operations will start)?
- Briefly describe the organisational structure of the research infrastructure in Finland (e.g. owner organisations, administrative structure, organisation of tasks).
- Which services does or will the research infrastructure offer?
- Describe the user base of the research infrastructure and how it will be expanded.

+ NON-ROADMAP call

- Present a risk management plan for the research infrastructure.

Review form

1.1 Does the research infrastructure have scientific and educational significance? Is the description of the research infrastructure and its lifecycle phase clear? Is the ownership, know-how and organisational structure of the research infrastructure appropriate? Are the services and service modes clearly described? Does the research infrastructure have a clearly defined user community and a plan for how to widen it?

Is the risk management plan of the research infrastructure sufficient? Please explain.

2. Wide and versatile impact

Action plan - both calls

What societal impact outside the scientific community does the research infrastructure pursue?

For example, you can describe the paths of impact from the perspective of business, the public sector, employment or business cooperation.

Review form - both calls

2.1 Does the research infrastructure have added value for society at large and does the project contribute to this (e.g. added value for economy, public sector, employment or innovation activities)? Please explain.

3. Description of project

Action plan

Project plan: In concrete terms, describe the project to be implemented with the funding applied for and how the project is linked to the activities of the current research infrastructure.

What is the project intended to do and build?

Who are the key actors for the implementation of the project? Describe their expertise.

Present a risk management plan for the project.

How does the project promote and develop the research infrastructure's operations and services?

Will the project have an impact on the user base? How will the project promote the scientific and educational significance of the research infrastructure?

How will the project promote the societal impact of the research infrastructure outside the scientific community

Review form

3.1 Is the description of the project and its aims clear? Is the project relevant for building or updating the RI? Are the relevant aspects for executing the project taken into account? Please elaborate why.

4. Digitalisation and data

Action plan

4.1 Data management policy The research infrastructure's data management policy is described on a **separate appendix**.

4.2 Increasing digitalisation and data intensity

How will the project take into account the needs for change created by increasing digitalisation and data intensity?

How will the project support the efforts of the research infrastructure to respond to the changing needs brought about by digitalisation?

ROADMAP

The data management policy that you have submitted with your roadmap application needs to be updated only if the project described in this application significantly changes it

Review form

4.1 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?

4.2 Does the research infrastructure and its project take into account the measures that are necessary to take due to the increase in digitalisation and data intensity (digital shift)? Are the described measures realistic and clearly described?

5. Responsible science

Action plan

5.1 The green transition

What concrete actions does the research infrastructure have planned to reach its carbon neutrality target?

5.2 Research ethics, equality and nondiscrimination, sustainable development

How are the principles of good scientific practice and good governance considered in the research infrastructure's activities and in the project? Read more in the Academy's ethical guidelines.

How will the research infrastructure and the project take into account and implement equality in their activities? Read more in the Academy's equality and nondiscrimination guidelines.

Briefly describe how, in addition to the green transition, the research infrastructure can contribute to one or more of the 17 Sustainable Development Goals, either through its activities or through its services. Read more: Academy of Finland's sustainability guidelines and Agenda 2030.

Review form

5.1 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.

5.1.1 Green transition in the operation of the research infrastructure

- Yes
- No, please comment

5.1.2 Good scientific practise and governance, promotion of equality and non-discrimination within the project or in society at large, relevant sustainable development goals (other than the green transition)

- Yes
- No, please comment

6. Long-term financial planning

Action plan

Overall long-term budget for the research infrastructure

* In two tables, enter estimates of the research infrastructure's total funding for 2024–2028. Enter the research infrastructure's expenditure (e.g. personnel costs, rents, equipment acquisitions) in Table 1 and the research infrastructure's revenue (e.g. contributions from own organisation, other organisations and the Academy of Finland) in Table 2. See example tables below.

* Fill in the information to the nearest EUR 1,000. Also, briefly describe the revenue and expenditure. **The information will be used in evaluating the sustainability of the research infrastructure's funding base.**

FIRI funding may, for justified reasons, be granted a research infrastructure that has ongoing FIRI funding. However, new funding cannot be granted for the same purpose as the previous funding. Describe the need for new funding and its links to funding granted previously.

The project funding to be applied for with this application shall be itemised and justified on the tab 'Funding applied for' in the online services.

Review form

6.1 Are the plans for the research infrastructure's long-term funding base sustainable and realistic in general?

6. Long-term financial planning – Table 1. expenditure

Table 1. Research infrastructure's estimated expenditure 2024–2028

Expenditure	2024	2025	2026	2027	2028
Personnel					
Equipment acquisitions					
Equipment maintenance (installations, maintenance contracts, repairs)					
Rents					
Other (specify on individual rows)					
TOTAL					

6. Long-term financial planning – Table 2. revenue

Table 2. Research infrastructure’s estimated revenue 2024–2028

Revenue	2024	2025	2026	2027	2028
Organisation funding					
Academy of Finland funding (currently)					
Funding now applied for from the Academy of Finland					
EU research funding					
Other competitive funding					
Other public funding					
Usage and service fees					
Other (specify on individual rows)					
TOTAL					

Progress report

- Applicants with ongoing FIRI-funding need to submit a **progress report** as an attachment to the application

The progress report contains the following information:

- Key information about the ongoing funding (decision number, name of FIRI-project, amount of funding granted)
- Funding period
- Short description of how the funded project has progressed (max. 2500 characters)
- Short description of connection between the funding being applied for and the project being executed with the ongoing funding

Timeline of FIRI2023 call & application processing



*FIRI = Finnish Research Infrastructure

What's new - recap

- Three components of the action plan assessed
 - An overall mark and a submark given for three subcomponents of the parts (Expected contribution of the project to the **scientific significance, the wide and versatile impact and the operation** of research infrastructure)
- Action plan submitted as an appendix (using the template provided)
- Organisational prioritisation only for applications with an overall mark of 5 or 6
- Research Council statements only for applications with an overall mark of 5 or 6
- Membership fees of international research infrastructures in a separate call (spring 2023, invitation only)



Communication and contacts

Contacts primarily by email firi@aka.fi and via [the Academy's helpdesk](#) (Division of Research Environments)

Paula Leskinen, Science Adviser, tel. +358 295 335 145

Marjut Kaukolehto, Science Adviser, tel. +358 295 335 169

Merja Särkioja, Senior Science Adviser, tel. +358 295 335 111

Tiina Ilo, Coordinator, tel. +358 295 335 150

Follow on Twitter: #FIRI2023 and @aka_firi

Thank you!



How to write a good FIRI-application

General tips:

- Remember that only RIs of **national level** (not local) can be funded in the FIRI calls; see definition of a national research infrastructure in the call text
- Read the evaluation questions carefully before writing the action plan
- Make sure that all of the information that is requested is found in the action plan (and clearly stated)
- Please strive to find a balance between **general and detailed description**

Research infrastructure - definition

Research infrastructures refer to a reserve of research instruments, data and related services that strengthens the impact and increases the international attraction of the Finnish research, education and innovation system. Research infrastructure services enable R&D activity, support researcher training, and maintain and develop research and innovation capacity, thus promoting the quality, renewal and competitiveness of research, strengthening the versatile impact of research environments and enhancing national and international cooperation.

- Research infrastructures are research-relevant equipment, information networks, databases, multidisciplinary research centres, research stations, collections, libraries and other memory organisations, as well as services related to their use. Large scientific research infrastructures are often shared and international, offering opportunities for cooperation for both domestic and foreign researchers and other actors.
- Research infrastructures may be based at a single location (single-sited), scattered across several sites (distributed), or provided via a virtual platform (virtual). They can also form mutually complementary wholes and networks.

National research infrastructure - definition

A national research infrastructure is a nationally and/or internationally significant research infrastructure that reinforces the quality of research and education. A national research infrastructure also has impact on business and industry and the wider society. The ownership and organisational structure of a national research infrastructure is clear, and the key skills needs of management and personnel are known. A national research infrastructure must have a long-term plan for maintaining and developing its services. The services and data produced by the research infrastructure must be openly available. A national research infrastructure must take into account the needs for change created by digitalisation and data-intensive activities. A national research infrastructure must also consider sustainable development in all its operations. The funding base for a national research infrastructure must be sustainable and cannot rely too heavily on competitive funding from the Academy of Finland.

Research organisation - definition

A research organisation refers to an organisation whose primary goal is to conduct independent basic research, industrial research or experimental development or to disseminate its results widely by means of education, publication or knowledge transfer. Research organisations are, for example, higher education institutes, research institutes, technology transfer organisations, innovation intermediaries, and research-oriented physical or virtual collaborative entities, regardless of their legal status (organised under public or private law) or financing source. When such an entity is also engaged in economic activities, separate accounts must be kept of the funding and costs of and the revenue generated by such activities. The enterprises exercising a controlling interest in such an entity (as shareholders, members, etc.) may not enjoy any preferential access to the results generated by the entity.

International research infrastructure membership-definition

Memberships in international research infrastructures are a means to promote the quality of research and education. The memberships create platforms for cooperation in international RDI. The memberships also contribute to strengthening the diverse impact of research environments on society. In the present call, an international research infrastructure refers to international research infrastructures where Finland is a member through a state treaty or research infrastructures whose membership fee is paid by the Academy of Finland.