FIRI 2024 roadmap call: roadmap for national research infrastructures 2025–2028
Call info 12.3.2024

Research Council
of Finland

Contents

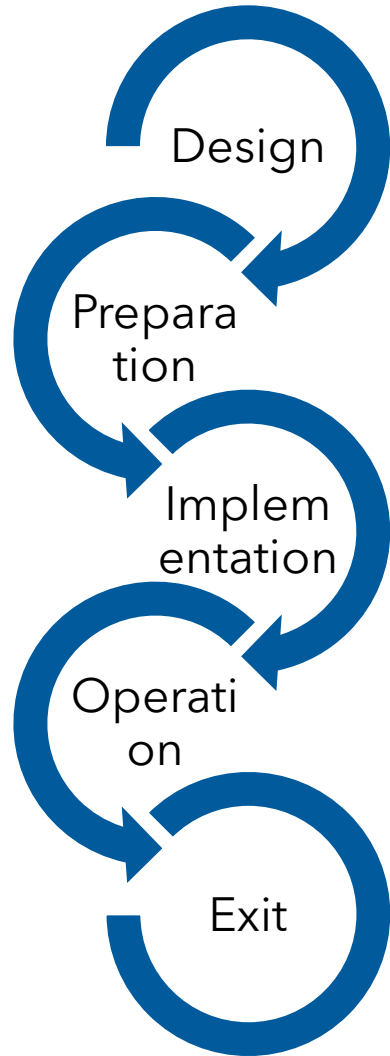Research Council of Finland

TIPAS and the roadmap

Why do we need a long-term strategic planning?

The life-cycle of national and international research infrastructure

Design

Prepara tion

Implem entation

Operati on

Exit

The life cycle of high-quality, renewable infrastructure is often 30-50 (-x) years

- If you become a professor at 40 and retire at 65, 25 years of work

- Long-term organisational support and commitment important

So at the design stage, you need to look far enough ahead

- Ability to anticipate future needs and build pathways to them

That's why we need to build long-term, decades-long ownership right from the start.

> That's why the FIRI-Committee Develop a long term plan for research infrastructures

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Long-term plan for research infrastructures 2030

Vision	Main objectives	To meet objectives
Excellent research infrastructures are the foundation of high-impact research, development and innovation.	Improve the potential of research infrastructures to support **high-level research and scientific renewal**, thus increasing the competitiveness of scientific research in Finland	• the assessment of research infrastructures is up-to-date and able to identify the most competitive infrastructures for scientific research in Finland • research infrastructure services and technological solutions are user-driven, dynamic and accessible • the funding for research infrastructures is predictable, supported by a long-term, multi-channel and transparent funding base, strong ownership and solid expertise.
	Increase the capacity of research infrastructures to generate **new knowledge and to grow and attract new talents**	• through **responsible and secure data processing and management**, research infrastructures contribute **as major players to the large-scale production and use of new knowledge** • **career paths** in research infrastructures are desirable and facilitate skills upgrading • research infrastructures actively **attract and train new talent**, thus contributing to the security of the knowledge supply • RDI and other societal actors have access to modern research infrastructure services that support **sustainable development and the green transition**.
	Encourage research infrastructures to **collaborate effectively and actively with RDI actors**	• the impact of research infrastructures is wide and versatile, verifiable and measurable • research infrastructures play **an expert and visible role as facilitators of collaboration, platforms for innovation and drivers of RDI**
The mission	*The Finnish Research Infrastructure Committee is to:* facilitate cooperation and the creation of new knowledge and know-how, open up new avenues and step up long-term research infrastructure activity in Finland.	

How the long term plan in connected to the roadmap call

Long-term plan for research infrastructures with development objectives

The roadmap call will be opened on the basis of the long-term plan: Action plan guideline and evaluation questions will be developed in line with the objectives of the Long-term plan development areas

Applications will take into account the guidelines of the Action Plan - Data collection for further action can be started by

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

The FIRI Committee will make the decisions based on peer-review and other national research infrastructure policy dimensions

Long-term plan

Roadmap call

Applications

Evaluation

Decisions
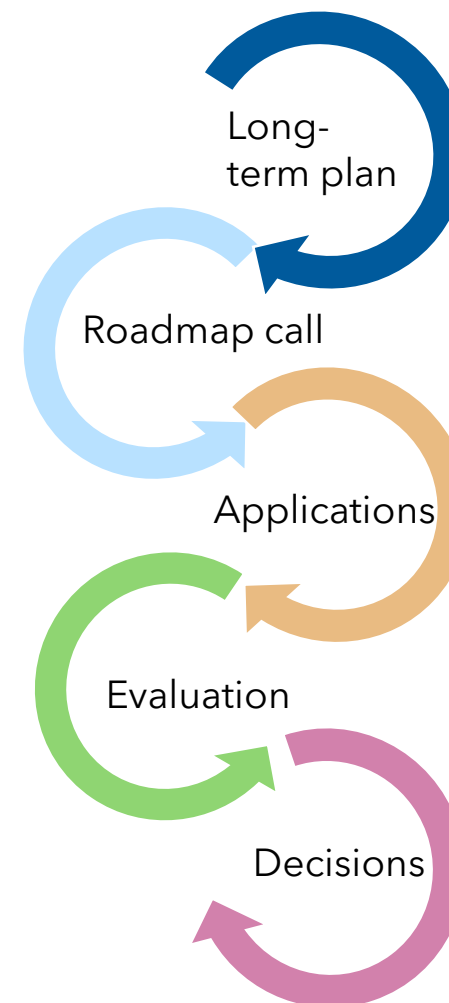
FIRI2024: 2-stage process for roadmap and funding applications

FIRI2024 Roadmap: The aim of the roadmap call

The aim of the call is to create a research infrastructure roadmap 2025-2028 to ensure that research infrastructures respond to both current and future **scientific challenges** by generating new knowledge, strengthening the versatile **impact** of research environments, remaining **internationally competitive**, increasing **knowledge** and **interacting** with RDI actors.

The roadmap will implement the objectives of the long-term plan for research infrastructures until 2030 (TIPAS).

Long-term plan for research infrastructures until 2030 (TIPAS)

What is new in this roadmap process

1. The funding is connected to the roadmap

    All research infrastructures selected to the roadmap will be granted funding

2. Previous prioritization process is replaced by long-term funding plan for the research infrastructure

    Important part of the roadmap application in stage 1

3. The research infrastructures selected for the roadmap will be grouped

    Best research infrastructures will be highlighted as so-called lighthouses

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Roadmap 2025-2028

- *the roadmap covers and identifies **the most important** infrastructures at national level*
- *Being on the roadmap should be of **tangible benefit to the infrastructures**, in particular to ensure their long-term development.*

Funding period 2025-2029

10M€	40M€	70M€		
(Mandate 2024)	(Mandate 2025)	(Mandate 2026 & 2027)		
2024	2025	2026	2027	**2028**	2029

Applications: roadmap and funding Apr-Oct 2024

Decisions on the roadmap and funding Dec 2024/ Jan 2025

Funding is allocated via two fixed terms funding decisions

Roadmap and funding applications 2028 (mandate 2028 & 2029)
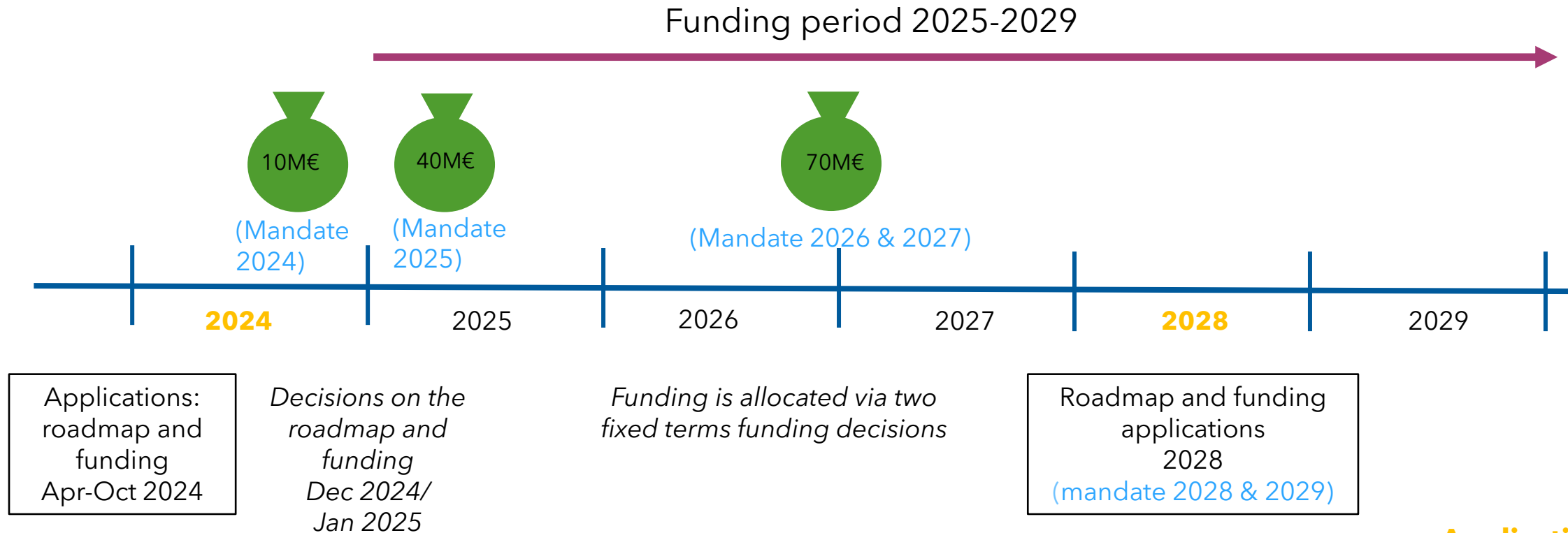
Application years in yellow

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Funding is temporary support for construction and development

Funding available ca. 120 M euros for 2025-2029

- All research infrastructures selected to the roadmap will be granted funding.

- 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; significantly **upgrading an existing national research infrastructure**

- Recommended minimum per single application 200,000 euros

- Recommended minimum per consortium application 100, 000 / 600,000

- Innovative procurement

- Academy funding cannot be used for economic activity

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Funding decisions

- Decisions on which research infrastructures get to the roadmap are taken in December 2024

- Funding decisions are taken in December 2024 and January 2025

- Funding period is max 5 years 2025-2029
  - ❖ funding is split into two separate, fixed-term funding decisions:
    - – 1 Jan 2025 – 31 Dec 2027 (1. period)
    - – 1 Jan 2027 – 31 Dec 2029 (2. period)

- **Interim report** is asked between the first and second funding decisions, in June 2026

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Applicant and commitment to the application

- **The applicant** (both stages) is an individual research organisation or a consortium of research organisations

- Both stages: The research organisation selects the person who will be responsible for submitting the application. We recommend that the research infrastructure's director/national coordinator is person responsible for the application.

- Both stages: All research organisations acting as consortium parties must demonstrate their **commitment to the application** in the Research Council of Finland's online services. NB! Only the senior management (rectors, etc.) can issue the commitment of the site of research.
  - Stage 1: the hosting organisations commit to the research infrastructure applied for the roadmap, and its sustainability, incl. the **long-term funding plan**
  - Stage 2: the research organisations applying for funding commit to the co-funded activity by contributing their percentage of the costs under the full cost model

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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.

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FIRI2024 Roadmap call: two-stage application process

1. Stage
Roadmap application
(April)

- External reviewer panel reviews the roadmap applications
- A very short description of the development project is included, how it supports the RI strategy, and what would be done with the requested money in the 2. stage, a budget *estimate*
- The most successful roadmap applications (rating 5 or 6 from the panel) will progress to the second stage
- Lighthouse candidates are interviewed by the FIRI Committee working committee

2. Stage
Funding application for the development project
(October)

- Very short funding application with project budget and its justification
- All research infrastructures that are decided to be on the roadmap, will get the funding
- FIRI Committee's working committee checks the applications
- Funding decisions in December and January 2025

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Overall timeline for the roadmap process

2024

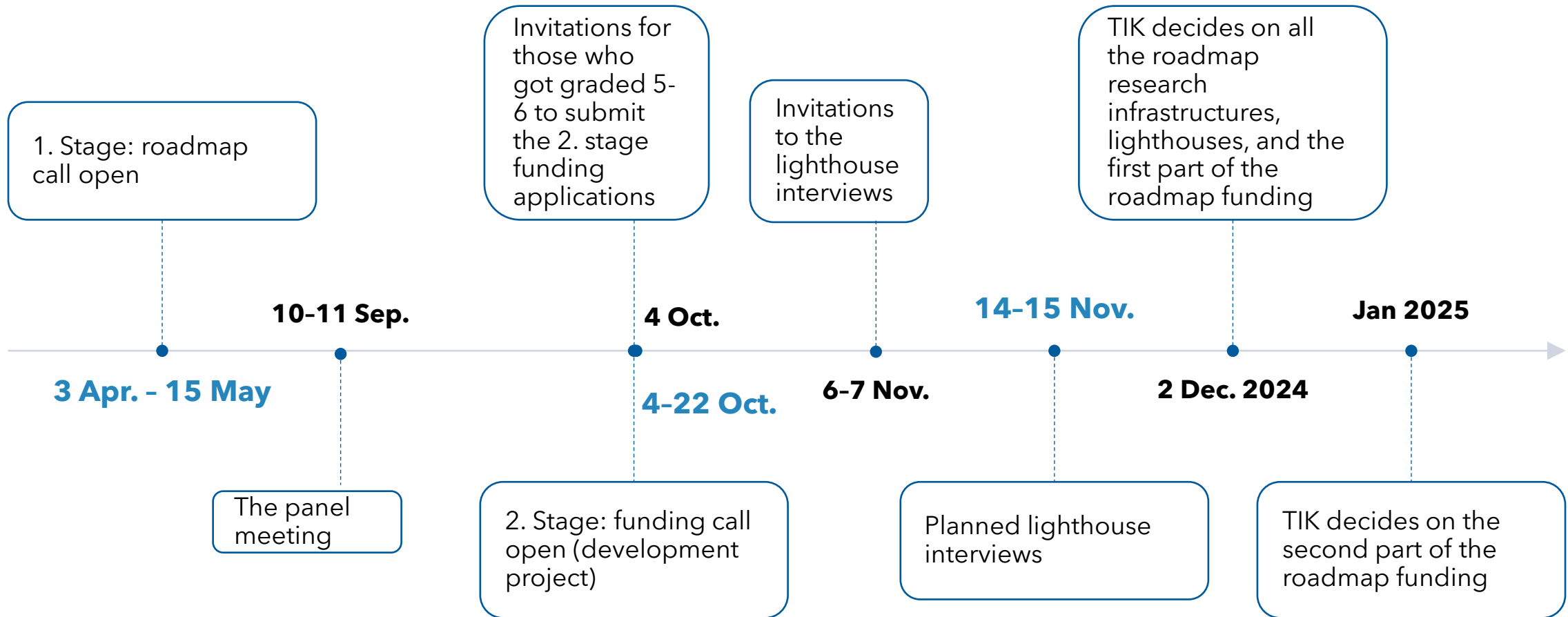**1. stage**

April	The first stage call for roadmap applications open	Call open April 3- 15 May, 2023
May-June	Application processing	Applications are checked and distributed to international reviewers
July-Sep	Review of applications	International reviewers convene for panel meeting in Sep., final review reports
	Commenting round, scientific councils	Comments from scientific councils on the most highly marked applications
Oct	The second stage call for funding applications open	The most successful ones (rating 5 or 6) will progress to the second stage to apply for funding
Nov	Lighthouse interviews	FIRI working committee interviews lighthouse candidates
Nov-Dec	Preparatory meeting of FIRI Committee	Discussion by the FIRI Committee on funding decisions
Dec	FIRI Committee deciding meeting	The FIRI Committee decides on the roadmap infrastructures, and makes the first batch of funding decisions, Dec. 2, 2024
Jan	FIRI Committee deciding meeting	The FIRI Committee makes the second batch of funding decisions, Jan, 2025

2. stage

2025

*FIRI = Finnish Research Infrastructure

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Timeline of two stages

1. Stage: roadmap call open

Invitations for those who got graded 5-6 to submit the 2. stage funding applications

Invitations to the lighthouse interviews

TIK decides on all the roadmap research infrastructures, lighthouses, and the first part of the roadmap funding

10-11 Sep.

4 Oct.

14–15 Nov.

Jan 2025

3 Apr. – 15 May

4–22 Oct.

6-7 Nov.

2 Dec. 2024

The panel meeting

2. Stage: funding call open (development project)

Planned lighthouse interviews

TIK decides on the second part of the roadmap funding

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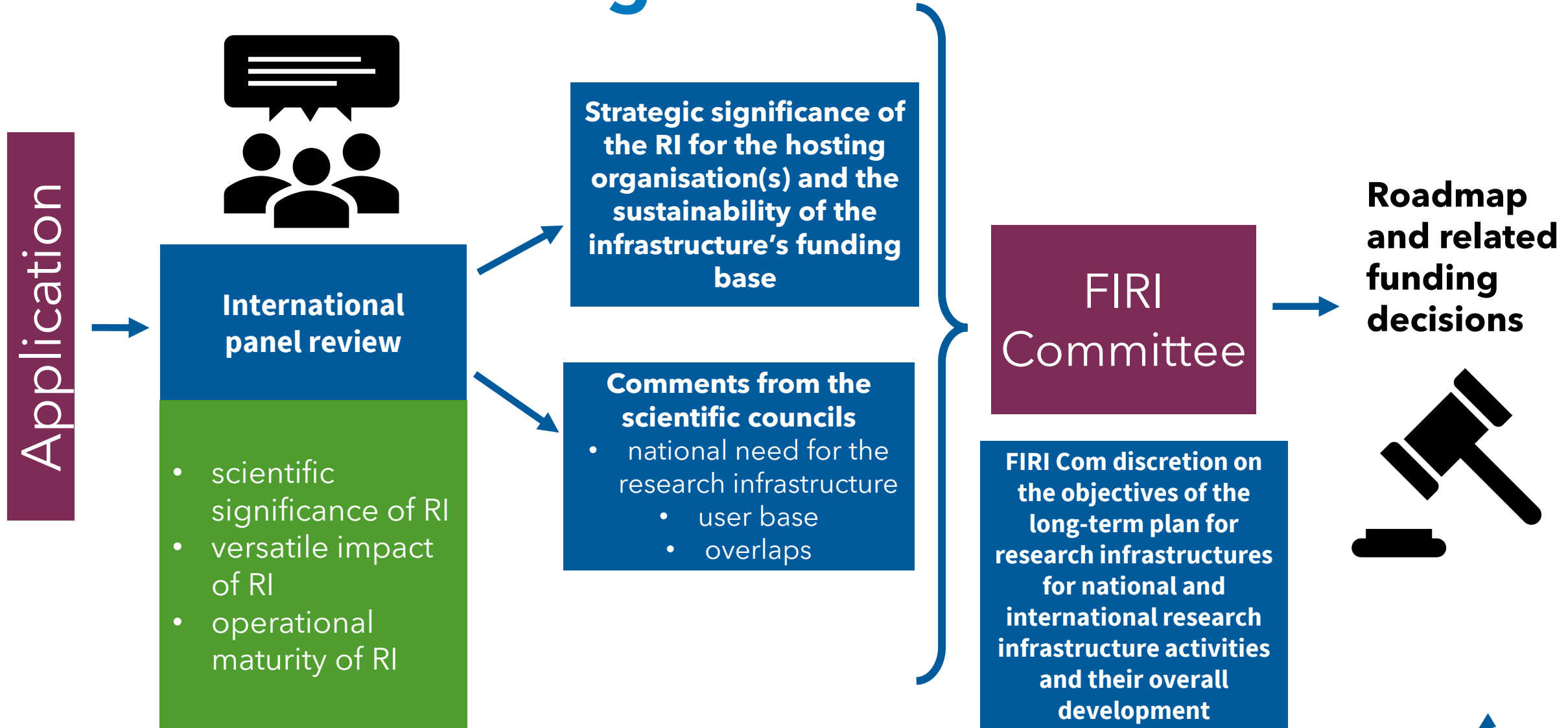
Decisions, summary

- Dec. 2, 2024 the FIRI Committee
  - Decides on the research infrastructures that are on the roadmap
  - Makes the first batch of funding decisions (ca. 10Meur), infrastruktuureista
  - Aims to decide the lighthouses
- Jan, 2025 the FIRI Committee
  - Makes the second batch of funding decisions (ca. 40 Meur) for the roadmap infrastructures

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Evaluation and decision making in roadmap process

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Factors influencing the decisions

Application

International panel review

- scientific significance of RI
- versatile impact of RI
- operational maturity of RI

Strategic significance of the RI for the hosting organisation(s) and the sustainability of the infrastructure's funding base

Comments from the scientific councils
- national need for the research infrastructure
  - user base
  - overlaps

FIRI Committee

FIRI Com discretion on the objectives of the long-term plan for research infrastructures for national and international research infrastructure activities and their overall development

Roadmap and related funding decisions

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National research infrastructure - definition

- A national research infrastructure is a research infrastructure of national or international importance that provides a basis for a high level of research, development and innovation. It contributes to advancing cooperation and knowledge development, supports scientific renewal and strengthens Finland's scientific competitiveness.

- A national research infrastructure provides user-driven, dynamic and open services. It has a clear ownership and organisational structure and a long-term, multi-channel and transparent funding base. A national research infrastructure aims to generate new knowledge, attract talent and promote responsible and secure data management. A national research infrastructure must also consider the green transition and sustainable development in its operations.

- National research infrastructures facilitate active collaboration with different RDI actors, highlighting their impact and role in driving innovation.

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Characteristics of national research infrastructure

Scientific and educational significance

The research infrastructure must promote high-quality science and identify and support the development of areas critical to the competitiveness of science.

Services and users

Research infrastructure services and technological solutions are user-driven, dynamic and accessible. Research infrastructures actively attract and train new talent.

Ownership, organisational structure, and competence and know-how

The ownership must be structured in a way that supports multi-channel and transparent funding and the development of the skills of research infrastructure staff, including career paths. Staff must have up-to-date expertise and the ability to support the versatile use of the research infrastructure.

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Characteristics of national research infrastructure (4-5/8)

Data management and production

Through responsible and secure data processing and management, research infrastructures contribute as major players to the large-scale production and use of new knowledge.

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.

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Characteristics of national research infrastructure

Impact and cooperation

The research infrastructure must have wide and versatile impact in the scientific community and in society at large. Research infrastructures play an expert and visible role as facilitators of collaboration, platforms for innovation and drivers of RDI.

Budget and funding

Research infrastructures must have a long-term funding plan that is stable, transparent and supports the maintenance and development of services.

Risk management

The research infrastructure must have a risk management plan.

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Comments from the scientific councils

- Applications with an overall mark of 5 or 6 given to the scientific councils for commenting (Scientific 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)

- Research infrastructure is an important enabler of high-quality science in Finland now and in the future.

- A sufficiently large proportion of potential users will make use of the research infrastructure: the research infrastructure will provide a significant part of the infrastructure services needed by the scientific area, without duplicating services provided by other national research infrastructures.

- The research infrastructure advances national and also possibly international collaboration.

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Strategic significance of the RI for the hosting organisation(s)

- Previous prioritization process is *replaced* by long-term funding plan for research infrastructure, which is part of the roadmap application in stage 1

- Strategic significance of the RI for the hosting organisation(s) and the sustainability of the infrastructure's funding base is evaluated via the **long-term funding plan**

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Characteristics of a lighthouse research infrastructure

- Lighthouse infrastructures are at the forefront of the national infrastructure roadmap in all key infrastructure areas, such as service provision, impact, functionality and interoperability. Lighthouse infrastructures are **already operational and included in the roadmap for 2021–2024**.

- Lighthouse research infrastructures are infrastructures that stand out from the other research infrastructures on the roadmap:
  - forefront of providing services for scientific research, development and innovation
  - Services do not overlap with other research infrastructures on the roadmap
  - broad and demonstrable impact on different aspects of society
  - high utilisation rate and are used by many sectors
  - proven track record in international networks
  - professional staff and management
  - stable and diversified financial base, which ensures long-term operation and development
  - take account of the green transition and sustainable development in their activities

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Lighthouse research infrastructure interviews

- A working committee, composed of members of the FIRI Committee, may invite representatives of the lighthouse candidates (the head of the research infrastructure and representatives of the host organisation(s)) for an interview in autumn 2024.

FIRI2024 roadmap: Components and responsibilities in the evaluation

Topic to be evaluated	The review panel	Scientific councils' national view	Working committee of the FIRI Com	FIRI Committee
Scientific significance of RI	x	x		
Operation of RI	x			
Wide and versatile impact internationally, level of international activities	x			
Wide and versatile impact in Finland (incl. R&D, society at large (example Flagships)			x	x
Strategic significance for the organisations (sustainability and commitment)			x	x
National scientific needs, users, collaboration and overlaps		x		
Feasibility of the development project			x	x
Decisions on the roadmap and funding				**x**

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1. Stage
The Roadmap Application

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The Roadmap Application

➢ Consists of

- forms completed in the online services (SARA) tabs
  - Incl. Action plan, max. 20 pages (18 + 2) that is prepared on a template and appended as a PDF on the dedicated tab in the online services
- Obligatory PDF appendices attached separately
  - Data management policy for research infrastructure
  - Long term funding plan for the research infrastructure

➢ Is evaluated by international experts. The scientific councils of the Research Council of Finland will provide input to the applications.

➢ Applications with a rating of 5 and 6 will go through to the second stage to apply for funding.

- Lighthouse candidates emerge from these

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Action plans and life cycle phase

The application has to take into account the requirements of the life cycle phase of the research infrastructure in all areas covered in action plan questions.

The life cycle phase of the RI will be taken into account in the evaluation of the application.

- construction and/or implementation

- operation and/or termination

Responsibility and sustainable development
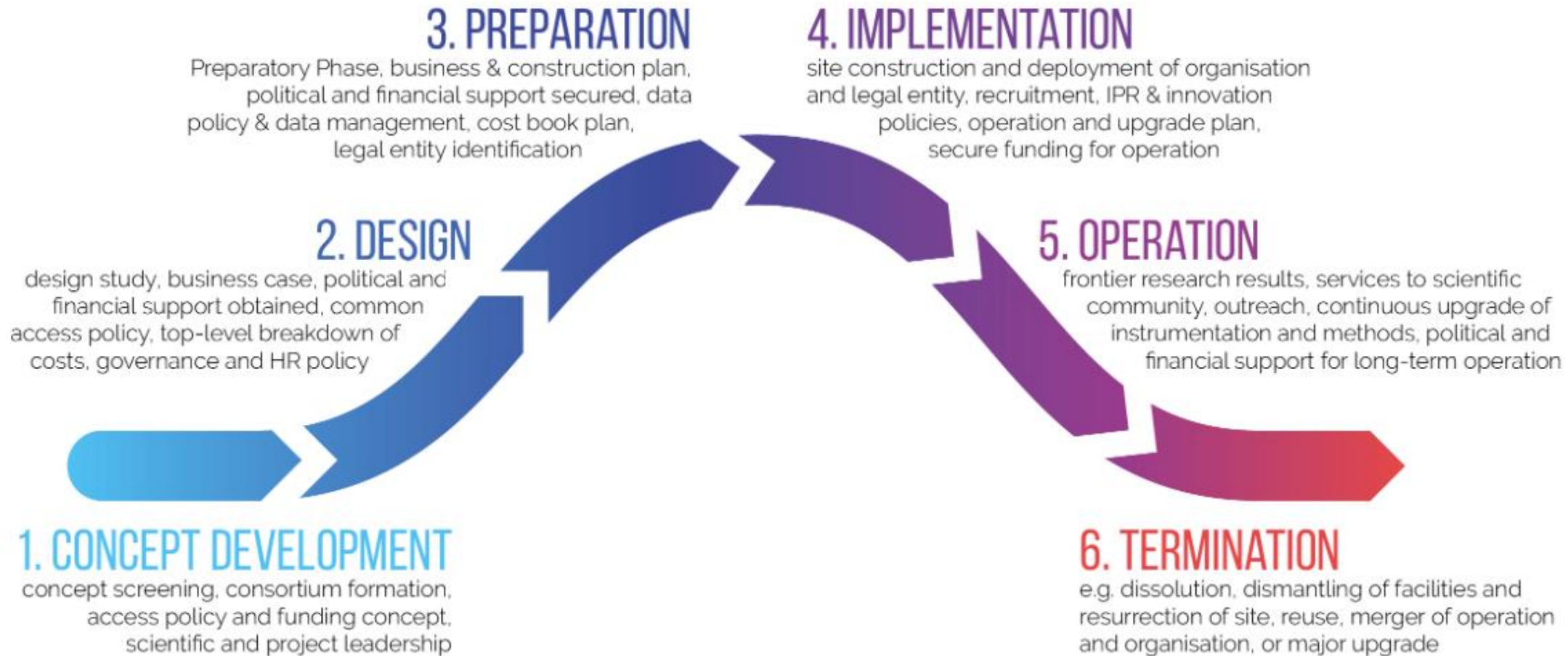
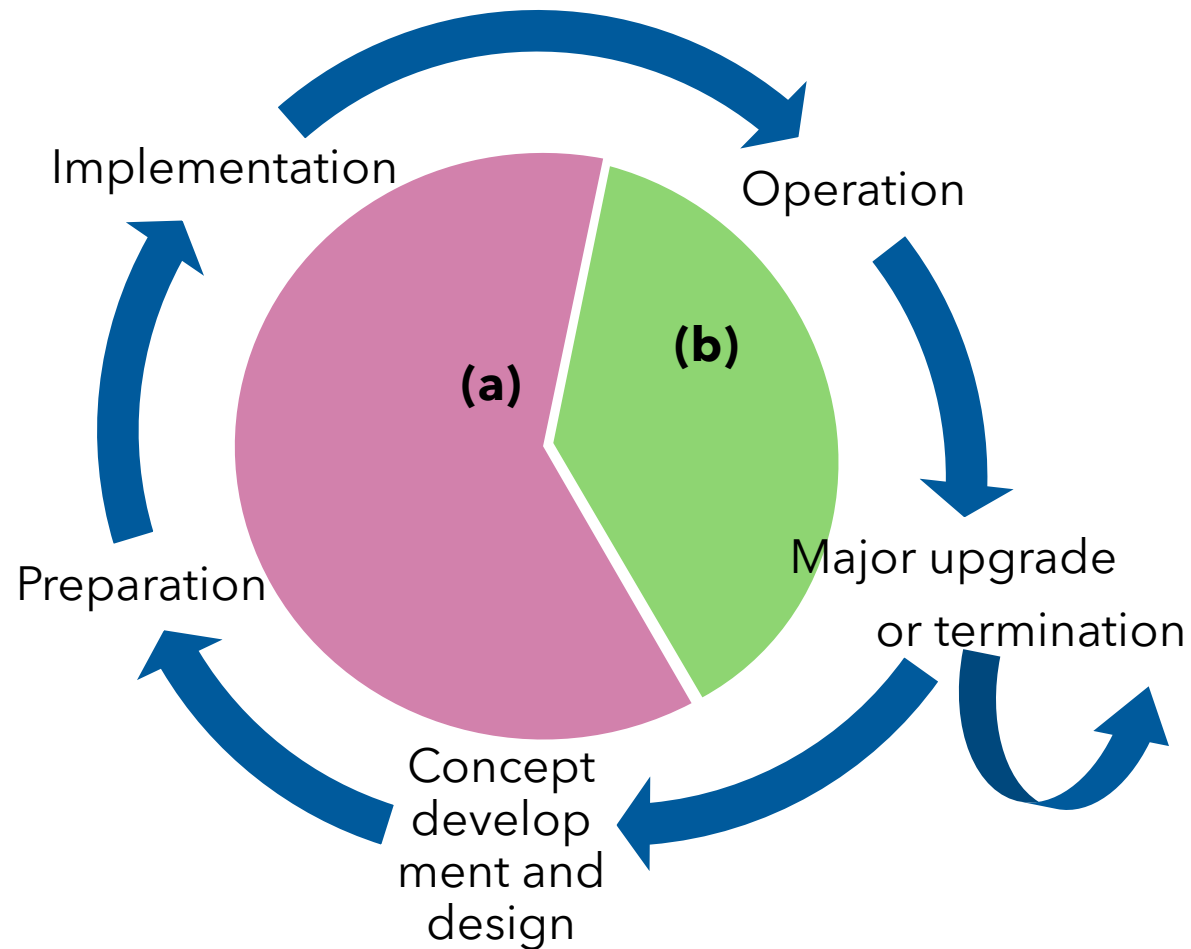**Long-term perspective and dynamism**

Ownership and know-how

Digital platforms and data

Open access and collaboration

Wide and versatile impact

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Lifecycle of research infrastructure (ESFRI)

3. PREPARATION
Preparatory Phase, business & construction plan, political and financial support secured, data policy & data management, cost book plan, legal entity identification

4. IMPLEMENTATION
site construction and deployment of organisation and legal entity, recruitment, IPR & innovation policies, operation and upgrade plan, secure funding for operation

2. DESIGN
design study, business case, political and financial support obtained, common access policy, top-level breakdown of costs, governance and HR policy

5. OPERATION
frontier research results, services to scientific community, outreach, continuous upgrade of instrumentation and methods, political and financial support for long-term operation

1. CONCEPT DEVELOPMENT
concept screening, consortium formation, access policy and funding concept, scientific and project leadership

6. TERMINATION
e.g. dissolution, dismantling of facilities and resurrection of site, reuse, merger of operation and organisation, or major upgrade

RI lifecycle phases in FIRI2024 Roadmap evaluation

- The assessment will take into account the lifecycle categories

  (a): planning, construction and/or implementation stage

  (b): operation and/or termination stage, or major upgrade

- The categories were also used in the Roadmap 2021-2024.

Suomen Akatemia

Appendix: Data management policy for research infrastructure

- Write the policy by using the DMPTuuli tool or following the guidelines published on the Research Council of Finland's website

- Maximum length of the DMPol is 5 pages

- New: data security

Review form

3.2 Is the data management policy of the research infrastructure sufficient? If it is not, please provide comments in the text box below.

Yes/no

See separate appendix for data management policy

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Appendix: Long term funding plan for the research infrastructure

- Long term funding plan is used to assess the **sustainability of the infrastructure's funding base and the commitment of the organisation(s) to the RI (strategic significance)**

- *Replaces* the previous prioritisation where organisations were asked to choose (prioritise) the strategically most central RIs

- Length in total 4 pages + 1 page per partner organisation

- In addition to the table, briefly explain the expenditure and revenue of the research infrastructure and the principles used to produce the figures in the table, how the numbers were obtained

- Include brief explanation of the monitoring of expenditure and revenue and a risk assessment of the long-term budget plan

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Table 1. Costs of the Research infrastructure for 2022-2023 and estimated costs for 2024-2030 (kilo €)

Costs	2022....2030	TOTAL
Personnell		
Investments		
Equipment meintenance (installations, depreciation, repair)		
Data management (excl. personnell)		
Premises (rent, electricity etc)		
Services (e.g. legal)		
Other costs (specify adding new lines)		
TOTAL		

Kuva: Kentoh, Most

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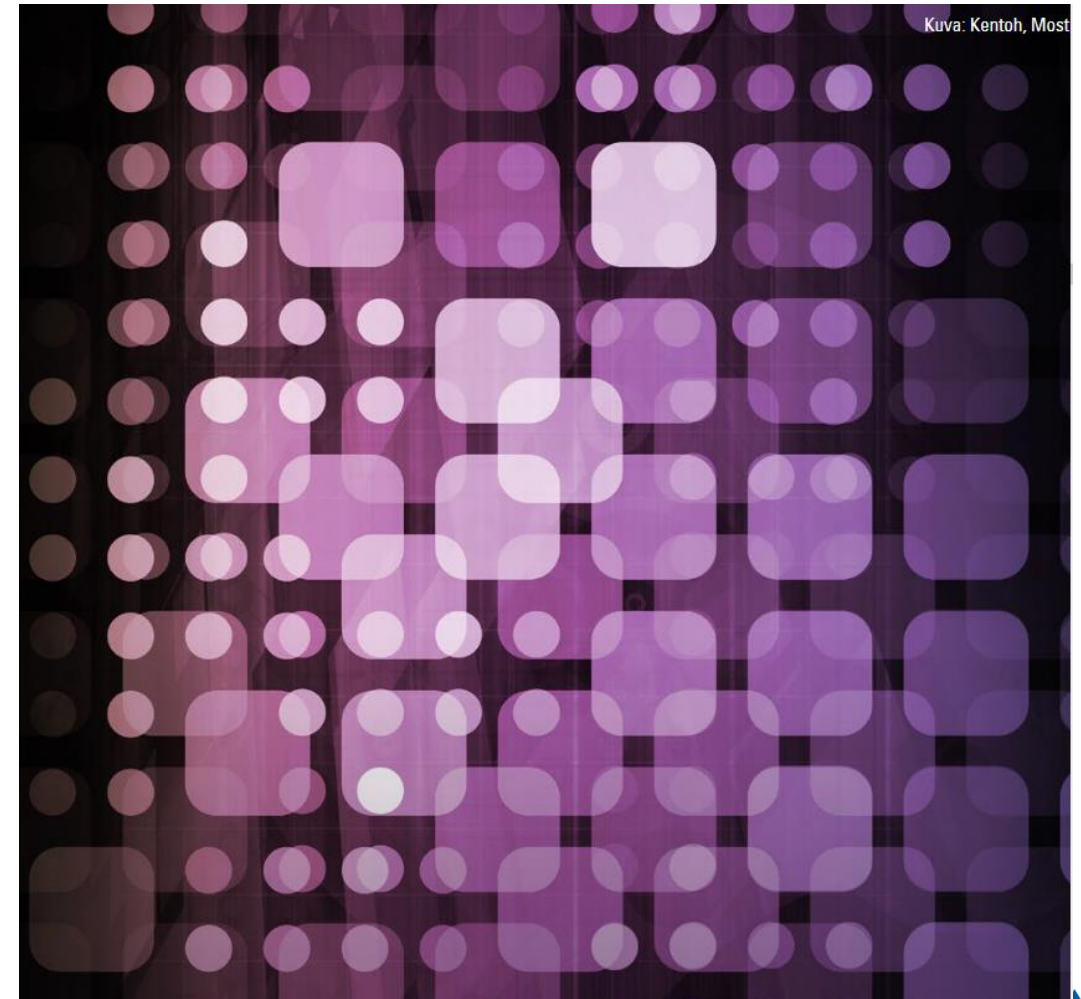
Table 2. Revenue for the research infrastructure for 2022-2023, and estimated revenue for 2024-2030 (kilo €)

Resources	2022….2030	TOTAL
1. Host university/research institute's own funding for the research infrastructure		
2. On-going Research Council of Finland FIRI-funding for the research infrastructure		
3. Funding planned to be applied in the 2. stage of the FIRI call 2024		
4. EC INFRA funding		
5. Other domestic competitive funding for the research infrastructure (e.g. Business Finland, foundations)		
6. Business companies		
7. Other public funding (e.g. ministries)		
8. User and service fees		
9. Other (specify adding new lines)		
TOTAL		

1. Funding provided by the host organisation(s) for the operation of the research infrastructure.

2. Ongoing FIRI funding from the Research Council of Finland for the upgrading or construction of the research infrastructure.

3. Estimate of funding to be applied for for the development project in the second stage of the roadmap call.

4. EU funding received or applied for by the host organisation(s) for the research infrastructure.

5. Finnish competitive funding for the research infrastructure received or sought elsewhere by the host organisation(s).

6. The host organisation's or organisations' existing and estimated business-sector funding for the research infrastructure (e.g. purchased services).

7. Ministry funding received or applied for by the host organisation(s) for the research infrastructure.

8. Funds received or estimated to be received from the research infrastructure's usage fees, if not already included in item 6.

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1. Stage FIRI Roadmap application ACTION PLANS

Review of action plans examines three aspects of the research infrastructure

- 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.

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1 Scientific significance of research infrastructure Subrating 1-6

Action plan

1.1 Scientific significance of research infrastructure and its position in the research landscape

Describe the relevance of the research infrastructure for promoting research quality, scientific renewal and research competitiveness in a national and international context. What research does the infrastructure serve? What is its vision?

•What role does the infrastructure play in Finland's infrastructure and research landscape? How does the infrastructure strengthen the existing national and international research infrastructure and research landscape? What synergies do you identify with other infrastructure actors?

•How is the infrastructure linked or how will it be linked to the infrastructure and research landscape internationally?

•How much scientific output will the infrastructure produce each year, e.g. publications per year 2019–2023?

•How has the infrastructure contributed to the development of the discipline and the creation of scientific breakthroughs?

•Consider the lifecycle stage of the infrastructure in your answer.

Review form

1.1 Is the scientific significance of the research infrastructure and its position in the research landscape described in a clear and convincing manner? Please review the following aspects:

• Does the RI strengthen the existing national and international RI landscape?

• Does the RI strengthen the research field(s) that it represents?

• Has the RI contributed to the development of the research fields it represents or to scientific breakthroughs in these?
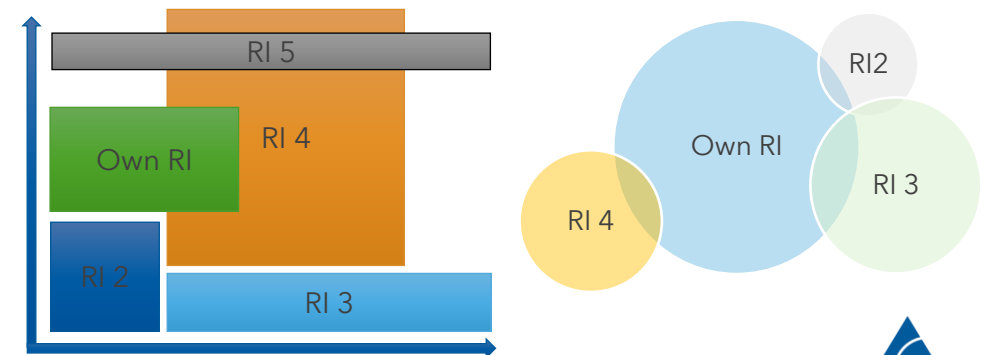
1 Scientific significance of research infrastructure, cont.

Action plan

1.2 Responsible science

How are the principles of good scientific practice and good governance considered in the infrastructure activities? Read more: Research ethics

How will the research infrastructure take into account and implement equality in its activities? Read more: Equality and nondiscrimination

Review form

1.2 Have good scientific practice and governance, promotion of equality and nondiscrimination within the activities of the research infrastructure been considered appropriately? If they have not, please provide comments in the text box below.

Yes/no

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2 Wide and versatile impact

Subrating (1-6)

Action plan

2.1 Wide and versatile impact

What societal impact outside the scientific community does the research infrastructure pursue? Describe the research infrastructure's expected/realised openness, societal added value and impact beyond academia, for example:

- effects on business and industry, society and employment as well as connections with business activities and new business initiatives

- its effects on knowledge and innovation ecosystems.

How does the research infrastructure support the research, development and innovation (RDI) ecosystem as a whole? How do the infrastructure and its networks contribute to international RDI cooperation?

Consider the lifecycle stage of the infrastructure in your answer. For example, you can describe the paths of impact from the perspective of business, the public sector, employment or business cooperation.

How have impact objectives been discussed and agreed with stakeholders?

Describe the indicators of impact and how they will be monitored (for research infrastructures in the operational phase) or a plan for such indicators (for research infrastructures in the planning or construction phase).

How many new technologies will be created through the infrastructure?

Review form

2.1 Does the research infrastructure have impact beyond the scientific community? Is it clearly and convincingly described? Please review the following aspects:

- Does the research infrastructure have impact on the research, development and innovation ecosystem (including international networks)?

- Does the research infrastructure have wide and versatile impact beyond the scientific community?

- Is impact discussed with the stakeholders and monitored sufficiently in relation to the lifecycle phase of the research infrastructure?

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2 Wide and versatile impact, cont.

Action plan

2.2 The green transition and sustainable development

What concrete actions does the research infrastructure have to reach the carbon neutrality target? Has the research infrastructure assessed or planned to assess its own carbon footprint? If it has, how was it done and what were the results?

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. How does it monitor the achievement of the objectives? Read more: Sustainable development principles

Review form

2.2 Has the green transition been considered appropriately in the operation of the research infrastructure? If it has not, please provide comments in the text box below.

Yes/no

2.3 Have relevant sustainable development goals (other than the green transition) been considered appropriately in the operation of the research infrastructure? If they have not, please provide comments in the text box below.

Yes/no

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3 Operation of research infrastructure
Subrating (1–6)

Action plan

3.1 Activities and operation/Lifecycle stage of research infrastructure

Describe in more detail the chosen lifecycle category (a or b). Describe, for instance, the following:

 (a) planning/construction/implementation

•Is the research infrastructure in the planning, construction or implementation stage?

•What steps are required before the infrastructure can move to the implementation stage (construction schedule; planned operational start date; when services can be provided)?

 (b) operation/termination

•How long has the research infrastructure been in operation, and how long is it planned to continue?

•Is there an exit plan for the research infrastructure or its parts?

Which parts of the research infrastructure require upgrades and/or development before 2030?

Review form

3.1 Are the activities and of the research infrastructure appropriate considering the lifecycle phase of the research infrastructure? Please review the following aspects:

• services and use of research infrastructure

• ownership and organisational structure of research infrastructure

• skills and know-how of research infrastructure personnel

• risk management plan of research infrastructure

• how the research infrastructure considers aspects related to digitalisation and data.

See action plan (sections 3.1, 3.2, 3.3, 3.4, 3.5 and 3.6)

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Action plan

3.2 Services provided by the research infrastructure and their use

Describe what services the research infrastructure provides now and in the future? How is the development of services linked to the infrastructure's stated vision?

Define the users of the research infrastructure (e.g. person, research team, organisation, other entity) and how their number will be monitored. Who are the main users or groups of users?

What is the research infrastructure's current and planned number of users per year on average and the utilisation rate? How and to what extent will the private sector, including businesses, use the research infrastructure?

How will the infrastructure train new talents? Describe how you plan to expand its use and user base. How will the shared use of the infrastructure with non-research actors be promoted?

Describe the research infrastructure's usage policy and service models. Describe where information on access to the research infrastructure can be found. Are fees charged for using the infrastructure? Can the infrastructure be accessed remotely? (Please note that open access does not mean that the use is free of charge.) Is access restricted in some way, for example to only research use, internal use or other uses? Are there any conditions for the use, such as passing a scientific selection process, evaluation of a research plan or other conditions? How are the access rights managed?

How is open access to the research infrastructure being promoted at national or international level?

Review form

3.1 Are the activities and of the research infrastructure appropriate considering the lifecycle phase of the research infrastructure? Please review the following aspects:

• services and use of research infrastructure

• ownership and organisational structure of research infrastructure

• skills and know-how of research infrastructure personnel

• risk management plan of research infrastructure

• how the research infrastructure considers aspects related to digitalisation and data.

See action plan (sections 3.1, 3.2, 3.3, 3.4, 3.5 and 3.6)

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3 Operation of research infrastructure
Subrating (1–6)

Action plan

3.3 Ownership and organisation of research infrastructure

Which organisation(s) own the research infrastructure and are involved in its operation and provision of services? Briefly describe the organisational structure of the infrastructure in Finland, including the management, host organisations and their roles and duties? How is the work distributed between the different functions?

Does the research infrastructure have a legal personality? How are its activities and the research it facilitates aligned with the strategies of the host organisations? In the case of a consortium, are there any agreements between the hosts, e.g. on division of labour or ownership? How have the roles been or how will they be agreed and the commitment ensured between organisations? Consider the lifecycle stage of the infrastructure in your answer.

Review form

3.1 Are the activities and of the research infrastructure appropriate considering the lifecycle phase of the research infrastructure? Please review the following aspects:

• services and use of research infrastructure

• ownership and organisational structure of research infrastructure

• skills and know-how of research infrastructure personnel

• risk management plan of research infrastructure

• how the research infrastructure considers aspects related to digitalisation and data.

See action plan (sections 3.1, 3.2, 3.3, 3.4, 3.5 and 3.6)

Research Council of Finland

3 Operation of research infrastructure
Subrating (1–6)

Action plan

3.4 Expertise of research infrastructure

What are the qualifications of the infrastructure's director and key personnel regarding the infrastructure's activities? Give an estimate of how many of them (in percentages) have a permanent employment relationship?

How do the qualifications of other research infrastructure staff support the infrastructure's activities? What is the proportion of permanent staff among other staff?

What are the skills needs of the infrastructure's staff in relation to its lifecycle stage. What expertise will the infrastructure need in the future? Is there a plan for the development of staff skills? What career paths are available for infrastructure staff? Does the infrastructure currently offer, or plan to offer in the future, job rotation or other forms of support that are relevant to staff tasks?

Review form

3.1 Are the activities and of the research infrastructure appropriate considering the lifecycle phase of the research infrastructure? Please review the following aspects:

• services and use of research infrastructure

• ownership and organisational structure of research infrastructure

• skills and know-how of research infrastructure personnel

• risk management plan of research infrastructure

• how the research infrastructure considers aspects related to digitalisation and data.

See action plan (sections 3.1, 3.2, 3.3, 3.4, 3.5 and 3.6)

Research Council of Finland

3 Operation of research infrastructure
Subrating (1–6)

Action plan

3.5 Risk management plan of research infrastructure

What are the critical points for the successful operation of the research infrastructure in its current and possible future lifecycle stage, and what are the alternative implementation strategies? Briefly describe the infrastructure's risk management plan.

Review form

3.1 Are the activities and of the research infrastructure appropriate considering the lifecycle phase of the research infrastructure? Please review the following aspects:

• services and use of research infrastructure

• ownership and organisational structure of research infrastructure

• skills and know-how of research infrastructure personnel

• risk management plan of research infrastructure

• how the research infrastructure considers aspects related to digitalisation and data.

Research Council of Finland

3 Operation of research infrastructure
Subrating (1–6)

Action plan

3.6 Digitalisation and data

The data management policy of the research infrastructure should be described in a separate appendix.

In its activities, how does the research infrastructure take account of the needs for change created by the growth of digitalisation and data intensity?

How does the infrastructure take care of data security (protecting digital data from corruption, theft or unauthorised access) throughout its lifecycle?

Please describe how the infrastructure relates to the EOSC (European Open Science Cloud).

Review form

3.1 Are the activities and of the research infrastructure appropriate considering the lifecycle phase of the research infrastructure? Please review the following aspects:

• services and use of research infrastructure

• ownership and organisational structure of research infrastructure

• skills and know-how of research infrastructure personnel

• risk management plan of research infrastructure

• how the research infrastructure considers aspects related to digitalisation and data.

See action plan (sections 3.1, 3.2, 3.3, 3.4, 3.5 and 3.6)

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4 Development project (no numerical rating)

Action plan

4 Description of development project (funding applied for in second stage)

Briefly describe the development project for which funding is sought, if the application proceeds to the second stage. The project is described in more detail in the second-stage funding application.

Which parts of the research infrastructure require upgrades and/or development before 2030, and why? How will the project contribute to the infrastructure strategy and develop its operations and services? How does the development project align with the infrastructure's lifecycle stage and vision?

What are the main measures and construction included in the development project? Estimate how much money is needed.

Review form

4.1 Comments on development project

The preliminary plan for the development project must be well founded and contribute to the strategy of the research infrastructure and to the development of its activities and services.

Please review the following aspects:

• How well does the development project support the vision and long-term plans of the research

infrastructure?

• Are the planned activities in the development project and its scale appropriate? Please explain.

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2. Stage Development project funding application

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2. Stage
the development project funding application

- Those selected to the second stage will be asked to apply for funding for a development project in the Research Council of Finland's online services by 22 October 2024.

Research Council of Finland

Case specific appendix: Progress report

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

- See the guidelines on the progress report

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

Research Council of Finland

2. Stage FIRI development project application ACTION PLANS

The development project application

➤ Consists of

- forms completed in the online services (SARA) tabs
  - Incl. Action plan, max. three pages that is prepared on a template and appended as a PDF on the dedicated tab in the online services
- Case specific PDF appendix attached separately
  - The progress report if ongoing FIRI funding for the same RI

➤ Only organisations applying for funding fill in the cost estimate. Other actors involved in the consortium as RI parties **do not fill in the cost estimate, but still indicate the site of research** in the application under 'General information' > 'Details on the site of research'.

➤ The feasibility is checked by the FIRI Committee's working committee

Research Council of Finland

Description of development project

- Describe in concrete terms the project presented in the first stage of the roadmap application. Why is the project needed to develop the research infrastructure? What actions does it require? Describe the timetable for the implementation of the project and the steps involved.

- Is the entire research infrastructure consortium applying for the project?

- What skills and competence are required to implement the project?

- How will the project contribute to research infrastructure's services? Will the project have an impact on the user base?

- How does the project take into account the green transition?

- Briefly present a risk management plan for the project.

Research Council of Finland

How to write a good roadmap application

General tips:

- Remember that only RIs of **national level** can be funded in the FIRI calls; see definition of a national research infrastructure in the call text
  - "Is this a national research infrastructure?"
- Research infrastructure ≠ project
- 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**

Communication and contacts

Contact us primarily via firi@aka.fi

Get in touch via <u>our helpdesk</u> (Division of Information Management) if you encounter technical issues in the online services.

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Thank you!

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