

Factsheet on the Swiss National Roadmap for Research Infrastructures 2023 for national projects

This document is intended as a quick reference guide on the evaluation process of national projects for the Swiss National Roadmap for Research Infrastructures 2023. For official guidelines, please see the documentation from the State Secretariat for Education, Research and Innovation (SERI)¹. Please also note that international projects are not covered in this document.

1. Context

1.1 Definition of RIs in this context

- Based on the European Strategy Forum on Research Infrastructures (ESFRI) definition
- RIs are **facilities, resources and services**, including:
 - major scientific equipment (or sets of instruments)
 - knowledge-based resources such as collections, archives and scientific data
 - e-infrastructure, such as data and computing systems and communication networks
- RIs have the potential to:
 - Contribute to important developments in the research field - **scientific «added-value»**
 - Used extensively by Swiss researchers - **national relevance**
 - To be **accessible** to national and international research communities
 - Drive fundamental **research** and technological **innovations**
 - Develop specialised fields and/or open new scientific frontiers

1.2 Financing of RIs in Switzerland in this context

- As stated in the **Research and Innovation Promotion Act (RIPA)**:
 - Funding for RIs is primarily the responsibility of the higher education institutions (cantonal universities and universities of applied sciences) and research institutes in the ETH Domain.
 - The Confederation is responsible for subsidiary support for RIs of national importance (art. 15 RIPA) and for Switzerland's participation in RIs coordinated at an international level (art. 41 RIPA).

¹ The information is based on the SERI guidelines on the Roadmap for RIs 2023 ([FR](#) / [DE](#)), the [application template](#) and the [Swiss Roadmap for Research Infrastructures 2019](#).

- **Cantonal universities and universities of applied sciences:**
 - The Confederation participates in subsidiary funding through basic contributions (Higher Education Act, HEdA).
 - For expensive RI projects in cost-intensive areas (HedA), the Confederation can fund up to 50% of investment and operating costs during the initial phase for 4 years (special support through Art. 47, para. 3 HEdA).
- **ETH domain:**
 - The Confederation contributes to RI funding via the ERI Dispatch global funding envelope.

2. Overview of the Swiss National Roadmap for RIs 2023

2.1 Objectives of the Swiss Roadmap for RIs 2023

- Strategic planning instrument, coordinated by the SERI, in view of the ERI Dispatch 2025-2028
- Aims to:
 - prepare and prioritise future and long-term investments in research infrastructures (RIs).
 - provide an overview of new projects (including major upgrades of existing RIs) and an update on those introduced in the 2019 and 2015 Roadmaps.

2.2 Eligibility criteria

- New projects or major upgrades of existing RIs (to maintain competitiveness for at least 10 years or for increased performance).
- «Mature» projects – no pilot or conceptual projects; close to implementation phase²
- Minimal investment and operating costs of CHF 5 million for 4 years. Projects requesting special support through Art. 47, para. 3 HEdA in cost-intensive areas (only for cantonal universities and universities of applied sciences), minimum of CHF 10 million.

2.3 Procedure

Phases & title	Period	Responsible bodies	Short description
Preparatory phase: Thematic Roadmaps	Until April 2021	SCNAT	Needs of the scientific communities (in biology, chemistry, astronomy, particle physics, photon science, neutron science, geosciences). Link here .
Phase 1: Selection	March – September 2021 ³	swissuniversities ETH-Board	Prioritisation of projects based on strategic and financial planning.

² Based on lifecycle phases defined by ESFRI : (1) concept development, (2) design, (3) preparation, (4) implementation, (5) operation, (6) termination

³ Phase 1 was originally from March – December 2021 in the SERI guidelines ([FR](#) / [DE](#)), but national projects were selected earlier.

Phase 2: Scientific evaluation	January – July 2022	SNSF	Scientific evaluation based on quality of the RI, national and international relevance, users and access and scientific feasibility. See section 3.
Phase 3: In-depth evaluation	July – December 2022	swissuniversities ETH-Board	Evaluation of the planning, governance and management and investment plan
	July 2022 – mid-2023	Swiss Higher Education Conference (CSHE / SHK) SERI	CSHE/SHK: Decision on priorities and cost-intensive areas for 2025-2028. SERI: decision on projects financed through extraordinary HEdA funding.
Phase 4: Roadmap publication	January – May 2023	SERI	Presentation of the Roadmap to the Federal Council, with a list of RIs that could be implemented and an estimation of costs; publication of the Roadmap.
Next: Decisions on implementation	2024	The decision as to whether a new RI will be implemented belongs to the responsible institution. The Confederation encourages RIs as described in section 1.2 and within the limits of the ERI credits available for the period 2025 - 2028.	

3. Overview of the SNSF scientific evaluation (Phase 2)

3.1 Procedure

- The SNSF is mandated by the SERI for the scientific evaluation (Phase 2) of projects selected by swissuniversities and the ETH-Board (in Phase 1)
- External reviewers and an Evaluation Panel, who are experts in the fields of the proposed projects, will review proposals (see section 3.2 for *Assessment criteria*)
- Proposals will be rated A, B or C and only A-rated proposals are selected to continue in Phase 3
- Independently from the scientific evaluation, external reviewers and the Panel will comment (with no associated rating) on the plausibility of the investment and operating costs for the proposed project (of interest to swissuniversities and ETH-Board in Phase 3)
- The SNSF does not make funding decisions and does not provide funding

3.2 Assessment criteria

- **Quality of the infrastructure and research**

Lead questions for the scientific evaluation: Does the infrastructure correspond to the state of the art in research and development in terms of its conceptual, technical and logistical aspects? Are the research questions and approaches that can be addressed using the infrastructure scientifically significant and original? What would be the added-value compared to existing research possibilities? Would it increase scientific collaborations?

- **National and international scientific relevance and future potential**

Lead questions for the scientific evaluation: How does the proposed infrastructure fit into the existing national and international RI landscape? Does it contribute to the visibility of this research field in Switzerland? Will it raise the profile of the field nationally and/or internationally? Is there an immediate or potential need for the requested infrastructure, based on the addressed scientific questions and achievable projects?

- **Users and access**

Lead questions for the scientific evaluation: What is/will be the access policy concerning access costs, access priority and selection of users? Does/will the RI meet the national open access policy ([Swiss National Open Access Strategy](#))? What is/will be the policy regarding open data? How many potential users do you expect and what are their main sectors of activity? How did the research community participate in the development of the proposed RI?

- **Scientific feasibility**

Lead questions for the scientific evaluation: Does the management have the required leadership capabilities (scientific and managerial skills)? Are the deliverables and milestones plausible from a scientific perspective? Are the technical and logistical conditions in line with the proposed infrastructure?

4. Contact

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