

# Swiss Quantum Initiative Call for Proposals 2024 Quantum Voucher Model

Call for proposals to request support for the use of infrastructures and services in the field of quantum science and technology (“2024 Quantum Voucher Model”)

**Important dates**

Submission deadline: August 30, 2024 midnight

Evaluation of applications until: November 6, 2024

Expiration date of vouchers: November 6, 2026

June 20, 2024

## 1. Purpose and scope

<sup>1</sup> The Swiss Quantum Initiative (SQI) has been initiated by the Swiss Confederation to further strengthen the leading position of Switzerland in the field of quantum research, technology and application.

<sup>2</sup> As part of the SQI, this Call for Proposals aims at supporting the broad and efficient use of infrastructures, platforms and services for quantum science and innovation in Switzerland.

<sup>3</sup> The award and use of vouchers is aimed at the broad and effective use of existing infrastructures, platforms and services in Switzerland and their gradual expansion.

<sup>4</sup> Proposals to request support for the use of infrastructures, platforms and services concerning the following topic areas are welcome: quantum communication, quantum computation, quantum simulation, quantum sensing and quantum metrology. Proposals in connection with the following related fields are also welcome: materials for quantum devices, control hardware, systems engineering, quantum theory and computer sciences.

## 2. Description of the 2024 Quantum Voucher Model

<sup>1</sup> The voucher redemption concept is as follows: The voucher holder purchases services from the nominated host institution of an infrastructure, platform or service. The host institution sends an invoice to SCNAT and SCNAT pays the invoice.

<sup>2</sup> This call for proposals follows a decentralized approach in which voucher holders and infrastructure hosts find each other autonomously and agree on the specific form of use bilaterally.

<sup>3</sup> Infrastructures for quantum are facilities, resources and services that are set up specifically for technology transfer and innovation purposes, are made available in the medium or long term and

require specific skills to be set up, operated and used. They are not used exclusively by individuals or individual groups, but are open to at least one specialist community (science and industry).

<sup>4</sup> Platforms are application-oriented architectures based on one or more specific quantum technology such as superconducting circuits, trapped ions, ultracold atoms or electron spins. Platforms usually contain several technical layers, including physical hardware, controls, information processing/software and user interfaces.

### **3. Legal basis**

<sup>1</sup> The general provisions of the SQI (Funding Regulations) apply to the 2024 Quantum Voucher Model and the corresponding funding procedures. This call document is issued by SCNAT under a mandate from the SERI concerning the tasks of the Swiss Academy of Sciences in the launch and implementation of the national quantum initiative of September 12, 2023.

### **4. Grant limitations**

<sup>1</sup> The maximum amount of funding that can be requested for any each voucher proposal is CHF 50'000. The SQI will not consider proposals for larger amounts.

<sup>2</sup> An applicant can apply for a maximum of two vouchers.

<sup>3</sup> SQI vouchers may be used to cover the following costs:

- a. Facility costs;
- b. Consumables;
- c. Computing time;
- d. Services provided by the host or by third parties which are directly related to the use of the infrastructure or platform, including but not limited to: setup of the work, training, help with the design of workflows or architectures, feasibility assessments;
- e. Travel and accommodation directly related to the use of the infrastructure or platform;
- f. Overhead directly related to the use and administration of the infrastructure, platform or service, not exceeding 5% of the voucher value.

### **5. Grant procedures**

<sup>1</sup> Grants will be awarded to applicants in form of vouchers of a maximum amount as indicated in Section 4.

<sup>2</sup> The vouchers may be redeemed at a higher education institution within Switzerland or at non-commercial research institutions outside the university sector based in Switzerland and with majority Swiss basic funding under Swiss law.

<sup>3</sup> The provisioning of infrastructure facilities, platforms and services at these institutions may include the participation of partner institutes or companies e.g. as supplier of equipment and services.

<sup>4</sup> Depending on actual costs occurred as part of the usage of infrastructures, platforms and services within 24 months of the award of the grant, the SQI will compensate the host institution of the infrastructure, platform or service. No money will be transferred to applicants directly as part of this funding instrument.

<sup>5</sup> Applications for the use of a voucher for infrastructure, platforms or services at the applicant's own institution will not be considered. Well-justified exceptions to this rule may be considered on a case-by-case basis.

## 6. Personal and formal requirements

<sup>1</sup> Natural persons who carry out research or innovation activities in the field of quantum in Switzerland or with a close connection to Switzerland are eligible to apply.

<sup>2</sup> The host institution of the infrastructure, platform or service must be named in application together with the responsible contact at this institution. This host must be an education institution within Switzerland or at non-commercial research institutions outside the university sector based in Switzerland and with majority Swiss basic funding under Swiss law.

<sup>3</sup> Applications may be submitted until August 30, 2024 midnight.

## 7. Proposals and eligible costs

<sup>1</sup> Proposals must be submitted via the provided SCNAT application tool and contain the following information:

- a. Title of the proposal: relating to the envisage use of the infrastructure, platform or service;
- b. Name and link to the website of the institution hosting the infrastructure, platform or service;
- c. Main themes and goals of the use: short description of work to be done;
- d. Short rationale why the proposed support with public funding is of relevance in the context of the SQI;
- e. Budget overview in CHF (total costs and high-level plan of usage, no individual contracts or cost items required);
- f. Leading house and application contact information for the SQI (name, email and phone number);
- g. Responsible contact at the host institution (name, email and phone number).

## 8. Evaluation process and assessment criteria

<sup>1</sup> Only proposals that meet the requirements according to chapter 6 and 7 above are considered.

<sup>2</sup> SQI voucher proposals are evaluated until November 6, 2024.

<sup>3</sup> Evaluation is conducted in accordance with the criteria set out in Article 17 of the SQI Funding Regulations:

- a. Relevance for Swiss industries;
- b. Enabling work towards breakthroughs in the underlying scientific approaches (incl. algorithms);
- c. Accessibility: the infrastructures, platforms, services are in principle open to the entire Swiss community (science and industry);
- d. Leverage effect: building on existing strengths and expertise in Switzerland;
- e. Feasibility of implementation.

## 9. Decisions

<sup>1</sup> Funding decisions are made via the following sequential steps:

- a. Assessment by an evaluation panel made up of experienced experts from Switzerland and/or abroad. The assessment is based on the criteria listed in Chapter 8. The evaluation panel will draw up a ranking of the applications submitted.
- b. Decision on the individual applications and allocation of funds by the Swiss Quantum Commission (SQC), taking into account the assessment of these applications by the evaluation panel. In case the SQC's decisions do not correspond to those of the panel, it must provide reasons for differences. The applications to be funded and rejected are included in the so-called funding/rejection proposal, which is submitted to the SCNAT Executive Board for ratification.
- c. The SCNAT Executive Board decides on the ratification of the SQC's funding/rejection proposal.

<sup>2</sup> All applicants will be informed about the outcome of the decision.

<sup>3</sup> The ruling may be appealed against before the Federal Administrative Court.