

# Second SDSC National Calls

## *General documentation*

<b>Introduction</b>	0
<b>Calls and types of projects</b>	1
Project Duration	1
<b>Resources granted in Collaborative projects</b>	1
Resources in personnel allocated by the SDSC	1
Computational resources used during the project	2
<b>Eligibility conditions</b>	2
Eligible institutions	2
<b>Domains and tracks</b>	3
Environment and Climate (EC)	3
Energy and Sustainability (ES)	3
Health and Biomedical Sciences (HBMS)	4
Data Science for Large-Scale Infrastructures (LSI)	4
Digital Society (DS)	5
General track (G)	5
<b>Open Science and Open Research Data</b>	5

## Introduction

The Swiss Data Science Center (SDSC) was founded as a joint initiative of EPFL and ETH Zürich for the period 2017-2024, with the mission to promote and facilitate the adoption of state-of-the-art data science methods across different scientific disciplines within the ETH Domain. It has offices at EPFL in Lausanne, ETH Zürich, and at the Paul Scherrer Institute (PSI) in Villigen. Since its creation, the SDSC has been providing services to academic researchers, the public sector, and industries. Every year the SDSC engages in collaborative projects spanning a wide range of applications and scientific use cases. Our collaborative projects are selected following a careful review process within the context of a competitive yearly call for projects.

In 2025, the SDSC became a National Research Infrastructure. In this transition, and expanded its offer nationwide and to new types of collaborations. In particular, in addition to the *Collaborative Research Data Science projects*, the SDSC will offer

support and collaboration on projects aiming at the development of software and data infrastructure, and on End-User Innovation projects.

## Calls and types of projects

The SDSC is opening simultaneously the following three calls:

- The **2025 Call for Collaborative Data Science Research Projects** offers to contribute in-kind expertise in statistical modeling, machine learning and AI to projects (of up to 2 years) from different application domains requiring research-informed methodology.
- The **2025 Call for Collaborative Data Science Infrastructure Projects** invites community-driven, FAIR-aligned initiatives to design, prototype, or develop sustainable and reusable data science infrastructures with potential for lasting impact across scientific domains and institutions. The call offers support for both early-stage *Exploration and Prototyping projects* (3–6 months) and more mature *Minimal Viable Product Development projects* (up to 2 years).
- The **2025 Call for End-User Innovation Projects** aims to ensure that novelty developed in an academic or research context achieves its full potential in end-user contexts, serving a community or society at large, e.g. public institutions, industrial and/or economic stakeholders. In addition to ***Collaborative End-User Innovation Projects*** (of up to one year), it is also possible to apply in this call to ***Expert Support Mandates***, which offer SDSC strategic and operational expertise to help design concrete data science initiatives.

## Resources granted in Collaborative projects

In our calls, the SDSC offers to contribute in-kind personnel and computational resources needed for the work contributed by the SDSC. Please note that the SDSC cannot fund third parties and does not grant any resources in cash.

### Resources in personnel allocated by the SDSC

The resources in personnel allocated in-kind by the SDSC for a project are determined based on the needs of the project. They are typically of the order of 0.5 FTE per year (to 1 FTE for the Research and Infrastructure calls) for the duration of the project. More significant personnel allocation is possible, provided it is motivated by a larger project, comprising several teams with sufficient in-kind involvement from co-applicants, and possibly from different institutions.

The number of FTEs allocated to the project will be assigned based on the evaluation of the project needs through the review process.

## Computational resources used during the project

If relevant, SDSC will provide in-kind computational resources needed for the work of its staff and for the related data analysis and data science work carried out by the project partners for the duration of the project, including temporary storage and CPU/GPU resources. An estimate of the amount of resources should be proposed and motivated in the proposal.

The cost of computational resources required for intensive numerical computations to produce data, and resources for a subsequent intensive use of algorithms or results of the project, cannot be contributed in-kind by the SDSC.

Similarly, the SDSC will not take care or cover the cost of long-term storage of the data and results produced by the project, but can help transfer the data to long-term storage at the end of the project.

The amount of computational/temporary storage resources allocated in-kind by the SDSC will be assigned based on the evaluation of the project needs through the review process.

## Eligibility conditions

Applicants to our calls must meet the following eligibility conditions, which are based on those for SNSF project funding.

Applicants must be in a position to carry out projects under their own responsibility and to lead project staff both technically or scientifically and as personnel.

Applicants must be able to show that:

- They have the relevant qualifications to contribute to the proposed project.
- They are employed at least for the duration of the project at the institution they are affiliated with or have been given assurance of such employment in writing;
- The necessary resources are at their disposal to contribute appropriately to the proposed project.

### Eligible institutions

The main applicant must be affiliated with a Swiss federal or cantonal administration, or with one of the recognised Swiss higher education research centers pursuant to Art. 4c RIPA<sup>1</sup>:

- The two Federal Institutes of Technology and Research Institutes within the Federal Institutes of Technology Domain,
- Higher Education Institutions and other institutions that are accredited under the HEdA ([list of accredited institutions](#)),
- Research facilities of national importance (Art. 15 RIPA). ([list of accredited institutions](#)),
- Swiss national nodes of internationally coordinated research infrastructure networks ([list of national nodes](#)).
- Swiss cantonal or federal administrations
- Swiss NGOs or international NGOs with a strong presence in Switzerland.

---

<sup>1</sup> <https://www.fedlex.admin.ch/eli/cc/2013/786/en>

Co-applicants must be affiliated with non-profit institutions. In projects from the End-User Innovation call, private companies can participate as joining implementation partners and benefit from first-mover advantage.

**If you are unsure about your institution's eligibility, please contact us for clarification.**

## Domains and tracks

In each of our Calls, proposals can be submitted to one of the following 6 tracks:

- Environment and Climate (EC)
- Energy and Sustainability (ES)
- Health and Biomedical Sciences (HBMS)
- Data Science for Large-Scale Infrastructures (LSI)
- Digital Society (DS).
- General (G)

In all tracks, we particularly encourage submissions that strive to create community-oriented solutions with long-lasting impacts, benefiting both the scientific community and society at large. Within each area, we welcome both research-oriented projects (e.g. developing data science methods and models) and infrastructure-oriented projects (e.g. developing reusable, FAIR-aligned components, platforms, and governance frameworks).

### **Environment and Climate (EC)**

In the EC track, we welcome project proposals on data science methods for environmental and climate sciences at large, focusing on open broad, impactful open problems in the domain. Environmental sciences at large are rapidly steering towards adopting and developing dedicated data science approaches, aiming at facilitating and improving data parsing and interpretation, modeling of spatio-temporal phenomena and forecasting of key processes related to the Earth and its components. In this track we encourage submissions spanning the use of data science and machine learning in ecology and biodiversity, natural hazards, climate and weather modeling, climate change adaptation and mitigation, among others. Projects will rely on and leverage the use of data of various forms and modalities, such as in-situ measurements and sampling, large scale Earth observation datasets from remote sensing instruments, gridded climatological and weather data, biodiversity databases, and any other form of spatial or temporal data source describing any relevant process. Infrastructure-focused initiatives may target interoperability of such data sources, the development of standards, metadata enrichment, or shared platforms that facilitate sustainable collaboration across institutions.

### **Energy and Sustainability (ES)**

In the ES track, we encourage the submission of data science projects supporting the sustainable use of energy and natural resources, and mitigating the impact of human activities on natural ecosystems. In the energy domain, data science has emerged as a powerful tool to accelerate the energy transition at scale. We thus welcome projects

where data-driven and ML/AI-based approaches are instrumental to enhance the forecasting of energy generation, optimize its distribution and consumption, and accelerate the deployment on the territory of renewable energy sources, like wind and solar, as well as their integration into the national energy infrastructure. These projects can among others leverage data collected by sensors to improve the energy efficiency of assets (e.g., buildings, industrial processes, etc). In the area of sustainability, we welcome project proposals that promote the responsible use of natural resources in relation to human activities, with emphasis on green technologies, sustainable manufacturing practices, development and application of circular materials, and innovative waste management technologies. Infrastructure-oriented initiatives may focus on reusable components, interoperability standards, metadata frameworks, or shared platforms that enable secure, FAIR-aligned energy data exchange or support sustainability initiatives.

### **Health and Biomedical Sciences (HBMS)**

In the HBMS track, we invite research proposals focused on developing and applying data science methods in health and biomedical sciences. We welcome submissions on a wide range of topics, including but not limited to biomedical imaging (e.g., MRI, CT scans, histological images, spatial omics), time-dependent data analysis (e.g., built around patient monitoring data, electronic health records), integration of multiple data modalities (e.g., genomic, proteomic, imaging, clinical) to provide a comprehensive view of patient health, and related to data science for preventive medicine or precision medicine. Proposals should aim to bridge the gap between data science and biomedical research, fostering interdisciplinary collaboration and innovation. Infrastructure-focused initiatives in this domain may target secure and privacy-preserving architectures, data access governance, interoperability across institutions, metadata and semantic integration, or platforms enabling reproducible and FAIR biomedical research.

### **Data Science for Large-Scale Infrastructures (LSI)**

In the LSI track, we encourage the submission of research data science projects relevant for the design, operation, and exploitation of large and complex research infrastructures. These include projects related to the improvement of the data production and acquisition capabilities, the control and maintenance of such facilities and instruments, as well as projects related to the data ingestion, processing and analysis for specific scientific use cases and end-user applications associated with their exploitation.

A large-scale infrastructure can be a complex dedicated research facility with specialized instrumentation and associated databases that serves a scientific and/or industrial community well beyond the owners/maintainers/operators of such infrastructure, and whose exploitation contributes to the strategic advantage of Switzerland in the research and development landscape. Examples of qualifying infrastructures are specialized instrumentation such as particle accelerators, large monitoring and sensing networks (e.g., satellite, environmental), or the Square Kilometer Array (SKA), to name a few.

If you are uncertain whether your project qualifies for the LSI track please, feel free to contact us.

## Digital Society (DS)

In the DS track, we invite project proposals that advance and apply data science methods to empower individuals and communities, strengthen public services, and address fundamental societal challenges.

Projects should aim to develop and deploy data-driven solutions that improve the efficiency and accessibility of public administration and services (e.g., resource planning optimization, advanced knowledge extraction, reasoning over standard operating procedures and regulations); enable collective participation (e.g., citizen science initiatives, collaborative knowledge-sharing and problem-solving platforms); expand access to essential services (e.g., interpretation tools for low-resource languages); support vulnerable or underserved populations (e.g., humanitarian aid delivery); and support efforts to use data science and AI for open-access knowledge and personalized education (e.g., adaptive learning systems).

We particularly encourage proposals involving multidisciplinary teams and consortia, and addressing critical aspects such as interoperability of public and proprietary data, fairness, transparency, and security. Infrastructure-focused initiatives may develop gated architectures to protect sensitive assets, reusable components for trustworthy data spaces, and citizen-facing applications or interfaces for trusted data entry, including semantic modelling to ensure validation and interoperability.

## General track (G)

In the general track, we accept project proposals relevant to other domains. Examples of past and current research projects can be found on our [projects page](#).

Projects submitted in the EC, ES, HBMS, LSI, and DS track, and which do not qualify in the proposed track will be automatically transferred and considered in the most relevant track.

## Open Science and Open Research Data

The SDSC strongly supports Open Science, Open Research Data (ORD), and the development of data science projects and research data infrastructures that meet the FAIR<sup>2</sup> (findable, accessible, interoperable, reusable) standards. Projects promoting Open Science and ORD are particularly welcome. Specific support to build research data infrastructures, enhance their FAIRness, implement strong ORD practices or develop associated data science platforms can be obtained from the SDSC by applying to the *Collaborative Data Infrastructure Projects* call.

---

<sup>2</sup> Wilkinson, M. D. *et al.* The FAIR Guiding Principles for scientific data management and stewardship. *Sci. Data* 3:160018 doi: 10.1038/sdata.2016.18 (2016)