

State Secretariat for Education, Research and Innovation



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs,
Education and Research EAER
**State Secretariat for Education,
Research and Innovation SERI**

SERI at a glance

EAER



Federal Department of Economic Affairs,
Education and Research, to which SERI belongs.



4.8

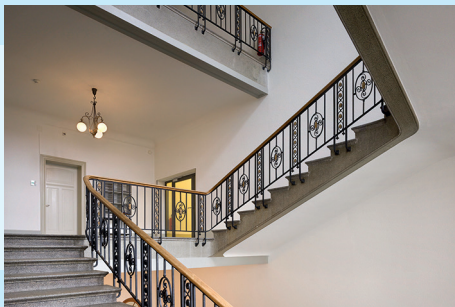


CHF 4.8 billion. SERI annual budget.

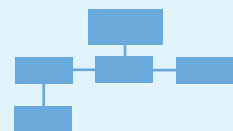
E2



Einsteinstrasse 2. SERI offices in Bern.



7



Divisions responsible for education,
research and innovation.

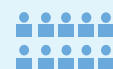
2013



The year SERI was founded. Since then, all federal
education, research and innovation activities are
carried out under one roof.



278



Employees. Plus 11 apprentices and
8 university interns as well as 7 seconded
and around 80 local staff abroad.



Foreword

Ladies and gentlemen,



Education, research and innovation (ERI) are essential for both personal development and the competitiveness of companies. They contribute to social well-being and prosperity. Accordingly, the Swiss ERI sector enjoys a high level of social, economic and political support.

The Swiss ERI sector is based on proven principles such as stakeholder diversification, subsidiarity and autonomy in the pursuit of common objectives. Additional principles include improved quality thanks to competition, system stability and adaptability, national and international cooperation and networking at various levels.

As part of the Federal Department of Economic Affairs, Education and Research (EAER), we feel that the State Secretariat for Education, Research and Innovation (SERI) exists to build bridges. Our role is to strengthen the ERI sector and further improve overall quality by working with the cantons, the private sector, higher education institutions and bodies, institutions that support research and innovation and other organisations. As the federal agency responsible for education, research and innovation, SERI focusses on national and international matters pertaining to education, upper-secondary level vocational education and training, tertiary-level professional education and higher education, research and innovation and space technology.

Together with our partners, we seek to ensure that Switzerland remains among the top countries in the area of education, research and innovation.

A handwritten signature in black ink, appearing to read 'Julia Hirayama', with a stylized flourish at the end.

Martina Hirayama
State Secretary for Education, Research and Innovation

SERI fields of activity

As part of the Federal Department of Economic Affairs, Education and Research (EAER), the State Secretariat for Education, Research and Innovation (SERI) is the federal competence centre for national and international matters pertaining to education, research and innovation policy.

As the federal authority responsible for preparing and implementing federal ERI policy, SERI works with its partners to carry out the following tasks:

- It develops a strategic overview of education, research and innovation in Switzerland and handles federal performance and resource planning in these areas.
- It develops Switzerland's international networks and ensures its place in European and global ERI activities.
- It provides a wide-ranging, varied and flexible system of high-quality general education and vocational education and training (VET).
- It raises the quality and appeal of vocational and professional education and training according to the changing needs of the labour market.
- It contributes to efficient and high-quality teaching and research at higher education institutions.
- It promotes research and innovation and coordinates the tasks and measures of the relevant federal grant funding bodies.
- It fosters and coordinates Swiss activities in space research and applications.
- It is responsible for the recognition of foreign vocational and professional qualifications as well as qualifications awarded by universities of applied sciences.





Our mission

- We are the federal competence centre for the design and implementation of education, research and innovation policy, which radiates and is felt at national and international levels. We see ourselves as the liaison between policymakers, society and business.
- We work with public and private partners to coherently shape future prospects for our society.
- We align our support activities with other federal and cantonal agencies and make subsidiary contributions aimed at consolidating Switzerland's position as a location for research and production.

In addition, SERI contributes to public funding of the VPET system with a budget of nearly CHF 1 billion per year.

VPET system

SERI is responsible for the regulation, strategic management and further development of the Swiss vocational and professional education and training system. This includes quality assurance and further development of the entire system of upper-secondary level vocational education and training (VET) and tertiary-level professional education. It also works to ensure comparability and transparency among the range of initial and subsequent training courses.

With the aim of achieving coherent and system-wide implementation and further development of the VPET system, SERI works to establish the foundation for evidence-based policymaking. It also prepares the indicators needed for strategic management. Furthermore, it has launched or supported implementation of various comprehensive projects (e.g. mobility, vocational and professional qualifications and professional reorientation for adults).

In addition, SERI allocates around CHF 1 billion per year in federal funding to the Swiss VPET system, mainly in the form of contributions to the cantons. Federal funding is also used to support innovations and projects (e.g. to develop new VET programmes or to help young people to integrate in VET programmes).

SERI is also responsible for drafting legislation, handling complaints, providing legal guidance in the preparation of VET ordinances and examination regulations as well as for processing requests for recognition and approvals. Moreover, SERI is responsible for providing training to VET professionals (vocational school teachers, apprenticeship trainers, branch course instructors, examiners) as well as to vocational, educational and career guidance counsellors. Finally, SERI works to develop and implement federal policy in the area of continuing education and training (CET).





Upper-secondary education

Switzerland's VET sector offers young people the choice of over 240 different occupations. The apprenticeships that are an inherent part of Swiss dual-track VET programmes ease the transition from school to working life and pave the way for the next generation of skilled workers. VET programmes are geared to suit the needs of the labour market. Training content is therefore determined by the professional organisation representing the given branch. SERI offers guidance and support to professional organisations in their efforts to develop new VET programmes and revise existing ones. It also organises consultations and readings for interested parties and issues the corresponding VET ordinance for each VET programme. An average of around 20 new or revised VET ordinances have come into effect each year since 2005.

SERI is responsible for strategic management, quality control and further development of Swiss upper-secondary level vocational education and training (VET). SERI therefore also handles the core syllabus for language, communication and society (LCS) courses within VET programmes, the core syllabus for preparatory courses for the Federal Vocational Baccalaureate examination and the core syllabus for physical education in VET programmes.

Particularly talented young people in VET programmes have the option of attending a preparatory course for the Federal Vocational Baccalaureate examination,

which covers more academic subjects. Those who pass this examination may enrol in a Swiss university of applied sciences (UAS) without having to take an entrance examination. SERI works with the cantons and professional organisations to support this qualification, which helps to draw more young people to VET programmes. SERI is responsible for the Vocational Baccalaureate Ordinance and supervises its implementation. The Confederation, the cantons and professional organisations have devised a core syllabus, which is used as the basis for each VET programme. SERI evaluates and recognises each VET programme following consultation with the Federal Vocational Baccalaureate Commission (FVBC). SERI also organises the examination for the federal vocational baccalaureate, which takes place once each year.

There are two ways to obtain an academic baccalaureate: attendance of a baccalaureate school recognised by the Confederation and the Swiss Conference of Cantonal Ministers of Education (EDK); taking an examination that has been centrally organised by the Swiss Baccalaureate Commission (SMK). As the SMK secretariat, SERI receives over 2,000 registrations each year and organises the examinations that are held twice per year in the German-, French- and Italian-speaking regions of Switzerland. It also coordinates recognition of baccalaureates in cooperation with EDK.

At federal level, SERI pursues a consolidated national education policy for the

Switzerland's VET sector offers young people the choice of over 240 different occupations.



With professional education, Switzerland has an effective and greatly appreciated means of enabling professionals to pursue subsequent training at tertiary-level.

entire upper-secondary level within the Swiss education system (i.e. VET sector and general education sector).

Professional education

With professional education, Switzerland has an effective and greatly appreciated means of enabling professionals to pursue subsequent training at tertiary-level. Professional education builds on work experience and enables holders of upper-secondary level vocational qualifications to specialise and deepen their expertise while gaining the knowledge and skills required to work in a managerial capacity. Tertiary-level professional qualifications may be obtained in one of two ways: preparing for a federal examination or attending a formal study programme at a federally recognised professional education institution. Over 25,000 professional qualifications are awarded each year.

SERI is responsible for strategic management and quality control for the Swiss professional education sector. Working with the cantons and professional organisations, SERI tackles key issues concerning subsequent development and consolidation of professional education. It also works to find solutions, particularly with regards to positioning and recognition of training courses. Major challenges for the professional education sector include maintaining permeability and creating junctures between the professional education and other sectors of the Swiss education system.

SERI helps professional organisations to develop federal examinations, coordinates alignment with related professions and approves examination regulations. It also supervises the conduct of federal

examinations and the work of examination boards. It is the complaints authority, issues tertiary-level professional qualifications and maintains a corresponding register. As far as federal recognition is concerned, once professional organisations have drafted a core syllabus, SERI takes the lead in recognition procedures and recognises formal study programmes of private and public professional colleges.

In addition, SERI provides financial support for the development of new examination regulations and core syllabuses, for the revision of existing ones and for the conduct of federal examinations. SERI provides grants to those attending preparatory courses for federal professional examinations.

Cooperation in education

National and international cooperation in education is essential for Switzerland. Working together, the Confederation and the cantons fulfil their constitutional mandate to pursue a coherent high-quality education system that is also optimally positioned at the international level. The Swiss Education Report provides important information for further development of the Swiss education system.

At the federal level, SERI is responsible for both national and international cooperation in education. It plays a leading role in federal and cantonal bodies whose purpose is to develop the Swiss education system further.

SERI is also the contact point for international queries relating to education. It encourages international cooperation both within multilateral institutions (e.g. OECD, UNESCO, EU or Council of Europe) and at the bilateral level. In addition, SERI pursues various bilateral and multilateral initiatives, cooperation ventures and programmes such as the EU's Education and Youth Programmes or the OECD's PISA study (Programme for International Stu-

dent Assessment), which was co-funded by the Confederation and the cantons. In so doing, SERI supports international networking and the international positioning of the Swiss education system.

In the area of international cooperation in vocational education and training (ICVET), SERI seeks to establish networks with players in the field of VET, achieve international recognition of Swiss upper-secondary level vocational qualifications and tertiary-level professional qualifications and exchange expertise to reinforce the Swiss VPET system.

National and international cooperation in education is essential for Switzerland.

Switzerland takes part in the European system for the mutual recognition of professional qualifications. As the national contact point for the recognition of professional qualifications in Switzerland, it is the first agency to contact. SERI is responsible for the recognition of foreign qualifications for both regulated and unregulated occupations and professions. SERI also decides what compensatory measures need to be taken. Each year, it processes between 5,000 and 6,000 applications.



SERI works with the cantons to maintain the competitiveness and quality of the Swiss higher education sector.

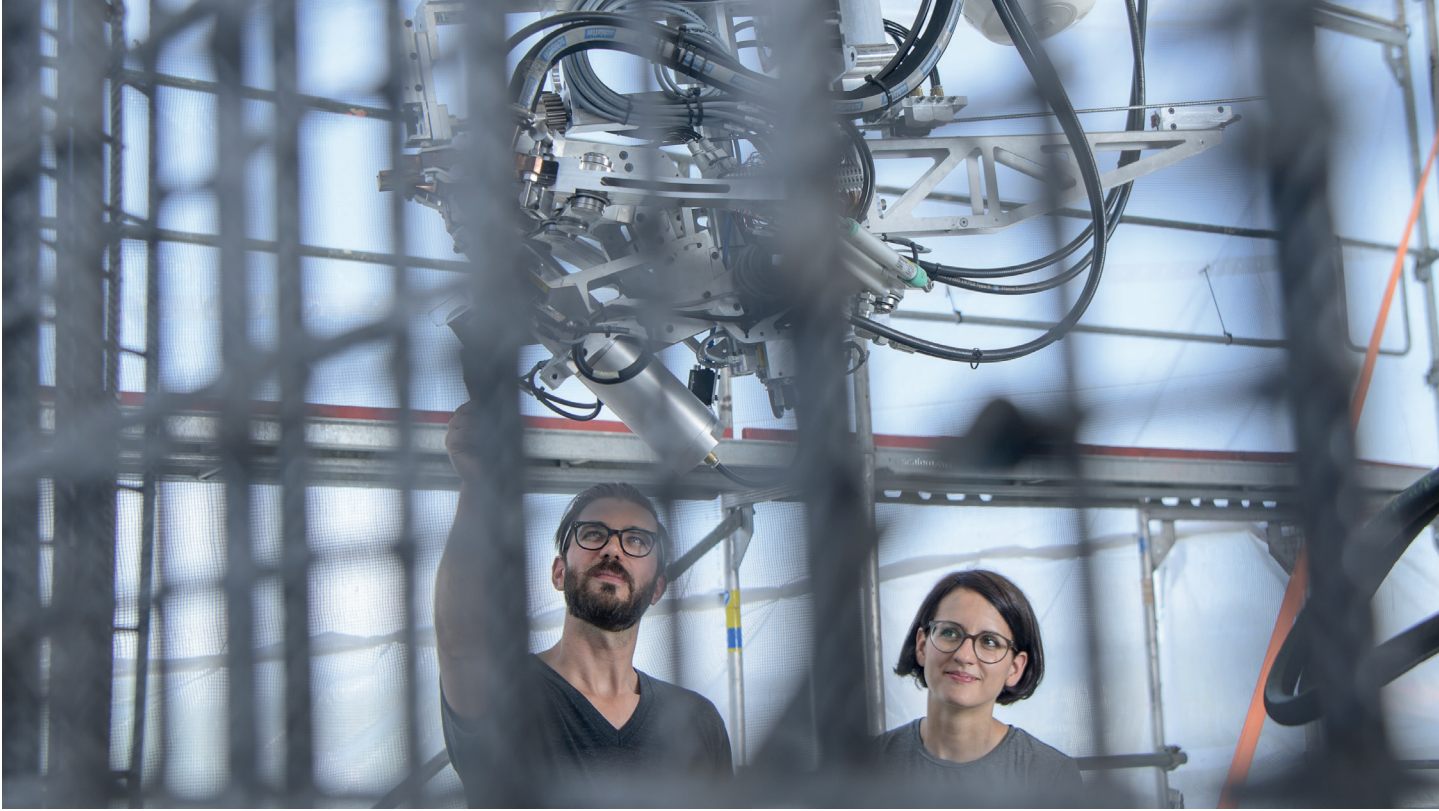
Higher education

At tertiary level, the Swiss higher education sector is both comprehensive and diverse: there are cantonal universities and federal institutes of technology (FITs), universities of applied sciences (UAS) and universities of teacher education (UTES). In addition to high-quality teaching, higher education institutions are responsible for research and the provision of continuing education and training. By producing internationally recognised output, higher education institutions make a major contribution to Swiss economic, cultural and social development. As co-sponsors of the Swiss higher education sector, the Confederation and the cantons are responsible for the regulation, funding, strategic management and supervision of higher education institutions as well as for quality control.

SERI and the cantons are committed to ensuring the competitiveness and quality of the Swiss higher education area. The legal basis for this can be found in both the Federal Institutes of Technology Act (ETH Act) and the Higher Education Act (HEdA). SERI contributes in various ways: it supports the Federal Department of Economic Affairs, Education and Research (EAER) and the Federal Council by assuming responsibility for the ETH Domain; it provides HEdA-based funding to cantons that run universities and universities of applied sciences; SERI also addresses higher education policy issues at national and international level. In addition, SERI manages the secretariat of the Swiss Conference of Higher Education Institutions (SHK), which is the highest federal and cantonal policymaking body responsible for the Swiss higher education sector. The SHK is chaired by the head of the EAER.

Through the Federal Commission for Scholarships for Foreign Students (FCS), SERI is responsible for awarding and funding Swiss Government Excellence Scholarships for Foreign Scholars and Artists.





Switzerland is very competitive in research and innovation. It is among the countries that spends the most for R&D in relation to its gross domestic product.

Research and innovation

Switzerland is very competitive in research and innovation (R&D). It is one of the highest spenders on R&D in relation to its gross domestic product (GDP). The private sector contributes over two-thirds of Swiss expenditure on R&D, which currently stands at roughly CHF 22 billion per year (3.2% of GDP). Public research spending is usually awarded on the basis of personal initiative of researchers, competitive calls for project proposals and international cooperation.

SERI is responsible for preparing and implementing research and innovation policy at federal level. It therefore establishes the policymaking foundation for this, develops the corresponding legal basis and implements the Research and Innovation Promotion Act. Working through the Swiss National Science Foundation (SNSF), SERI also provides funding for research and innovation initiatives.

It supports the EAER and the Federal Council by supervising the activities of the Swiss Innovation Agency (Innosuisse).

This includes planning and coordination of national funding programmes, e.g. national research programmes (NRPs), national centres of competence in research (NCCRs) and initiatives to develop research infrastructures of national importance. In addition, SERI plays a role as a supervisory and approval authority in relation to federal guarantees at Swiss Innovation Park sites. SERI continues to support around 30 research institutions of national importance as well as the Swiss Academies of Arts and Sciences. Finally, SERI also coordinates federal policy research.



International cooperation in research and innovation is becoming increasingly important and frequent. This is because research is an activity that inherently thrives on international exchange.

Cooperation in research and innovation

International cooperation in research and innovation is becoming increasingly important and frequent. This is because research is an activity that inherently thrives on international exchange. In addition, certain large-scale projects exceed the research capacities of any single country. At the same time, increased specialisation requires the international mobility of experts.

Switzerland is a member of numerous international research organisations such as the European Organization for Nuclear Research (CERN), the European Southern Observatory (ESO) and the European Spallation Source (ESS). It is also involved in international programmes and initiatives such as EU Framework Programmes for Research and Innovation.

SERI handles all of the preparatory work for Swiss participation in relevant organisations, programmes and initiatives. It conducts negotiations, represents Swiss interests in steering committees and provides funding for the corresponding membership fees. It also helps research and innovation actors to take part in projects.

In addition, SERI provides Swiss researchers, innovation players and companies with information about opportunities offered by international organisations and programmes and how to take advantage of them.

SERI is responsible for the implementation and continued development of Switzerland's international strategy in the area of education, research and innovation, particularly for bilateral cooperation with chosen partner countries.

International relations and Swissnex network

International ERI policy is an important part of Swiss foreign policy. The aim is to raise Switzerland's profile as one of the world's most competitive locations for research, technological development and innovation and to encourage people and institutions to become more involved in international cooperation in these areas.

SERI is responsible for the implementation and continued development of Switzerland's international strategy in the area of education, research and innovation, particularly for bilateral cooperation with chosen partner countries.

It negotiates bilateral agreements and corresponding programmes. In addition, it manages the Swissnex network, which serves as a world showcase for Swiss ERI activities.

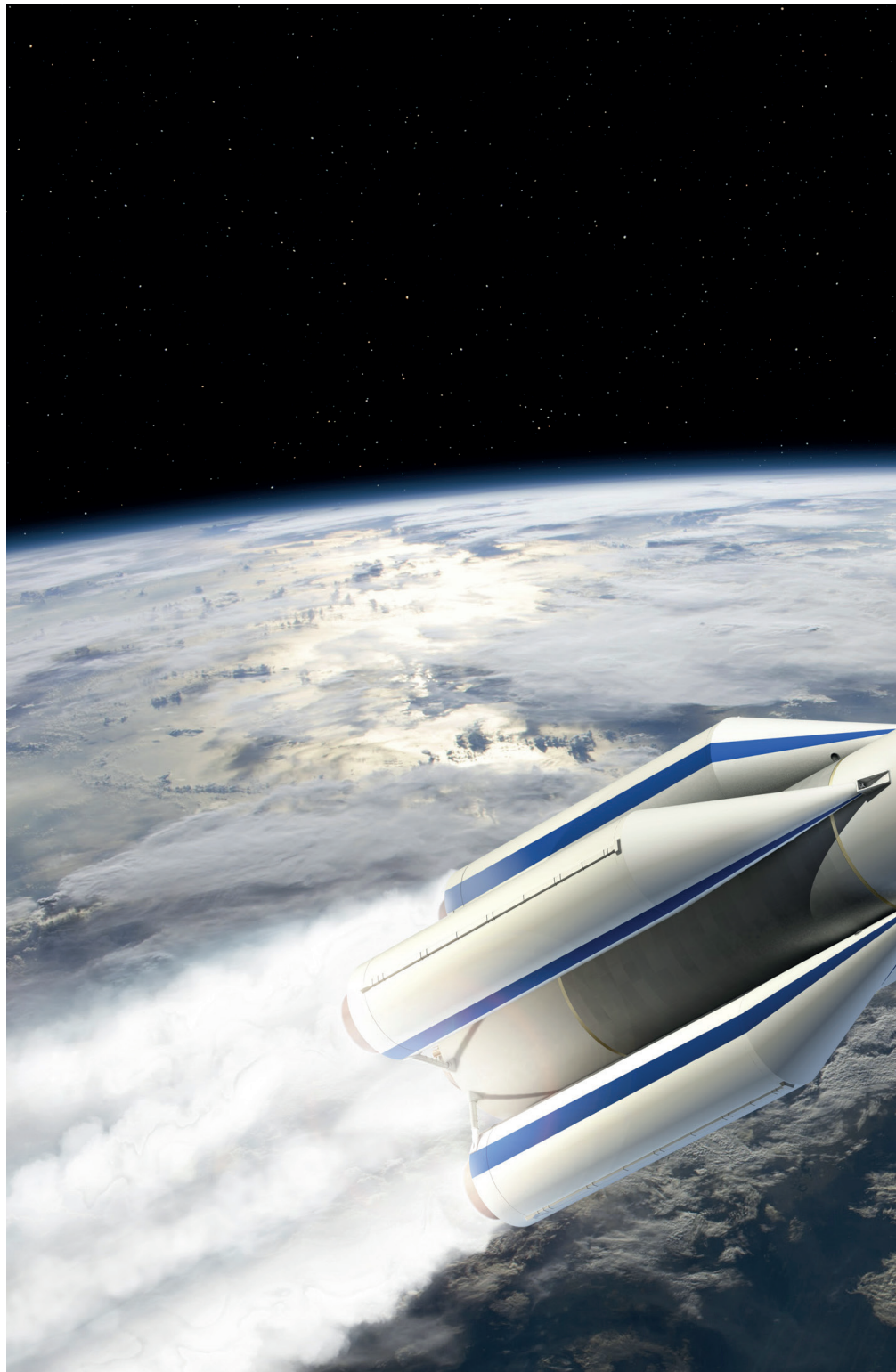
The Swissnex network is comprised of science and technology counsellors (STCs) at Swiss embassies across the globe and Swissnex consular annexes in San Francisco, Boston (with a branch in New York), Rio de Janeiro (with a branch in São Paulo), Bangalore, Shanghai and Osaka.



Space

Space research and technology is very important to Switzerland. As a founding member of the European Space Agency (ESA), Switzerland is positioned as a competitive partner in the international arena. In addition to new scientific discoveries, Swiss involvement in space brings important industrial and technological innovations to Switzerland.

SERI supports and coordinates Swiss space policy at both the national and international level. Switzerland pursues its national interests through targeted international cooperation, namely by taking part in ESA programmes and other European and international space activities. SERI represents Switzerland within the ESA and is the contact point for research institutes and industrial companies that work in the field of space.



In addition to new scientific discoveries,
Swiss involvement in space brings important
industrial and technological innovations to
Switzerland.



SERI structure and partners

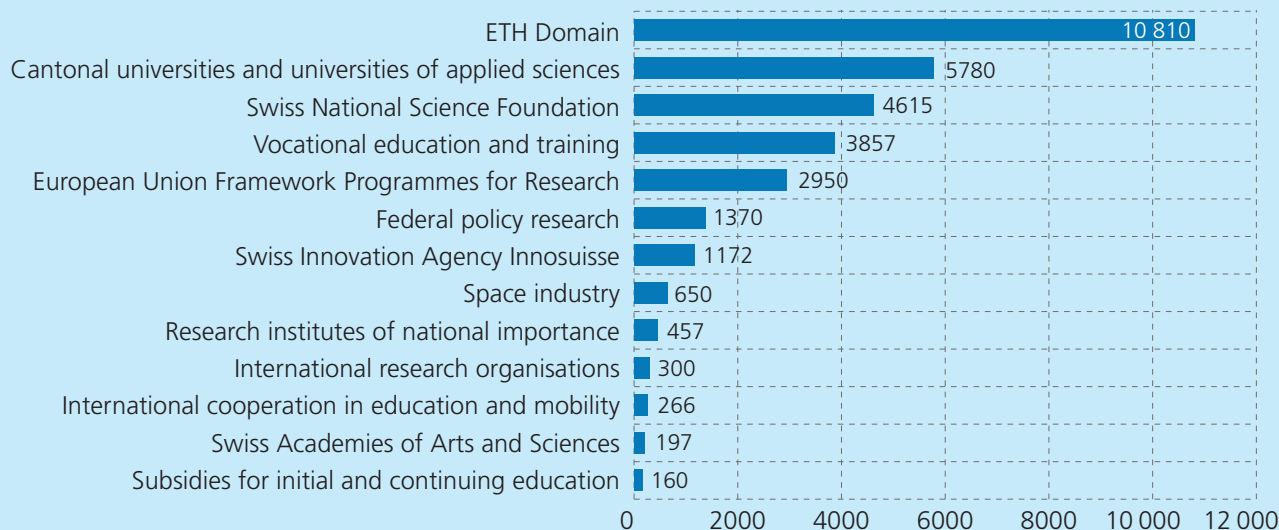
SERI works closely with other federal agencies, the cantons and professional organisations, as well as with higher education institutions and grant funding institutions that promote research and innovation. As part of its remit, SERI serves as the contact point for national and international authorities and represents Switzerland in international bodies.

SERI is headed by State Secretary Martina Hirayama and Deputy Director Rémy Hübschi. The various divisions at SERI are responsible for different fields of activity. The Resources Division ensures the smooth running of SERI operations.



Facts and figures

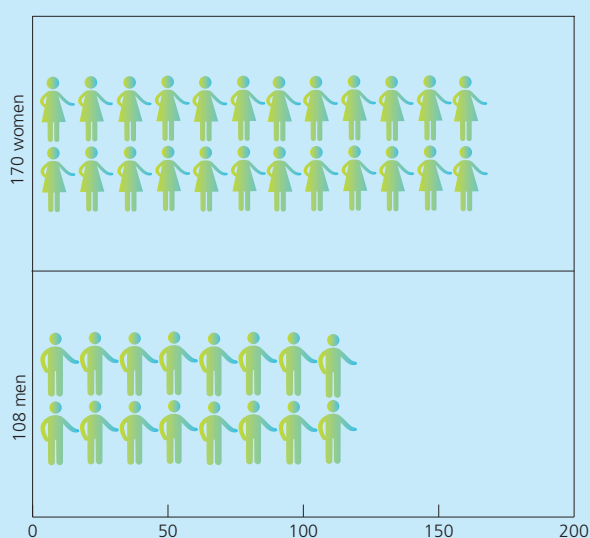
Federal funding of ERI system for 2021–2024 in CHF million



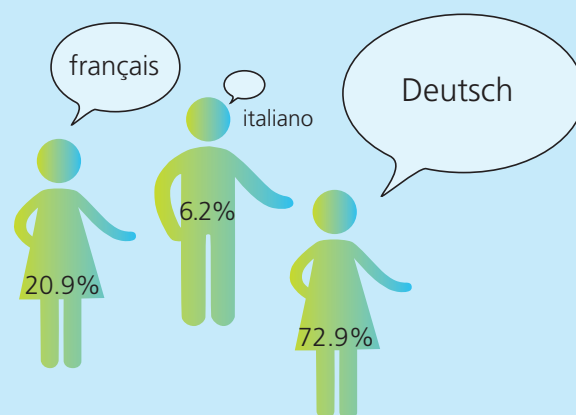
Source: Approved budgetary allocations based on ERI Dispatch for 2021-2024; Federal Finance Administration (FFA)

Federal expenditure for ERI will amount to around CHF 32.5 billion in the period 2021-2024. The funds managed by SERI amount to around CHF 4.8 billion per year; the ETH Domain and Innosuisse manage their funds themselves under the terms of a performance mandate signed with the Confederation; policy research is funded by the respective federal offices.

Women and men at SERI



Excl. 7 seconded and around 80 local staff abroad.



Employees working in Bern. Average levels in 2021

Training at SERI

- Numbers of apprentices (enrolled in VET programme in commerce) 11
- Number of university interns and trainees 8

THE EAER

SERI belongs to the Federal Department of Economic Affairs, Education and Research EAER. The EAER is made up of six federal offices and seven other agencies.



○ The federal offices of the EAER

● The agencies of the EAER

Publication details

Published by: State Secretariat for Education, Research and Innovation SERI, © 2022

Edited by: Communication SERI

Layout: Communication SERI

Translated by: SERI Language Services, GS-EAER and FCh

Languages: g, f, i, and e

Photos: C. Carreau, ESA (title page top left), A. Herzog, EPFL (title page top right),

European XFEL / Jan Hosan (title page bottom left), Monique Wittwer (title page bottom right),

Iris Krebs (p. 4, 5, 6, 7, 8, 10), Béatrice Devènes (p.11), CERN (p. 12), David Ducros, ESA (p. 14 & 15)

Contact

State Secretariat for Education,
Research and Innovation SERI
Einsteinstrasse 2
CH-3003 Bern
T +41 58 462 21 29
info@sbfi.admin.ch
www.sbf.admin.ch