

# **The Federal Council's Strategic Objectives for the ETH Domain for the Period 2017–2020**

Dated 5 April 2017

## **1 Introduction**

The ETH Domain comprises the two Federal Institutes of Technology in Zurich (ETH Zurich) and in Lausanne (EPFL) as well as the four research institutes, Paul Scherrer Institute (PSI), Swiss Federal Institute for Forest, Snow and Landscape Research (WSL), Swiss Federal Laboratories for Materials Science and Technology (Empa) and Swiss Federal Institute of Aquatic Science and Technology (Eawag). The ETH Board is the strategic governing and supervisory body of the ETH Domain. The two Federal Institutes of Technology and the four research institutes within the ETH Domain are autonomous public-law institutions established by the Swiss Confederation and have their own legal personality.

The ETH Domain is owned by the Swiss Confederation. Under Article 33 of the ETH Act of 4 October 1991<sup>1</sup>, the Federal Council defines the strategic objectives of the ETH Domain. Both the timelines and content of these objectives are aligned with the Federal Decree of 15 September 2016<sup>2</sup> on the payment framework for the ETH Domain for the period 2017–2020. The ETH Domain reports to the Federal Department of Economic Affairs, Education and Research (EAER).

## **2 Strategic focus areas**

### *Objective 1: Teaching*

The ETH Domain provides teaching which, in an international comparison, is first-class, research-based and appealing to students.

The Federal Council expects the ETH Domain:

- to safeguard and strengthen research-based, skills-centred education, and to systematically gear courses to learning outcomes;
- to promote innovative forms of teaching and learning, to review systematically and periodically the quality of education and to incorporate the results into the ongoing development of the curricula;
- to encourage students' national and international mobility.

### *Objective 2: Research*

The ETH Domain defends its international leading position in research.

The Federal Council expects the ETH Domain:

- to carry out pioneering basic research and applied research at the highest international standard, and to provide room for exploratory research;

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<sup>1</sup> SR 414.110

<sup>2</sup> BBl 2016 7955 (German) / FF 2016 7741 (French)

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- to continue research activities in the energy field and define focus areas within the scope of financial resources;
  - to strengthen computer sciences and information technology in research and teaching at the two Federal Institutes of Technology in the context of implementing the *Action Plan on Digitalisation* of the EAER of 5 July 2017<sup>3</sup>;
  - to observe the principles of scientific integrity and good scientific practice and to uphold its ethical responsibility.

### *Objective 3: Research infrastructures*

The ETH Domain operates and develops research infrastructures.

The Federal Council expects the ETH Domain:

- to operate large-scale research infrastructures of national and international significance, to continuously develop these infrastructures and to make them available to researchers from science and – subject to the charging-on of costs – from industry;
- according to its own priority-setting, to carry out projects in accordance with the *Swiss Roadmap for Research Infrastructures* while prioritising the following projects:
  - the *Sustained Scientific User Lab for Simulation Based Science* at the Swiss National Supercomputing Centre (CSCS) of ETH Zurich,
  - EPFL's *Blue Brain Project*,
  - the second beamline, ATHOS, at PSI's SwissFEL,
  - upgrading the CMS detector at CERN under the leadership of ETH Zurich;
- to participate in international research infrastructures in accordance with its own defined priorities.

### *Objective 4: Knowledge and technology transfer (KTT)*

The ETH Domain fosters cooperation and dialogue with the economy and society in order to strengthen Switzerland's capacity to innovate and compete.

The Federal Council expects the ETH Domain:

- to further develop its position as an academic partner to companies and the public administration, and to exploit the opportunities offered by these partnerships;
- to update the continuing education programmes according to the needs of economy and society;
- to create favourable conditions for KTT and promote entrepreneurship among its members;
- to set up a national network of regional technology transfer centres for advanced manufacturing as a measure of the *Action Plan on Digitalisation* of the EAER of 5 July 2017<sup>4</sup>.
- to play an active role in the continuing design and implementation of the strategy for the Swiss Innovation Park;

### *Objective 5: National cooperation and coordination*

The ETH Domain plays an active role in shaping the Swiss higher education area.

The Federal Council expects the ETH Domain:

- to strengthen research and teaching cooperation between its institutions, with the cantonal universities and with the universities of applied sciences, taking account of the complementary profiles of these various institutions;

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<sup>3</sup> Introduced by the Federal Council's decision of 25 April 2018. For the original version of the Strategic Objectives of the Federal Council for the ETH Domain see BBl **2017** 3313 (German) and FF **2017** 3131 (French).

<sup>4</sup> Ibid.

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- to maintain strategic alliances with selected national technology competence centres and research institutes in Switzerland;
  - in connection with the implementation of the Higher Education Act of 30 September 2011<sup>5</sup>, to participate in the nationwide coordination of Swiss higher education policy and appropriate division of tasks in particularly cost-intensive areas;
  - to intensify its activities in medicine and medical technology in cooperation with medical faculties, university hospitals, cantonal hospitals and clinics.

*Objective 6: International positioning and cooperation*

The ETH Domain will further expand cooperation and networking with the world's leading institutions and strengthen its international standing.

The Federal Council expects:

- the ETH Domain to be able to maintain its current level of appeal to particularly talented students and doctoral students as well as leading scientists from around the world;
- the ETH Domain to create favourable conditions for bottom-up initiatives in international cooperation and to make use of strategic alliances and networks with universities, research institutions and companies worldwide;
- ETH Zurich and EPFL to continue to play an active role (e.g. as "Leading Houses") in bilateral research cooperation with emerging countries.

*Objective 7: Role in society and national tasks*

The ETH Domain maintains a dialogue with society and performs tasks of national interest.

The Federal Council expects the ETH Domain:

- to maintain a dialogue with society and make scientific findings accessible to a broad audience in a comprehensible manner;
- to encourage interest among schoolchildren in science, technology, engineering and mathematics (STEM<sup>6</sup> subjects);
- to continue to deliver at a high level the scientific services that it currently provides for the benefit of the country ("national tasks" such as the Swiss Seismological Service, the Swiss Economic Institute KOF, the avalanche warning service, or the Centre for Applied Ecotoxicology).

### **3 Financial and infrastructure-related objectives**

*Objective 8: Funding sources and use of funds*

The ETH Domain expands its financial base and ensures that funds are used efficiently and in compliance with the defined strategy.

The Federal Council expects the ETH Domain:

- to strive to increase the proportion of third-party funding in its financial resources, ensuring that indirect costs that are not covered do not jeopardise its core mandate or its sustainable development; these indirect costs shall be disclosed and invoiced where possible;

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<sup>5</sup> SR 414.20

<sup>6</sup> STEM (science, technology, engineering and mathematics), incl. computer and communication sciences in analogy to the German term MINT (Mathematik, Informatik, Naturwissenschaften, Technik).

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- to ensure that with third-party-funded projects and donations the freedom of teaching and research is not limited, and publication of research results remains possible;
  - to pursue measures to improve efficiency and to exploit synergies through coordination and cooperation;
  - when allocating funds, to take account of the institutions' attainment of the strategic objectives, the academic performance and the financial burdens arising from their teaching, research and KTT activities, as well as from their national tasks;
  - to operate an appropriate risk management system, to refine the system when there is a proven need to do so and to inform the EAER of the most important core risks;
  - to make the necessary provision for the dismantling and disposal of the accelerator facilities at PSI in accordance with the specifications of the Swiss Confederation.

#### *Objective 9: Real estate management*

The ETH Domain coordinates property and real estate management and is responsible for maintaining their value and function.

The Federal Council expects the ETH Domain:

- to plan and develop its real estate portfolio in the medium and long term so as to take account of research and teaching needs as well as the requirements of the Swiss Confederation as the owner of the real estate, and to carry out the associated monitoring;
- to use energy and environmental master plans to plan the development of its sites, and in doing so to factor into its schemes new developments and technologies in sustainable construction, energy engineering and environmental engineering, and to implement these developments and technologies in tangible projects;
- to integrate real estate-related life cycle costs – particularly the costs of operating and maintaining its real estate portfolio and planned new projects – into its Spatial and Financial Master Plans (SFMP) and to make specific investments to maintain the value and function of real estate;
- in the course of discussions with the owner, to inform the Confederation in advance of new investment projects worth CHF 10 million or more that involve alternative financing models (e.g. transfer of rights under building legislation, leasing, PPP transactions, lease-back agreements) and of major changes (e.g. deteriorating profitability) to existing similar projects;
- to keep consolidated real estate accounts and operate an internal control system (ICS).

## **4 Human resources and pension policy objectives**

#### *Objective 10: Working conditions, equal opportunities and young scientists*

The ETH Domain is an attractive and responsible employer.

The Federal Council expects the ETH Domain:

- to provide internationally appealing, family-friendly working conditions, to further the professional development and continuing education of employees in all functions and at all hierarchical levels, and to support them in their career planning and workplace mobility;
- in its recruitment and HR policy, to take suitable measures to exploit the potential of the domestic labour market in the technical and administrative areas;
- as a socially responsible employer, to encourage the professional integration and employment of people with a restricted ability to work or perform certain tasks;
- to promote young scientists and prepare them for an academic or professional career in a national and international environment;

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- to ensure equal opportunities, encourage diversity and endeavour to increase the overall proportion of women in teaching and research, and in management positions and decision-making bodies in particular;
  - as a responsible employer, to encourage the training of apprentices in various professions;
  - in the event of a significant shortfall in the occupational pension funds, to notify the Federal Council as early as possible of the measures planned;
  - to encourage an integrity-led approach to work at all hierarchical levels.

## **5 Cooperation and shareholdings**

Under Article 3a of the ETH Act, ETH Zurich, EPFL and the research institutes within the ETH Domain may set up or hold shares in companies or cooperate in other ways with third parties in line with the strategic objectives of the Federal Council for the ETH Domain and with the directives of the ETH Board. The ETH Board is responsible for the strategy governing the ETH Domain's shareholdings.

The Federal Council expects the ETH Domain to disclose its shareholdings as part of its reporting activities and to report on the purpose of these shareholdings in the context of the strategic objectives and associated risks.

## **6 Modification of the strategic objectives**

If necessary, the Federal Council may modify the strategic objectives during the period of their validity. It makes decisions on modifications after consultation with the ETH Board.

## **7 Reporting**

In accordance with Article 34 of the ETH Act, the ETH Board will submit to the Federal Council along with its Annual Report a report on the attainment of its strategic objectives during the previous year. It will collect the data and key figures required to produce this report.

Furthermore, the ETH Board will regularly engage in dialogue with representatives of the Swiss Confederation in the course of the year, specifically in discussions with the owner that usually take place semi-annually.

5 April 2017

On behalf of the Swiss Federal Council

The President of the Swiss Confederation: Doris Leuthard

The Federal Chancellor: Walter Thurnherr