

Excerpt from :

“Strategy for ETH Domain institutions’ associated locations, working with cantonal or international partners”, May 2022

Executive summary (update Version, June 2022)

Over the past fifteen years, the ETH Domain - mainly EPFL and ETH Zurich - has developed long-term partnerships with several Cantons and with government authorities abroad. In this context, ETH Zurich and EPFL have established a durable and sizeable academic presence and activity at the respective sites. Although geographically remote, these associated cantonal or international locations are an integral part of the academic strategy of their parent institution and contribute to the strength and positioning of the ETH Domain.

A distinction is made between associated locations that have emerged in the past fifteen years and have a “campus-like” form and other locations not included in this mandate, which have been designed with specific missions. Under this mandate and unless specified differently in the text, an associated location (hereafter simply referred to as location - or locations) is a durable local presence of an institution outside of its headquarters that hosts academic units consisting of professors, scientists, doctoral students, technical and administrative staff. These units carry out research, education and innovation activities on site and in coordination with the parent institution. With its own local operational and financial management, each location acts under the name, academic supervision and administrative authority of its parent institution. Experience has shown that such a location should at least achieve the critical mass of an institute with 10 or more research laboratories (around 200 people or more) to enable a material and intellectual community on site. Achieving critical mass is a key-factor to ensure the long-term success of the location and to reduce the risk of isolation that might otherwise exist due to the geographical distance from the headquarters of the parent institution.

The rationale for the existence of a location is based on the alignment with the parent institution’s academic missions and goals. It rests on expected and confirmed long-term opportunities for all the partners involved, with a research focus on global and national challenges that can be better addressed locally. There are currently seven main locations, all of which present academic complementarity within the ETH Domain activities at the national or international level respectively ^{1,2}. They play a key role in positioning the ETH Domain nationally and globally, in enhancing technology transfer, in attracting and nurturing talent and in the transfer of knowledge. These locations operate mainly in

¹ Cantonal locations are: Basel (ETH Zurich, Basel Campus), Geneva (EPFL Geneva), Neuchâtel (EPFL Neuchâtel), Fribourg (EPFL Fribourg), Sion (EPFL Valais-Wallis, which includes Empa-Sion)

² International locations are: Singapore (ETH Zurich SEC), United Arab Emirates (EPFL Middle East)

facilities provided by the local partners, which will represent over 61'000 m² by 2024. This enables the parent institutions to concentrate the use of federal resources efficiently on their core academic missions. Moreover, the two international locations operate predominantly or entirely with local resources including government and third-party funds, both in terms of infrastructure (3100 m²) and operating costs (273 MCHF over the years 2009-2024).

Currently, the seven locations are home to more than 1200 researchers and staff from the ETH-Domain, soon to grow to nearly 1600, and have already produced a significant body of research outcomes and numerous technology transfers. They represent a global investment of about CHF 2.8 billion, with contributions from the respective local partners (22%), third-party competitive funds (23%) and the ETH Domain (55%). In general, the locations do not represent an additional investment for the parent institutions, rather a delocalization of activities that are amplified by local investments. Federal budget invested in the locations since their respective inceptions, between 2007 and 2024, amounts to CHF 1.55 Bn. This number is estimated to be on the order of 4% of the total ETH Domain funds (CHF 40 billion) for that same period. An input-output review of the locations shows that the impact of the locations is substantial in terms of scientific outcomes, innovation and economic development.

A location can be set up on the basis of a federal mandate or a decision by the parent institution based on an opportunity identified with the local partners and the ETH Domain. Based on the definition, a common set of criteria is put forward that qualifies a location and guides the assessment of the feasibility, viability and sustainability of a location. Thereby, cantonal and international locations are dealt within a single strategy as they are both constituted according to the same criteria, with adjustments where needed. These criteria cover all the aspects of the planned activity and include:

- academic strategy and complementarity;
- scope and opportunities;
- local environment and partners;
- intellectual property;
- structure;
- management principles;
- political, legal, financial and infrastructure conditions.

An opportunity-risk analysis is an integral part of the decision-making process at the institutional, ETH-Board and federal level. Three synthetic tables at the end of this executive summary present the definitions, governance processes and criteria that qualify a location.

The seven locations included in this mandate were examined alongside a review of previous proceedings of the ETH Board on locations. Although not always formalized at the level of the ETH Board, the criteria and good practices summarized in this document were generally found to be already in place and implemented by the parent institutions when planning the creation of a new location. The review also shows that opportunities and challenges were appropriately identified prior to inception as the development of these locations has already started to produce the expected long-term benefits in strategic areas of national and global importance. Examples of such areas are energy, sustainability, smart living and urban environments, systems biology, neuro- and brain sciences, and microengineering.

The review further shows that the existing risk management plans are effective and that the financial and infrastructure risks at the locations are under control, a common scenario when the local partners are responsible for the infrastructure. The current locations have reached or will soon reach a mature stage, and their respective renewals are all supported by the local partners and by the respective parent institutions. This is a sign that their inceptions have seized relevant development opportunities for all parties involved and were not just opportunistic in nature. Finally, it should be noted that locations may take different forms, both in their organization and in their relationship with their respective parent institutions. For example, an entire institute or department (like ETH Zurich Basel campus, home to the D-BSSE), an extension of a department or school (like EPFL Fribourg or EPFL Neuchâtel), or a thematically coordinated or multidisciplinary emanation of several departments or schools (like EPFL Valais-Wallis, EPFL Geneva or the two international locations).

These different forms are governed by institutional strategy and build on the strengths of the parent institutions. They also offer the ETH Domain the agility needed to optimize the collaborations with the local partners.

This review also results in **three recommendations** for improving governance at the institutional and ETH-Board level:

- it is in the autonomy of the parent institutions to incept, renew or close locations, and lead the process. But they need to systematically provide advance information for strategic discussions at the ETH-Board level to ensure timely decisions;
- two to three formal evaluations should take place during the initial six years of existence of a location; after this initial phase, the ETH Board and the parent institution should decide on a regular evaluation schedule, commensurable with the size, scope and age of the location;
- the parent institutions and the ETH Board should enhance their internal, public and political communication with respect to the benefits and impact of the locations for the ETH Domain and for Switzerland.

Definition of a location

Definition

Within Switzerland, a location of the ETH Domain has these characteristics:

- a durable physical representation of the parent institution outside of its headquarters;
- the need (and existence) of a local operational management;
- full academic and administrative subordination to the parent institution;
- a separate financial management for reporting purposes, consolidated with that of the parent institution;
- the location operates under the name and brand of its parent institution.

Outside Switzerland, a location (international) also verifies the following:

- a legal structure compatible with the Swiss legislation and approved by the ETH Board;
- the possibility to enter contracts locally (employment, insurance, other).

Governance

Governance and decision-making process

The location can be established or maintained based on and/or as a result of

- a federal decision, in consultation with the parent institution and the ETH Board;
-or-
a decision by the parent institution, with the prior approval of the ETH Board;
- a necessary positive multidimensional opportunity/risk analysis;
- compliance with federal regulations (ETH Board, BBL) for real estate, where needed.

Formal contracts proposals and revisions for approvals by the ETH Board are

- submitted in their final form by the parent institution 3 months before the date of decision;
- reviewed by the Owner of the ETH Domain at the request of the ETH Board.

Communication

- Regular communication by the ETH Board and the parent institutions to the involved governments and to the general public on the benefits, impact and resources invested.

Evaluations

Ongoing evaluations of the location by the parent institution

- comprise 2-3 evaluations over the first 6-year initial phase, extendable by the ETH Board;
- follow a regular calendar and mode of evaluation after the initial phase, according to a schedule agreed upon between the ETH Board and the parent institution;
- are regularly communicated to the ETH Board for information.

Specific evaluations of the location (e.g., in the context of contract renewal)

- take place at the time of the review to decide on the renewing of a contract;
- take place as ad hoc evaluations, if necessary or as required by the contract;
- take the form of reports and peer-review evaluations;
- include an analysis of the value of the location to the parent institution, and of its management;
- include an analysis of the real estate when a new building is needed;
- present updated opportunity and risk analyses.

Criteria

Academics

The location presents

- a distinct contribution to the missions and goals of the parent institution;
- coherence with the parent institution's strategy;
- a focus on global and national challenges that are better addressed at the location;
- complementarity within the parent institution and the ETH Domain;
- complementarity in the local/regional context (academic, economic);
- improved positioning of the parent institution, the ETH Domain, and Switzerland;
- a critical mass that ensures success, national and international competitiveness.

Structure

The location exists

- under the parent institution's own name and brand;
- by means of a renewable long-term agreement if the location is in Switzerland;
- by an agreement of 5+ years, renewable if it is an international location;
- for a duration commensurable with the activity (e.g. full-chair lifetime in cantonal locations)

Management

The location operates

- within the autonomy and under the management authority of the parent institution;
- with full academic independence from local partners;
- with its own local management, organized and steered by the parent institution;
- with regular performance reviews by the parent institution, discussed at the ETH Board;
- with transparency and full disclosure (academic, financial, operational) to the ETH Board.

Finance and infrastructure

The parent institution must

- document the total cost of ownership over the planned lifetime of the location;
- provide a financial plan that includes all contributions over the lifetime of the location;
- preferably not carry the infrastructure costs at the location (CAPEX or OPEX);
- preserve the institutional budgets to fulfill its core mission;
- make commitments commensurate with the expected lifetime of the location;
- establish a contingency plan in the event that the location has to reduce or cease its activity;
- have a fall-back strategy that includes financial and infrastructure aspects.

Environment and partners

In general, the environment at the location presents

- reputable local partners who participate operationally;
- positive long-term relationships with local government, academia and industry;
- standards for ethics, academic integrity and IP practices compatible with the ETH Domain's.

Particularly for international locations, the environment presents

- a general context of societal and human values compatible with those of Switzerland;
- the required stability (geopolitics, security and context, access to healthcare);
- a legal framework compatible with the operations of the parent institution at the location;
- an official representation of Switzerland in that country;
- a history of positive bilateral relations with Switzerland (political and economic).

Main observations and recommendations

Main observations

The review of all the locations in the scope of this mandate indicates that

- the strategy of the institutions does drive the existence of their respective locations;
- opportunities identified earlier fulfill their expected potential;
- strategic decisions were well-guided;
- governance processes at institutional and ETH-Board levels were adequate in terms of criteria, planning, risk management, implementation;
- critical mass for a (campus-like) location is at least 10+ laboratories / 200+ people, to create a local intellectual and material community.

Recommendations

The document puts forward the following main recommendations:

- the parent institutions are autonomous and lead the process, but should systematically provide advance information to the ETH Board to ensure timely decisions;
- evaluations should follow the schedule defined under Governance (see above);
- enhanced communication is needed by the parent institutions and the ETH Board internally as well as to government(s) and to the general public, regarding resources, benefit and impact for society.